

BOX T LODGE

Designing A Premiere Colorado Hunting and Fishing Preserve

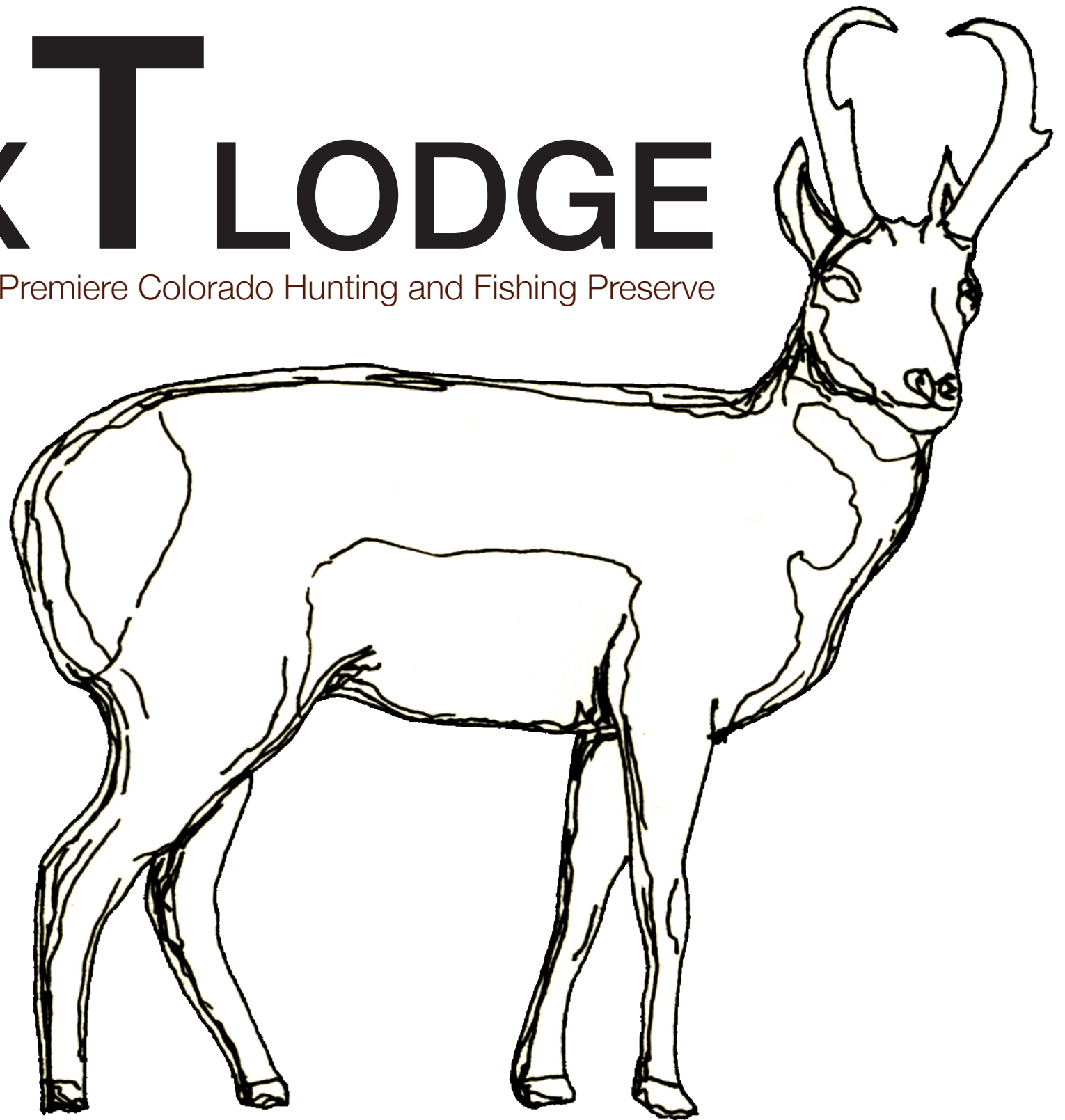


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Project

This project depicts my process of designing the “Box T Lodge” at The Chico Basin Ranch in Colorado. It will detail my process; from finding inspiration in my experience working there, through design development, to a final master plan.

This project will be limited to development of a final master plan. No construction drawings will be included.

This project aims to fulfill the requirements for me to graduate from the UC Davis Landscape Architecture program.

I would like to acknowledge everyone at The Chico for their support. You guys are great to me. Duke and Tullay, I can't wait to see this vision come to life.

This project is dedicated to my mother. Everything will be fine.



Table of Figures

Due to the large amounts of images utilized in this project, I will provide citation for only the images which are not mine. All illustrations, sketches, and renderings are my own creations. Any image within my project which is not mine, will have a small white circular marker at it's base.

1	Karen Myers
3	Dave Showalter - Bison Below Sangre De Cristo Range
6	Kerstein Reinisch - Untitled
7	Jack Buetell - Untitled
10	Karen Myers - Bison Gather 2012
19	Jack Buetell - Untitled
20	Jack Buetell - Untitled
21	Katherine Creswell - Untitled
22	Kerstein Reinisch - Untitled
23	Jack Buetell - Untitled
27	Duke Phillips - Untitled
30	Kerstein Reinisch - Untitled
32	Jack Buetell - Untitled
35	Jack Buetell - Untitled
36	Jack Buetell - Untitled
37	Kerstein Reinisch - Untitled
39	Kerstein Reinisch - Untitled

41	Patricia Arthur - Untitled
43	Jack Buetell - Untitled
44	Kerstein Reinisch - Untitled
46	Jack Buetell - Untitled
47	Kerstein Reinisch - Untitled
51	Kerstein Reinisch - Untitled
78	Duke Phillips - Untitled

Objective

My intent is to let my experiences within the last six months of working at The Chico Basin Ranch guide my design. By doing this, I hope to create a design which has the core experiential elements at its roots, one which embodies the essence, or “to ti esti” of The Chico as I have perceived it.

It is in the essence of our experiences from which we derive our understanding of human life. It is from what we see, hear, taste, smell, and feel which we construct our own realities. With this design, I aim to do this in a very literal sense; reflect on what I believe is the “to ti esti” of the Chico, and translate or “construct” it into a physical reality.

I will be pulling directly from my daily writings, pictures I have taken, sketches I have drawn, poetry I have created, and knowledge I have absorbed while being on the ranch. These being documented evidence of my time on the Chico.



My intent is to create a design with the holistic vision of the ranch in mind. To capture every aspect of my experience at the ranch, giving each aspect weight in developing my design, with the goal being to incorporate all aspects into one encompassing design which embodies the ranch as a whole.

Approach

I have chosen six categories to group my experiences into.

- *Natural*
- *Social / Cultural*
- *Physical / Built*
- *Educational*
- *Historical*
- *Spiritual*

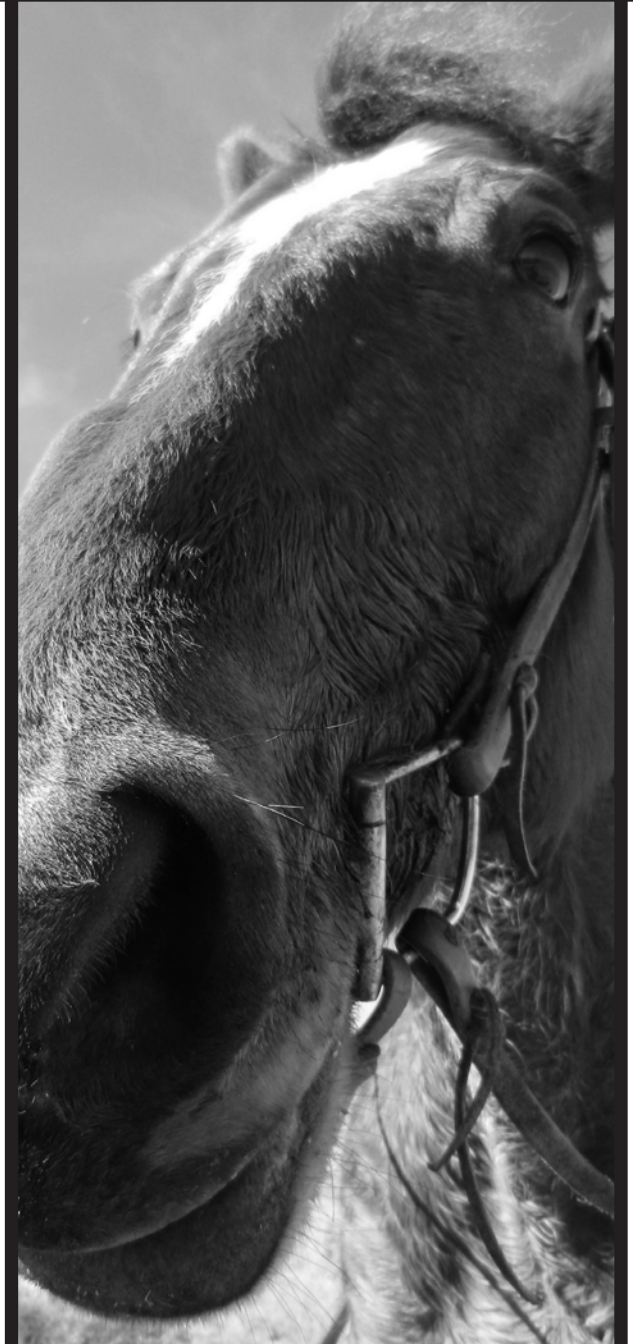
These titles will act as an organizational element for this project. They share commonalities when describing aspects of both the landscape and my experiences.

