September 3, 2010

President Robert A. Wharton, Ph.D.
South Dakota School of Mines and Technology
501 East St. Joseph Street
Rapid City, SD 57701

President:

We are pleased to present the “South Dakota School of Mines and Technology Landscape Master Plan,” a comprehensive landscape master planning document that we hope helps provide a long-term vision for the beautification efforts of the landscape elements at the campus.

The vision and recommendations within are an effort to combine immediate problem solving with creative solutions. The natural result is intended to be a campus landscape which is attractive, sustainable, and directly relevant to the school’s mission of providing high-quality education. These efforts are intended to make the basic elements of functionality and operations run more smoothly for the many users and groups using the campus.

We thank you, Dr. Carolyn Fassi Wharton, Pat Mahon, Sandy Fischer, the rest of the Beautification Committee, the faculty and staff members who gave us so much help and guidance throughout this process. Special thanks also go out to the students who faithfully attended our meetings and gave their insight into the campus day to day life.

Respectfully,

Patrick Wyss, CEO
Fellow, American Society of Landscape Architects

Matt Fridell, ASLA
Senior Landscape Architect
Landscape Master Plan

Campus Beautification Committee:
- Dr. Carolyn Fassi Wharton
- Pat Mahon, Vice President for Student Affairs and Dean of Students
- Sandy Fischer, Director of Business Services
- Reeny Wilson, Director, Residence Life and Surbeck Center/Student Conduct Administrator
- Maria Luze, Student
- Alison Baue, Student
- Erik Yeash, Student
- Molly Frankl, Interim Director
- Carine Reed, Senior Rep, Student Admissions
- Christopher Weyer, Student Association
Land Ownership with Pavement
Executive Summary
Executive Summary

The South Dakota School of Mines and Technology Landscape Master Plan provides direction for preserving and enhancing the campus landscape in order to express in its physical form the high quality education and research that occurs within.

The Landscape Master Plan uses the term “landscape” to describe physical and programmatic aspects of the campus in a broad sense. “Landscape” includes the uniquely identifiable exterior elements of place, including open space, plant material, contour of the land, the spaces formed between buildings, spaces formed by trees and slopes, programmatic activities that occur on site and the physical elements of the site such as walks, steps, waste receptacles, lights, parking lots, trees and shrubs. These all contribute to the overall image of the campus.

This plan proposes fundamental guiding principles based upon ideas from the Campus Beautification Committee, its advisors and a multitude of students, staff and faculty who have chosen to participate.

I. Campus Aesthetics: to present a campus appearance that reflects the quality of education offered at SDSM&T.

II. Sustainability: to provide landscape recommendations that result in positive, lasting physical, social and economic impact on the campus.

III. Relevance: to provide landscape designs that relate directly to the education opportunities offered at SDSM&T.

IV. Consistency: to provide designs that are consistent throughout the campus, sometimes including the replacement of inconsistent features.

V. Protecting Building Function: to provide recommendations that protect the operating function of each building on the campus.

Based upon these principles, concepts and recommendations have been developed and itemized into a tiered prioritized set of Design Concepts. These Concepts are described within a Landscape Framework of Gateways, Formal and Informal Pedestrian Connections and Spaces, Formal and Informal Vehicular Connections and Spaces, Parking Lot Screening, Bicycle Connections, Landscape Buffering, Landscaping, Site Amenities and Service Zones. Examples of the design concepts are:

- Basic Change – Fundamental Improvements:
  - To implement the historic hedge at the Northern edge of the site along St. Joseph.
  - To develop a terraced landscape and seating area at Surbeck

- Moderate Change – Character and Function Improvements:
  - Redesign the western end of Technology Court and change its name to “Technology Lane” or other appropriate name.
  - Implement a “Free Bikes” on Campus Program for students, faculty and staff.

- Significant Change – Long Term Vision Improvements:
  - Implement “Plant a Solar Tree” parking lot plan
  - Develop a “Complete Streets” plan for all adjacent and intersecting streets, existing and planned.

Based upon these concepts, a study of the site vernacular and historic development of the campus, Design Principles are expressed for guiding future site improvements, including some general principles:

- Expanding West with the proposed Technology Corridor, Open Spaces and Site Design, Mobility, and Plantings. These are developed to help either accent the positive or overcome negative features of the current campus such as the terracing that creates different “levels” of campus, the ambiguous and confusing wayfinding and signage, the lush lawns and canopied open spaces, or poor soils and drainage evident in some locations.

Several planning recommendations have emerged out of the Landscape Master Plan that can help the Campus Master Plan and other future planning efforts.

1. Use the Landscape Master Plan to facilitate the upcoming Campus Master Plan. When the Campus Master Plan is complete update the Landscape Master Plan appropriately.

2. Create and maintain an ALTA grade survey of the campus to facilitate Master Planning and Site Planning efforts.

3. Integrate a Master Drainage Plan into the Campus Master Plan.


5. Conduct a comprehensive Traffic Analysis during Campus Master Plan.

6. Develop a Comprehensive Wayfinding Plan
   a. Coordinate with SDDOT to clarify highway signage from Highway 16 and Interstate 90
   b. Develop a hierarchy of wayfinding signage particular to vehicular, bicycle and pedestrian users
   c. Differentiate signage for temporary visitors to the campus and regular users of the campus

Strategic Aspects of the plan and Implementation guidelines identify the means and methods for coordinating small miscellaneous site based projects and a potential procedure for reviewing projects is identified. A final project list is compiled, itemizing each proposed project, its priority, its location, main features, and any project specific notes. These are summarized in the Landscape Master Plan section.

-End Executive Summary-
Landscape Master Plan Legend
1. Veteran’s Memorial
2. Museum Walk
3. Arch Memorial
4. Classroom Court
5. Student Memorial / Sculpture Location / Outdoor Classroom
6. Facilities Plaza
7. Physical Plant Enclosure
8. Proposed Sign Location
9. Bike / Pedestrian Crossing
10. History Plazas
11. The Terrace at Surbeck
12. Bike Parking
13. Lower Surbeck Plaza
14. Roundabout at Birch and Kansas City Streets
15. Screening plantings
16. Landscaped Island
17. New Parking Lot
18. Rails with Trails
19. Arch over East St. Joseph
20. Nodes or Gateways
21. VIP / Corporate Tents
22. District Gateways
23. Stormwater Gardens
24. Playground
25. VIP Boxes at O’Harra
26. Future Roads
27. Turbine Trail
28. Trailer Parking Paved
29. Winding Walk to King Center
30. O’Harra Pedestrian Plaza
31. Commons Front Porch
32. Volleyball & BBQ Area
33. Scooter Parking
34. Road Realignment
35. Parking Lot Beautification
36. Technology Lane Realignment
Introduction & Overview
Introduction and Overview

This Landscape Master Plan provides a general direction for preserving and enhancing the SDSM&T campus landscape. Both comprehensive advice and site specific projects are identified as means to implement these goals over time. The School of Mines has developed over more than a hundred years with each new vision trumping the last. Several planning reiterations have envisioned what the campus may look like and how to shape the future.

This plan implements the concepts and recommendations of the 2010 Beautification Committee, its advisors and a multitude of students, staff and faculty who have chosen to participate. Its development is in time between several new construction projects, including the Paleontology Research Laboratory, the Chemical Engineering Building Expansion, and The Palmerton / Connolly Connector, and a new overall Campus Master Planning effort that will begin in the fall of 2010.

The guiding principles that have emerged out of the meetings and discussions are:

Campus Aesthetics: to present a campus appearance that reflects the quality of education offered at SDSM&T.

Sustainability: to provide landscape recommendations that have lasting physical, social and economic impact on the campus.

Relevance: to provide landscape designs that relate directly to the education opportunities offered at SDSM&T.

Consistency: to provide designs that are consistent throughout the campus, sometimes including the replacement of inconsistent features.

Protecting Building Function: to provide recommendations that protect the operating function of each building on the campus.

Campus Master Plans prepared in the past for SDSM&T have identified specific site and building projects but have often passed landscape issues “downstream” for the next project to solve. Now, new buildings and walkways crisscross the campus - the result of hundreds of projects solving localized problems. There are both opportunities and pressure from various groups to implement facilities projects and while this Landscape Master Plan seeks to protect the unique image of the campus, it also tries to organize this collective energy towards a common vision. Campus character is at a cross roads – where a rich history of mining and rugged industry is morphing into high-tech industry and research.

Relevance to Mission Statement

The Campus Mission (as listed on the SDSM&T website) is to provide a well rounded education that prepares students for leadership roles in engineering and science; to advance the state of knowledge and application of this knowledge through research and scholarship; and to benefit the state, regions and nation through collaborative efforts in education and economic development. This Landscape Master Plan seeks to align itself with the campus mission by offering student participation and leadership potential in the planning process, by applying information gained in the site evaluation to guide design recommendations and by helping connect the physical campus to the City of Rapid City environs.

Other Documents and Plans Affecting the Landscape Master Plan

Several other documents have been developed that have bearing on this plan. These have been reviewed and some of the ideas and proposals have been moved forward in this plan. This Landscape Master Plan is not a comprehensive review and analysis of the former plans, but many of the ideas that have been developed and are still under consideration by the various entities that affect the campus are very good ones and relevant to the Landscape Master Plan.

- Campus Master Plan, TSP, 2007
- Facility Condition Assessment Report, Aramark, 2009
- Tech Corridor Plan, Dream Design International, 2009
- Vision Presentation—Downtown Rapid City, 2009
- Greenway Trails & Pedestrian Facilities Presentation—2010

This Landscape Master Plan is being completed in the summer of 2010.

End Introduction and Overview
Site Evaluation
Site Evaluation

Existing Conditions:

This Landscape Master Plan uses the term “landscape” to describe physical and programmatic aspects of the campus in a broad sense. “Landscape” includes the uniquely identifiable exterior elements of place, including open space, plant material, contour of the land, the spaces formed between buildings, spaces formed by trees and slopes, programmatic activities that occur on site and the physical elements of the site such as walks, steps, waste receptacles, lights, parking lots, trees and shrubs. These all contribute to the campus image.

The campus is currently maintained in good condition and is wrapping up several significant construction projects. Landscape maintenance staff has recently expanded, but is pressed throughout the summer to keep up with current maintenance demands.

The campus landscape is maintained under a facilities maintenance contract by the SDSM&T Facilities. The Director of Facilities and Representatives on the Campus Beautification Committee are in daily contact regarding site and facilities issues and enjoy a strong working relationship.

The Campus Beautification Committee was initially part of the Campus Planning Committee, but when requested was designated as a separate committee at the request of Dr. Carolyn Fassi Wharton. Dr. Fassi had been meeting with students, staff and community members to explore and implement ways to enhance the look of the campus. After receiving a grant from an anonymous donor for beautification initiatives she wanted to separate this committee to further include extensive participation of students in the beautification efforts. The purpose of the committee is to make recommendations to the campus and the facilities planning committee regarding campus beautification efforts.

Multiple meetings and several site walk-throughs with students, staff and some faculty impressed upon us the desire for the campus to tidy up and allow its physical presence match the caliber of education taking place. One student stated that she felt the campus appearance should match the first-rate reputation the school is known for. That one statement has helped solidify this document’s mission statement:

The South Dakota School of Mines and Technology (SDSM&T) Landscape Master Plan provides direction for preserving and enhancing the campus landscape in order to express the high quality education and research that occurs within.

As is the case in large institutions, the in-between spaces that make up the site are often dealt with as the periphery to individual projects. This tends to create partial implementation of many good ideas at the periphery of these projects. The site is an equal part of the overall campus and lends itself to the image and character of the campus as much as individual buildings. The site is like a fabric that holds the campus together as a unified place.

A review of the site itself finds most walkways, curbs, planting areas and other outdoor features in fair to good condition, with some areas of failure and others with exceptional quality. A complete assessment of the site is not included in this effort, but many specific problem areas and types were identified during our process. With that in mind we turn to review the:

- Site history that led us here,
- An analysis of what distinguishes the campus,
- How we learned about what could be done with the landscape, and
- A presentation of concepts that were developed for this master plan.

The campus beautification committee, students and faculty who attended the meetings were essential in providing information that makes up this document. Ideas or observations expressed in this report all have root in conversations held with them.

Landscape History:

The South Dakota School of Mines and Technology was established in 1885 by the Dakota Territorial Legislature as the Dakota School of Mines to provide instruction in mining engineering for surveying and assaying. South Dakota was granted statehood in 1889 and then renamed the South Dakota School of Mines.

The location in Rapid City was selected over alternate locations in Deadwood for its proximity to the Railroad and to create a perceived distance from the primary industry hub in the hills. Instruction began February 17, 1887 with initial degrees offered in mining engineering and metallurgical engineering. Dr. Franklin R. Carpenter was appointed the first president and dean of the faculty.

