Northern Hills Historic Trail

“A Trail Linking Scenic, Natural, Historic and Cultural Areas Across 13.6 Miles of Northern Black Hills Landscape”

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Landscape Architecture Thesis
North Dakota State University
Northern Hills Historic Trail System

A DESIGN THESIS SUBMITTED TO THE
DEPARTMENT OF ARCHITECTURE AND LANDSCAPE ARCHITECTURE
OF NORTH DAKOTA STATE UNIVERSITY

By

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
BACHELOR OF LANDSCAPE ARCHITECTURE

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abstract

Through my thesis research and design I seek to send a new message about memorializing war, and who we define ourselves as in regards to war, country, culture, and self-identity. It is not my concern to design based off of political battles, but it is my concern to design a memorial tailored to the experience of the visitor as an individual. By the end of my thesis I will have established who people memorialize, if a successful design influence people's understanding of war, and it impact visitors cultural and social viewpoints; and can all of this be done while offering a coexisting location for all visitors to heal? Creating a communal site of memory is my primary objective. The memorial will be open for interpretation for the individual experiencing the site. After encouraging people to self-interpret the memorial, the design will help that same individual gain a better understanding of their own personal relation to war. I will seek to explore how culture molds our design and interpretation of memorial sites. Solving and creating experiences at the individual level will help those individuals come together as a culture with a well-defined understanding of who they are and how the war affects them on a larger level. As a society we have become accustomed to traditional memorial design in order to mourn and commemorate our losses.
CHAPTER 1

PROJECT TYPOLOGY | LITERATURE
Project Typology

This thesis examines the impact of designing a unifying memorial site, built to address how war affects individuals rather than cultures. The design will focus on human experience rather than a political argument that will influence conflicts as a means of so-called peace making. The design will create an environment that allows visitors to seek solitude and reflection regarding War. Keywords involved in this typology include: time, cultural landscapes, ritual ground, neutral ground, personal existence, experience, death, and injury.

Introduction

Mt. Rushmore is a sculpted granite rock, which consists of carven faces of four of the American Presidents, all of which represent some negative symbolism of desecration to the Native Americans. The National Parks Service considers this memorial the symbol of America. The colossal statue “represents freedom and hope for people from all cultures and backgrounds” (“Mount rushmore national,” 2013). No more than 16 miles away is the sculpting process of Crazy Horse Monument, which pushes to show that Indian Nations also have heroes of their own. Although work is being done at both sites to commemorate native and non-native people, through interpretive programs, storytelling and demonstration; both of these monuments were built with a powerful message within them that does little to soothe past conflict, and fails to send a message of unity to the living generations. A political argument exists at both locations, from which arises the question “who and what do we choose to memorialize”.

"Mount rushmore national,” 2013
Problem Statement

How can a single, designed space encourage people to examine the effects war without honoring specific cultures, but encouraging visitation from users of all cultures? Through good design, can a memorial provoke a deeper understanding of self-identity and assist in solving the mulit-layering process of identification that many Americans experience?

Intent

It is my intent to design a war memorial that will examine war and the sacrifices and results of it. Other questions I aim to solve through research include: how can a design influence users to discover self-identity and belonging? What design implications will result from placing the design amongst a controversial cultural region in the Midwest? Will politics and prejudice regarding surrounding community influence critics? I believe my research will find that the effects of war impact not only soldiers and their families, but all people. Users will be a very diverse group in age, ethnicity, profession, religion and generation. I also hypothesize that I will be able to explain how important a well-designed site can be towards individual experiences and helping people understand their association and relation to war.
Site Information

Memorials are a focus in the design field in various ways. The design of memorials themselves are a work of art. In which sculpture and architecture can mold together and intertwine to create a place for people to quiescently be in the moment. A landscape is created where people are left to discover the origin and meaning of the memorial at their own leisure. Whether it is reshaping the earth with new contours or adding a figurative image for people to observe, a memorial utilizes the land and either changing or non-changing objects to evoke certain feelings in the people that interact with the site.

My site will need to meet certain criteria in order to make it a successful design. One of the larger criteria is where to place a war memorial. The location will determine the type of visitors/users, it will address surrounding cultural issues, and it will allow for a design that addresses war in relation to the regional location. Other criteria I should consider include: accessibility, tourism, self-identity, politics, surrounding community and the cultural values, regional and seasonal conditions, and historical wars.
Criteria

Accessibility
The site should address ADA (Americans with Disabilities Act) accessibility to allow many prior-service and disabled veterans to experience the memorial.

Tourism and Surrounding Community
Another criteria includes accessibility to neighboring towns and circulation patterns. By understanding traffic and the movement of people, I will be able to account for who I can influence to visit my site.

Self-Identity
Self-identity and self-image will play a crucial role in my memorial, because I want people to leave asking themselves “to whom do they belong.” The site will encourage an individual experience that is key to one’s journey and self-image.

Politics
Politics will be a criteria to address when designing my memorial. Politics exist whether I decide to incorporate them and let it rule the direction of my design, or dismiss them completely. Creating a site that is not fueled by political ideals is important to keeping respect to multi-cultures.
Cultural Values
Cultural values may not be incorporated on my site specifically, but understanding them and how they relate to the surrounding community will help to respect and gain support from a diverse community and group of tourists.

Views
Bear Butte is recognized as a sacred place for Native American tribes and Ft. Meade as a historic site for U.S. Military history. Connecting these two through visual ties has the potential to enhance my theme of ‘unity” through design principles.

Location
Creating a list of guidelines for the memorials location should guide me to choose a site-specific location that respects surrounding community and does not encroach upon sacred or historic land.

Tragic Events/Death/Injury in the Region
In order to reach a larger audience and user, looking into ongoing issues of death and injury will create a more diverse audience at my memorial site. Specifically, looking at the Sturgis Rally and the deaths/injuries that occur annually.
Literature Review

In 2011, the National Parks Service conducted a geologic resources inventory report on the Little Bighorn Battlefield National Monument. The battlefield monument is located in southeastern Montana overlooking Little Bighorn River. At this location in 1876, the Battle of Little Bighorn occurred, involving a fight between the U.S. Army and various groups of Northern Plains Indians. According to the National Parks Service, the monument memorializes “a major victory of the Northern Plains Indians to preserve their ancestral way of life, and protects the site where Lieutenant Colonel George A. Custer and all the men under his immediate command met death” (Kellerlyn, 2011). In total 270 U.S. Soldiers were killed and 75 Sioux and Cheyenne warriors died in battle. This memorial addresses both native and non native cultures, which relates to my site with Ft. Meade and Bear Butte being in close proximity to the memorial I am designing. I can begin to understand different viewpoints on their cultural differences and arguments which proves to me that there are still ongoing tensions between the two cultures.

Design Intent and Design Outcome
The primary purpose of Little Bighorn Battlefield National Monument is to preserve and protect the historic and natural resources pertaining to the battle itself and to provide its visitors with a better understanding of the events that led up to the battle, the battle and the resulting effects of the battle (Kellerlyn, 2011). Clearly the National Parks Service had a theme and definite idea of what they wished the park to represent. However, the article does not discuss the architect who won the design contest. John R. Collins was a Philidelphia designer who was chosen over 563 entries submitted.
John Collins vision of the memorial was “peace through unity.” He aimed to link the two different cultures (U.S. Army Soldiers and Northern Plains Indians). He even took a spiritual approach to his design stating, “welcoming the dead, so that there can be an exchange of spirits. Once you are dead, whether an Indian or a white man, you have a better understanding of the infinite from where you came. All the differences of this world are not important.” As we can see it is easy at times for the overall idea for memorials to be altered through the designers own inspiration and ideas.

political | controversial design

With a separation between the Park’s purpose and the design outcome we begin to see controversy and critics to the design. The New York times published an article discussing such criticism in regards to the memorial. There are two different arguments to the memorial site.