The organization of the document is as follows:

First, I will reflect on the most provoking experiences I have had here at the chico.

Second, I aim to derive important details, nuances, lessons, and concepts from my experiences

Third, I will translate these derivations into the physical form of my design



First

My Experience at The Chico



1

The first section is a chronicle of my most defining experiences I've had at The Chico.

Although, some may be more relevant to the design than others, I am using this section as a chance to record my first six months at the ranch. In the second section I aim to withdraw the experiences which might influence my design.

Experiences in the Natural world



My richest experiences
have come from The
Chico's natural setting.
So many little nuances
and beautiful details
are noticed when you
are working the land
every day. I feel deeply
privileged to work on
land as beautiful as
this. I often stop, look
around, and wonder,
how did I get so lucky?





I feel the brisk winter winds against my face while riding into the sunrise. I drink the water flowing through the land in seasonal rivers and streams. I eat the animals on our land, tasting the meat we have raised with my own tongue. I witness beautiful sunsets and sunrises. I witness birth, I witness death, and the pain and pleasure in between both. I feel the cracks and calluses on my hands from a hard days work in the field. I see the soil cracking, gasping for water. I get poked by cactus when riding by on horseback.



The natural world is what the Chico is founded upon. It is the sole reason we are able to thrive.

We rely on it.

We rely on rain

We rely on sun

We rely on microbes

We rely on soil

We rely on plants

We rely on animals

We rely on humans

We rely on the cycle of life

And because we rely on it,

We have to protect it.



The health of the land and its systems is critical to both our business and our lifestyle on the Chico Basin Ranch. Every single plant and animal on the ranch is precious to the ranch and our lives...We look at land as a whole to make sure all the natural processes are healthy and moving ahead, and then, and only then, identify species that need more attention than others and try to balance their needs with the rest.(2)



Feeling the tension in the room while sitting in on grazing management meetings, everyone wondering, will it rain? My stern realization of the power which precipitation has over cattle ranchers. The simple fact that water equals success, and drought means loss. This idea never hit home with me until I started working on the ranch. However simple the idea may be, the amount of precipitation never had an impact on my “success”.



While rounding up wild bison last fall, I experienced the true power of a large animal. In my written account of this round-up, my description of the experience was as follows:

When we get the go ahead from big duke, all three teams break off into their designated positions, beginning their march toward the bison.

We are in tight formation as we make our approach, 3 lines of 6 riders, appearing as cavalry do while marching into battle.

Then, slowly, the Bison lift their heads, with their thick manes and large horns facing at us, letting us know, we see you. Every rider is on point, perfectly positioned to make an advance, all is calm, its almost dead silent.

As the margin between my team of horses and the herd of Bison becomes thinner, it happens.

One takes off.

And I mean takes off.

Its on.

Team leaders start screaming, go go go!!!!

Your horse takes off into a full run.

Your job is to stay on your teammates ass at all times, covering up holes in the formation which bison could possibly slip through. You have no choice but to keep up.

Its your job.

Keep up.

At this point, words cannot describe the intense rush of adrenaline I'm feeling. Honestly.

I have done some crazy shit in my day, but nothing, and I mean nothing, has come close to this.

We're hauling ass, right next to this herd of wild animals. People are screaming at the very top of their lungs, trying to intimidate these massive creatures. They aren't scared. They understand that at any moment if they decide they want out, they can charge the line of horses, forcing their way free.

The crack of bull whips fills the air, sounding like guns firing in a battle of rouge vaqueros.

Dust fills my nostrils and mouth, I can hardly see through the cloud.

Bison are swerving, trying to make a break from the herd, but we jam them back into formation. It seems like were headed in the right direction.

Brutae is panting, but he has too much heart to quit. He continues to jump over 10 foot creek crossings, dodge remnant wire and metal, jump over chico brush, and kick it into gears I never knew he had.

The power of the bison herd running next to me is astonishing. The athleticism, strength, power, and rage of an animal fleeing for it's life. The sound of 1000 hoofs pounding the ground. The feeling of insignificance, and the idea that if at any point, the bison want to escape from our loose control, they absolutely can.



The second facet of this experience, was the power of my horse. When running at such a rate, it is imperative to have complete trust in the horse. Your life rides in it's footsteps. I had never been at the mercy of such a powerful being, the feeling is not one I am accustom to. But in this moment, I feel one with my horse, as if our legs are moving together, our brains are synchronized, and our thoughts coordinated. I have rarely felt so scared, powerless, and meager, yet I have rarely felt so deeply connected to nature.



Waking up every morning to a roosters crow, I step out onto the porch of the bunkhouse and witness the first glimmers of the day's light. The sun's daily rise has new meaning to me here. It starts a new day, a new cycle, a new beginning to a new adventure. It's beautiful, and I enjoy watching it.

The high desert prairie landscape is simple and beautiful. Not flashy or exotic by any means, but complex and rich in its own ways. The cholla cacti blanket the earth and stand out as the most predominant plant species. Grasses and shrubs fill in the gaps, while the occasional tree can be found in the riparian areas only. It's a fairly short statured plant community overall, which provides cover for a variety of prairie animals like rodents and birds.



With most plants on the land being drought tolerant, it is always a joy to wander down into the riparian areas of the ranch. I enjoy the sensation of the temperature dropping when riding down in these parts. A rare occurrence in the high desert, you can feel moisture in the air.





We eat what we raise right here on the ranch. Cattle and sheep. What an unexpectedly gratifying experience that has been, to know that you are sustaining yourself with meat which you have raised.



I love the dogs. What great companions. And they aren't in short supply either. We have a veritable wolf pack running around headquarters at all times.

Working together with my horse and team of cowboys, I walk slowly behind a herd of 1000 animals. Cattle extend as far as the eye can see. We have to move them 10 miles, probably an 8 hour ride. I look around, breathe in, and absorb the experience. Dust in my eyes, the smell of cattle, a warm dry breeze, sun beating down, and sheer happiness.

I love this.



This is my gun horse Brutus. He and I have developed a very strong bond while I have been at the Chico. He knows me, I know him, and we work as a team to get the job done. This experience is new to me, and I have to say, has been one of my favorites. **The experience of working together with another living being**, sensing what it feels, telling it where to go, praising it and scolding it. I enjoy the sense of accomplishment you both feel when riding back from a long days work, mission accomplished.




There are no gas or brake pedals, and even though you have reigns, the 1800 lb animal you're sitting atop is the one with the real control. The trusting relationship you have with the horse is deep, you trust it not to buck you off and it trusts you handle it properly. **Brutus is my boy, I feel like were buddies.**

I often sit at my favorite spot at headquarters and watch the sun set.

It is supremely relaxing and somewhat of a ritual for me.

I like to think about what my uncle Reedy wrote to me at the beginning of my stay.