During the presidency of Dr. Robert Slagle (1896-1905), field geology was introduced, and a large collection of Badlands fossils and minerals was added to the geological museum. The museum is still a defining destination on the campus. During that early period, the third building was constructed on campus, and the first School of Mines magazine was published. The first three buildings constructed on Campus – the Prep Building, the Metallurgy Building, and The Liberal Arts / Main Building have all since been demolished. The recognizable arc in the Quad was initially part of the Liberal Arts building and was carefully deconstructed, each stone carefully labeled and reconstructed in the original location, symbolizing the campus’ history of development and change.

The university’s reputation as a diversified science and engineering school was established following World War I with the rapid increase of engineering students and the termination of college preparatory courses. This is indicative of the important role the armed services had in forming and filling the campus. The WWI barracks were torn down in the 1950s, but had a significant presence on campus. No military memorial exists on campus. The area of the current O’Harra Stadium is rumored to have been a “slew” prior to development. The president let all students out of class for a one day construction project to shape the field, but there was not enough time, manpower nor money to finish the project. The WPA and then the Civilian Conservation Corps finished the project. A 50’ fill reshaped the original drainage that came down from the gap West of TOTH hill. No plaque or recognition of this initial construction effort occurs at the field complex. However, this CCC’s have at least two stone monuments in the area.

In 1943, the state legislature changed the name of the institution to the South Dakota School of Mines and Technology, in recognition of the school’s expanded role.
in new areas of science and technology. Since that time, the university has expanded its curriculum continuously.

McLaury Building is the oldest remaining structure on campus; the fourth built overall and presents a historic face to the campus setting.

The Flood of 1972 had a significant impact on the campus landscape, although only one building was lost. The physical plant was destroyed and the stadium severely damaged. The landscape was severely affected.

The “Operation Evergreen” was implemented by President Guy March and local resident retired Colonel Joseph Wallace, which installed hundreds of ponderosa pine trees on the slope west of the dormitories. There are multiple popular views from the interior of the campus to this hillside. This hillside, with its green pine canopy is seen as connecting the campus to the black hills that are otherwise hidden from the campus.

A Xeriscape rock garden is located at the Library and was built with help from Museum of Geology. The garden highlights strong ties to the Badlands and its rich geology and paleontology resources. Black Hills Power donated 125 trees for the campus’ 125th anniversary in 2010 which 50 sf. were planted along the North border of the campus adjacent to East St. Joseph Street.

A technology corridor is envisioned between Birch Street and East North Street east of the primary SDSM&T campus. Exact plans for this corridor are uncertain at this time although the SDSM&T Foundation is acquiring properties and has developed an overall Master Plan to guide development in this area.

Model on display in the Library showing the naturalistic landscape of the campus

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as opportunities occur. The transition of this area into more active uses could have a dramatic affect on the
campus landscape, in particular by adding another highly visible campus entrance.

The south campus is intended for building expansion and will be further envisioned during the overall
Campus Master Planning process. Plans for a large field house behind the King Center and a Master Plan
concept that entirely reorients the campus to the south have been proposed.

Historic Decisions that have shaped the Campus Landscape:

1876: City of Rapid City Platted
1885: School of Mines founded, Construction began on first building.
1901: National Smelting Co. built the smokestack on the hill. Original Liberal Arts Building
constructed. The Arch that commands the Quad now was the facade of this building.
1920s: TOTH hill Smelter Smokestack removed
1921: McLaury Building completed
1928-29: Gymnasium constructed
1930s: Wiidcat of the Hills radio tower presides over campus
1931: Work begins on football stadium
1937: CCC finishes O’Harra Stadium improvements / terraces
1942: O’Harra Building completed
WWII: Campus used for Army Specialized Training Program
1947: Connolly Hall completed
1948: North Hedge mature
1952-57: Civil/Mechanical Building completed
1959: March/Drake Hall completed
1960: Forest Service Station completed
1961: Surbeck constructed
1962: Mineral Industries Building completed
1967: All weather track installed at stadium
1970: Devereaux Library completed
1972: Rapid City Flood takes 238 lives in Rapid, Floods lower campus
1973: Electrical Engineering / Physics Building completed
1974: Physical Plant constructed
1976: Goodell Gymnasium and Physical Education Complex completed (now Kings Center)
1980-84: Operation Evergreen
1982: Flood Memorial built
1989: Classroom Building completed
1994: Liberal Arts Building demolished
1996: Memorial Arch and Plaza constructed
2004: Peterson Residence Hall/Surbeck Renovation complete
2008: TOTH came down
2009: Campus Master Plan Reiterations
2009: Wind Turbine installed

* A special thank you to the Library Staff for information presented here.

Physical Features and User Interviews:

The analysis and conclusions about the campus that are presented in this document have come about
through a collaborative process. Opportunities were provided for interested parties to pass on their
knowledge and insight about the campus through open houses, a survey, and individual interviews.

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Meetings were as follows (See Appendix A for full Agendas, Attendance and Handouts):

- Start up meeting: May 19
- Campus Walkthrough: May 26
- Programming Open House: June 16
- Alumni Open House July 9
- Executive Committee Presentation: August 11
- Open Campus Presentation: August 30

In addition, individual interviews were held with the Devereaux Library Staff, Past and Present Facilities Directors, The President Robert Wharton, Ph.D. & Carolyn Fassi Wharton, Ph.D., Rod Pappel, SDSM&T Foundation, and various individuals met while observing the campus. These allowed us to both share our findings during the process and to listen for key issues and priorities.

We found that overall people’s sense of the campus is that it “looks fantastic” this summer (as one alumni put it), but overall it always seems like it could use a coat of paint. Visitors typically do not have a clear sense of entry at the campus edges, nor do they understand where to go, or how to find out where to go. The Museum of Geology relates that this is an issue they face everyday as they direct people to their door over the phone who are trying to navigate through Rapid City and then into the Campus.

People appreciate recent efforts at Surbeck to add color and accent to the building. A solid base of volunteer effort is observed at the school—many small projects around the campus were student or alumni motivated. There are multiple important memorials around the campus that people address. Overall, there is little discussion about outdoor spaces, or solid recent “landscape” projects that have improved the campus. One of the most popular “landscape” projects—Operation Evergreen is over 25 years old!

Many over-arching “Master Plan” level issues lay unresolved by this study, yet the people we visited with had a difficult time getting through these issues and into the Landscape Master Plan issues of features and amenities. Because of that, this report touches upon some of the larger issues with observations that were made at various points during the user interviews, but we have not attempted to propose comprehensive solutions when it comes to parking garages, completely shutting traffic out of Technology Lane, resolving the service and delivery issues at the Civil Building and some of the other larger issues that dominate conversations about former Master Plans and functional relationships on the campus.

The Existing Campus

The SDSM&T campus consists of 21 buildings on 110 acres located on the east side of Rapid City, SD. The campus is bordered on the north by St. Joseph Street, currently the primary access route to the school with multiple vehicular entry points. The multiple entry points are on one hand very convenient but on the other hand so numerous that they add to the difficulty in identifying campus gateways and way finding. The western boundary is Birch Street although that boundary is changing as the technology corridor looks to expand westward. The eastern boundary is the east entry to the field complex. The south boundary is the natural hillside which visually contains the campus. A proposed connecting road to the south will connect the campus to East St. Patrick Street and offer an opportunity to set the standard for designing consistent campus gateways.
Landscape Character

The landscape character of the campus is mainly a picturesque landscape. Rolling lawns and generous tree plantings shade the central campus. Small accent planting areas are dispersed throughout campus, although somewhat inconsistent in their detailing and use of materials. The tree and grass covered hills to the south provide connectivity to the regional landscape setting. The urban development south, east and west of the campus offers the opportunity for community connectivity in the landscape. The railroad to the north has a heavy industry appearance, somewhat in conflict with the overall campus appearance.

Wayfinding methods have been attempted on campus at numerous times. Each seems good in and of itself, although convenient user-friendly wayfinding is still a challenge. Wayfinding needs to consist of a consistent, repeated message beginning off-campus, reiterated at the campus edges and repeated for vehicular and pedestrian orientation. One should feel comfortable in all stages of wayfinding from the approach to campus all the way to walking into the final destination and exiting safely.

Maps:

Campus Aerial (p. 27)

This map was the foundation for many of the meetings and discussions at the campus.

Land Ownership (p. 28)

The map shows that State of South Dakota via various agencies owns the campus land and several parcels to the South and East. The Observatory is listed on Rapid Map as being owned by the United States of America. The School of Mines Foundation has purchased several properties to the West and North over the last several years. The technology corridor is increasingly owned by the foundation and other school related organizations. Another map with the campus roads and parking areas is also shown here.

Districts (p. 29)

Three distinctive districts are referred to in this document. The Central Campus consists of the primary buildings and open space of the campus. The Perimeter Areas are the parking, stadium areas and naturalistic slopes that surround the campus. The adjacent highway and property within it are referred to as Perimeter Areas. The Developing Technology Corridor Connecting downtown consists of the city blocks beginning at Birch Avenue and heading west to East Boulevard.

The Terraced Campus (p. 30)

The existing campus is generally situated on three terraced levels which define separate identifiable areas of the campus. The “Quad” (Lower Terrace) is the Surbeck Parking Lot and the lower Quad area surrounded by the primary academic and administrative buildings. The “Transition” (Middle Terrace) to the south is essentially defined as Technology Court – the road that divides the North and South Campus. The Surbeck Center can be described as being part of the middle terrace. The “Foothills” the highest elevation of the Upper Terrace has accommodated most of the building expansion over the last decade houses the parking and recreation areas as well as the King Center and Paleontology Research Laboratory.

Moving from one terrace to another terrace defines many of the common expansion on campus, from climbing the steps at Surbeck from descending to the 2nd from the King Center to the Quad. Many of the Pedestrian and Vehicular obstacles on campus relate to these grade transitions.

Special Spots (p. 31)

The following special places were identified through student interviews and conversations with people who spend their days on campus. These places define the “Living Character” and day-to-day life of people as they experience the campus environments. These are often the hallmarks or “Kodak Moments”, such as:

1. Steps at Surbeck: This is the accepted “front door” of the campus. When you are directed to the campus for the first time, you are directed to this location: the parking lot and steps leading to the Surbeck Center.
2. Classroom Building Courtyard/The Painted Rock: This area is a common social space for students between classes. The Painted Rock is the living billboard for activities and expression on campus where students can paint their thoughts or activity. The only rule being leave the previous paint for at least 24 hours before painting over it. It is a nexus for creative expression.
3. O’Harra Building & The Museum of Geology: First time visitors to the campus are certain to visit this building for one reason or another.
4. Dunham Field at O’Harra Stadium: This unique, Civilian Conservation Corps project is well known for hosting numerous school and community athletic events.
5. Wind Turbines at the Historic Smelter location: There has almost always been a visible landmark on TOTH hill. Initially a Smelter chimney reached to the sky. The smelter stopped operations around the 1920’s and slowly devolved over the years. In 1981 TOTH (Tower on the Hill) was built there by nationally recognized sculptor Andrew Leicester. TOTH came down in 2001 and is now replaced by a living expression of the learning and research on the campus, a Wind Turbine.

The Arc/Quad is indicated in this report as an “underperforming” space. While the unique Arc structure located at the original location of the Liberal Arts Building is a beautiful monument, the space itself appears to under serve the campus. The photo moments are not balanced by student activities in this space, and the quad does not serve the overall campus outdoor social center. Students expressed a preference for areas like the smaller open lawns west of the Classroom Building. Overtime the trees have filled in the Quad area, cutting off important axial views and impeding the visual connectivity that reinforces the functional relationships of the campus.

Materials (p. 32)

Brick and stone are the common materials found on the campus, and that should be emphasized in future site and building projects. These materials reflect the mining and geologic heritage of the campus. Stone is found throughout, used uniquely as landscape rock or monuments. This could be enhanced.

Other materials used throughout campus in a secondary manner are metal, glass and concrete.
Community Connectivity (p.33)

This map illustrates the overall campus setting in the Rapid City, SD municipality, and the major arterial connections to the campus. Also defined is the proposed southern route connecting to Saint Patrick Street. This connection opens a new southern backway to the campus with some benefits and some challenges. It will make the campus more accessible to the community and provide traffic congestion relief. It will open the saddle area, once planned for recreational uses, to development. It will also create the opportunity for cut-across traffic and more vehicles crossing campus.

Pedestrian Barriers (p.34)

The ability for a pedestrian to navigate the campus is limited by many factors on the campus. Overall ADA access is out of compliance with modern standards. Many walks are completely out of compliance and many are connected by specific areas that do not conform. The basic principle of keeping walks less than 5% overall is difficult to manage on a sloping site, but the cross slopes are often steeper than the required 2% maximum as well. ADA routes were not comprehensively analyzed for this study. Specific trouble areas impede people’s free and open access to the campus as well. Those locations are indicated on the plans. Longer arrows indicate the perceived distance barrier people express when talking about parking issues on campus.