The first argument is against honoring the Natives as heros and disregarding the lives lost on the U.S. Army side. “If you want to emphasize the Indian victory, please don’t do it at a mass grave of 200 U.S. soldiers” stated Wayne M. Sarf, a New Jersey history professor. This argument helps me to understand the importance of not building on sacred or historically important land. If my design can avoid this, I expect less chance of seeing criticism and avoid chances of offending cultures surrounding my memorial (Brooke 1997). Critics also accuse the Parks former superintendent, Gerard Baker, of “Indianizing” the battlefield, because he is Mandan-Hidatsa Indian.

The second argument is for those who do not agree that the memorial has made it a polarized park geared towards memorializing the Native Americans. One argument from Professor Patricia Nelson Limerick of the University of Colorado discussed the survivors or the battle. “When I was a student 20 years ago, people would say that the only
survivor of the battle was Comanche, when he died, his body was stuffed and put on display at the University of Kansas. But there were about 2,000 Indian survivors of the battle”. Her argument suggests that the memorial could have acted as a place for the descendants of those survivors to go and mourn. It is only a coincidence that the horse Comance was nursed back to health after battle and remained on Ft. Meade Military Post until being transferred to Kansas.

The arguments show how easily misinterpretation can occur. When designing, it is crucial I take into account all surrounding cultures and ensure the site remains unifying and not one sided. I cannot glorify war or design to meet the needs and wishes of one culture in particular.

Case Studies

Kent State Design Competition

The 1960s and 1970s was a time of reoccurring political battles within the American governmental system and the American people. During the days following President Richard Nixon’s announcement on radio and television, in which he discussed his stand on American involvement in Vietnam and the Cambodian incursion, protests began sporadically appearing, one of which was on the campus of Kent State University on Monday, May 4, 1970 (Sorvig, 1990).
sporadically appearing, one of which was on the campus of Kent State University on Monday, May 4, 1970 (Sorvig, 1990). On this day, a political assembly and protest had begun at “Victory Bell,” located on Kent State University. Those in attendance included both students and non-students alike. Soon the demonstration turned violent and the Ohio National Guard took action in order to ease tension and react to the campus wide demonstrations. After days of protests filled with tear gas and violence, May 4 had finally ended with the shooting deaths of four students and wounding of nine others by the National Guard Soldiers.

This attack and political battle between two different groups gained attention nation wide. The song “Ohio” by was composed by musical artist Neil Young, in order to express his reaction to the incident. Unfortunately, with the media’s lack of involvement over time, full coverage on both sides of the argument was never quite acknowledged. Over 14 years later, Kent State’s Board of Trustees established the Kent State University’s May 4th Memorial Committee. This committee’s purpose was to announce a competition in which they would select a memorial that aimed to re-examine and bring meaning to the University and to the nation. A competition was now open to all American Designers, architects, landscape architects, artists and sculptors. This memorial relates to my design because it was an incident between two groups within the United States. It involved a great deal of politics, which led to uprising and eventually deaths. It demonstrates an incident that we can inquire about, that we can learn from, and most important that we can reflect upon through the use of memorial design. The goal was to create a space for those who experienced the events in person, and for those who agreed with the same demonstration reasons as those who died for the same reasons they believed strongly about. Campus wide, students were affected by this accident, and for Kent State the only solution was a memorial. A memorial would allow students to grieve in their own individual way, but together on a specific and historically important site, the Kent State Campus and the location the 4 deaths occurred.
n total, 689 designs were submitted, but first prize bragging rights, and a $20,000 check was awarded to Bruno Ast. Bruno created a symbolic landscape that suggested containment and escape for those who visited the site (Dalton 1988). What I found so intriguing was how details of his design had a much larger meaning. For example: the sheared wall piece was an attempt to suggest wider impacts of the events on the social, physical and psychological fabric of our society (Dalton 1988).

While observing Bruno’s renderings and design reflection, I noticed him asking himself questions that showed his struggle with defining the purpose of the memorial competition. He states, “Was it to be a memorial to individuals, the community, the institution, or to history?” Like Dalton, I have time and time again asked myself throughout this thesis process, “what or whom do I want to memorialize?” With this thesis I am able to set my own Design Program, which in turn makes me question my own personal and political beliefs. As for Bruno, he sought to answer his beliefs through the process of designing for a group with a set reasoning and behind the memorial.
Another design proposed, which did not make it as a finalist was the design done by Kim Sorvig. As he designed for the competition, he found himself so emotionally impacted he began to document every step of his design process in a book titled “To Heal Kent State: a memorial meditation”. Throughout his work, I begin to understand the connection between the designer and the project. Sorvig as a designer found himself dealing with a wide range of emotion and confusion regarding which events and opinions the public wanted to commemorate (Sorvig, 1990). By writing this book, Sorvig is example for self-identity. As the designer, he needed
to write a book exploring his journey in hopes of identifying his own morals, values, opinions and standpoints on the topic. A lot of time, energy and emotions went into designing for Kent State, but unfortunately for Bruno and Kim neither of their proposals were built due to the lack of raising funds.

Yet another reason this case study relates to my criteria is through implementation costs. Finding funds, whether it be government or private, is always a concern for the designer and for those stakeholders involved in the project. The estimated cost for Bruno’s memorial design was around $1.3 million dollars back in the 1980s. According to an article written in *Landscape Architecture Magazine in June 2012*, the following memorials come with various price tags (Jost, 2012).

**Costs of Memorials**

<table>
<thead>
<tr>
<th>Memorial</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Martin Luther King Jr. Memorial (2011)</td>
<td>$120 million</td>
</tr>
<tr>
<td>National World War II Memorial (2004)</td>
<td>$182 million</td>
</tr>
<tr>
<td>Korean War Veterans memorial (1995)</td>
<td>$16.5 million</td>
</tr>
<tr>
<td>Franklin Delano Roosevelt National Memorial (1997)</td>
<td>$52 million</td>
</tr>
<tr>
<td>Vietnam Veterans Memorial (1982)</td>
<td>$8.4 million</td>
</tr>
<tr>
<td>Thomas Jefferson Memorial (1943)</td>
<td>$3 million</td>
</tr>
<tr>
<td>Lincoln Memorial (1922)</td>
<td>$2,957,000</td>
</tr>
<tr>
<td>Washington Monument (1884)</td>
<td>$1,187,710</td>
</tr>
</tbody>
</table>

Cost inflation must be taken into account. For example, The Washington Monument’s approximate cost in 2012 dollars would have made it a $28.4 million project rather than a $1.2 million project (Jost, 2012). That projection is using a consumer price index inflation calculator with information from the Bureau of Labor Statistics. This is the perfect example of politics intruding on the designers vision. Could it be that the memorial was not built because it was too controversial for people to support? Would it have been a better success if it were designed on land that does not belong to Kent State University? Or would it have been successful if it addressed Ohio National Guard on a plaque, thanking them for their service? Although I cannot answer any of those questions, they bring about the point of political correctness in monumentality. A designer who took a more abstract approach to a political battle and was criticized for doing so, was Mya Lin the designer of Vietnam Veterans Memorial.
Vietnam Veterans Memorial

Maya Lin, or anonymous design competitor #1026, faced highly political debates when her design was selected as the winning design for the Vietnam War Memorial. The competition for this monument began in October 1980, and with a total of 1,421 design entries the jury selected Lin on May 1, 1981. Lin, who was a student at Yale at the time, was unanimously selected for her design because it best met the spirit and formal requirements of the competition. Lin is pictured on the next page, holding up her model she constructed of the Vietnam Veterans Memorial.

Her design was a black granite wall that reflects the ground’s surface beneath it. Lin created a mirroring effect through reflection of the two walls. Each wall had a specific direction it was facing; one to the Lincoln Memorial and the other to the Washington Memorial. In doing this, Lin successfully linked two points and created a unity between past and present (Lin, 2000). The wall has 58,272 names of military personnel who were injured and later died during the Vietnam War. These names are arranged chronologically according to the date of casualty. It was important to Lin that those service members who died together would be forever linked together by correct placement.
Lin’s memorial is an example of in a group war memorials that took an abstract approach to designing. In doing so, many Veterans strongly criticized the design/build process. Lin discusses the ideas of ethnicity in her book, *Boundaries*. She recalls, “I remember at the very first press conference a reporter asking me if I did not find it ironic that the memorial was for the Vietnam War and that I was of Asian descent” (Lin, 2000). Lin responded to the political address saying her race was completely irrelevant. It had never occurred to her that race was an issue in her design work.