*You look like your taking to the country life. Now you're starting to get a sniff of why I love the open spaces... I love the city but you can't take me out of the country... It truly is the open spaces that I love, fresh air, the breeze... I love to sit where nobody is and just close my eyes and listen... You hear the birds, insects, the breeze, grass blowing in the wind, it's perfect as far as I am concerned... Don't you love the "Thunderhead Clouds", they are sooo impressive how they form on a hot day, usually late in the afternoon... The best part of country life is the people though... The people are the best part, they care, they work hard, they have common sense a city boy will never establish, they have loyalty, they have commitment... Look around you El, some of these people will be the most impressive people you'll ever spend time around. They're simple in all aspects but that is what makes them so awesome... Enjoy your next 5 ½ months my friend... You're going to learn more about life than a professor could ever teach you... Your ranch hand friends will also teach you more about life, more about yourself than any university, believe me I know... Hope you learn to love what I have loved for the last 50 years, country livin... Good luck, stay in touch and remember to stop your world, sit down, close your eyes and just listen.... *Breath through your nostrils and just listen.... It's "Zen" baby, just Zen...**

Social & Cultural Experiences



The Chico is a very social place, much more so than I expected. Everyone who works and lives here contributes to what I believe is a synergistic unit. We all share the itch for some good hard work and love to have fun doing it. We believe that social health is just as important as physical and mental health.



Let me introduce you to (most of) the team...





Until working at The Chico, I had never lived with the people I worked with. Just this has been an experience in itself. I would assume it would be a much worse experience if this group of people happened to hate each other and didn't work well together, but this is not the case at the chico. We are a tight knit group who work together on a daily basis, accomplishing tasks and solving problems. Our work is our bond, our common ground. We're all working together, everyone has their role, and were making things happen. We are the sole force which keeps the ranch running, the job is a lifestyle, we take pride in what we do every day.

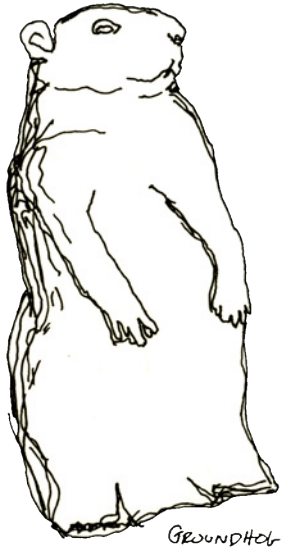


At times the work is mundane, but slow times bring out the comedian in everyone. Having fun with what we're doing is important to us. The crew at the chico has fun. Lots of it.

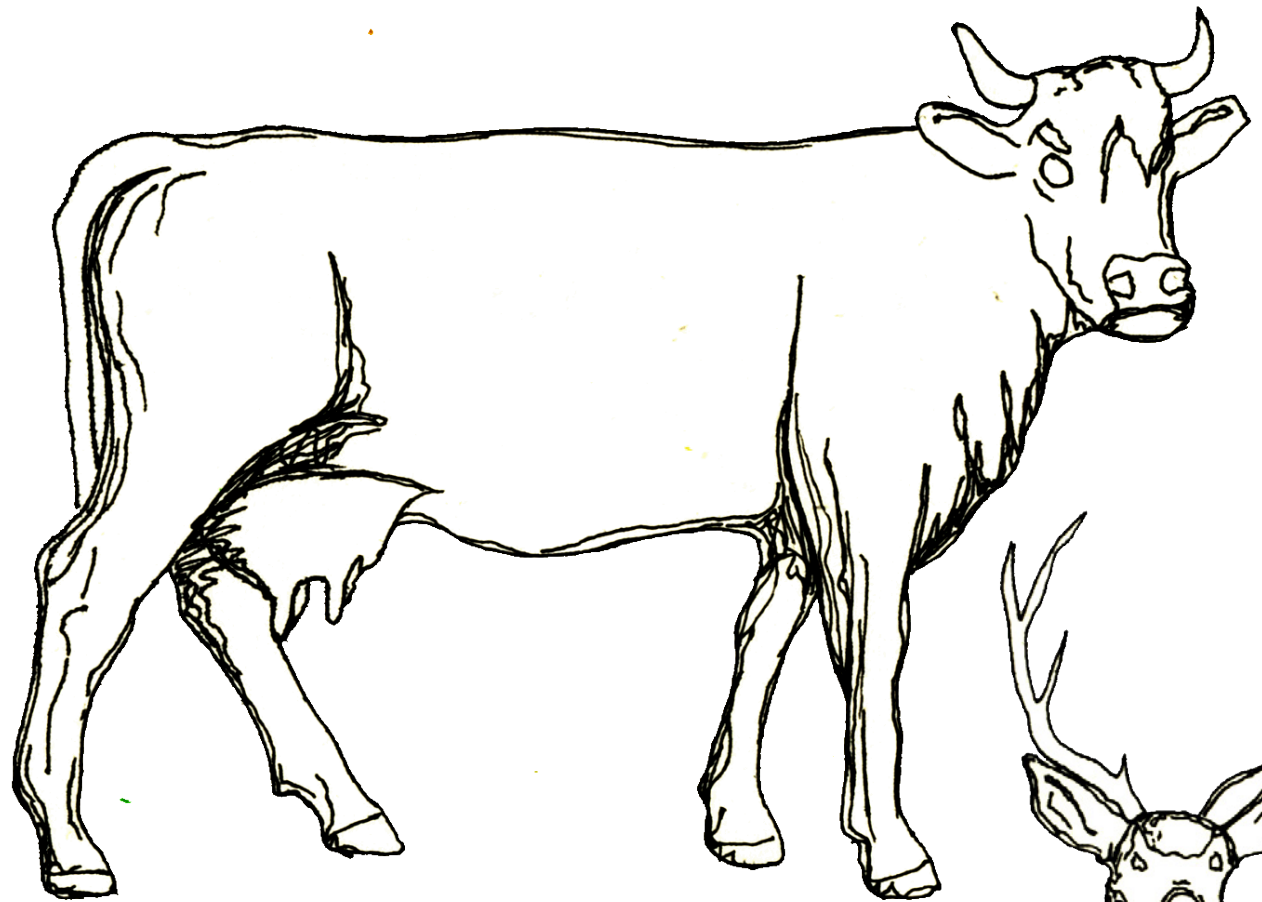


Along these lines, everyone loves to dance, and no one is shy about showing it. Good music is always floating in the air, whether it's being played on speakers, or belted out by someone riding next to you. Most everyone at the chiko is musically inclined, with lots of instrument playing and singing happening. Music is important to me. I enjoy learning about different types of music.

My time at the chico has given me an opportunity to practice my field sketching, photography, and creative writing skills. It is quite a blessing to maintain an artistic element in what I am doing.