Views Off Campus (p.35)

Views on the campus get progressively better as get higher on the slope of the campus. From certain locations “M” Hill at Hansen Larsen Memorial Park is visible. A grand view across to the city opens up to people who visit the Paleontology Research Laboratory or King Center at these high elevations. Contrast that to the most visited area in the Surbeck Parking lot where the view north is of a Rail Yard and City Shop Area. This view to the North was one of the most commented upon aspects of the campus.

Water and Drainage (p.36)

Surface runoff problems are symptomatic of the numerous projects that have taken place over the years. No comprehensive and sustainable master storm drainage plan has been developed and as a result there are numerous pockets of standing water which restrict vegetative development and attracts insects. Low areas of wet soils exist in several locations, appearing unkempt and unintentional.

User Interviews

We have met with numerous committees, interviewed interested individuals, conducted a day-long open house and attended the all year alumni reunion. In the process we heard many ideas, opinions, suggestions and preferences. Some of the items brought to our attention that we seek to address in the Landscape Master Plan include:

- **Campus Aesthetics**
  - Install a landscape buffer in front of the stadium
  - Screen the Business Development Center parking lot
  - Evergreens and other year round interest plants
  - Need a painting and trimming program
  - There are no covered outdoor areas on campus – add some
  - New sign is popular – more
  - Walking connection to stadium

- **Sustainability**
  - Xeriscape landscape at East Drive entrance
  - Tunnel under St. Joe for path connection to Bike Trail
  - Hillside Path around Campus
  - Community Gardens – Central Compost Center
  - Storm water floods University Loop from slope
  - Reinforce main East West Pedestrian Corridor
  - Preserve trees – there is a “protective feeling” toward them
  - Sustainability is key

- **Relevance**
  - Open up central quad for large events
  - Relate sculpture to footprint tracks to Museum
  - In 2012 a large Blacksmith convention will be in town at fairgrounds – coordinate an on-campus project for them to complete
  - Cycad fossil at Library – hidden, needs to be opened up
  - Use industrial engineering department for signage

- **Consistency**
  - Define Edges
  - First impression area at Surbeck needs beautification
  - Street Signs at sidewalk entrances
  - No theme to current plantings – it is a hodge-podge
  - Fix awkward sidewalk jointing, path merging

- **Protecting Building Function**
  - Need for places to post notices – Kiosks
  - Driveway on Technology Court west of the Classroom Building is unsafe and unusable
  - Maintain freight access to Civil Mechanical Engineering Building to the south

-End Analysis of Existing Conditions-
The Campus Districts:
1. The Central Campus
2. The Perimeter Areas
   Parking
   Stadium
3. The Developing Technology Corridor
   Connecting to Downtown
The Topography Divides the Campus into Distinct and Separate Terraces. It’s a Hallmark of the Campus & References the History and Origin of the Campus.
These Special Spots define the living character of the campus

**Special Spots:**
1. Steps at Surbeck
2. Classroom Building
   Courtyard/
   The Painted Rock
3. O’Harra
4. Dunham Field at O’Harra Stadium
5. Wind Turbines at Historic Smelter location

**Underperforming:**
1. The Quad
Issue: Community Connectivity

Accessing the Campus
Issue: Pedestrian Barriers

Specific Barriers
- ADA Access is limited
- Topography
- Poor Conditions
Better views higher on Campus
Issue: Water and Drainage

Issues:
1. Wet areas
2. Ice may collect
3. Erosion
4. Ongoing Drainage Issue
5. Freeze/Thaw Problems

Features:
1. Rapid Creek
Design Concepts
Design Concepts

The Concepts presented in this report cover a wide range of landscape issues and physical settings. Each concept is offered as a means to evaluate the level of treatment possible and to understand the various ways of addressing similar landscape conditions. In particular, these recommendations are identified as having the potential to infuse either Minimal Change, Moderate Change or Significant Change, more fully described as:

- **Minimal Change:** This includes conceptual recommendations that are fundamental to the campus landscape and should be completed one way or another.
- **Moderate Change:** This includes conceptual recommendations that may offer a new way of considering the landscape, by both character and function.
- **Significant Change:** This includes conceptual recommendations that are far reaching in their scope and incorporate a new long-term vision for the campus landscape element.

A variety of landscape types and approaches populate the outdoor spaces of the campus, from the rolling natural prairies of the hills that surround the campus to the Xeriscape planting areas outside the Library Building. Recent project trends have begun to move the campus away from simple lawn and tree plantings accented by small flower beds and foundation plantings and toward measures of sustainability such as short grass lawns seeded at the new Paleontology Research Laboratory, the wind turbine on the hill and the energy grant analysis. The concepts presented in this report advocate continuing the sustainability principles of LEED and the Sustainable Sites Initiative.

From the primary guiding principles listed in the introduction, the following conceptual values create the landscape framework for future projects that could occur on the campus. These are to be used, where appropriate, in future campus projects that have a landscape element.

**Campus Aesthetics:**

- Identify the campus and the campus district through repetitive landscape elements.
- Provide the addition of repeating or other simple strong elements to the skyline surrounding the campus should be considered desirable to accent the iconic landmarks of the campus.
- Maintain the school’s historic or traditional image as a place of learning and stature.
- Features that help define the unifying character of the place, such as plantings, landscape features, selection of hardscape materials and signage should be considered and budgeted for in each type of building project whether it’s a new building, a new road, or a walkway.
- Use a common base planting palette for similar projects. Use similar plants at and around all sign projects.
- Use high tech materials that reflect the innovation that is learned at the school.
- Use “problem areas” as examples of how to fix problems. The campus should be a “learning laboratory” for the students in each of the school curriculums.
- The following Design Precepts should be considered as the foundation for new projects:
  ◦ Good and consistent design for such features as benches, planters, terraces, retaining walls, steps and stairs as part of the total landscape and circulation system, not individual entities.

**Sustainability:**

- Minimize paving dedicated solely to vehicular traffic or deliveries.
- Use the current stormwater flows that create wet areas in the lawns as opportunities for Civil Engineering Best Management Practices.
- Install both Waste Receptacles and Recycling Receptacles at every building, parking lot, or other landscape area entrance or use area.
- Distinguish between types of lawn areas: Active use areas and visual use only. Consider using native grasses that require low water use and less maintenance in visual use areas.
- Species selection and landscaping techniques should be carefully considered to require minimal maintenance.
- Cool Season grasses dominate the campus turf grass stands, but warm season grasses such as buffalograss and blue grama should be welcome grass species. They are well suited to the
Design Concepts

Consistency:

- The central campus should maintain its ratio of built to open space. Areas between the buildings should be evaluated for their efficiency of providing high quality outdoor spaces and reordered where space is overly devoted to vehicular traffic or absent of usable or designated space. Spaces that are also “Over-programmed” or devoted to many uses should be reconsidered. An example could be the space between PEEB and CEB adjacent to the east leg of university loop. This area contains parking, walkways, trash containers, large utilities, and lawn.
- Use the same base materials throughout the campus. Bricks, stone, concrete and a common planting palette are this base.
- Use a common base planting palette for similar projects. Use similar plants at and around all sign projects.
- Create consistent way finding and thematic elements.
- Consistency requires a hierarchy of spaces and travel ways. Not all spaces should have the same scale or presence, nor should all walks be the same width or slope. Primary spaces and walks should have more open feeling, connecting primary views and destinations. Those places and paths less travelled should have different but appropriate character.
- The lighting on the campus is extremely varied. Certain areas of the central campus have up to five different light poles visible at a single location. Multiple light types are perhaps acceptable, but using night sky friendly light types (as defined by the International Dark-Sky Association) is recommended. Future projects should also use similar fixtures to what is adjacent to them, or propose a larger retrofit.

Protecting Building/Infrastructure Function:

- Identify critical areas of use, how often they are used, how they are accessed, and program new uses so as to minimize conflict.
- Create simple and direct routes on campus. Walkways should be functional and adequate, wide enough for the traffic conditions they experience, and managed so that they are usable and accessible throughout the year by all users.
- Building entrances should be located to relate to both internal layout considerations and site connections.
- Minimize pedestrian and vehicular conflicts as much as possible. Streets should be considered streetscapes, transporting all modes of transportation equally. They are corridors for enabling smooth and logical pedestrian and vehicle mobility. Vehicular speeds should be reduced as much as possible in and around the campus.
- “Service Zone” only areas around buildings are almost nonexistent on this campus. Every side of each building is exposed to the visitor.
- The Physical Plant is no exception to this rule. In fact, its proximity to East St. Joseph Street creates a condition where its exposure to the highway is highly visible and dominates the passersby’s view as they head west. This yard area needs to be treated with the same respect as other elements of the Campus Gateways as it provides context for the campus front door.
- The Facilities building and parking area are also central to the cross-traffic from Stadium Parking to Main Campus. The treatment of this area should make it easy and safe for pedestrian traffic to cross, create clear travel paths for vehicles and be visually appealing as well.

Relevance:

- Use Civil Engineering Best Management Practices, such as outlined in the Rapid City Stormwater Quality Manual and taught at the school for all construction projects that affect the campus environment.
- Use high-tech materials that reflect the innovation that is learned at the school.
- Use materials from the lexicon of the campus heritage. These are the brick, mortar and stone of the building, but also site furnishings and benches, that recall the mining and industrial heritage of the school.
- Celebrate the history of the campus through projects similar in concept to the Liberal Arts Building Arc, the Brontothere Paleontology building animal sculptures and TOTH – use a relic from the past as a new icon or iconic element of the campus.
- Some relevant examples here are to integrate the new Grubby Statue and the George Thomson Memorial Sundial into new projects on campus.
- The sundial will need to be set at 44 degrees, 7 minutes and requires some minor repairs to the Gnomon.
- Choices about the character and type of routes accessing or directing people around campus should be made based upon their anticipated user type. The Museum Walk should cater to a wide variety of user abilities. Other routes may have a lesser degree of compliance with Americans with Disabilities Act. Some routes are more dominant than others, but this provides a sense of coherence and welcoming.

Minimal rainfall conditions and lower maintenance conditions that are prevalent throughout much of the campus.
- Areas of turf whose grade exceeds 1:4 or 1:3 should be identified and replaced with solid stands of native grasses and native flowers.

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“Figure Ground” of campus showing the open spaces

Large delivery vehicles to Civil Mechanical Building now have to back out of the now disconnected “University Loop”. 
Landscape Framework

The School of Mines is comprised of multiple spaces and destinations with a variety of users that have real and perceived requirements. They are characterized by some unifying aspects and differentiated by their physical form and place. The following is a brief description of the functional role the major landscape types apparent on the campus and a listing of first some of the appropriate expectations we have for these areas, and some of the concepts proposed to deal with various issues and challenges that were identified.

These concepts have been presented to the Beautification Committee and the Executive Committee with other presentations planned. They are consolidated in a logical formation on the Landscape Master Plan.

Gateways

Gateways define the front door to the campus. They are the entrances and markers that indicate to users and visitors that they have arrived. Gateways provide a baseline of expectation, establishing an expectation of quality for many aspects of the campus environment. They should be consistently designed so that they enhance their relative importance to entering, navigating and exiting the campus.

Note that one solution cannot be applied to all gateways onto the campus. Each entrance drive has different traffic patterns and a separate unique character. However, incorporating elements that are similar in each design will provide a consistent image. These elements include monumentation, wayfinding elements, orientation, walls, gates, and landscaping.

Gateways Landscape Treatment should be:

- Readily identifiable: instantly identifiable as being the School of Mines
- Visually appealing
- Colorful and eye catching
- Signage elements integrated
- Landscape elements that are eye-catching

Concepts / Proposed Improvements:

- Minimum change
  - Consistent Signage and Wayfinding

- Moderate Change
  - "Mines District" Gateway Markers and Corner Improvements
  - "Campus" Gateway Markers and Corner Improvements
  - Birch and St. Joseph
  - University Loop East and East St. Joseph
  - O’Harra Stadium Entrances
  - Provide a hedge connecting gateway elements to tie Northern Fasade of Campus together
  - Arc over St. Joseph at Birch Street.
  - Duplicate new Campus Signage at eastern edge of campus, between Devereaux Library and Mineral Industries and at O’Harra Stadium

- Significant change
  - Site redesign at each entrance, adding turn lanes
  - Redevelop the convenience store site.
  - Develop the new Southern Entrance with a signature Gateway to match East St. Joseph when the connector is constructed.
Formal Pedestrian Connections & Spaces

Formal Pedestrian Connections & Spaces on campus are the ceremonial spaces that are instantly recognizable as iconic spaces or connections on the campus. These spaces are important to the significant daily visitors to the site as recognizable pathways and open spaces that define the campus.