As I had mentioned before about designers having and creating their own viewpoint through design, I find that it would be hard to create a space where the designer has no connection to a space. Would these Veterans would have preferred someone who had fought rather than someone of Asian ethnicity? Or would they have preferred someone who had no direct connection with the Vietnam War? What they did was categorize the designer as a foreign citizen, who they believed would have a hard time connecting to the design topic and having sympathy for the loss of American lives. These questions and ideas made me realize that a designer must be able to reflect and have a response to a specific topic if they want to convey a message through their design. Without an opinion, one could not send a message since there would be no definite concept.
Maya Lin’s memorial relates to my thesis because I will be dealing with a very political topic, and as someone who belongs to both a non-native ethnicity and to the military, I will have to design and write as apolitically as possible if I want my project to be supported by all ethnicities, races, ages, sexes and religions. There are many things to draw from these case studies. Not only will self-identity experiences be associated with the users, but the designers will be as well. With both case studies I found each architect dealt with issues of self-identity during the process of designing memorials. They questioned their own values, ideals, beliefs and themselves at least once during the design process. Knowing this will help me as I develop my concepts and programs for the Memorial.
Research Approach

My research approach to this point has been mostly logical and theoretical assumptions. I took emotions that I had felt during my Pearl Harbor visit and began building off of those ideas that began to surface in my head. Then I began getting quantitative and qualitative information from sources that backed up my ideas. Regarding my future research, I look towards continuing to examine the sociological and political arguments which will assist me in answering my research questions as well as all me to address how our nation and the cultures living under one nation memorialize war and trauma.

Methods

In order to create a memorial in the Black Hills Region, a strategic plan is needed to help me understand what the existing site is experiencing in regards to culture and war. First, research is needed about the people in the surrounding community. This includes quantitative numbers on how many people are affected by war and statistics that prove war in one way or another impacts all cultures and people. This research also includes qualitative information on the psychosocial problems people experience from war, or from experiencing trauma in general. It is essential the research I find begins to explain current problems and issues people are living with and how self-identity concerns relate back to culture. Through finding research regarding traumatic events the region faces, I can begin establishing who are potential site users. By the end of my thesis, all of my research will ideally guide in developing a definite understanding and strong program for my memorial.
Site Introduction

Creating a list of guidelines for the memorial location must be done in order to select a site-specific location for my design. The first guideline establishes that the memorial must be placed within the United States. This would create easy accessibility for myself as the designer and also for the client, which is discussed later in client/users as primarily US Citizens. The second guideline was to select a site with rich cultural and historical context. It would benefit the overall design to select a location with over fifty years of history. A site with history has the opportunity to teach visitors the importance of preserving and extending the surrounding cultural and historical heritages.

Using these guidelines, I choose to place the memorial on a site outside Sturgis, South Dakota. The memorial ideally creates an alignment between Ft. Meade, a historic military post; and Bear Butte Mountain, a sacred site to the American Tribes. Like the Pearl Harbor Memorial, the site will bring together two different cultures that still hold anger regarding the war that occurred between America’s Army and the Plains Indians in the late 1800s.
Northern Hills Historic Trail

“A Trail Linking Scenic, Natural, Historic and Cultural Areas Across 13.6 Miles of Northern Black Hills Landscape”

Johannah Wiege


2.3 Miles of trail
- Crosses Ft. Meade Cemetery
- Most heavily wooded section of trail.
- Steepest slopes will be found here.
- Max of 20% slope of natural trail.
- Shaded heavily by Black Hills Spruce and ponderosa pine.

Signage will be important along the Northern Hills Historic Trial. Since the trail connects to so many surrounding trails heads, keeping a signage style along my portion of trail is critical to keeping people on the track rather than steering onto additional trail routes. The signage to the right is an example of incorporating different materials such as stone, wood and metal.

Site Context

Black Hills, South Dakota
As you can see the memorial is located to the West of Ft. Meade and in closer proximity to the Fort than it is to Bear Butte, creating a triangular connecting of lines.
User Description

those who have served in war

Personal accounts and memories are to be thought of as inviolable. Our thoughts and personalities are defined by what and how we remember, and when our memories are called into question, so too are our identities. People who have experienced war first hand will be a user. The memories they collected from war are still a constant battle. Some of these users may be injured, some may have lost close friends and some may just be adapting to being back in a civilian style environment after returning from deployment. Personal cases and account will vary from veteran to veteran.

From this website I received an image of Mia Lin as a young designer with her model of the Vietnam Veterans Memorial. This website discusses facts and questions about the memorial site and answers them. It includes who funds the project also.

those who have not served in war

With much discussion on veterans, we must also account for those who have not served in the military. Regardless of spending time overseas at war, trauma is not limited to war. People will always experience trauma in various ways, soldier or not, trauma leaves a significant impact on all who experience it. However, those experiences do not always result in psychological disorders. In other words, exposure to trauma is so catastrophic it affects almost everyone, regardless of one background or pre-morbid factors (Scurfield & Platoni, 2013). Many individuals will have experienced trauma and have their own personal account of it, but groups I expect to visit who have seen trauma, but not seen war, could include tourists and motorcyclists.
those with no affiliation war

One example is age. People of different ages will view the memorial and be impacted differently due to their age and ability to understand the world around them. For example a fifty-year-old US citizen who had never served a day in the military will experience the site differently than a twelve-year-old boy whose family members have not served either. Regardless of their military affiliations, they will still experience the site differently according to Doctor Grace Christ, Emerita Social Work faculty at Colombia University. She states, “there is now general agreement that children as young as three years of age do indeed grieve, and that their mourning is different from that of adults.” So if children at a young age can understand death, and the common principles that are associated with dying, they can be easily influenced at a young age while visiting a memorial. This proves that a design could influence feelings of all age groups, it is not limited necessarily to adults. It also explains why many memorials have interpretive centers, so they can impact and influence the thoughts regarding culture, war and genocide to a generation at a young age.

For those people that have absolutely no affiliation with the military, they are affected on a social level. As a society we see our own brothers and sisters (US Citizens) being sent to war and some never returning home alive or some returning home not well. We could also consider anti-war and human rights groups. These groups are welcome to experience the site, because in the end the design is meant to show unity, not to pick a heroic battle and memorialize that.
CHAPTER 3

Results | Inventory | Program
History Results

Bear Butte

General Sheridan originally established Fort Meade in 1878. It was Sheridan's orders that established a post in close proximity to Bear Butte. He claimed that the settlement of the Black Hills had created a new frontier that needed military protection. He immediately placed Colonel Samuel D. Sturgis as the first commander of the Seventh Cavalry on Fort Meade. At that same time Sturgis tasked his troops to conduct reconnaissance missions in all directions from the camp. The Seventh Cavalry’s job was to protect the Black hills and secure the roads from Bismarck and Fort Pierre from hostile attacks by Native Americans.

By 1879, there were four companies of infantry and six troops of Cavalry assigned to Ft. Meade. Their first tour was from 1907 to 1911, where they returned in 1925 and remained until 1942 to be an integral part of storming the beaches on D-Day in Normandy. What originally started as a Cavalry unit transitioned to a mechanized unit shortly before World War II (Lee, 1991). After the Battle of the Little Big Horn in 1876, the 7th Cavalry re-formed. Their commander was the founder of the nearby town of Sturgis. It was also at Fort Meade where the Calvary horse Commanche retired with military honors. This horse was said to be the only living U.S. Soldier on the battlefield. It was also at Ft. Meade where the “Star Spangled banner” was announced as the official music for the militaries retreat ceremonies.