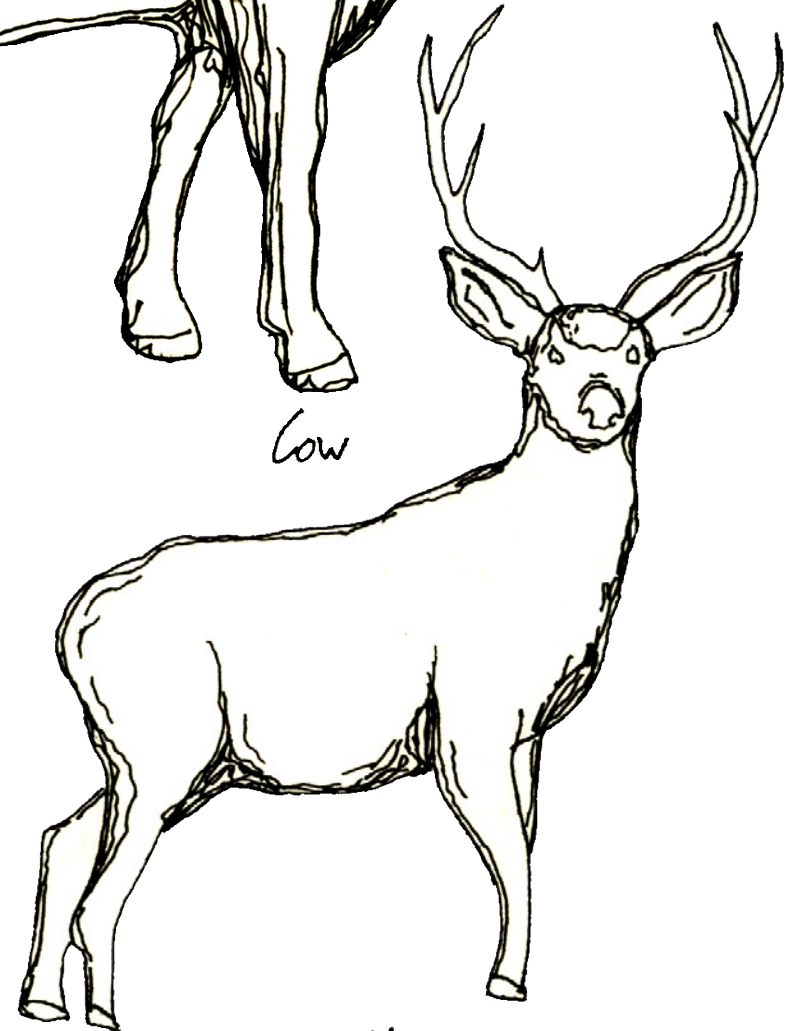
GROUNDHOG



COW



BISON



MULE DEER

I have experienced what it really means to be a cowboy. Not the romanticized vision of the western world cowboy, but the honest hard working cowboy who lives off the land he works. The cowboys I work with have taught me that the our cultural vision of the cowboy is skewed. The glorified John Wayne-esque image of a cowboy is only that, an image. The real cowboy is humble, respectful, honest, hard working, steward of the land. The cowboy acts like himself and doesn't try to be something he's not. ***He doesn't have time for that, there's work to do.***



I'm still working on it, *okay?*



Physical Experiences



Packed into the corral, the cattle kick up dirt when they scamper away from our horses. Dust lines my nostrils as I breathe in. The smell is distinct. I have grown accustomed to it, and even enjoy it. It smells like work.



The Chico believes in craftsmanship, durability, and longevity. We take pride in what we build. There is a certain standard of toughness everything must have to sustain on the ranch.



The ruggedness I feel when operating large machinery on the ranch is exhilarating. The feeling of power when lifting, moving, and scooping huge loads can be overtaking. I feel as if I am consumed by the machine, as if its arms are connected to mine like an extension of my body.





This photo encapsulates the three linear elements which partition the land. Power lines, roads and fences. I have never experienced such vast open spaces or the massive lines which subdivide it. I do wish they didn't have to be there, as they obstruct the natural setting, However, I find them to be aesthetically quite wonderful. I enjoy gazing off into the distance and tracing their wandering paths until I can't see them any longer. The scale of the line cutting through the land is massive.



Smells of all sorts fill the air. Some of my favorites are: wet soil, cattle, storms rolling in, food cooking, fuel, smoke, gunpowder, exhaust, sweaty horse, and my favorite smell on the ranch, the leather shop and saddle room.

The only built structures on the ranch consist of our headquarters facility, two historical buildings, and housing for employees. This is my bunkhouse. It is minimal, basic, and gets the job done. In an attempt to impact the land as little as possible, this seems to be the approach with all development done on The Chico.



Educational Experiences



The Chico is the most conducive learning environment I have ever worked in. Every day, and I mean every day, I learn something new. Education is a priority to the elders. They strongly believe in the value of a learning experience, and always encourage me to try. Just try, its the only way you learn.





We use an ecological monitoring technique called Land EKG to monitor the plant, animal, and insect species on the ranch. Important information is gathered to help us better manage our land's limited resources.



The Chico offers free field trips to the ranch for local schools. They use them to educate young people about how the ranch manages its resources, how a ranch functions, how the ranch uses science, and many other aspects of holistic ranch management.

Passing knowledge between generations is seen as the primary way to promote sustainable ranching practices. It is understood that our future is in the hands of young people, and if we pass our knowledge and experiences down to them, maybe they won't make many of the same mistakes we have.



The Chico offers a two year apprenticeship program in ranch management. It is an opportunity for the elders to educate prospective ranchers in the field of holistic ranch management. Although I am not an apprentice, I absorb many of the lessons and bits of knowledge, simply by being around.



I can't even begin to list what I have learned while working at The Chico. All I know is that it has been the most educationally enriching experience of my life. Hell, I hadn't even ridden a horse before I got here. I have absorbed ample amounts of very practical knowledge while here, and I believe that's why I put it at the top of my list over school. Because what I learn here is practical and useful in every day situations. Learning in a classroom is essential, and I believe strongly in its merits. However, **The Chico has exposed me to the effectiveness of learning through experience.** Getting tossed into a situation and having to figure out is my new favorite way of learning.



Historical Experiences



The Chico aims to hold on to the historical traditions and lifestyle of ranching. The life of a cowboy is rich in it's history. It is rooted in our countries heritage, and many invaluable lessons can be learned from it.



History plays an important role at The Chico. If we learn the history of cattle ranching, we can identify mistakes in the traditional approach, and modify it to be more sustainable.



A photograph of a sunset over a mountain range. The sun is a bright yellow-orange orb on the horizon, casting a warm glow across the sky. The sky is filled with large, dark clouds that are illuminated from below, creating a dramatic, golden-orange light. The mountains in the foreground are silhouetted against the bright sky. The text "Spiritual Experiences" is written in a white, thin, sans-serif font on the right side of the image.

Spiritual Experiences

Being isolated in the middle of 87,000 acres has been one of the most spiritually uplifting experiences of my life. Freedom from popular culture, the media, technological connection, and mostly, highly opinionated people has done my spirit well.



I am not a religious person. I have always found sanctity in nature, and have felt most spiritually secure when surrounded by it. The Chico has given me the opportunity to explore my spirituality, figure out what I feel about who we are as humans and why we're here. I still don't have any answers, but exploration is the first step.



It's hard not to realize some sort of divinity
in spectacular scenes such as this.



Second

Letting my Experiences Inform my Design



This section will analyze the aspects of my experiences at The Chico which are most relevant to my design.

Analyzing the lessons, ideas, details, and nuances I have derived from my experiences will inform my design process, and ultimately translate into the final design solution.

The natural environment is where I have experienced most joy on The Chico. So many times, I find myself awestruck by its beauty, pondering it's mystic ways, and marveling in it's infinitely detailed design. I often just sit and contemplate. I think about life, where I am in it's cycle, and how lucky I am to be in this beautiful setting.

- The lodge should showcase the beautiful natural setting, giving the user a chance to explore it and learn about it.
- Measures should be taken to protect the existing natural environment throughout construction, as well as when the site is occupied.
- The design should give the user places to stop and contemplate. To be alone and just think.



Education is an essential part of a sustainable future for ranching. The Chico makes it a priority to offer it's knowledge to next generation ranchers in an effort to promote holistic resource management. If we can attract people to the lodge with the natural beauty, we have the chance to educate them on how we are working to conserve it.

- The lodge must act as a catalyst for learning. Information must be provided to guests about who we are, what we do, how we do it, and how they can get involved.
- There must be enough space for educational groups to fit comfortably and be able to partake in activities.
- Incorporation of interpretive sinage would be a good idea.



The Chico strives to conserve and promote all aspects of the native ecology of the land. The Chico is unique in the methods it uses to manage it's land. The land is sensitive, and conserving it is in the rancher's best interests. The Chico aims to conserve the natural resources of the ranch and leave as small a footprint as possible.

- The design should incorporate these natural elements.
- It should take special measures to conserve native animal habitats, especially the riparian area surrounding the lake.
- Responsible use of water on site including; low water use plant palette, minimal irrigation, responsible run-off management, etc.
- Hydrology should be a strong influence of the design.
- The use of an all native plant palette should be considered.



Social interaction and social well being are important when living on 87,000 acres. You have to enjoy what you're doing, like the people you do it with, and have fun with it. All work all the time can drive people into the ground, and although we work very hard, we make time to take our cowboy hats off and let loose.

- The lodge has to facilitate social settings and encourage social interaction. One of the main goals is to bring people to the ranch who are from two completely different camps, conservationists and hunters. Both of these groups have nature's well being as one of their core values, the lodge setting can facilitate discussion between these groups.
- The design must have enough room for medium to large social functions. I would estimate 100 people max.
- The design should incorporate ample space for social gatherings places like fire pits, seating nooks, and large patio spaces should be included.