Formal Pedestrian Connections & Spaces Landscape Treatments should provide:
- A safe pedestrian friendly campus
- Understandable routes
- Clear hierarchy of important spaces
- Different Routes for Different Users
- Different Spaces for different uses, multi-use spaces in critical locations

Concepts / Proposed Improvements:
- Minimum change
  - Create a clear Museum Walk or Money Loop connecting the North paring in the lower terrace to the O’Harra Building
    - Move dinosaur sculptures to be adjacent to path.
    - Light this path with step lights or bollards
    - Use materials and construction techniques developed at the school to implement
    - Include “Dinosaur” or other footprints in concrete
    - Sketch Plan shows colored concrete with deeper color bands on either side.
    - Shown in red on plan
  - Create History Plazas in front of McLaury and move the site information signage up to this location
    - Include historical images
    - Some memorial elements could be combined into these, such as the George Thompson Memorial Sundial.
  - Create a Veterans Memorial at the top of the New Green in the Quad

- Moderate change
  - Provide aesthetic improvements at O’Harra Stadium
    - Fencing
    - Landscape & Paving
    - Gate House
  - Remodeling the Quad
    - Create an open green
    - Integrate sightlines with landscape elements
    - Add stormwater swales
    - Integrate Pathway changes

- Significant change
  - Former Master Plans have removed Technology Court from Vehicular use entirely. As an alternative, this plan proposes a “Complete Street” with narrowed lanes, bus parking,
Formal Pedestrian Areas of concern.

Legend

- Minimal
- Moderate
- Significant
realignment on the west and different paving materials at crossings, pedestrian walkways, bikeways and street trees.

Informal Pedestrian Connections & Spaces

Informal Pedestrian Connections & Spaces on campus are the common spaces that are used occasionally or daily by everyone who visits the campus. They are the connective tissue of the campus. Pedestrian traffic on the campus is inherently hectic, sporadic, varied and prone to change over time. Corridors are numerous and are not always easily articulated. The story of the architect who waited a year to pave the paths on the new campus was mentioned several times in our meetings. The SDSM&T has experienced years of paving the paths until we are at a point now where enough changes have been made that many paths now may be no longer necessary, or could be reconfigured around logical outdoor spaces. New building construction with new entrances has the potential for altering pedestrian traffic flow.

Informal Pedestrian Connections and Spaces also are the fun places, athletic uses, and follies that exist on a campus. Sitting areas, running paths and monuments fall under this category.

Formal Pedestrian Connections & Spaces Landscape Treatments should provide:
- All the same functions of the formal Pedestrian Connections and Spaces
- Fitness & Health
- Fun & Games

Concepts / Proposed Improvements:
- **Minimum change**
  - Create the Turbine Trail, a multi use natural surface path that circumnavigates the southern portion of the campus. A route could also be designated through the campus to define a complete loop through the campus.
  - A series of site projects in the central campus area:
    - Classroom Building Entrance Plaza
    - Volleyball court and site improvements at Palmerton Hall parking lot
- **Moderate Change**
  - Building Entrances: Analyse each building entrance for seating, plantings and functional improvements.
  - Provide pedestrian crossings of a contrasting material or color at all designated pedestrian crossings.
  - Continue the series of site projects in the central campus area:
    - Pedestrian Crossing north of Physical Plant
    - Stair and Parking Improvements south and east of Facilities Building

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The proposed “Terrace at Surbeck”

Museum Walk Design.

Commons Front.
Wyss Associates, Inc.

Analysis of Existing Conditions

- Area South of Devereaux Library and Mineral Industries building.
- Outdoor Shelters / Classrooms on east and west of Quad
- Winding path to King Center
- Clean up area north of Palmerton
- P/C Commons Front Yard
- Detach walk from north side of East St. Joseph Street and Main Street creating a meandering path and planted boulevard.
- This falls under the trail “Rails WITH Trails” and requires a strong partnership with the Railroad.

- Significant change
  - Amphitheatre in the old Hardrocker Beach valley
  - O’Harra Stadium Improvements
    - Corporate / Tournament Shelters and stairs on West
    - VIP Boxes at 50 yard line
    - Playground

Formal Vehicular and Informal Vehicular

Formal Vehicular corridors are the Main Entrances and gateways to the campus. These are the approaching roadways and entrances that provide the strong edge to the north of the campus. They can also be streets within the campus that are clearly defined as formal vehicular travel ways.

Their character is that of safety and function and the landscape treatment of these corridors should provide for travel safety, safe sightlines, limited access into the campus, clear and simple signage and regular and formal plantings with minimal accents at access points.

At the School of Mines Informal Vehicular areas are the secondary roads and parking areas within the campus and areas that serve vehicle storage and parking. These areas and their associated landscapes ideally provide several functions to the campus including screening, shading, buffering, beautification, corridor alignment, organizations clarity and conformance with the overall expectations of the campus environment. These benefits are achieved through basic principles of planting design, landscape area designation (such as islands), and other material usage.

These areas are secondary to the formal vehicular areas in winter, and need to be prepared not only to be plowed during winter snow storms, but to adequately receive and store snow, where designated appropriate.

Formal and Informal Vehicular Area Landscape Treatments should:

- Promote an Elegant Image of the Campus
- Provide Safe Access to the Campus
- Identify Limited and identifiable access into Campus
- Be built as “Complete Streets”
- Treat Parking Lots as Open Space

Concepts / Proposed Improvements:

- Minimum change
  - Revised Surbeck Drop Off and Turn Around
  - Gateway Changes as above
  - Lane Stripping to reduce lane widths

Design Concepts

VIP Boxes at O’Harra

Loop the Campus with a meandering walking / hiking / mountain bicycling trail similar to the new trails at Hansen Larsen Memorial Park (“M” Hill).
Minimal
Moderate
Significant

Legend

Design Concepts

Vehicular Concepts

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• Moderate Change
  ◊ Parking Lot Beautification throughout
    - For example, the South side of Connolly Hall could be reorganized to put some plantings adjacent to the building
  ◊ Road / Lane Narrowing
    - For example, University Loop has several areas where the wide road creates dangerous traffic patterns.
  ◊ Parking Lot Addition on island property between Main Street and East St. Joseph.
  ◊ Implement a formal campus entrance feature at the intersection of Birch Avenue and Kansas City Street. This should be a roundabout that provides access to Kansas City Street, University Loop, the parking lot and Birch Street.
  ◊ Implement a “Mines District” feature at East Street and Kansas City Street.

• Significant change
  ◊ Complete streets treatment of all roads and parking lots
  ◊ Kansas City Reconstruction and West Gateways
  ◊ Close Birch Street, strengthening the pedestrian connection to the Tech Corridor. This space should not be simply parking – it should be a green space or buildings tying these two areas together boldly and distinctively. It needs to be a feature worth losing the clean access or else it is not worth it.
  ◊ Technology Court
    - Change name to Technology Lane
    - Realign at west Classroom Building
  ◊ Parking Garages – these need to be addressed in greater detail, per their need, in the campus master plan, but three locations have been identified in this study as potential locations for Parking Garages.

• West Stadium Parking. This low flat area could easily have a second level deck added for a relatively low cost. It is also as close to the center campus as most of the other parking areas and could deliver pedestrians to the second terrace level at the South Facilities area.
  ◊ South of Facilities Building. We understand this area may have a 50’ fill. Excavating a large area and inserting a parking facility, opening to the stadium is an opportunity.
  ◊ South of O’Harra Building. This structure would be built into the slope behind the O’Harra Building. It would provide centralized parking, allow through traffic on the new closed University Loop (needed for large vehicle delivery to the Civil Engineering Building) and connect the Middle and High Terraces of the campus with an elevator that provides absolute accessibility and perhaps even temperature regulated parking.
  ◊ Solar Parking. Many of the parking lots on campus are open and have a fairly open view south, despite their northerly aspect. Adding solar coverage to the parking lots could shade the cars, provide a learning opportunity to students, and promote sustainability. This type of facility is gaining recognition throughout the world for its various benefits, but would be unique in this region.

Bicycle Connections
Areas of bicycle use on campus are currently nearly invisible on campus. Specific areas for bicycles are occasional and intermittent. Bicycle lanes are not painted nor designated, although current plans for adjacent bicycle corridor expansion has identified some routes through campus for bicycles. This document advocates bicycle use. We believe that the planned growth of the campus will require and benefit from more bicycle use. Therefore, this document supplies some guidance in how to promote bicycle use by providing the infrastructure for it, and some innovative ideas as to how to include bicycle use into the daily life of the campus.

Bicycle Treatment on campus should provide:
  • Safe Bicycle Friendly Campus
  • Understandable Routes
  • Easy Use on Campus
  • Free access and storage for students and faculty

Concepts / Proposed Improvements:
  • Minimum change
    ◊ Integrate bicycle parking at all buildings
    ◊ Provide covered bike storage at key locations
Stripe “sharrows” or bike lanes onto all campus roads, narrowing vehicular drive lanes to 8.5’ or less if necessary. Current research indicates that narrowing drive lanes serves to regulate driver speed as effectively as any other control measure. Clear driving expectations are set by drive lane width.

**Moderate Change**
- Free Bikes on Campus. This is a program that locates stations to check out bikes to ride across campus as students, faculty and staff need them. They would be located so as to allow a quicker ride into campus from exterior parking areas or across campus.

**Significant change**
- Work to include a bike lane on East St. Joseph Street.
- Work to develop a bicycle corridor off the highway on railroad land North of Main Street allowing bikes to travel in the open mown area South of the tracks.

**Landscape Buffering**

The campus is currently bounded on its southern side by open grassy hills. The northeastern view is of Rapid Creek. Buildings enclose portions of the site and the tree plantings in the central core of the campus provide a visual scrim to the site that, in places, sets the campus in a very naturalistic setting. Appropriate and deliberate landscape buffering efforts could amplify these effects and work to reduce the very poor views to the North. Successful landscape buffering works to divert attention from or reduce the negative impacts that undesirable land uses may have to the overall character of the campus. It may also serve to improve the view into the campus as well.

Landscape Buffering is typically done with specific planting or landscape treatments designed to address a specific issue or problem area. It is a response to a specific place and need, and is shaped by that specific context. A specific design response will vary depending on the need, proximity, available space, formality and ownership of the place. However, it can also be proactive and include planning measures that preserve and enhance the character of the campus.

**Design Concepts**

Landscape Buffering efforts should:
- Preserve the naturalistic aspects of the campus, such as the grassed slopes to the south
- Limit views to and across East St. Joseph Street
- Address loading areas and service zones on campus
- Control views into the campus from the community
- Unify the campus visually

Concepts / Proposed Improvements:

**Minimum change**
- Purchase or otherwise secure the properties on the southern border of the campus
- Work with other stakeholders (city, railroad, DOT) to provide screening across the entire northern view shed of the site
- Screen the Business Incubator Parking Lot

**Moderate Change**
- Create a “patio” space on the North side of the library at the rarely used service entrance.
- Completely reconfigure the Physical Plant yard so that it has a unified appearance from the highway that obscures the functional uses while accenting that area as a living part of the campus.
- Expand the pine tree plantings of “Operation Evergreen” to the West and integrate a “Black Hills” stone and pine landscape into the Tech corridor developments that occur.

**Significant change**
- No recommendations. These are all must have recommendations.

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Plantings or Landscaping

Landscaping here refers to the specific design and arrangement of landscape elements to form the green places on campus. Plantings and landscapes are currently characterized by the effort that placed them on the campus rather than the places they make. Often their presence is unique (as in the grasses west of the Surbeck Center), dominant (as in the grassed hills or pine covered slope, or dramatic (as in the new Campus sign north of Surbeck Center) that they create places themselves.

We propose that the plantings on campus should serve the places they help define, accenting the spaces through their placement and editing. Plant massing should buffer blighted areas, and accents should clearly draw the eye to important features such as signage, icons and special spots. Plantings are also where color can be brought to the campus in dramatic fashion, highlighting the buildings, entrances and features.

Great lawns and healthy turf are an important part of a campus as well. Students need places to rest, park their solar vehicle for display and bragging rights, toss a Frisbee, or allow their mind to wind down. Yet not every corner of the campus needs to be mown turf. Other landscape types are available and should be implemented where appropriate.