Ft. Meade was one of the last South Dakotan frontier posts. It was open as an active military institution for sixty-six years until the army closed the post and turned it over to the Veteran Affairs in 1944. The land is now jurisdiction of the Bureau of Land Management as of 1956. However, Fort Meade still serves as a training site for the South Dakota National Guardsmen and for Army National Guard Officer Candidate School (OCS).
PHOTO FROM: Grabil, Fort Meade, Dakota, Bear Butte, 3 miles distant
Fort Meade National Cemetery is located two miles east of the Fort Meade. The Quartermaster Corps established the 2-acre cemetery on Sept. 24, 1878, and the first interment was made on the same day. The cemetery closed 70 years later after only 188 interments. To this day the cemetery is not taking an additional interment (“Fort Meade National,” 2013). The cemetery contains a mixture of both government-furnished headstones and headstones placed by family and friends. This created a distinctive graveyard with varying headstones, some of which I inventoried included ornamental fencing, or wooden boards enclosing the tomb.

The Department of Veterans Affairs describes the diversity of headstones just as diverse as the men women and children buried at the cemetery. Enclosed by a wrought-iron fence, for example, is the gravesite of the late Otto Von Wargowski, a member of the Prussian nobility. Nearby are two graves partnered together and marked “Child of Civilian Refugee” and “Lucy, Child, Sioux Indian” (“Fort Meade National,” 2013).
Native American groups aim to keep butte a spiritual place. Certain activists also encourage Sturgis to create stricter zoning and licensing laws regarding building near the butte. One of the latest pushes from activists was the revoking and hauling new sales of liquor licenses within a five-mile buffer zone around Bear Butte. Bear Butte is cherished for its location in relation to the Black Hills and holds traditional and sacred values that are practiced to this day by certain Native American groups, such as the Lakota. One reason the Lakota consider the mountain sacred is the fact the Butte has all 7 elements surrounding it: land, air, water, rocks, animals, plants and fire. Each tribe assimilates a different story and meaning to the Butte, but overall each tribe uses the mountain as a place for religious rituals.

Bear Butte

CLEARING OF TREES TO VIEW BEAR BUTTE FROM FT. MEADE CEMETARY
Accessibility Results

Slopes and Contours
Fort Meade sits on the edge of the hill where the Black Hills fade into the prairie. The last major hill considered part of the Black Hills is where the Ft. Meade Cemetery now lays. From contour maps it is apparent the design will be tailoring to various slopes and grading challenges. Opportunity for interesting design is possible, but further calculations will need to be addressed next semester. The maps of my surrounding site are available via Geographic Information Systems (GIS).

Wind and Vegetation
The Black Hills has a unique combination of topography and climate unlike the rest of South and North Dakota. This creates a rich diversity of plants and animal habitats. Vegetation in relation to my site contains a mixture of ponderosa pine, lodgepole pine, Black Hills spruce and quacking aspen for trees. Trees offer little coverage where the memorial is to be placed. Towards the top of the contoured slopes are mixture of these trees, but at the start of the hill there is nothing but prairie grass mixtures. The amount of vegetation is going through a transition from Hills to Prairie, therefore density of forest is not as apparent on the site. The hill located on the site contains a mixture of native grasses. These various vegetative systems provide habitat for animals such as marmots, porcupines, coyotes, mountain lions and deer. Vegetation keeps the landscape from eroding at a fast pace. Natural processes are occurring at a stable rate and after visiting the site I saw no problems of sudden erosion or vegetative loss.
Weather Permitting Conditions

Using data from US weather stations for the period of time from 1980 to 2010, I found average temperatures and snowfall patterns for Sturgis, South Dakota. Through examining other local and state park hours and seasons of operation, websites show that the National Parks in the Black Hills to include Mt. Rushmore and Crazy Horse do in fact stay open year round. The daily hours of operation cut back by three hours, however. March 20-September 30 the memorial is open from 5:00 a.m. – 11:00 p.m. Starting on October 1 and going through to March 19, the park reverts to the hours of 5:00 a.m. – 8:00 p.m. (“Mount rushmore national,” 2013).
Self Identity Results

Professors Stanley Klein of University of California and Shaun Nichols of University of Arizona spent their graduate years researching memory and the sense of personal identity. In a research paper published by the two professors, they explore how sense of identity provides evidence of personal identity. In their publication they propose the idea that “the sense of identity derives from two components, one delivering the content of the memory and the other generating the sense of mineness.”

In relation to meaning of mineness, I focused on the work of the German philosopher Martin Heidegger. As a 20th century philosopher he focused a majority of his work on phenomenological explorations, or in order to more easily understand a complex term, it is research discussing the “question of being”. This type of study describes human consciousness and self-awareness as it pertains to existence. In Heideggers work Mineness and Memory, he writes that “mineness is a primitive form of self-referentiality”. All of this research shows that identity has been subject of widespread theoretical exploration for centuries. However, in present day behavioral development, experts are discovering the link between identity and adaptive psychological functioning. Adaptive functioning measures include: self esteem, purpose in life, internal locus of control and ego strength; but also includes the maladaptive functioning side to include: depression, anxiety, impulsivity and tolerance for deviance (Schwartz, Zamboanga, Weisskirch & Rodriguez, 2009).
Western societies, such as Sturgis and the surrounding area, experience the task of identity development. Identity exploration is when an individual sorts through various identity elements in an attempt to identify their own goals, values and beliefs. Some users may be battling these issues which include: veterans returning from war, injured veterans, active service members stationed at Ft. Meade, family members of those killed in war, nearby high school students experiencing self-identity as they transition into adulthood, and motorcyclists drawn to the region for the Sturgis Rally.

How is self-identity important in relation to minority groups?
Individuals from ethnic and cultural minority groups often face the task of defining who they are at the ethnic-group level as well as at the individual level (Schwartz, Montgomery). As such, they often must develop a personal identity, as well as a sense of ethnic identity, within a multicultural society (Schwartz, Zamboanga, Weisskirch & Rodriguez, 2009).

How is self-identity important to returning veterans?
Katherine Platoni, is a colonel in the Medical Service Corps for the U.S. Army Reserve. Alongside Vietnam veteran, Raymond Scurfield, the two took their expertise from war and education and began researching post war psychosocial stresses of veterans and those closely affected by returning soldiers. Platoni believes that certain issues returning veterans are fighting include: self-identity, alienation, disillusionment with the U.S. government and its leaders, and damage to religious and spiritual beliefs, or “moral injury” (Scurfield & Platoni, 2013). We can logically conclude that those returning from war are seeking answers or closure to their past, which will help ease the spiritual or moral pain they have developed post-war.
Politics Results

Politics will be one of the more difficult criteria to address when designing my memorial. Politics exist whether I decide to incorporate them and let it rule the direction of my design or dismiss them completely. A New York Times article discussed the hard feelings of present day memorials that “commemorate and triumph” a battle that took place merely 200 years ago (Tagliabue, 2013).

The time Gerard Baker (Mandan-Hidatsa Indian) spent as Superintendant of the Little Bighorn Battlefield Monument was a learning curve as he dealt with some of the worst critics’ possible. He actively promoted the memorial by filling tour guide positions with over half of those guides being Native American. He increased Indian attendance from about 10% by holding more Indian ceremonies there (“Mount rushmore national,” 2013). As a result of his actions, he has been criticized as “Indianizing” the battlefield. Animosities have gone so far during Mr. Baker’s tenure, that he has received death threats. Mr. Bakers response to these attacks said, “There are some people who are very opposed to what I am doing. They lost their playground” (“Mount rushmore national,” 2013).
Location Results

Creating a list of guidelines for the memorial location must be done in order to select a site-specific location for my design. The first guideline establishes that the memorial must be placed within the United States. This would create easy accessibility for myself as the designer and also for the client. The second guideline was to select a site with rich cultural and historical context. It would benefit the overall design to select a location with over fifty years of history. A site with history has the opportunity to teach visitors the importance of preserving and extending the surrounding cultural and historical heritages.