Social and cultural heritage are important to The Chico. The image they have of a “cowboy” is much different than the stereotypical image modern society has. At The Chico, a cowboy is a raw, hard working, honest, respectful steward of the land.

- The lodge needs to embrace The Chico’s vision of the cowboy. We’re not going for the chintzy western honky tonk look. It’s much more refined than that. It’s a landscape built by cowboys with an almost minimalist approach. We do what is functional, what gets the job done.

- The lodge should highlight the history of ranching in America. It should express how we embrace and conserve most facets of the history, but adapt ones which may not be sustainable.



The aesthetic of The Chico can best be described in a series of descriptive words; durability, longevity, craftsmanship, solid, bulky, classy, stylish. On the ranch, we build almost everything ourselves. We take pride in our ability to do so, and consider fabrication, construction, repairs, and maintenance part of our trade.

- Material selection should reflect these attributes

- The design should be simple enough for our crew to build most of it. Nothing too eccentric, the emphasis should be on feasibility, constructability, and functionality.



Third

Designing The Box T Lodge

3

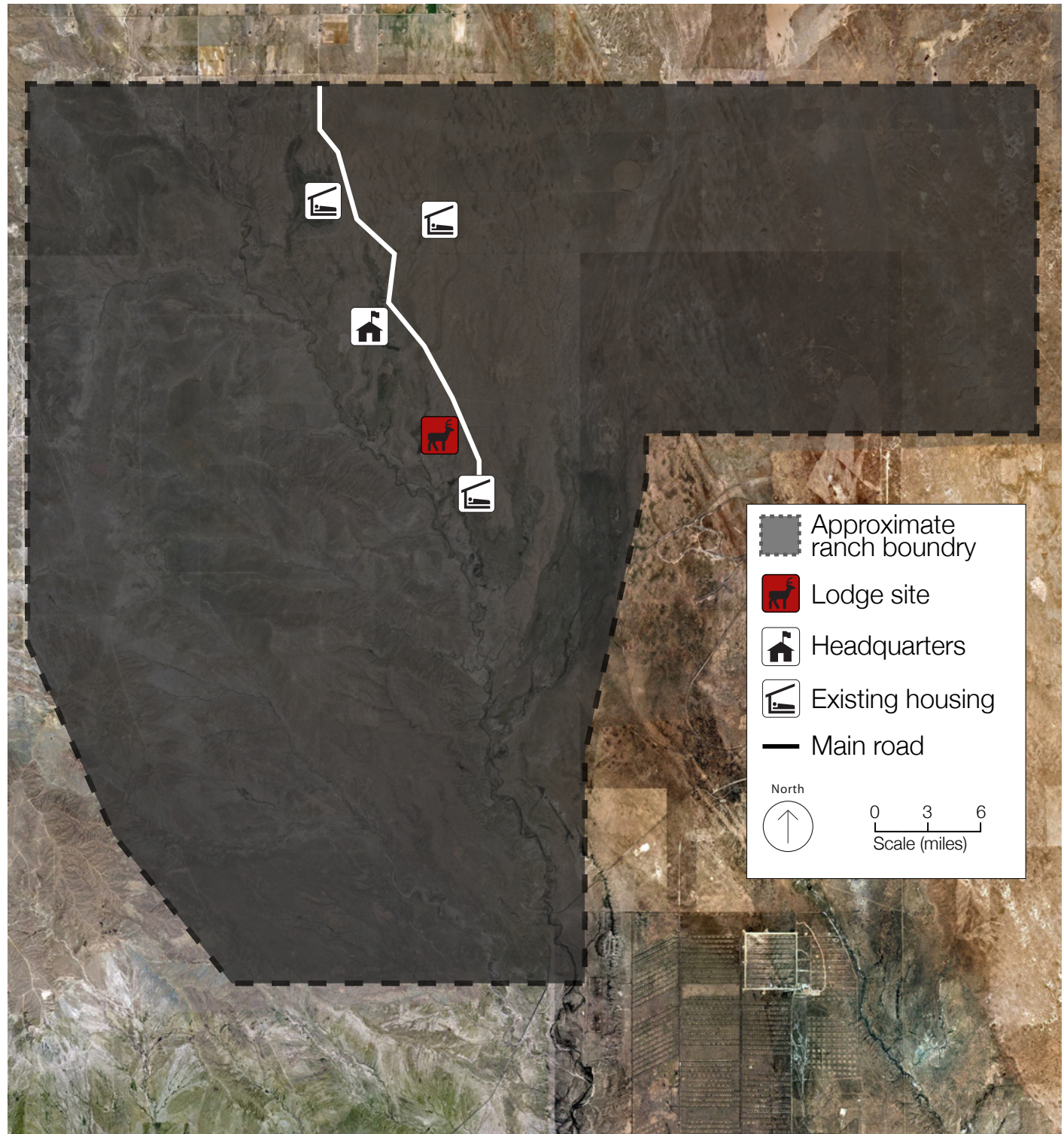
The final section will delineate my design process, including; contextual analysis, site selection, site analysis, conceptual design, design development, and finally, the master plan.

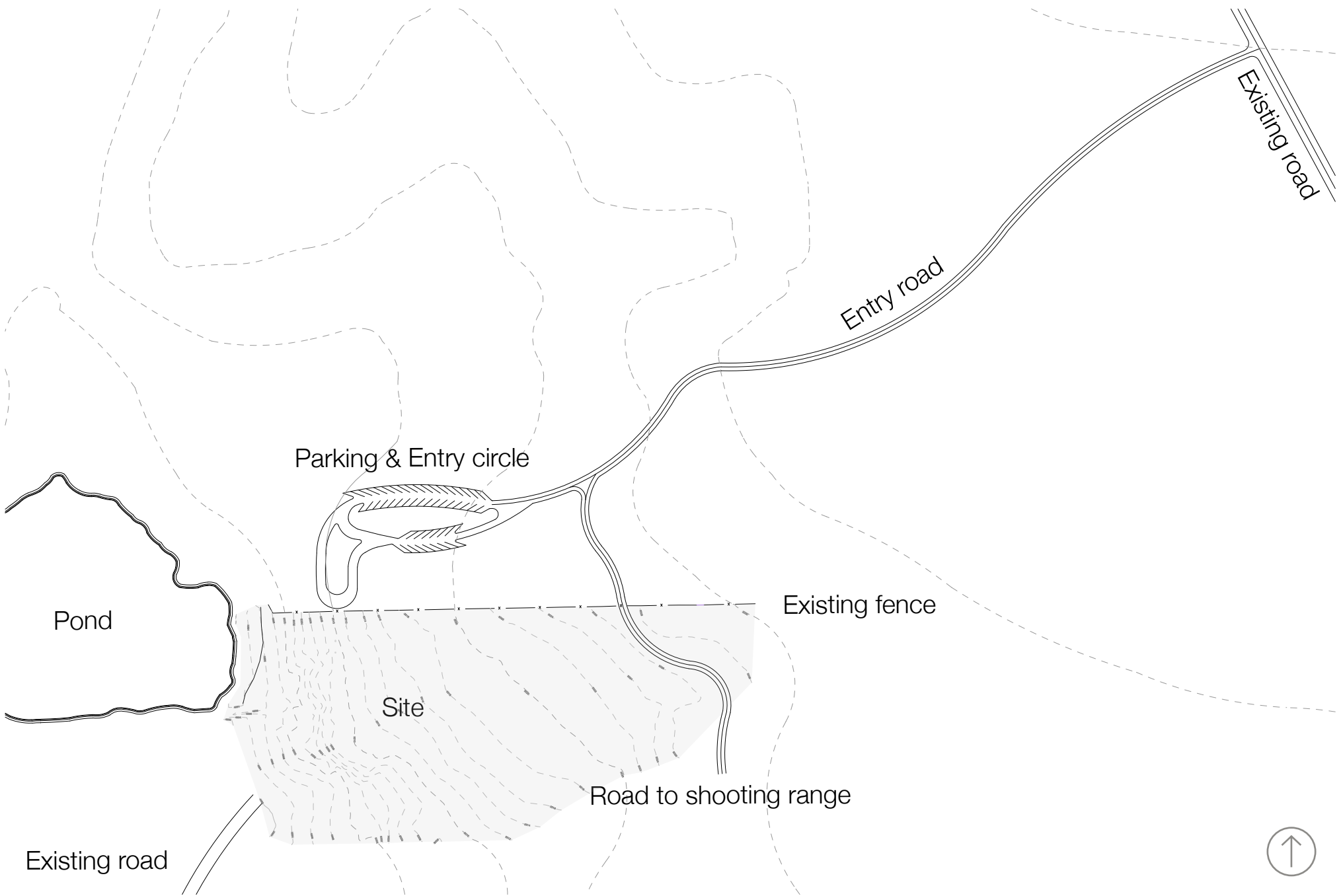
Context

87,000 acre Chico Basin Ranch is located in central southeastern Colorado about 40 miles southeast of Colorado Springs and 150 miles southeast of Denver.