Landscape Treatments should:

• Promote an elegant image of the Campus
• Be simple
• Be easy to maintenance and have clear maintenance expectations
• Have "a Black Hills" and western South Dakota character
• Have clear boundaries
• Continue the subtle blue and gold planting scheme wherever appropriate

Concepts / Proposed Improvements:

• Minimum change

◊ Operation “Daylily”. Plant 10,000 daylilies on campus in two years, accenting features, signage and entrances.
◊ Install “wetland gardens” where existing drainage problems exist. Promote these as the “Poetics of Stormwater” using gargoyles and other follies to add human interest.
◊ Install the historic hedge that bounded the northern portion of the site along the highway. We recommend this hedge instead of a continuous brick or stone wall. It was discussed that a wall could emphasize a perceived barrier between the city and the school, while a hedge provides a tidy and observable cue of care. It is a warm inviting element rather than a cold edge. It is also a formal edge, with landscape defining the critical edge of the site.
◊ Provide additional or new plantings in the existing peony bed in front of Surbeck. This can be a short term solution to provide additional landscape interest in this location. Other recommendations may completely remodel this drop off area.
◊ Replant the boulevard with very large street trees. The new plantings in this area are smaller trees.
◊ Remove Shrubs on the south side of the Monument Gate patio to open it to the rest of the quad and expand its potential uses.
Replace the lawn along East St. Joseph with cobble and tree plantings. Protect the trunks of these trees. Remove and replace soils during this process. This would likely be done while implementing the hedge concept along the north boundary of the site. Lawn could remain, but it requires the soil be excavated every few years to alleviate the buildup from the snow melt.

**Moderate Change**
- Implement dry creek swales and weirs in the quad to allow stormwater to transverse the site above ground from Technology Court to the new swale along the North side of the Chemical Engineering Building
- Participate in the Tree Campus USA program. This program has specific requirements that must be met, but would indicate the campus’s dedication to planting and preserving its forest.
- Spruce up building entrances. Currently many of the building entrances are planted like service zones. An aggressive program to mark and highlight building entrances with accent planting and focus areas will improve each buildings’ perception. Civil would be a great place to start. The evergreens there make the building blend right into the background.

**Significant change**
- Expand the “Black Hills” character of the west slope into the corridor area along Kansas City Street. Allow a more “Downtown” urban character to follow East St. Joseph Street

Site Amenities

Site amenities are the outdoor furniture of the campus. They include Benches, Seats, Tables, Umbrellas, Planters, Waste & Recycling Receptacles, Lighting, Wayfinding Elements, Information Centers, Paving Materials, Art Pieces, Planters, Bollards, Bicycle Racks, Play / Miscellaneous Sports Equipment, Site Utilities, Plaques, Flagpoles, and Monuments and memorials of all types.

The current conditions of these elements on campus is well maintained, but without an overall thematic element, spatial pattern or discernable hierarchy. This plan promotes consistency, and where possible accenting these elements, consolidating their locations around a theme, expanding their implementation.

Site Amenity Treatments should:
- Be consistent throughout the campus, with happy surprises that relate to their specific context (i.e. use one bike rack typically, but a special rack might relate to the use of a specific building or location
- Respect the context of their location and context
- Be available wherever needed
- Be extremely durable and vandal resistant

Concepts / Proposed Improvements:
- **Minimum change**
  - Implement a bench and waste/recycling receptacle placement program
  - Pull the new planters in front of Surbeck away from the walls 3’ so that students can sit on them

Large art installations on Campus would continue a strong tradition and create interest.

Complete Street—Including rocks instead of lawn along East St. Joseph Street
Add a small playground to the enclosed stadium area
Reset the Thompson Sundial on campus
Remove walls and walks that are no longer necessary
Remove the Information Center Sign at the current Surbeck drop off
Relocate the Student Memorial and tree of Tyler Jake Loeb in conjunction with the Quad remodel

The new Grubby Statue by Joe Kittel:
- We recommend locating the new Grubby Statue either at the King Center or the Stadium. Grubby is a sports mascot and should be placed in relationship to the physical education building / event center or at the main sportsplex.
- The front of the King Center needs a visual terminus along the axis from the library to the building. Grubby could serve that purpose as well.

Moderate Change
- Add signs similar to the new big one at the Surbeck Center at the east edge of the campus, between the Devereaux Library and Mineral Industries and at the stadium.
- Create a Veterans Memorial in the Quad at the southern border of the proposed “Green” that is subtle, yet integrated with the flagpole location.
- Create a historic interpretive system throughout the campus to celebrate the changing physical setting of the university.
- Create a wayfinding system on campus that relates to survey pins and has meaning to the students that are studying at the school.
- Allow for information centers and pin up boards at select locations on campus, inside and outside.
- Have rotating art installations on a grand scale reminiscent of the incredible pieces at the new Paleontology Research Laboratory above the door.

Significant change
- Complete relighting of the Campus. All exterior lighting systems replaced.
- Bury utilities wherever possible on campus.

Service Zones
These are functional and utilitarian areas on Campus that have specific access and space requirements. Landscape treatments of these areas need to be deliberate and inclusive. Landscape should buffer, screen and control the sight lines for these without diminishing their operational aspects. Informal landscape elements, placed to not draw the eye work best for these areas.

Currently on campus these areas have often been left to pasture as their uses change and operational elements shift. Some service areas have been compromised by recent construction, but overall the campus is small enough that every access is exposed to the public eye, and important to the public perception of the character.
Concepts for Central Campus

The following Landscape Master Plan (see Landscape Master Plan Section) shows a vision for the center campus. Some of the concepts listed in this chapter that are specifically addressed by this plan are:

- The Terrace at Surbeck
- The History Plazas at McLaury Building
- The Museum Walk
- The Green in the Quad
- The Veterans Memorial
- Walk Realignment in the Quad
- Dry Creek in the Quad
- Classroom Building West Plaza
- Technology “Lane” improvements

Concepts for Westward Expansion / Kansas City Street

Drawing upon former plans, the Landscape Master Plan shows a vision for the Westward Expansion of Kansas City Street and the Tech Corridor. Some of the concepts listed in this chapter that are specifically addressed by this plan are:

- A roundabout at Birch Street
- Plantings in the tech corridor
- Black Hills character plantings on the nodes on East St. Joseph Street
- District Gateways at every corner
- Campus Gateways Arch

In Conclusion

The above concepts provide a series of very site specific as well as long range landscape recommendations for the SDSM&T campus. The landscape concepts presented all fall within the original mission of providing direction for preserving and enhancing the campus landscape in order to express the high quality education and research that occurs within.

*End of Design Concepts*
Design Principles
Design Principles

The guiding principles that have emerged from our conversations on campus are the basis of the design principles offered here:

**Campus Aesthetics:** to present a campus appearance that reflects the quality of education offered at SDS&M&T.

**Sustainability:** to provide landscape recommendations that have lasting physical, social and economic impact on the campus.

**Relevance:** to provide landscape designs that relate directly to the education opportunities offered at SDS&M&T.

**Consistency:** to provide designs that are consistent throughout the campus, sometimes including the replacement of inconsistent features.

**Protecting Building Function:** to provide recommendations that protect the operating function of each building on the campus.

There are several general principles that tie into these that are specifically relevant to the School of Mines and Technology. Inventing Tomorrow is what is done on the campus, and the evidence of what was invented here should be visible in the physical form of the campus. The specific mission of the school to advance and advocate for new technology could be very well expressed on the campus by the inclusion of these technologies into the site designs. Some methods to do this are listed here:

First, this is a design and research institution. Reach out to the work that is being accomplished at the school and get those ideas built on campus through direct solicitations from faculty and staff. Ask for good ideas. The campus could have the feel of a living laboratory!

Include student ideas into site features. Use a design contest from students to design the lights for the gateway pedestals. Work with a manufacturer to get them built and installed.

Solicit from alumni, both for ideas and money. Our efforts to gain comment from alumni during the Landscape Master Plan process were successful in that folks are pleased that the campus is being addressed. Continue to build these positive relationships. The interactions we observed were very positive.

**Sustainable Sites**

The “Sustainable Site Initiative” is a pilot program organized through the American Society of Landscape Architects, the Lady Bird Johnson Wildflower Center, and the United States Botanic Garden to promote the development of sustainable sites. It is recommended that the guiding principles, or similar principles from similar sustainability initiatives, are used to compliment and propel the energy and interest made by signing the President’s Climate Commitment. The following guiding principles are from Sustainable Sites:

- Do No Harm – Make no changes to the site that will degrade the surrounding environment. Promote projects on sites where previous disturbance or development presents an opportunity to regenerate ecosystem services through a sustainable design.
- Precautionary principle – Be cautious in making decisions that could create risk to human and environmental health. Some actions can cause irreversible damage. Examine a full range of alternative, including no action, and be open to contributions from all affected parties.
- Design with nature and culture – Create and implement designs that are responsive to economic, environment, and cultural conditions with respect to the local, regional, and global context.
- Use a decision making hierarchy of preservation, conservation, and regulation – Maximize and mimic the benefits of ecosystem services be preserving existing environmental features, conserving resources in a sustainable manner, and regenerating lost or damaged ecosystem services.
- Provide regenerative systems as an intergenerational equality – Provide future generations with a sustainable environment supported by regenerative systems and endowed with regenerative resources.
- Support a living process – Continuously re-evaluate assumptions and values and adapt to demographic and environmental changes.
- Use a system thinking approach – Understand and value the relationships in an ecosystem and use an approach that reflects and sustains ecosystem services; re-establish the integral and essential relationship between natural processes and human activity.
- Use a collaborative and ethical approach – Encourage direct and open communication among colleagues, clients, manufacturers, and users to link long-term sustainability with ethical responsibility.
- Maintain integrity in leadership and research – Implement transparent and participatory leadership, develop research with technical rigor, and communicate new findings in a clear, consistent and timely manner.
- Foster environmental stewardship – In all aspects of land development and management foster an ethic of environmental stewardship – an understanding that responsible management of healthy ecosystems improves the quality of life for present and future generations.

The following site specific design principles are intended to direct future improvements toward these goals and to continue to improve the quality of life on the campus while allowing the growth and change that will come over time.

**Expanding west with the proposed Technology Corridor.**

With the advent of DUSEL in Lead and the significant implications of the relationship of the SDSM&T with this research facility it is a very exciting time for partnerships and collaborative means of growth for the Campus. The relationships with the work at DUSEL that are developed over the next few years will define a period of incredible growth and research. Several groups have identified an area known as the “Technology Corridor” that extends eastward from downtown Rapid City to the west edge of the campus at Birch Street, bounded loosely by Main Street or East St. Joseph on the North and Kansas City Street to the South. The SDSM&T Foundation has been looking at this for some time and has been investigating how to best provide the housing demand, partner facilities and other space needs of the campus.

Some principles that may help identify this area with the school, but allow it to create its own district and growth pattern follow:

- Use District Level gateway markers at each intersection in this district.
- Use the same base planting palette as provided for the school, with this twist: Use Ponderosa Pine and Aspens extensively to characterize the district with a “Black Hills Character”
- Carry this Black Hills Character planting scheme throughout the district. Develop a “signature” plant grouping.
- Develop a “signature” sign type for the district.

Wyss Associates, Inc.
Refurbish the streets as complete streets
Use interior block parking wherever practical
Use a Black Hills vernacular architecture, such as has been developed near M Hill
Maintain existing plantings where practical
Develop nodes and safe crossings at intersections

Open Space & Site Design

Open spaces are extremely significant on this campus. They both provide the places for active and passive outdoor activities and define the important places on campus.

The so called Quad, or quadrangle is the three dimensional space in the center of the campus, clearly bounded by buildings on all sides. Ideally the plantings, furniture, monuments and paths accent the space, reinforcing the memorability of the place. Currently the landscape and monument combine to obscure the space and fill it to an even park like quality. It is an informal space, and is quite beautiful in the summer. However, it does not serve its role as being the heart of the campus, nor can it host the diversity of events it may if otherwise opened.

Guidelines

Reinforce the main axes of the campus by creating strong visual connections between destinations. The axis can be either visual or physical, but does not need to be both.

• Devereaux Library to King Center (Visual Connection)
• Mineral Industries to O’Harra (Visual Connection)
• South of Chemical Engineering to South of McLaury Building (Visual /Physical Connection)
• Surbeck Center to Power Plant (Physical Connection)
• Technology Court (Visual Connection)

Use basic shapes for major elements, allow secondary space making elements to be funky.

• The outline of the Quad Green should be balanced using harmonic geometrical principles, but the secondary pathways and accents can be shaped however they need.
• Most of the large current buildings on campus are designed in this manner, with large forms broken by smaller geometric insertions. The same should be done for the exterior spaces.
• Generally local symmetry works better in a site than overall symmetry. Individual site designs should respond to their local conditions.
• Achieve visual uniformity in building facades through secondary methods.
• The current campus is an amalgam of different building styles, scale and material. Continue the successful use of landscape material to harmonize these differences.
• Use landscape elements to create the human scale spaces that create comfortable places.

Use iconic features to anchor spaces and place significant landscape elements to frame, terminate or accent major views.

Preserve the existing Quad. Do not allow further encroachment into its space by major building features. With the completion of the Chemical Engineering Building Addition the quad is almost completely enclosed, with specific axial views poking out.