Using these guidelines, I choose to place the memorial on a site outside Sturgis, South Dakota. The memorial ideally creates an alignment between Ft. Meade, a historic military post; and Bear Butte Mountain, a sacred site to the American Tribes. Like the Pearl Harbor Memorial, the site will bring together two different cultures that still hold anger regarding the war that occurred between America's Army and the Plains Indians in the late 1800s.
Region Results

Prohibition in South Dakota had been repealed in 1897. It was at this time that Sturgis saloonkeepers saw an increase in economic business sales. Soldiers were now spending money at these off-post establishments that were able to serve alcohol. In 1936, Clarence “Pappy” Hoel purchased an Indian Motorcycle Franchise in Sturgis, SD. This same time the first motorcycle Club was formed called the Jackpine Gypsies.

In 1975 the Rally evolved to its present 7-day event and by 1979 the City of Sturgis began licensing temporary vendors to sell alcohol, clothing and various items for business revenues. In 2000, the rally saw its largest attendance numbers, which exceeded 600,000 people (City of Sturgis Rally and Events Department, 2013). Now with nearly half a million bikers that flock from their hometowns and travel to Sturgis annually for the biker camaraderie, we must not forget that some of them do not have the privilege of returning home. Fatal wrecks occur as a result of alcohol-fueled bar scenes, concerts, and scenic drives, which all attribute to serious injury and death. Rapid City Journal did a study of Sturgis-related motorcycle accidents on August 04, 2013, in which they found patterns that correlated after examining the incidents that occurred between 1994 and 2012.

The infograph below shows some of the statistics compiled from state accident reports. One of the most common elements was the lack of proper protective equipment. Of the 100 accident reports that involved helmet data, 77 of those riders who died were not wearing helmets (O’Sullivan, 2013).

Age is a stereotype when talking about rallygoers (people who take annual trips to motorcycle rallies) but it plays a great importance when understanding causes of death at the Sturgis Rally. Rick Kiley, the director of South Dakota’s motorcycle safety program said, “middle-aged or older biker may be a contributing factor to the high fatality rates” (O’Sullivan, 2013). With the average death age at 50, vision and reaction times at this age become worse.
And the last problem that is increasing motorcycle deaths is the pressure of alcohol as a culturally acceptable pasttime during the rally. The rally is a time for vendors to make profits on the sales of alcohol, food, and apparel. Like noted in Sturgis History, the city’s rich history revolves around prohibition and sales of alcohol prior to the 19th Century. This trend has remained in centuries since. According to Doctors Stephen Sun, David Kahn, and Kenneth Swan, driving two-wheeled vehicles reflects the need for greater coordination and balance than those skills needed to drive a four-wheeled passenger vehicle. In their article published by the New Jersey Medical School, they argue that lowering the legal blood alcohol level for motorcyclists is an essential task our society needs to address. Their recommendations are stricter laws on drinking and driving while operating a motorcycle (Sun, 1998).
In order to see how people travel and utilize the road ways around my site, I looked into traffic count locations, specifically during the Rally. The South Dakota Department of Transportation created twenty-four control points that would count traffic. The map shows all of Sturgis to include traffic coming from Interstate 90 into Sturgis. This control point had an average of 25,972 vehicles cross it on a Daily average. The sites with the next highest numbers were points 19 and 20. These two points are directly north of my memorial site location. Count point 19 averaged 15,901 vehicles per day and count point 20 averaged 15,788 vehicles.

Control points 21 and 22 are located along South Dakota Highway 79. This highway is the only means of access to Bear Butte if coming from the South. Traffic counts here were notably lower. Point 21 only averaged 5,775 vehicles per day and point 22 averaged 5,503. These numbers were not the lowest traffic counts on roads that act as city entrance points. Other city access roads only brought in around 2,000-3,000 vehicles per day.
Panoramic Narrative

WEST-NORTHWEST views overlook cemetery and ft. meade

NORTH-NORTHEAST

EAST-SOUTHEAST views overlook cemetery and ft. meade
CHAPTER 4

Discussion
History Discussion

Reviewing the history of Fort Meade and its relation to Bear Butte are important for me in my design. Since I am unifying the various locations, I need to understand the historic importance of the three locations. Considering Bear Butte as a religious site for various native groups means I cannot disturb the land. However, I can use it to mold my design into a work of art, opening at point to allow for the breathtaking views of the mountain. In terms of the 5-mile buffer, I feel as if that only applied to the owners of properties that are surrounding the Butte for profitable reasons such as, bars and outdoor performance stages. The battle between religious rights and property rights is only aggravated more by economic development in the area. My design can explore ways of respecting Bear Butte, while still being accepted as a positive landscape being built in a closer than 5-mile buffer of the hill.

Accessibility Discussion

The slopes I have chosen to work with on the site will make for interesting ways to shape the landscape, but it also poses a few challenges. Accessibility will be a challenge in keeping up to code with ADA regulations on a slope like I have chosen. Through research, I discovered the importance of my project to meet these standards. With possible users being wounded veterans, wounded motorcyclists or veterans of old age, they could utilize walkers, wheelchairs or crutches on this site. Erosion will be a factor when re-grading slopes and removing plant materials in order to do such design-build work. Therefore, creating a plant palette and integrating the new planting plan as soon as possible is critical. Site details will need to be addressed at an early stage in order to understand what is physically capable of being built on the site and what will result in major land erosion or unsettling of earth. If the ground begins erosion, the sites infrastructure is at risk and that leads to not meeting the ADA standards.
After establishing the slope and grading issues, I can now see what possibilities and challenges I can look forward to. One of these opportunities could be designing grade separating crossings. Cutting into the land in order to allow those with mobility impairments to negotiate my site more freely is imperative. Two ways of doing this could potentially be overpasses and underpasses. Creating either bridges, elevated walkways or even tunnels below-grade are possible design features to further develop in the next phase.

One technical issue regarding accessibility is maintenance. Potential problems that would limit good circulation and accessibility include:

Bad sidewalk surfaces, i.e., uneven or broken concrete could result in limited wheelchair access
Bad sidewalk maintenance, i.e., overhanging bushes or trees or unshoveled snow on sidewalks
Researching weather conditions was useful for understanding the climate and what I should account for such as: shelters, shade protection, and the benefits of wind proof materials vs. easily torn materials. This will be determined after I establish the forms and structures that will make up my memorial design and if they are suitable for providing shelter to visitors throughout various climatic conditions.

Examining the corresponding memorials near-by taught me that despite cold conditions in certain months, the State Parks continue to offer their facilities to the public as a way of ensuring they reach their messages to the public and therefore their educational opportunities never go unseen. During later design phases I will establish whether or not I want to integrate these same operating hours into my own memorial site. This conclusion will be based off of the physical layout of my space and the maintenance costs it may take to upkeep and staff the memorial to continue allowing accessibility throughout the winter months.

**Self-Identity Discussion**

Self-identity and self-image are going to play a crucial role in this memorial as it further develops. Like stated in my criteria, I want people to leave asking themselves “to whom do they belong.” Do we automatically jump to ethnic and cultural responses when asked, “what are you” or “where are you from?” Not only will cultural identity be addressed in the design, but also how people consider themselves regarding their age, job, education, and social background. Those visiting the site will not all be visiting to seek answers to the ongoing native and non-native cultural issues regarding war in the Black Hills Region. The reasons for visiting the memorial will be as diverse as the people who come to visit it.
By documenting and interviewing a group of people in the early Spring Semester, I hope to seek solutions to our cultural identity problems. I will interview the same series of questions to a native, non-native, male, female, soldier, and citizen. By the end of my thesis, I want to have a better understanding of how United States citizens perceive different cultures and how memorials can be either a hindrance or useful aid to helping cultures understand one another and move past cultural differences.

For those returning veterans, I need to take into account a design that creates a place for them to reflect. We learned from Klein and Nicholas, identity is linked to two things:

1.  Memory

When designing a memorial I need to take into account the veterans who are re-discovering their identity post-war. Creating a place where they can reflect on their own memories and reference how they individually relate to the war memorial could help them cope through problems of self-identity, alienation, disillusionment and moral injury.