The ranch has a main road running north-south. Employee housing is located along this road in four locations. Headquarters, where I live, and the home base of the ranch, is also located along this road.

The site was selected by Duke before I started on the project. He enjoys the scenic beauty of the site, the natural features such as the pond and riparian area, and the stunning views. It is located centrally on the ranch, just a 5 minute drive from headquarters, and is accessible from the main road, making it easy for visitors to find.





The highlighted grey area is the specific location of the site. It is connected to the main road leading to headquarters to the North. The entry road and parking layout shown have been planned and determined to be the least intrusive to the existing natural environment.

Site Analysis

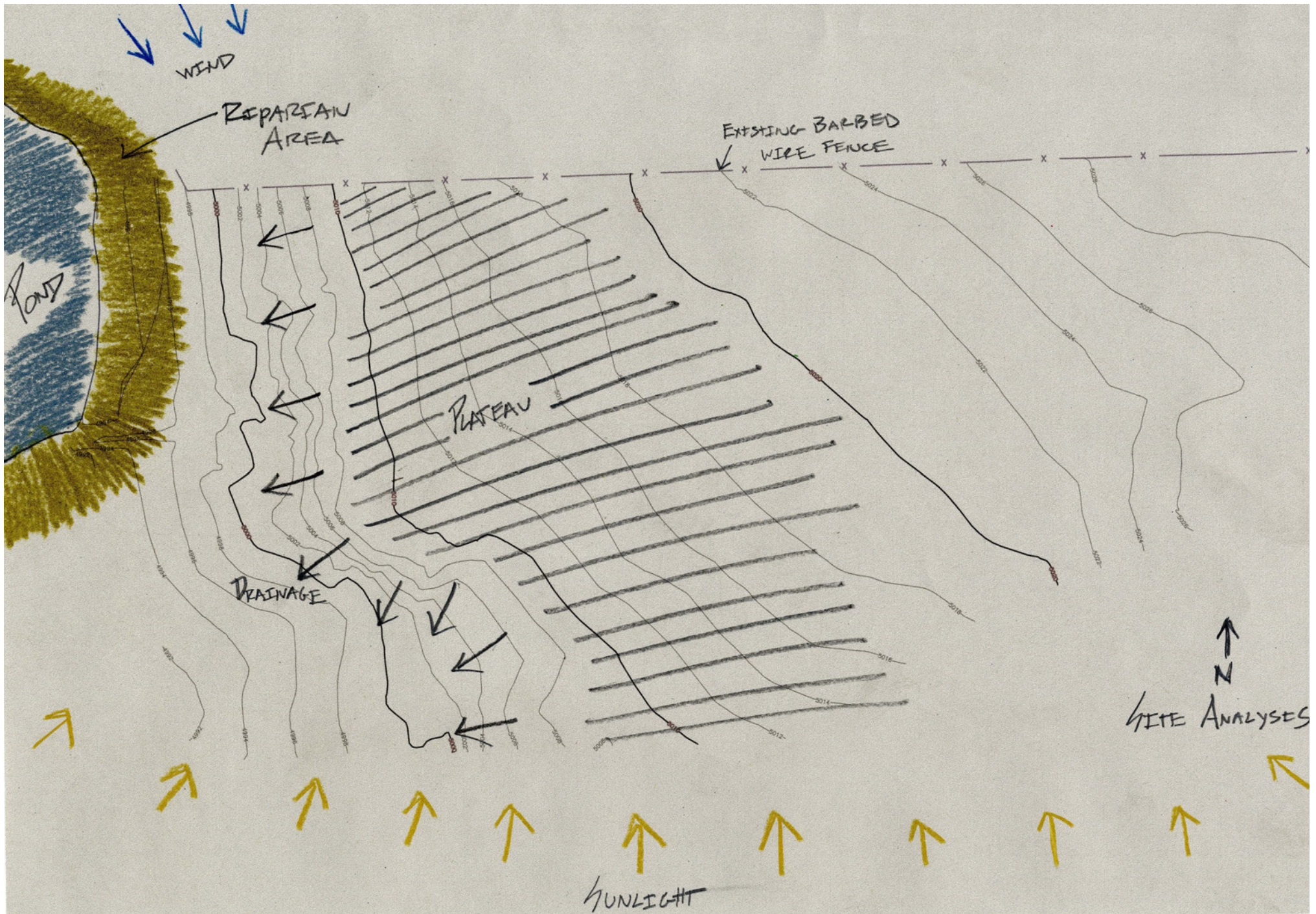
The site analysis for this project is a bit different than a typical site analysis. With the site being in such a remote location, there are some typical analysis variables which are absent;

- Beside one fence, there is no existing built environment to analyze, the site is a blank slate as far as built elements.
- There aren't any social or cultural variables to look at either. No existing population is present. No demographic analysis is needed. There aren't any proximal social or cultural relationships to consider.
- There aren't any zoning restrictions as to what can be built here, and no constraining easements to design within.
- Large scale contextual analysis isn't necessary either. It's an hour drive to any sort of urban setting. Proximity to different amenities and services is irrelevant.

The focus of the analysis will be on the natural environment. With the goal being seamless integration of the design into the land, recognizing important features of the existing landscape will be crucial to the success of the design.

Here is the view from the site. —————→ Not bad huh?





The site's topography consists of a large plateau which drops off considerably into a riparian area which surrounds the pond. Prevailing winds come from the northwest, and sun exposure from the south. The best views look to the west, with 14,114 ft. Pikes Peak looming in the distance. An existing barbed wire fence runs east-west along the north side of the site.

This is the soil analysis conducted by Colorado State University soil, water, and plant testing lab. (1) Some of the more noticeable attributes of the soil profile are:

- Very high pH. Noting that the soil may be too alkaline for most landscape plants.