Open a “Green” on the Quad. Create an open space extending south of the Arch to the Technology Court.

Realign the walks and remove or relocate trees to open this space. This is the ceremonial heart of the campus. A strong center will provide a formal focal point for the campus that has a weight of significance.

Maintain the steep slopes south of the campus as open green spaces. Maintain the views to these as much as possible. Protect the open views either side of the O’Harra Building.

Work with property owners to south to preserve the open hilltops.

Plantings

Well designed plantings will reduce the business of the current central campus and provide as sense of simplicity and inner calm. Designs should be connected through repeating elements and complimentary variations, not egocentric and isolated. There is room and need for unique places of contrast, but similarities should echo or be recalled throughout the campus.

Guidelines

Use plantings to control local climate and wind conditions. Properly placed plantings can modify ambient air temperature and soften winds. Trees shade and cool the environment, and can reduce energy costs in adjacent buildings. The air beneath a tree can be significantly cooler than air above asphalt and concrete surfaces, or even that above an open grass field. Trees also can affect wind and air flow. Use standard planting principles to achieve the desired local affect.

Place large trees in parking lot islands to shade and cool the vehicles. Use planting areas to reduce the perceived area of parking lots.

Strictly formal plantings, such as the proposed hedge along the northern border should be limited to key spots for maintenance reasons. Naturalistic planting styles allow for the inconsistent growth and life cycles of living material.

Minimize turf in landscape areas defined by acute angles of buildings, walkways and other features. This is critical in the repair and replacement of existing walkways. Many areas of lawn 6” wide or less exist.

Use decorative plantings to accent monuments and flagpole areas. Landscape areas around monuments with plantings that accent the feature and mark the spot to read the monument.

Use higher maintenance landscape at building entrances and at suitable areas of foundation planting. Building entrances should be recognizable due to the care and interest expressed by the plantings that surround them.

Soften certain building elements with plantings. Planting is a simple and straight forward method of providing visual screening.

Preserve existing vegetation & protect soils from compaction.

Use erosion control methods, rain gardens, stormwater features and other best management practices to accent the use of plant material in stormwater control.

Wyss Associates, Inc.
Use plantings to put visual space between the back of Surbeck Center and the termination of Kansas City Street.

Use a base planting palette for all new plantings and use some repeating thematic planting patterns. Here is the recommended base planting palate:

### DECIDUOUS TREES

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<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Symbol</th>
<th>Height</th>
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<tr>
<td>ACER GINNALA</td>
<td>FLAME AMUR MAPLE</td>
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<td>RED SENATION MAPLE</td>
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<td>SHADEMASTER* HONEYLOCUST</td>
<td>GLTRSM</td>
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<td>SYRINGA RETICULATA</td>
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<tr>
<td>Tilia CORDATA 'GREENSPIRE'</td>
<td>GREENSPIRE* LINDEN</td>
<td>TICOG</td>
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### DECIDUOUS SHRUBS

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<td>SOAPWEED YUCCA</td>
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<td>JOHN DAVIS CLIMBING ROSE</td>
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### CONIFEROUS TREES

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<td>BLACK HILLS SPRUCE</td>
<td>PIPUB</td>
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<td>COLORADO BLUE SPRUCE</td>
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<td>PONDEROSA PINE</td>
<td>PIPO</td>
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### ORNAMENTAL GRASSES

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<td>PIERRE SIDEATS GRAMA</td>
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<td>CALAMAGROSTIS X ACUTIFOLIA 'ARCTIC'</td>
<td>KARL FOERSTER GRASS</td>
<td>CAAKL</td>
<td>3'‐5'</td>
<td>12&quot;</td>
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<tr>
<td>CALAMAGROSTIS ACUTIFOLIA 'AVANCHE'</td>
<td>FEATHER REED GRASS</td>
<td>CAACA</td>
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<td>SWITCHGRASS</td>
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### PERENNIALS/ FORBS

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<td>KINI PEARL DAVLILY</td>
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<td>KARDON ME DAVILY</td>
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<td>RUSSIAN SAGE</td>
<td>PEAT10</td>
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<td>RUDEBECKIA HIRTA</td>
<td>BLACK EYED SUSAN</td>
<td>RUH</td>
<td>12-18'</td>
<td>18&quot;</td>
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<tr>
<td>SEDEUM 'AUTUMN JOY'</td>
<td>AUTUMN JOY SEDEUM</td>
<td>SEDU</td>
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Wyss Associates, Inc.
TURF GRASSES

*Use Buffalograss based mixes designed for western South Dakota in all areas that are not strictly active use lawns.

Mobility

The campus walkway systems provide the base network for the users. They should be simple and instantly understood, with a proportional use of scale and pattern to identify the hierarchy of the network.

The interior of the campus is almost entirely pedestrian. People filter from the outside in on foot. Parking occurs on the fringes. These recommendations are regarding the pathways and travel routes that people use to transverse the campus.

Guidelines

Correlate walkway and roadway widths with the traffic they serve. Ceremonial walkways or walkways that climb steep grades may have wider or narrower widths where other conditions demand. No walkway should be narrower than 5’ and no major pedestrian route should be narrower than 8’.

Design walkways to ADA compliance standards wherever possible. Provide alternate or additional routes where feasible.

Review campus research into materials to determine whether some innovations developed at the SDSM&T could be used on site at the school.

The central east-west walk across the Quad is a gentle curving walk that directly connects two main destinations on campus. It is a wonderful transition space. Accenting this walk with plantings at either end or shade/rain proof structures would allow students an outdoor place to inhabit in temperamental weather.

Use simple gateway features as described in the design concepts to accent walkways throughout the campus.

Provide clear and consistent markings wherever pedestrians have official road crossings.

Install other new and innovative traffic control devices approved by the Manual on Uniform Traffic Control to improve pedestrian crossings.

Roads within the campus should be designed to minimize high speeds and reduce potential conflict areas between pedestrians and vehicles.

- End Design Principles -
Landscape Master Plan
Landscape Master Plan

The following Landscape Master Plan describes a scenario for the completed projects outlined in this document. It can be used to discuss specific projects, fundraise for their implementation and track the success of the committee’s efforts to beautify the campus. The Landscape Master Plan is prepared as a guide for future landscape improvements on the SDSM&T campus and sets a framework for future site planning needs.

Planning Recommendations

Many items were identified during the Landscape Master Plan process that affect or would benefit other planning processes. These are itemized below:

- Use the Landscape Master Plan to facilitate the Upcoming Campus Master. When the Campus Master Plan is complete update the Landscape Master Plan appropriately.
- Create and maintain an ALTA grade survey of the campus to facilitate Master Planning and Site Planning efforts.
- Integrate a Master Drainage Plan into the Campus Master Plan
- Develop a Master Landscape Maintenance Manual
  - Use this as a basis of the maintenance and facilities contract with the provider.
- Conduct a comprehensive Traffic Analysis during Campus Master Plan.
- Develop a Comprehensive Wayfinding Plan
  - Coordinate with SDDOT to clarify highway signage from Highway 16 and Interstate 90
  - Develop a hierarchy of signage particular to vehicular, bicycle and pedestrian users
  - Differentiate signage for temporary visitors to the campus and regular users of the campus.

Strategic Aspects

The Landscape Master Plan is based upon the premise that future projects can simplify, enhance and create the well connected campus envisioned by its stakeholders in incremental steps. Within the overall campus planning process, the Landscape Master Plan utilizes design guidelines and principles to enable future projects to conform to an overall vision.

Identifying project areas and specific projects makes it easier to manage projects within the planning and implementation levels. Because of the relatively limited footprint of the campus and the moderate growth pattern, the districts are simple and straightforward elements of the Landscape Master Plan. Within this plan then, individual project planning areas are simply the area of the project rather than the entire campus. Keep in mind that while the project planning area may be limited, that limitation is only relative to the area of construction, not impact. The elements of each project should be consistent and relevant to all the projects occurring on campus.

Implementation Guidelines

Having an organized process for implementing the Landscape Master Plan is important to keeping the goals and vision of it intact as time passes and new projects are identified. This is an incremental process. Campus Master Plans have a 25 year window of relevance. This document will be immediately followed by an overall Campus Master Plan process that may have significant impact upon its goals and guidelines. Having a process for identifying projects and implementing them will fall upon the Campus Beautification Committee and the Campus Planning Committee.

In all of this, the overall vision is the critical element that remains the same while time passes, new people join the committees and new ideas come forward. Educating the newcomers to the process that identified these projects and how to amend them is a vital role of the Committees to ensure continuity and the ultimate implementation of the ideas they have generated.

The Beautification committee is then charged with reviewing project designs in line with the fundamental guiding principles of Campus Aesthetics, Sustainability, Relevance, Consistency, and Protecting Building Function that have shaped this plan:

- To interpret the recommendations and guidelines within the Landscape Master Plan to determine their ultimate priority, maintain the energy and enthusiasm that has created the need for these projects and identify paths towards seeing them completed.
- To evaluate proposed project to ensure that they are consistent with the expectations and needs identified in the Landscape Master Plan.
- To both identify short term projects and the methods and means that allow various groups to participate in the campus maintenance and improvement.
- And finally to recommend modifications, additions and adjustments to the plan when circumstances and desires change.

The Beautification and Planning Committees are charged with looking beyond specific short-term needs, to fix hot spot problem areas and to evaluate the long term vision and goals of the campus. They are in the driver’s seat and must maintain the overall vision. We recommend that all project plans, from simple landscape improvement plans to major building construction be reviewed by both committees in order to solicit the insight of the stakeholders involved in these groups and critically, the active student representation of the Beautification Committee.

Without review and conformance to the overall plan, the accumulation of multitudes of small individual projects will leave the campus in the situation it is currently struggling to overcome — disconnected projects with relic spaces and features of older items littering the campus. That is the role of the committee: to oversee the continuous improvement within a single vision.

Specifically the procedures should be as follows:

- Projects are identified and initiated
- The Campus Master Plan, related studies and Landscape Master Plan are provided to the design team. Other relevant documents created prior to these or after these are also shared.
- Projects are presented to the various committees in their conceptual phase.
- The Committee prepares clear written recommendations and suggestions that are distributed to their overseeing committee and other stakeholders.
- These recommendations are relayed to the project committee and consultants in a timely manner.
- If necessary, these projects are brought to the committees again for review.
- The Committees conduct a post-construction project assessment to discuss whether their instructions gained the results desired.

Project Identification & Prioritization

Projects have been grouped into three basic categories. These do not mean they should be attempted sequentially, nor should they be attempted without reference to the others. However, perhaps the most critical recommendation regarding any of these projects is addressing site projects as a holistic effort to improve the entire campus.

Wyss Associates, Inc.
The following list was requested by the Beautification Committee so that their strategy could easily adapt to need and funding availability. Some of the recommendations are aggregated into larger projects in this list. Most projects previously discussed are included in this list.

**Project List:**

**Gateways**

- **Minimum change**
  - Consistent Signage and Wayfinding
- **Moderate Change**
  - "Mines District" Gateway Markers and Corner Improvements
  - "Campus" Gateway Markers and Corner Improvements
  - Birch and St. Joseph
  - University Loop East and East St. Joseph
  - O’Harra Stadium Entrances
  - Provide a hedge connecting gateway elements to tie Northern Facade of Campus together
  - Arc over St. Joseph at Birch Street.
  - Duplicate new Campus Signage at eastern edge of campus, between Devereaux Library and Mineral Industries and at O’Harra Stadium

- **Significant change**
  - Site redesign at each entrance, adding turn lanes
  - Redevelop the convenience store site.
  - Develop the new Southern Entrance with a signature Gateway to match East St. Joseph when the connector is constructed

**Formal Pedestrian Connections & Spaces**

- **Minimum change**
  - Create a clear Museum Walk or Money Loop connecting the North paring in the lower terrace to the O’Harra Building
  - Move dinosaur sculptures to be adjacent to path.
  - Light this path with step lights or bollards
  - Use materials and construction techniques developed at the school to implement
  - Include “Dinosaurs” or other footprints in concrete
  - Sketch Plan shows colored concrete with deeper color bands on either side.
  - Shown in red on plan
  - Create History Plazas in front of McLaury and move the site information signage up to this location
  - Include historical images
  - Some memorial elements could be combined into these, such as the George Thompson Memorial Sundial.
  - Create a Veterans Memorial at the top of the New Green in the Quad
  - Create accessible routes into the campus from each direction
  - Surbeck Front Parking
  - King Center Parking
  - Stadium Parking
  - Upper Old Gym Parking
  - Technology Corridor
  - Bike Trail crossing of highway
  - Create "The Terrace" at Surbeck – an expansion of the front steps of Surbeck

- **Moderate change**
  - Include a water feature, black hills style plantings, seating areas, lighting, steps and a long ramp that deposits you in the Classroom Building Plaza
  - Provide aesthetic improvements at O’Harra Stadium
  - Fencing
  - Landscape & Paving
  - Gate House
  - Remodeling the Quad
  - Create an open green
  - Integrate sightlines with landscape elements
  - Add stormwater swales
  - Integrate Pathway changes

- **Significant change**
  - Former Master Plans have removed Technology Court from Vehicular use entirely. As an alternative, this plan proposes a "Complete Street" with narrowed lanes, bus parking, realignment on the west and different paving materials at crossings, pedestrian walkways, bikeways and street trees.