**Politics Discussion**

The way my design will avoid political affiliation is by honoring the dead without necessarily honoring the cause of death. Not honoring the cause of death in the memorial can be done by avoiding paying homage to battles or victorious triumphs. Through designing, this can be done by avoiding statues, plaques, weapons, or quotes that depict or visualize war in a positive manner. In case studies I was able to see how politics influenced both Sorvig and Lin as they attempted to design and send a message as a designer to the public. People are always going to disagree with your standpoint on some issues, but by keeping political jargon out of my thesis project I can honor all standpoints on war without offending one culture or another.
Location Discussion

I spent the summer of 2013 traveling to various states for military training. One of those training events took me to Hawaii, where I was able to spend a day touring the Pearl Harbor Memorial. Throughout my tour I was amazed at how the Japanese tourists were also experiencing such powerful feelings and thoughts. How could they be so touched by a war that placed them as our enemy? Yet still show compassion for the thousands of Americans that lay beneath them?

By the end of the day I began questioning my own values, morals, my opinions on war and even nationalism vs. patriotism ideals. I was amazed at the harmonious interactions between two cultures that could easily still foster anger towards one another. This coexistence between these different cultures, at one historically important site, made me realize that with proper design principles the design could bring harmony back to the Great Plains. Using design I can influence feelings about the historic past of the US Army and the American Indians of the Great Plains. Using this location that is rich in historical importance and beliefs is the key to future developing my site. Site selection is also an important factor in helping me join different cultures harmoniously, since this location still has tension from its past, which is an important criteria for my design. After choosing the site just East of Fort Meade, I felt as if the location was ideal for not only visitor numbers but also for unifying the cultures.
Tragic events | Deaths | Injury Discussion

Rally Deaths Discussion

Riders without helmets made up 77% of those riders who died in motorcycle crashes. Reasons for not wearing helmets can be attributed to two main things. For one, the cultural acceptance and fashion trends are slowly leaning towards safer alternatives. Secondly, television shows like *Sons of Anarchy* and *Orange County Choppers* present clips of their cast wearing helmets while riding. This observation shows that television culture is slowly influencing a more acceptable outlook on wearing protective equipment while riding motorcycles. A change in traffic violations shows a decrease in the amount that are being issued since August 2000. Traffic Violations have gone down from 500 violations in 2000, to 165 violations in 2011, which proves that culturally bikers are beginning to understand the dangers of driving unprotected, and impaired.

However, a point must still be made that many of the rallygoers are men averaging the age of 50. This means there is a high possibility of these men being veterans either serving in World War II, Korean War, Vietnam War, Desert Shield/Desert Storm, or the operations in Iraq and Afghanistan. Understanding the connection between bikers and veterans is critical since both will be large users at my site.
Death from War Discussion

**World War II** (1941-1945)
U.S. servicemembers: 16,112,566
Native American servicemembers: 44,000
Deaths: 405,399 (291,557 in combat)
Wounded: 670,846
Estimated living veterans: 1,711,000

**Korean War** (1950-1953)
U.S. servicemembers: 5,720,000
Native American servicemembers: 10,000
Deaths: 54,246 (36,574 in combat)
Wounded: 103,284
Estimated living veterans: 2,275,000

**Vietnam War** (1964-1975)
U.S. servicemembers: 8,744,000
Native American servicemembers: 42,000 – 90% were volunteers
Deaths: 90,220 (58,220 in combat)
Wounded: 153,303
Estimated living veterans: 7,391,000
Desert Shield/Desert Storm (1990-1991)
U.S. servicemembers: 2,322,000 (694,550 deployed)
Deaths: 1,948 (383 in combat)
Wounded: 467

**Operation Iraqi Freedom (OIF)** (March 2003 to September 1, 2010)
U.S. servicemembers: Data still not published
Deaths: 66 (38 in theater)
Wounded: 295
American Indian/Alaska Native Deaths: 43

**Operation New Dawn (OND)** (September 2010 to as of Dec. 3, 2013)
U.S. servicemembers: Data still not published
Deaths: 4,423 (3,490 in combat)
Wounded: 31,941

**Operation Enduring Freedom (OEF)** (September 2010 to as of Dec. 3, 2013)
U.S. servicemembers: Data still not published
Deaths: 2,289 (1,797 in combat)
Wounded: 19,496
American Indian/Alaska Native: 27
Estimated living veterans: 2,244,583 (2009 estimate, may include veterans who served in Iraq and Afghanistan)

Results from these statistics show that overall the majority of military soldiers I would be designing for would be returning veterans who have been wounded. When it comes to memorial design for these users, I can take into account Doctor Platoni’s research regarding post war stresses. If my design can aim to help these men and women cope with certain psychosocial stresses they experienced in battle after getting wounded, the memorial can act as healing landscape as well as a landscape for these particular users to visit in order to pay tribute to those who were not able to come home and died overseas.
Site in Context Discussion

Roads Discussion
The road counts helped me in determining entrance points to my memorial site. When I begin designing and focusing on circulation of the site, I will consider placing the entrance at the same location traffic control points 19 and 20 were placed which is along South Dakota Highway 34. This way the design is potentially drawing in more people with larger exposure the entrance. I will also need to take into consideration signage and making the site visible and easy to access, but also understand signage can result in an obstruction of views looking towards Bear Butte.

Points 21 and 22 proved that this means there is a desire for bikers and tourists during the rally to visit Bear Butte. A culturally significant and sacred site is attracting people to it, therefore the success of bikers visiting my site is likely. I can assume that with increase of signage, a build memorial will attract people from Highway 34 to my site if I plan for proper and circulation from the Highway to my sites parking lot. Ensuring a safe and easy transition for visitors who will be exiting the highway to enter my site is important.

Tourism and Surrounding Community
Another criteria is accessibility to neighboring towns and circulation. By looking at state traffic studies on nearby roads, I will be able to account for the amount of traffic I can expect to bypass my site. Now that I have found quantitative measurements on the amount of people that will potentially visit my site, I will need to plan for these numbers. For example, my parking lots will need to cater to motorcycle parking and larger amounts of visitors at seasonal times. I could further investigate alternative parking spaces or multi use parking. Accepting that the memorial’s location to Sturgis Motorcycle Rally is in close proximity leads me to accept tourisms large role in who visits this site. Knowing the months or even dates that I could expect high amount of people will guide me in deciding whether to do an ephemeral memorial or not by next spring. I am looking at bringing in nearly three million tourists, like the numbers that that visit Mt. Rushmore and Crazy Horse annually (“Mount rushmore national,” 2013).
Views Discussion

Views play an important role in the memorial because I will be using views to tie together my theme of ‘unity.’ The memorial I create will have visual ties to both the Ford Meade post and Bear Butte Mountain. I chose these two points because they are within five miles of each other, and both hold very historic and cultural significance to both Native People and Non Native People. Ft Meade is a military post, that is still in commission. The post was established as a strategic standpoint and cavalry fort on August 31, 1878. At that time it was used to protect new settlements in the northern Black Hills. Nearby, and within clear sight from the post is Bear Butte. Bear Butte is recognized as a sacred place for Native American tribes.
CHAPTER 5

SITE INFORMATION
Through research, results and discussions I have started piecing together elements and criteria I find important enough to address in my memorial design. I have established the users I will gear my design towards, which does not create a defined limitation on who the users be. In general my user is everyone, because through my design I expect to find that the site will do more than just tailor a single group of people or individual. I did however begin to develop concepts for users limited to only certain mobilities.