- Texture being a sandy clay

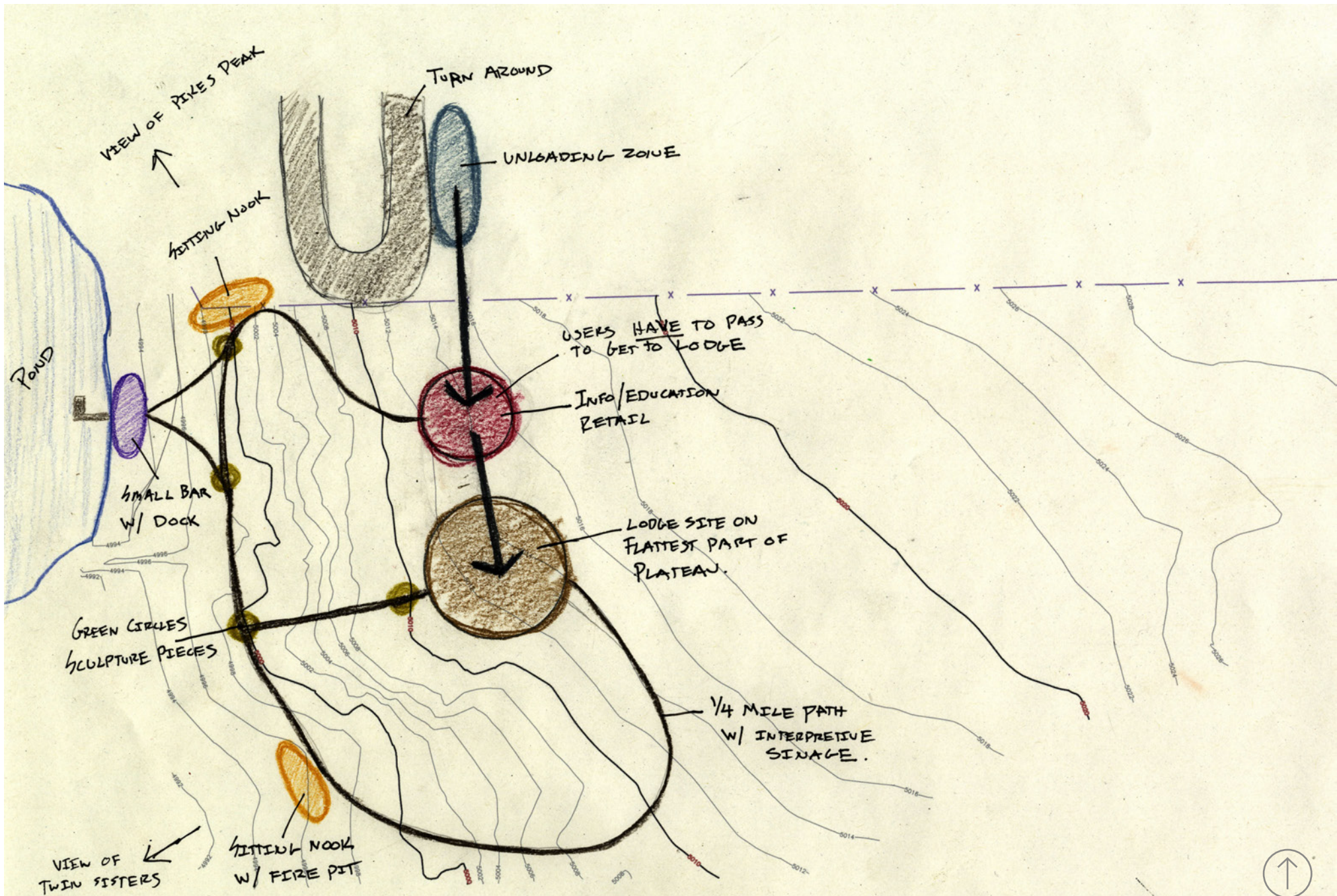
- Low infiltration rates and poor drainage due to the fine texture

- Low organic matter content.

- The soil is low in nitrogen, phosphorus, and potassium, three key nutrients for successful plant growth.

Basically, the soil is terrible. Non-native plants will struggle to survive in soil like this. Due to this constraining factor the plant palette will have to be restricted to native species only. This is not a problem, as I was planning on using a native plant palette regardless.

Customer Name:	Land Patterns, Inc 615 East Rio Grande Street Colorado Springs, CO 80903	TLW140100 Colorado State University Soil, Water and Plant Testing Laboratory Room A319, NESB PHONE: 970-491-5061 / FAX: 491-2930
Lab Number:	H1838a	
Sample ID Number:	11020 - Senior Living prog - CAICO BABY	
Date Received:	5/4/2011	
Date Reported:	5/13/2011	previous amendments added: none
County:	Pueblo	Irrigation yes, sprinkler, drip flowers, turfgrass, trees, shrubs to be grown
pH 8.7	pH is very high. This pH may be too alkaline for most landscape plants Add sulfur at a rate of 0.5 lbs./100 sq ft. every 4-6 weeks to help lower the pH. Till in the sulfur about 4-6 inches, if possible.	
E. C. OR SALTS (Electrical Conductivity) 0.9 mmhos/cm	Low. When E.C. is less than 2.0, salinity is not a problem for plant growth.	
Lime Estimate Very High	Lime is greater than 5%. It is not unusual to have very high lime in the soil. Plants can still grow quite well in soil with this lime content.	
Texture Estimate Sandy Clay	This soil may drain at a low to very low rate. Water schedules may have to be increased to allow for better water infiltration in the soil profile.	
SAR 9.7 (Sodium adsorption ratio)	Moderately elevated, but not high enough for this soil to be considered sodic. The SAR must be at least 13 for the soil to be sodic.	
O. M. 1.3% (Organic Matter)	Low. A good goal for landscapes is to gradually increase the OM content to about 5% over a period of years. For 2-3 years in the spring, apply 2-3" depth of plant-based compost, and incorporate in the top 6-8" of the soil. This OM is sufficient for established turf.	
NO₃-N 4 (ppm Nitrate-Nitrogen)	N is low: For landscape (flowers, shrubs, etc) apply 3.0 lb N/1000 sq ft to the soil. For each 1.0 lb of N needed, apply about 2 lb urea, or 5 lb ammonium sulfate, or 8 lb bloodmeal, or 10 lb corn gluten meal or 40 lbs. alfalfa meal pellets per 1000 sq. ft. When nitrate-N is less than 10 ppm, add N at these rates: For high maintenance bluegrass turf: add 1 lb N/1000 sq.ft in each of 4 applications: (1) mid-April, (2) May-to-mid-June, (3) mid-Aug to mid-Sept., (4) and early Oct. to early Nov. For low maintenance bluegrass : reduce applications (1) and (2) to 1/2 lb N/1000 sq.ft; application (4) is optional. For each 1 lb of N needed, apply 2 lb urea, or 5 lb ammonium sulfate, or 3 3/4 lb (27-3-4) lawn fertilizer, or 8 lb bloodmeal, or 11 lb corn gluten meal, or 50 lb alfalfa meal/pellets, per 1000 sq.ft..	
P 1.8 (ppm Available Phosphorus)	Very low; add 5 lbs. P2O5/1000 sq.ft or 0.5 lbs. P2O5/100 sq.ft. Bonemeal can be added at 3.5 lbs/100 sq ft or triple superphosphate at 1 lb/100 sq.ft.	
K 95.4 (ppm Available Potassium)	Low; add 2 lbs K2O per 1000 sq. ft. or 0.2 lbs. K2O/100 sq. ft. Potassium can be added as potassium chloride at 0.2 lbs/100 sq.ft. or as manure at 0.1 cubic yds /100 sq ft.	
Zn 0.3 (ppm Available Zinc)	Low; add 0.1 lbs. zinc per 100 sq. ft.	
Fe 8.2 (ppm Available Iron)	Adequate; no additional Fe is needed	
Mn 1.1 (ppm Available Manganese)	Adequate; no additional Mn is needed	
Cu 2.1 (ppm Available Copper)	Adequate; no additional Cu is needed.	
B 0.5 (ppm Available Boron)	Adequate; no additional B is needed.	
C:N Ratio	Not requested	
Additional Comments:	More information on landscaping and gardening can be found at www.ext.colostate.edu . Be sure to check out our website at www.soiltestinglab.colostate.edu for a list of garden centers where you can find a variety of fertilizers and soil amendments.	
APPROVED		
TITLE	Extension Soil Testing Specialist	