**Informal Pedestrian Connections & Spaces**

- **Minimum change**
  - Include "Dinosaur" or other footprints in concrete
  - Sketch Plan shows colored concrete with deeper color bands on either side.

- **Moderate Change**
  - Building Entrances: Analyze each building entrance for seating, plantings and functional improvements.
  - Provide pedestrian crossings of a contrasting material or color at all designated pedestrian crossings.

- **Significant change**
  - Create History Plazas in front of McLaury and move the site information signage up to this location
  - Include historical images
  - Some memorial elements could be combined into these, such as the George Thompson Memorial Sundial.
  - Create a Veterans Memorial at the top of the New Green in the Quad
  - Create accessible routes into the campus from each direction
  - Surbeck Front Parking
  - King Center Parking
  - Stadium Parking
  - Upper Old Gym Parking
  - Technology Corridor
  - Bike Trail crossing of highway
  - Create "The Terrace" at Surbeck – an expansion of the front steps of Surbeck

- **Informal Pedestrian Connections & Spaces**
  - Minimum change
    - Create the Turbine Trail, a multi use natural surface path that circumnavigates the southern portion of the campus. A route could also be designated through the campus to define a complete loop through the campus.
    - A series of site projects in the central campus area:
      - Classroom Building Entrance Plaza
      - Volleyball court and site improvements at Palmerton Hall parking lot

  - **Moderate Change**
    - Continue the series of site projects in the central campus area:
      - Pedestrian Crossing north of Physical Plant
      - Stair and Parking Improvements south and east of Facilities Building
      - Area South of Devereaux Library and Mineral Industries building:
      - Outdoor Shelters / Classrooms on east and west of Quad
      - Winding path to King Center
      - Clean up area north of Palmetron
      - P/C Commons Front Yard
    - Detach walk from north Side of East St. Joseph Street and Main Street creating a meandering path and planted boulevard
    - This falls under the trail “Rails WITH Trails” and requires a strong partnership with the Railroad

  - **Significant change**
    - Amphitheatre in the old Hardrocker Beach valley
    - O’Harra Stadium Improvements
      - Corporate / Tournament Shelters and stairs on West
      - VIP Boxes at 50 yard line
      - Playground
Formal Vehicular and Informal Vehicular

- **Minimum change**
  - Revised Surbeck Drop Off and Turn Around
  - Gateway Changes as above
  - Lane Striping to reduce lane widths

- **Moderate Change**
  - Parking Lot Beautification throughout
    - For example, the South side of Connolly Hall could be reorganized to put some plantings adjacent to the building
  - Road / Lane Narrowing
    - For example, University Loop has several areas where the wide road creates dangerous traffic patterns.
  - Parking Lot Addition on island property between Main Street and East St. Joseph.
  - Implement a formal campus entrance feature at the intersection of Birch Avenue and Kansas City Street. This should be a roundabout that provides access to Kansas City Street, University Loop, the parking lot and Birch Street.
  - Implement a “Mines District” feature at East Street and Kansas City Street.

- **Significant change**
  - Complete streets treatment of all roads and parking lots
  - Kansas City Reconstruction and West Gateways
  - Close Birch Street, strengthening the pedestrian connection to the Tech Corridor. This space should not be simply parking – it should be a green space or buildings tying these two areas together boldly and distinctively. It needs to be a feature worth losing the clean access or else it is not worth it.
  - Technology Court
    - Change name to Technology Lane
    - Realign at west Classroom Building
  - Parking Garages – these need to be addressed in greater detail, per their need, in the campus master plan, but three locations have been identified in this study as potential locations for Parking Garages.
    - West Stadium Parking. This low flat area could easily have a second level deck added for a relatively low cost. It is also as close to the center campus as most of the other parking areas and could deliver pedestrians to the second terrace level at the South Facilities area.
    - South of Facilities Building. We understand this area may have a 50' fill. Excavating a large area and inserting a parking facility, opening to the stadium is an opportunity.
    - South of O’Harra Building. This structure would be built into the slope behind the O’Harra Building. It would provide centralized parking, allow through traffic on the now closed University Loop (needed for large vehicle delivery to the Civil Engineering Building) and connect the Middle and High Terraces of the campus with an elevator that provides absolute accessibility and perhaps even temperature regulated parking.
    - Solar Parking. Many of the parking lots on campus are open and have a fairly open view south, despite their northerly aspect. Adding solar coverage to the parking lots could shade the cars, provide a learning opportunity to students, and promote sustainability. This type of facility is gaining recognition throughout the world for its various benefits, but would be unique in this region.

Bicycle Connections

- **Minimum change**
  - Integrate bicycle parking at all buildings
  - Provide covered bike storage at key locations
  - Stripe “sharrows” or bike lanes onto all campus roads, narrowing vehicular drive lanes to 8.5’ or less if necessary. Current research indicates that narrowing drive lanes serves to regulate driver speed as effectively as any other control measure. Clear driving expectations are set by drive lane width.

- **Moderate Change**
  - Free Bikes on Campus. This is a program that locates stations to check out bikes to ride across campus as students, faculty and staff need them. They would be located so as to allow a quicker ride into campus from exterior parking areas or across campus.

- **Significant change**
  - Work to include a bike lane on East St. Joseph Street.
  - Work to develop a bicycle corridor off the highway on railroad land North of Main Street allowi

Landscape Buffering

- **Minimum change**
  - Purchase or otherwise secure the properties on the southern border of the campus
  - Work with other stakeholders (city, railroad, DOT) to provide screening across the entire northern view shed of the site

- **Moderate Change**
  - Create a “patio” space on the North side of the library at the rarely used service entrance.
  - Completely reconfigure the Physical Plant yard so that it has a unified appearance from the highway that obscures the functional uses while accenting that area as a living part of the campus.
  - Expand the pine tree plantings of “Operation Evergreen” to the west and integrate a “Black Hills” stone and pine landscape into the Tech corridor developments that occur.

- **Significant change**
  - No recommendations. These are all must have recommendations.

Plantings or Landscaping

- **Minimum change**
  - Operation “Daylily”. Plant 10,000 daylilies on campus in two years, accenting features, signage and entrances.
  - Install “wetland gardens” where existing drainage problems exist. Promote these as the “Poetics of Stormwater” using gargoyles and other follies to add human interest.
  - Install the historic hedge that bounded the northern portion of the site along the highway. We recommend this hedge in a formal, edge, with landscape defining the critical edge of the site.
  - Provide additional or new plantings in the existing peony bed in front of Surbeck. This can be a short term solution to provide additional landscape interest in this location.
  - Other recommendations may completely remedied this drop off area.
  - Replant the boulevard with very large street trees. The new plantings in this area are smaller trees.

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- Remove Shrubs on the south side of the Monument Gate patio to open it to the rest of the quad and expand its potential uses.

**Moderate Change**
- Implement dry creek swales and weirs in the quad to allow stormwater to transverse the site above ground from Technology Court to the new swale along the North side of the Chemical Engineering Building
- Participate in the Tree Campus USA program. This program has specific requirements that must be met, but would indicate the campus’s dedication to planting and preserving its forest.
- Spruce up building entrances. Currently many of the building entrances are planted like service zones. An aggressive program to mark and highlight building entrances with accent planting and focus areas will improve each buildings’ perception. Civil would be a great place to start. The evergreens there make the building blend right into the background.

**Significant change**
- Expand the “Black Hills” character of the west slope into the corridor area along Kansas City Street. Allow a more “Downtown” urban character to follow East St. Joseph Street

**Site Amenities**

**Minimum change**
- Implement a bench and waste/recycling receptacle placement program
- Pull the new planters in front of Surbeck away from the walls 3’ so that students can sit on them
- Add a small playground to the enclosed stadium area
- Reset the Thompson Sundial on campus
- Remove walls and walls that are no longer necessary
- Remove the Information Center Sign at the current Surbeck drop off
- Relocate the Student Memorial and tree of Tyler Jake Loeb in conjunction with the Quad remodel
- The new Grubby Statue by Joe Kittel:
  - We recommend locating the new Grubby Statue either at the King Center or the Stadium. Grubby is a sports mascot and should be placed in relationship to the physical education building / event center or at the main sportsplex.
  - The front of the King Center needs a visual terminus along the axis from the library to the building. Grubby could serve that purpose as well.

**Moderate Change**
- Add signs similar to the new big one at the Surbeck Center at the east edge of the campus, between the Devereaux Library and Mineral Industries and at the stadium.
- Create a Veterans Memorial in the Quad at the southern border of the proposed “Green” that is subtle, yet integrated with the flagpole location
- Create a historic interpretive system throughout the campus to celebrate the changing physical setting of the university.
- Create a wayfinding system on campus that relates to survey pins and has meaning to the students that are studying at the school.
- Allow for information centers and pin up boards at select locations on campus, inside and outside.

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Appendix A
Appendix A

Start-up Meeting - May 19, 2010

SDSM&T Landscape Master Plan

SDSM&T Surbeck Center
Date: Wednesday, May 19, 2010
Time: 10:00 - 11:30 AM

Agenda:
1. Introductions
2. Project Scope and Schedule
3. Key Stakeholder Identification (People to Meet With)
4. Campus Walking Tour
5. Reconvene at Surbeck Center
6. Desired Outcomes (Of the Overall Process)
7. Data Request (Clarifications)
8. Summary & Questions

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h. Do we need a summer intern at Wyss? – Could help with some of this.
3. Sustainability Committee
   a. (from web) John Bruni, Mary Jo Farrington, Sandy Fischer, Beth Francis, Joelle Frederikson, Lucas Haan, Chrystal Erness, Mitch Miller, Jan Pauzymski, Jerelyn Roberts, Jan Stone, Eunny Wiblen
4. Sign Committee
   a. Wary finding – part of separate study and effort. Time line unknown
5. Athletics Department
   a. Tom Badabush – Foundation Committee
   b. Dick Kaiser – Director Athletics
6. Fatti Anderson - Library - Historical Knowledge of Campus
7. Alumni - All School Reunion - Rondoids
   a. 9 Morning time for open house
   b. Golf tournament
   c. Friday 6 p.m. meeting – meet with Duff Enroth (Coordinator)
8. Handbeck Foundation
   a. Red Pappo
   b. Reel Johnson
   c. Tom Badabush
   d. Larry Simmons
9. Facilities
   a. Clay
   b. Dennis Ganshawke
   c. Miller, Mitch - Director of Facilities Services
   d. Mark
10. Miscellaneous notes
    a. Sandy will come to sit down meeting with Facilities
    b. ARAMark - All Facilities Maintenance are contracted through them
    c. Maintain all systems
    d. Student Hire – RHEU – TASS Fund
    e. Work Study here...
    f. Beautification Committee reports to planning who reports to Exec.
    g. Spell O’Hara with 2 e’s

Site Walk

Comments from committee during site walk:

f. Sidewalks joining and intersections - Slivers of grass are not good

q. Main information sign at Surbeck Parking lot is poor. Visitors have to stand in the road to see it.

m. Hand helds close enough to read it: either...

r. Fall from Surbeck to Classroom Building – students cut across lawn and slope

s. Need for outdoor sitting areas all over - develop the plan/is.
   i. Respect them once in in by not placing signage on the seating spots. Classroom building.
   ii. West entrance had big house.
   iii. No theme to planting - overall, hedge pondge, 3 red, 3 green - no patterns

u. Stadium needs work - no walking connection to campus except through parking

v. Many of the paths from outer parts of campus go through parking lots to get to destinations

w. Extremities – take a closer look at the edges and reaches of campus

Discussion Regarding Desired Outcomes:

Comments from committee regarding Desired Outcomes of L.M.P.

1. SODIM needs a systematic plan with priorities associated

2. Clear direction forward

3. Campus currently suffers from too many ad hoc ideas - needs organization

4. Projects – a to do list of work

5. Moving West – between Kansas City Street, St, Lou & Main - How to deal with an expanding campus

6. Recommendations on trees/plan palette/pots/site furniture

7. Foundation has plan for Kansas City – A Big Picture

8. Remember the importance of the outdoor spaces while the campus expands

9. Entering to campus need help (Edge?)

10. Goal from President: 4,000 students by 2020. What does that mean for campus

11. Would like the campus to better represent the high level of students & professionals who work at, attended and come back to SODIM.