Accessibility was a crucial topic that leads me to begin thinking of the forms and shapes I will utilize and begin sketching in the next phase. It also had me develop new criteria regarding a style of memorial I will explore next semester. Some design options include but are not limited to:

- Ephemeral vs. Monumental Design
- Literal versus Abstract Design
- Informative versus Passive Design
- Modern versus Contemporary Memorial
- Remembering versus Commemorating

Theses styles are common terms found in the landscape architecture field and are the base on which I will begin designing. In relation to material objects however, I will use the results from weather data to help pick lasting and aesthetic building materials. This is important since the history of the site goes back, I will be respecting the surrounding forms and materials located around my site.
Designing a war memorial can be almost a scary process, knowing you will find criticism in anything the designer does and no matter how apolitical the attempt may be, politics always finds a way to connect to memorial design. The fact I chose to place a war memorial at a location that is still fostering politics to the mixture only makes it more challenging. But having a solid foundation and viewpoint on the topic is what will make this a successful design. Research has shown me that I have a varied audience, yet they all seem to inter connect. For example the rally motorcyclists are connected to veterans groups, of which many of these veterans come from different ethnic groups, to include native American. The ties are there, yet the political side of these arguments on land use cannot see past the connections. I aim to prove through the physical design that the connection is strong and that culture or no culture, we are all facing a self-identity crisis and beginning to understand where we fit in, either in a cultural or societal sense. War affects everyone and the importance of memorial design today means people have a place to go to mourn and deal with personal sacrifice at their own leisure.
CHAPTER 6
Design Phase
Progression Moving Forward

As my design began progressing into the Spring Semester it took a completely different turn in terms of design and overall purpose of the design. Through different phases of concept work in the Spring Semester, I began finding it hard to make connections between the surrounding people and forms that would connect the people to my ideas and abstracts about memorials. My biggest question I could not solve was “what physical form will grab peoples attention and make my site a destination location within the Black Hills?” Building an interesting form that could integrate into the landscape was simple, connecting the feelings and memories of war through symbolism and plant material was also easy, however; justifying why people would choose this site over existing tourist sites across the region was not clear.

Through answering these questions, I began looking back and researching again the demographics of the region as in overall interests, activities, and themes across the Black Hills. One thing that stood out was the amount of trail systems connecting the region and the people across the region. Hundreds of miles of trails exist as both recreational and cultural connections to different locations and landmarks. The use of these trails has been at a constant increase since the early 1970s when some of the first trials were dedicated. I began connecting the population increase of the Black Hills with the increase of miles added in trails. There was a synchronized correlation between an increase in trails and population from 1970 to present day.
New Design

Gathering this research helped me to focus on a new overall site design. I decided to now focus on a trail system that would connect the historic and culturally significant locations together in one unifying looped trail system. This trail system design will be rich in cultural history being that it is adjacent to Bear Butte (a sacred site for several Northern Plains Tribes), and adjacent to Ft. Meade (one of the first military posts in the Black Hills). Protecting and sharing the cultural significance of the area is critical to future generations and to tourism of the region. I see the opportunity to create a space for visitors to enjoy the wildlife and history in a recreational setting.

1. Public Use: Connecting existing trails and historic spaces to allow opportunities for guests to experience recreation and education as means of promoting awareness of the areas resources.

2. Cultural Resources: Recognize the cultural significance and sacredness of the Bear Butte area to the plains tribes, while honoring the Ft. Meade Post and the connection it has to past and present military institutions.

3. Wildlife and Vegetative Management: Impose very little on the natural habitat in order to maintain habitat for migratory birds, fish and other wildlife.
Northern Hills Historic Trail

“A Trail Linking Scenic, Natural, Historic and Cultural Areas Across 13.6 Miles of Northern Black Hills Landscape”


2.3 Miles of trail
- Crosses Ft. Meade Cemetery
- Most heavily wooded section of trail.
- Steepest slopes will be found here.
- Max of 20% slope of natural trail.
- Shaded heavily by Black Hills Spruce and ponderosa pine.

View looking northeast towards Interpretive Center and Bear Butte

SOUTHWEST SECTION OF TRAIL

Signage will be important along the Northern Hills Historic Trail. Since the trail connects to so many surrounding trails heads, keeping a signage style along my portion of trail is critical to keeping people on the track rather than steering onto additional trail routes. The signage to the right is an example of incorporating different materials such as stone, wood and metal.

INTERPRETIVE CENTER

PARKING LOT SECTION

MASTER PLAN

View to Bear Butte
View to Ft. Meade Post
No view past Hilltop
View to Cemetery

TRAIL MAP

Public Use: Connecting existing trails and historic spaces to allow opportunities for guests to experience recreation and education as means of promoting awareness of the areas resources.

Cultural Resources: Recognize the cultural significance and sacredness of the Bear Butte area to the plains tribes, while honoring the Ft. Meade Post and the connection it has to past and present military institutions.

Wildlife and Vegetative Management: Impose very little on the natural habitat in order to maintain habitat for migratory birds, fish and other wildlife.

Master Plan of Trail
Trail Segments

The trail is made up of 3 different segments that make up the 13.6 miles of trail. Each trail is unique with vegetative characteristics and each has its own activity that makes for an overall diverse trail system.

**SOUTHWEST SECTION OF TRAIL**

2.3 Miles of trail
- Crosses Ft. Meade Cemetery
- Most heavily wooded section of trail
- Steepest slopes will be found here.
- Max of 20% slope of natural trail.
- Shaded heavily by Black Hills Spruce and ponderosa pine.

Signage will be important along the Northern Hills Historic Trail. Since the trail connects to so many surrounding trail heads, keeping a signage style along my portion of trail is critical to keeping people on the track rather than steering onto additional trail routes. The signage to the right is an example of incorporating different materials such as stone, wood and metal.

**SOUTHEAST SECTION OF TRAIL**

7.6 Miles of trail
- Meanders along Bear Butte Creek for over 5 miles of trail.
- Crosses over Hwy 79 twice, with an underground trail system.
- Connects to existing Bear Butte Summit Trail
- Vegetation consists of part shade and deciduous trees along creek bed.

The trail system will be incorporating mirror sculptures into the Southeast Trail Section. The mirrors are placed along the trail as a way of reflecting various images for visitors. The mirror will reflect an abstract view of surrounding landscapes to include Bear Butte, the sky, hills, trees, landmarks and even people. Mirrors were my way of incorporating peoples perspective of the land and molding how they view it along with how they view themselves in a landscape.
Bear Butte Lake encompasses 215 square acres and has a shoreline of 3.2 miles. Anglers can expect to catch Northern Pike, White Crappie, Yellow Bullheads, and Yellow Perch.

The Northwest Section of trail is unique with its water features. The wetland will have seasonal | occasional flooding which will create reflection ponds for the viewers. Below is a more in depth look at how the wetland system will function.

**CREATING A WETLAND SYSTEM**

Bear Butte Lake is rich and unique to the countries past. During the Great Depression, President Franklin Roosevelt set out to improve and rebuild America’s resources. His actions to restore our natural water resources are still visible today at the lakeshore. You can find a former bathhouse, picnic shelter, stone walls, and a dam structure along with an artesian well which were all constructed to encourage camping, swimming, boating and picnicking.

**GOAL: Create a Wet Meadow**

The past decade Bear Butte Lake has found itself with ample amounts of precipitation rain. Leaving the shorelines eroded and the annual depth higher than the average 7 feet. By creating an overflow area for the lake, I will be introducing a wet meadow at the edge of the lake. When water reaches a certain point over 7 feet, it will flow into the constructed meadow and serve as shallow reflection ponds for visitors. This reflective pond will help me understand my original concept of creating spaces for visitors to reflect and focus on internal self.

A reflective pond will allow for not only visual inclusion, but of surrounding scenery. The reflections will only be visible during overflow water levels. By adding new vegetation, it will serve as a recreational pleasing location, while also providing excellent habitat for birds.