12. Apartments in western corridor - what happens there

13. Etes Apartments on top of hill - connection down to the campus

14. Memorial projects – popular gift program

15. Plaza spaces

16. Benches strategically placing

Meeting ended 11:45
Start-up Meeting - May 19, 2010 (continued)

Wyss Associates, Inc.

Sign-In Sheet

Wyss Associates, Inc.

Start-up Meeting - May 19, 2010

Project: SDSMT Master Plan

Project No: 10107

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<th>Organization</th>
<th>Contact Information</th>
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Landscape Architecture  Golf Course Architecture  Parks & Recreation Design
Appendix A

Site Walk Through Meeting—May 25, 2010

Wyss Associates, Inc.

Meeting Notes

Wyss Associates, Inc.
725 Sixth Street, Rapid City, South Dakota 57701 • Tel 605-345-2268 • Fax 605-345-6519 • E-mail info@wyssassociates.com

Date: May 26, 2010
Present: Pat Wyss
Debbie Fiddell
Sandy Fischer
Deveny Wilson
Erlie Yonas
Maria Lazo

House Keeping

• May handout with proposed walk.

Begin Site Walk Discussion

• Planner located in front of Strandt, ask off east wall.
• Cross Calling location in front of Strandt creates a dangerous situation. Stop sign and ice building. Path on lawns.
• Area South of Parking, West of Main and North of Palomino is a very popular pedestrian gathering area. STM campus's patio is a creative designed and half project. Supply for future space and Information gathering. Lawn walk for future.
• Parking is generally good to bring in campus.
• Visualizations of important ideas discussed as a tool for understanding the concepts and marketing

Guides:

• Kansas Street City Street & Birch Avenue
  • Back of Strandt is front of Campus from Kansas City Street.
  • Dumbell locations are less than ideal
  • Where is gateway – access reveal to west?
  • Could adjust planing or make a gateway permeable, or landscaped accent area here.

Guides:

• St. Joe & Birch Avenue
  • New brick signs in first indication of campus
  • Noise at this location
  • STM Foundation property across the road
  • No first traffic crossing at turnaround time
  • Discussion of brick permeability, or other indications of "Campus Design"

• Discussion of monument sign "Campus Neighborhood" indicators that could extend out on the road.

• Plant at sign in a roadside bed and gold

• Low area between Strandt and St. Joe. "Wild" garden area concept to deal with existence discussed

Guides:

• Central Parking Lot
  • Signage above the concrete type (all over campus) – being outsourced.
  • New Goose Lake Metamor sign – location makes parking lot seem devoted to that.
  • Signage and wayfinding will be looked at generally as a part of this project with concepts for entries and so forth.

• Information sign at south end of entrance area in parking lot in last location for pedestrian and poor location for car.

• Difficult to gain access to both forms of travel.

Penny but static discussed.

• Parking received. Great edge to campus.

• Irrigation of edge discussed. May conflict with care if parked over head during scheduled irrigation times.

• Voids on wall or monument along walk discussed. Spaces between Library and Mineral Industries (these types of paper) could be accounted with a wall.

• Parking lot not a central defining characteristics of the campus.

• Cross walk at Stock Avenue discussed. Connection into campus needed. This will be a new gateway to the campus.

• East of Mineral Industries building is a driveway that leads to Walgreens.

• Highways could be narrowed to center lanes. - paths 5 against center of MI.

• Entrance walk will open when construction trims up.

Guides: St. Joe and Entrance Road

Landscaper Architecture
Golf Course Architecture
Park & Recreation Design

Wyss Associates, Inc.
Site Walk Through Meeting—May 25, 2010 (continued)

Wyss Associates, Inc.

Meeting ended: 11:45
Meeting—June 11, 2010

Date: 6/11/10  Project: SD0687
Present: Matt, Patty, Candy, Janet

Questions:
1. When was School of Mines founded?
2. Is this the original site?
3. Who laid it out?
4. Organizing principles?
5. Major site organizing events?
6. Traditional “nations” of campus/districts?
7. History of icons?
8. Why Rapid City? Why this location? Was there a depot?
9. History of quads?

Administrative Team
1. Patty Anderson, Library Director
2. Cindy Davie
   a. Loyola-Hinch-Powers
3. Janet Taylor
   a. Loyola-Hinch-Powers

1. Historical timeline available
   a. Will send over.
   b. Everything not in hardcover double sourced, but no guarantees

2. Memorial Garden in front of Surbeck
   a. First grad of SCM who died in Vietnam
   b. On East side – Donor’s during renovation.

3. Memorial Garden to 1st caretaker – George Thompson
   a. Hard cut survived
   b. Most of wall still remain
   c. South of old Surbeck
   d. Under Surbeck now

4. School of Mines – Original
   a. Deschard and Loyola group lobbied Dakota Territory Legislator for School of Mines in Black Hills
      i. Mainly for survey and assaying
   b. In Rapid City, for proximity to placer and other mining

5. 1st Building Deep Building?
   a. 1872 Demol’d
   b. Buildings 5-3 all gone now

6. Liberal Arts or Main Building

7. No Original Master Plan
   a. O’Harra
   b. 1905 National Smelting Co. – Smoak stock on hill
   c. 1910’s Smoakstock
   d. 1970’s late 70’s – came down in 2008

Landscape Architecture  Golf Course Architecture  Parks & Recreation Design

Wyss Associates, Inc.
Appendix A

Meeting—June 11, 2010 (continued)

3 Page

a. Upslope
b. Big Map – no “museum”
34. Connection to museum – not good from parking lot. Many get lost. Confusing directions
c. Not enough lights on campus, especially in parking lot
36. Lots of transient traffic
a. Path from Downtown to SE Rapid
b. Paths on hills above campus
c. Tunnels – locked from inside buildings – no known exterior entrances to them
37. Tunnels in Smeltz Hill (Still there? No one knows)
d. No other CNET areas
38. Distinct Areas
a. Stadium
b. Quad
c. P-Lot
d. No other CNET areas
40. Highlight items of interest throughout campus
a. Fossil Tree at C. R.
b. Pyramid at Library – Originally at Civil Mechanics
41. Seracape Rock Garden, here at library
a. Incon – Campus Master Gardener
b. Built with Museum
42. New Plastic flower pots seem out of place on this "Mining" campus – better connection to history.
43. West Military Memorial
a. Campus was military training box
b. 1/3 grade served in WWIII
c. ROTC (Vets Club) – Mandatory until 1969
44. Back Hills Leading Dock – looks great
45. Library could use secure outdoor sitting area
a. Coin pad for chillers – chillers gone
b. Confined so materials do not escaping
c. Basement stairs
d. Good views from windows
46. They will send 3 pages.
You are invited to join an open house discussion regarding campus beautification and the development of a Landscape Master Plan for the South Dakota School of Mines campus in Rapid City. Bring your ideas, concerns and knowledge of the university grounds and help us plan for a campus learning environment that reflects the quality of the Mines learning experience!

Please join us for an Open House
June 16, 2010 10am – 2pm
McKeel Room, Surbeck Center
Appendix A

Meeting—June 16, 2010  (continued)

Wyss Associates, Inc. Questionnaire

SDSM&T Landscape Master Plan

• What is your favorite spot to be outside on Campus?

• What is your favorite feature of the Campus?

• Where is the Campus “front door”?

• If you could add three landscape (gates, benches, signs, stairs, trees, flower beds, sports equipment—anything) items to the Campus what would they be?
  1. ________________________
  2. ________________________
  3. ________________________

• If you could fix three things in the campus landscape, what would they be?
  1. ________________________
  2. ________________________
  3. ________________________

• Ideas for Improvement?

Please rate your level of satisfaction with each of the facilities/features on the Campus. (Place a check in the appropriate box)

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Name:

Contact Information:

Map: we contact you about your answers?  Yes / No

Landscape Architecture  Golf Course Architecture  Parks & Recreation Design

Wyss Associates, Inc.
Questionnaire Results:

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Date: June 16, 2010

Project: SDSCIT

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<td>Becky Cornell</td>
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### Wyss Associates, Inc.

#### Sign-In Sheet

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**Date:** June 16, 2010  
**Project:** SODM&T

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<tr>
<td>Scott Dillery</td>
<td>SODM&amp;T Student</td>
<td>605-384-1828</td>
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<tr>
<td>Name Andrews</td>
<td>SODM&amp;T Student</td>
<td><a href="mailto:jcollar@iastate.edu">jcollar@iastate.edu</a></td>
</tr>
<tr>
<td>Carter Kirk</td>
<td>1st Ave Dent</td>
<td>347-2057, <a href="mailto:Carter.Kirk@iastate.edu">Carter.Kirk@iastate.edu</a></td>
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<tr>
<td>Kelsey Finkel</td>
<td>Admissions Office</td>
<td>605-2068</td>
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<td>Scott Kerns</td>
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<td>Logan Leah</td>
<td>SODM&amp;T</td>
<td>(704) 721-7929</td>
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Landscape Architecture | Golf Course Architecture | Parks & Recreation Design

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**Wyss Associates, Inc.**

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<th>Name</th>
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<tr>
<td>Ang Xue</td>
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<td>Song Wei</td>
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Landscape Architecture  Golf Course Architecture  Parks & Recreation Design
Appendix A

Meeting—July 9, 2010

**Wyss Associates, Inc.**

**Sign-Up Sheet**

Please sign up if you would like information about this project in the future.

**Date:** July 9, 2010  
**Project:** SDSM&T

<table>
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<tr>
<th>Name</th>
<th>Email</th>
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<tr>
<td>John W. Thomas</td>
<td><a href="mailto:jwthomas@gmail.com">jwthomas@gmail.com</a></td>
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</tr>
<tr>
<td>Everett Bloom</td>
<td><a href="mailto:bloomes@bolcom.com">bloomes@bolcom.com</a></td>
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</tr>
<tr>
<td>Bob Miesen</td>
<td><a href="mailto:rjmiesen@comcast.net">rjmiesen@comcast.net</a></td>
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<tr>
<td>Len Dottson</td>
<td><a href="mailto:jadottson@comcast.net">jadottson@comcast.net</a></td>
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Landscape Architecture  
Golf Course Architecture  
Park & Recreation Design

**Wyss Associates, Inc.**

Meeting—August 30, 2010

**Wyss Associates, Inc.**

**PROJECT:**  
**DATE:**  

**Please Sign In:**

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<td>Tim Saunders</td>
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<td>Southern Est.</td>
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Wyss Associates, Inc.
Appendix B

Wyss Associates, Inc.

The HARDROCK

VOL. 16 NO. 3
FEBRUARY 16, 1982
Edited by EMIL H. TUCHER

North Dakota School

"LEST WE FORGET"

ONE SMALL CORNER OF OUR
Campus should be set aside as a plot that
will be "forever England", as a memorial
to "George." Either the area shown below,
between the Civil-Mechanical Building
and Connolly Hall or what may turn out
to be a more appropriate spot, an area
Enchanted on page 8.

George E. Thomson*

"... Think only this of me;
That there's some corner of a
foreign field that is
forever England..."

Midland Area Picnic

An annual event for those in the Midland,
Midland, and area H.S. community. Every
year the school sponsors a picnic. This
year the event was held at the Midland
Park Wednesday, June 26, to honor the
students, faculty, and staff. The event
was a great success, with many people
attending and enjoying the food and

*George, son of James (and children), of
Paul Thomson, is continuing the love of
the land and the profession of agriculture.
He is a valued member of the Midland
High School family and will be missed by
many.

George B. Thomson

Appendix B

George Thomson Memorial

"Returning after 14 years, Al SCRIBNER
(Middle) of Westlake, Mass., dedicated
the George Thomson Memorial during
Homecoming.

Numerous other things:

The dedication of the George Thomson
Memorial to the memory of one past
founder, George Thomson, was
embraced by all who attended the
ceremony. The sign for the new
structure was unveiled to the
public.

The classes of the early twenty
years were higher than the average
classes of today, but the George
Thomson Memorial is a reminder
that they are still remembered.

Al SCRIBNER

Appendix B

Wyss Associates, Inc.

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Wyss Associates, Inc.
Continued From The Cover

"Lest We Forget"

Last week's Alumni Association Board of Directors meeting was attended by a large number of alumni, including some who had not attended in years. The meeting was held in the Alumni Center on the campus of the South Dakota School of Mines and Technology.

I. LEVIN, RICHARDSON, received a special citation as an Honorary Alumnus. Mr. Levin was a member of the original faculty of the school, and has been active in alumni affairs since its inception.

IV. WISLATION, chairman of the Board of Directors, reported that the department is continuing to work on the new dormitory project, which is expected to be completed by the fall semester. The department also announced that it will hold a series of seminars on the history of the school, beginning in the fall semester.

From Your Editor's Desk

Here we have received a letter from a South Dakota State alum

Wyss Associates, Inc.