<table>
<thead>
<tr>
<th>Wetland Plant List</th>
<th>Wetland Animals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spotted Joe-Pye-Weed</td>
<td>Willets Phalarope</td>
</tr>
<tr>
<td>Eupatoriadelphus maculatus</td>
<td>Willets Snipe</td>
</tr>
<tr>
<td>White Turtlehead</td>
<td>American Woodcock</td>
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<tr>
<td>Chelone glabra</td>
<td>Piping flower</td>
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<tr>
<td>Lake Sedge</td>
<td>Spotted Sandpiper</td>
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<tr>
<td>Corn Sedges</td>
<td>Black-necked Stilt</td>
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<td>Bluejoeing Grass</td>
<td>Killdeer</td>
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<td>Calamagrostis canadensis</td>
<td>Upland Sandpiper</td>
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<tr>
<td>Spotted Sandpiper</td>
<td>Marbled Godwit</td>
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<td>Long billed Curlew</td>
<td>Willet</td>
</tr>
<tr>
<td>American Avocet</td>
<td>Black-necked Stilt</td>
</tr>
</tbody>
</table>

**WETLAND DEPTH CHART**

![Wetland Depth Chart](image-url)
Interpretive Center

At the core of the trail system sits an Interpretive Center. This building serves as the central figure that connects the surrounding trails at a single location. It is designed to sit into the existing slope of the hill. Inspiration and symbolism that helped shaped the design include the looping system from the infinity symbol and the idea of salvia to connect healing and therapeutic values like those I researched in Fall Semester, to the site.

SITE SYMBOLISM:

The **infinity symbol** is also known to represent the cycle of existence of birth, death and rebirth.

The infinity symbol in Northern Native American culture is a representation of Hummingbirds (paired), also sometimes waterbirds, or quail. Together in a mated pair they symbolize a devotion, permanence and eternity. For better terms a representation of the life cycle. These are often modified in many, very simple forms. Using the infinity symbol for many of my concept work meant I was taking into account the idea of **history of the land**, present day appreciation of the landscape and future preservation and **education** for the upcoming generations.

**Salvia** - Salvia comes from the Latin root “salvare”, which means “to heal”. Although Salvia is not used in the medical field to treat sickness, Northern Native American populations use it for Smudging ceremonies, where they burn the herb in order to **drive out bad feelings, spirits, or negative influences**.
Master Plan of Center

The Center has a parking lot built into the existing contoured slopes. It also has a theater for viewing educational videos, for community usage and for events. The center offers an indoor salvia field for year long enjoyment and therapeutic healing attributes, as well as offering a gift shop, and food cafe.
Walkway through indoor Salvia gardens.
Hanging iris plants will be on structures which overhang the walkway.


Mock, F. (Director) (1994). Maya Lin: A strong clear vision [DVD].


In Text Citation


In Text Citation
(Academy of achievement, 2000)

The website goes on to interview Maya Lin on her childhood and her profession as an artist and architect.


In text citation (Borders, 2012)

This article discusses behaviors that returning combat veterans experience regarding traumatic brian injury and PTSD. It goes on to discuss the connection between risky behaviors and U.S. Veterans.


In Text Citation
(Brooke, 1997)

This article published in the New York Times discusses both sides to the controversial debate regarding the memorial at Little Bighorn battlefield. It discussed the designers intent when he submitted the design to the National Parks Service.


In Text Citation
(Brown, 1970)

Brown begins the book with a brief history of the discovery and settlements of Europeans in America. The book than discusses incidents that involved American encroachment on Native Americans, as well as discuses post 1860 expansion and Native American eradication.


In Text Citation
(Christ, 2000)

This article discusses the different stages of mourning children and adolescents go though in order to grieve. It discusses traits, habits, feelings they encounter and at what stages they observed certain habits.

In Text Citation
(City of Sturgis Rally and Events Department, 2013)

This website gave me information regarding the history of the Sturgis bike rally that I used.


In Text Citation
(Dalton, 1988)

This book explains the tragic event that took place on May 4, 1970 among students and Ohio National Guardsmen. It then reviews the process of creating a design committee for a memorial site on Kent State University, Ohio. The top three designs are reviewed along with the designers’ programs and thoughts on designing towards such a controversial topic.


In Text Citation
(Fischer, H., 2013)

In this source I found statistics that told me who the men and women of different (specifically native) cultures were and how many were dying or being injured.


In Text Citation
(Fischer, 2013)

I retrieved a photo of Maya Lin’s design after being built. The image shows the reflecting wall and how it points to a neighboring memorial.


In Text Citation
(Foa, Cahill, Boscarino, Hobfoll, Lahad, McNally & Solomon, 2005)

This article discusses aftereffects of terrorist attacks and how it affects both physical and mental health. One entire section covers chronic stress reactions following types of traumatic events such as war, and accidents.

In Text Citation (Grabil, Fort Meade, Dakota, Bear Butte, 3 miles distant)

This website offered a photograph from 1888 of Bear Butte and Fort Meade, two sites that are significant in my design.


In Text Citation (Heideggar, 2008)

This book discusses the central ideas of 20th Century thought and culture from the standpoint of Heidegger, a German Philosopher. The book published in 2008 was a translation to his philosophical works published in the Twentieth Century


In Text Citation (Jost, 2012)

This article discusses the different prices for War Memorials from 1884 to 2011 and their cost than and in today's 2012 cost.


In Text Citation (Kellerlyn, 2011)

Document published by the National Resources Stewardship and Science department in order to address natural resource topics of interest and make them available to the broad public audiences in the National Park Service and other departments.


In Text Citation (Lee, 1991)

Research on Ft. Meade and the surrounding Black Hills history, to include Bear Butte and the National Cemetery.
Maya Lin’s book discusses her approach to design, her projects from her first design to more recent architectural design. The beginning chapters are a memoir of her design process through the Vietnam War Memorial.

This article discusses indigenous participation in cultural tourism. The author describes how cultures can maintain their cultural identity and practices while still sustaining their communities economically.

This documentary focuses on the creation of the Vietnam War Memorial. The movie focuses on the controversy that arose based on Lin’s ethnic background. The documentary also describes other work she has done since her work on Vietnam Memorial.

Government website useful to finding all United States Park Systems and giving an overview, brief description of each park. Here I gathered information pertaining to Crazy Horse and Mt. Rushmore Memorials.

The article published after August 2013's rally discusses the rates of death that are attributed to the rally over the past decade with statistics regarding the death rates.

In Text Citation
(Schwartz, Zamboanga, Weisskirch & Rodriguez, 2009)

This article goes into depth on personal identity exploration and how it is often associated with psychosocial functioning such as anxiety and depression.


In Text Citation
(Scurfield & Platoni, 2013)

This is an edited and revised book from two military combat veterans regarding the impacts of war and its effect on U.S. military personnel, U.S. civilians and foreign citizens.


In Text Citation
(Sharp, Wade, 2010)

Quote taken from (Martenez 2012) as he quotes Wade and Sharp.


In Text Citation
(Sorvig, 1990)

Sorvig is a designer who submitted an entry for the May 4 Memorial competition. He was not an initial winner of the competition, but he wrote a book about his thoughts while designing for the competition.


In text citation (Sun, 1998)

This article argues why lowering the legal blood alcohol levels in motorcyclists is quintessential to the prevention of accidents.


In Text Citation
(Tagliabue, 2013)
This publication in the New York Times discusses Plans to build where the Waterloo battle was fought in present day Belgium. A visitor center is under construction at the farmstead Hougoumont, which has some people up in arms.

In Text Citation
(“Sturgis Rally Counts,” 2013)

A review of traffic counts during the 2004-2013 Sturgis Motorcycle Rallies. Discussed a list of 24 traffic control points and the average vehicles counted per day.

In Text Citation
(“Fort Meade National,” 2013)

This article discusses the Fort Meade National Cemetery its history and how it associates to design in terms of location and history.

In text citation (“American Indian and,” 2012)

This government publication has statistics that relate to different ethnic groups serving in the past and present wars.

In Text Citation
(“Designing sidewalks and,” 2013)

Publications discussing the standards for designing sites to be ADA Accessable.

In Text Citation
(Vietnam veterans memorial fund, 2013)

From this website I received an image of Mia Lin as a young designer with her model of the Vietnam Veterans Memorial. This website discusses facts and questions about the memorial site and answers them. It includes who funds the project also.

(Wiege)

Photographs I compiled during my inventory of the site in October 2013.