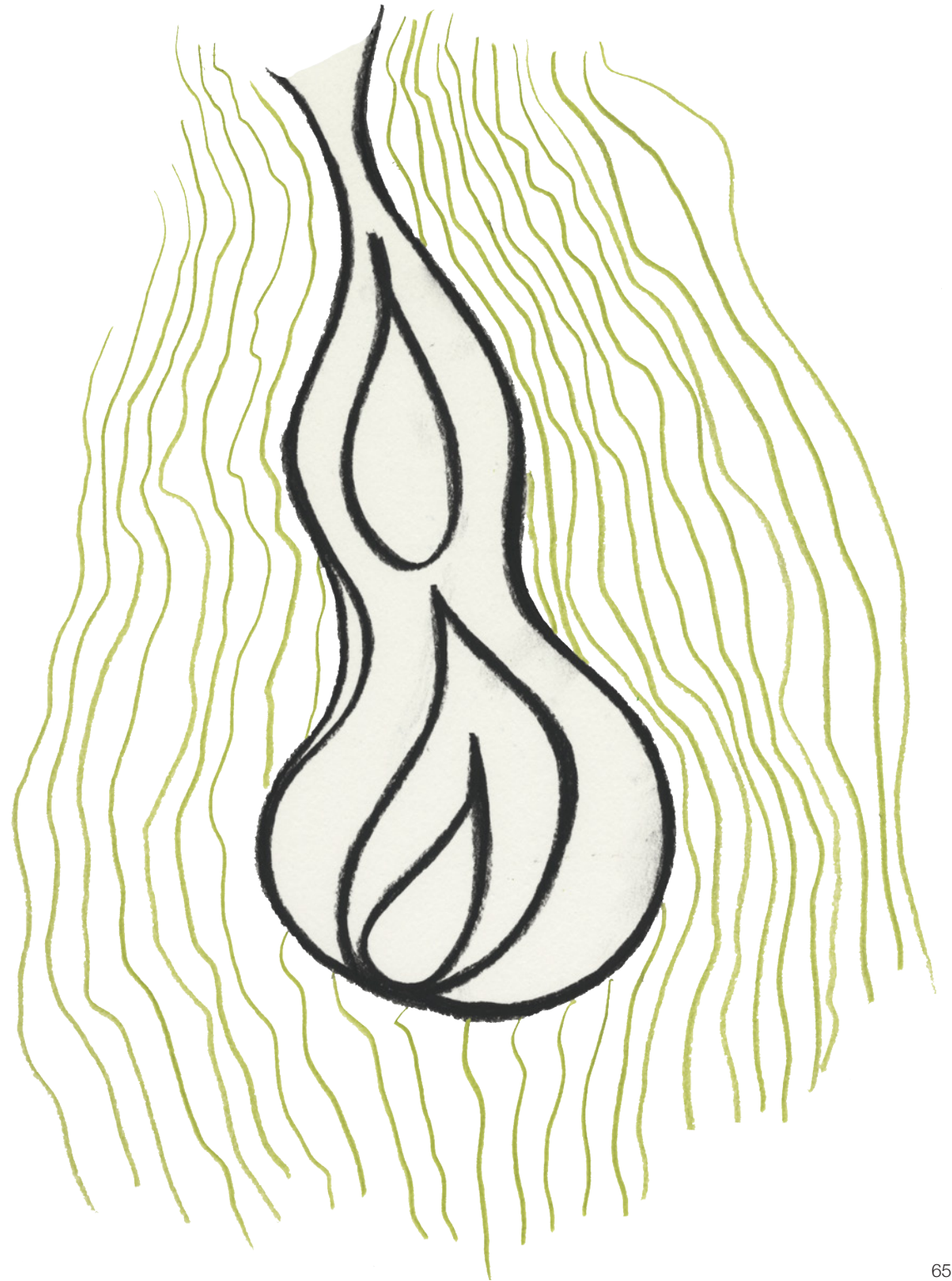


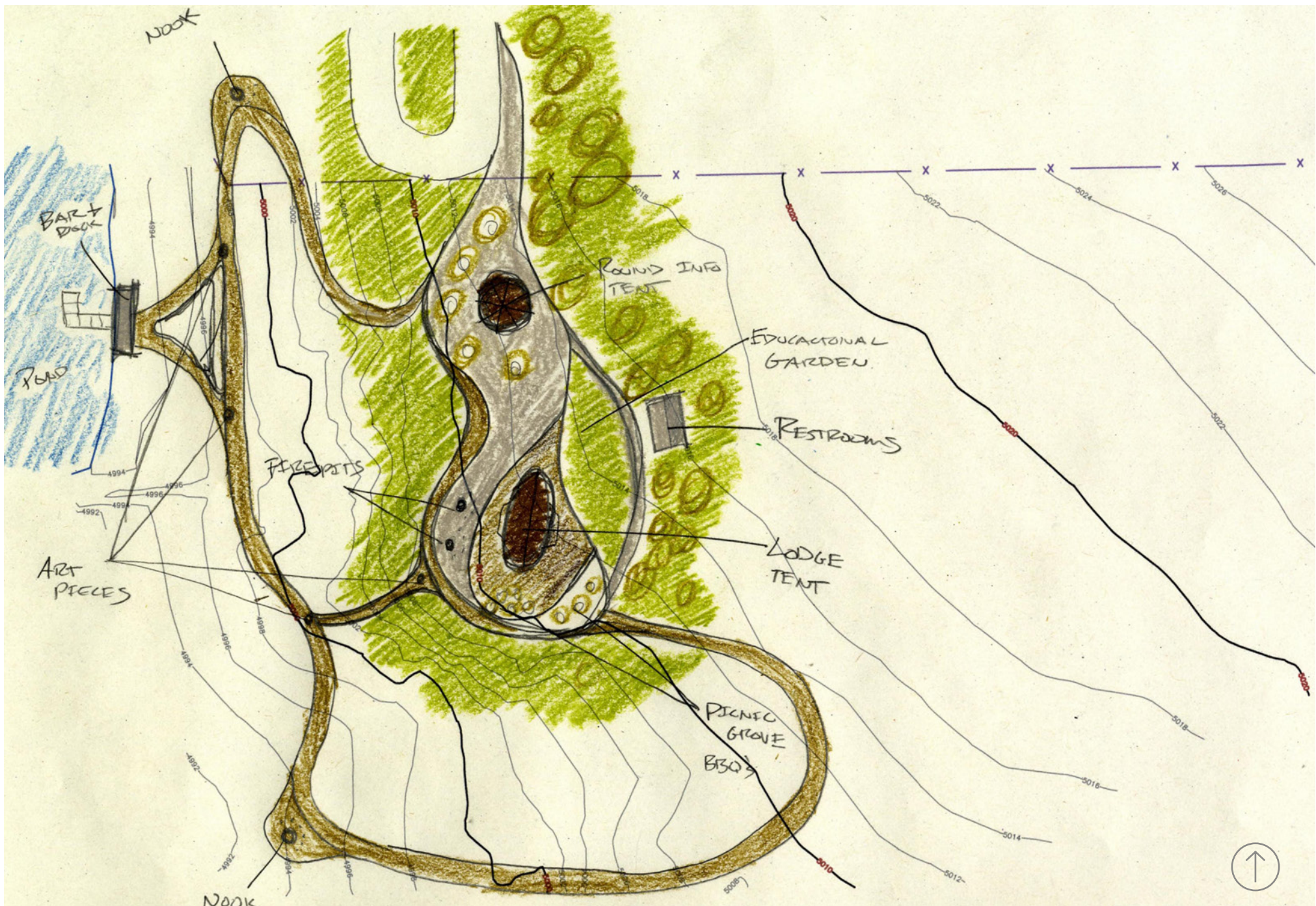
Diagram

This bubble diagram depicts the spatial relationships of different elements in my design. Ideas to note: The positioning of the information building directly in the main path of travel to the lodge, the lodge site located on the flattest part of the plateau, isolated sitting nooks facing the best views, and the 1/4 mile interpretive walk.

Concept

My concept is to use a hydrologic form, paying tribute to the importance of water to the ranch, and is the central inspiration of the concept. The multiple tear drop forms nested within each other represent the nested ecological systems of the land.





Conceptual Design This conceptual design adds some rough form to the bubble diagram.

Design Development

A refined vision of the conceptual plan, this further developed design explores more precise spatial relationships.

It defines the footprints of the buildings and spaces surrounding them.

It looks further into the length of the interpretive walk.


It lays out the planted areas of the design.





Master Plan

Plan Details



The pick up / drop off area is large enough to accommodate large trucks, and trucks with trailers. There is even enough room for a small truck to drive past the first circular planter, on site, to perform any necessary maintenance.

The first experiential stage of the site is the information tent. This tent provides information to guests regarding who we are, what we do, and how they can experience it. Information on conservation, hunting, fishing, bird watching, education program, our horse sanctuary, ranchlands, our other ranches, and many more topics will also be provided.

The main lodge structure serves as a multi-purpose building. Uses might include, staging room for hunting and fishing, dinner events, art shows, concerts, educational events, community events, wedding receptions, ranch cookouts etc. The lodge is oriented directly at the view of pikes peak, providing stunning views from inside. The actual structure is a 645 sq. ft. tent built with three layers of heavy duty canvas. As opposed to a traditional building, the tent is more organic, and adheres to the simple, refined, prairie aesthetic of the ranch.

Plan Details



Large swaths of native grasses consume the site on all sides. Grasses will be the main plant material used in the design. I love the kinetic quality of grass blowing in the wind.

The seating area outside of the informational tent gives users who newly arrived a place to rest their feet, and take in the views under the shade of the cottonwoods.

The restroom facilities are located out of the way, but centrally between the information tent and the lodge.

This semi-circle seat wall acts as a perfect gathering area for educational speakers. Users sit on the wall facing the speaker, creating a sort of amphitheater style venue.

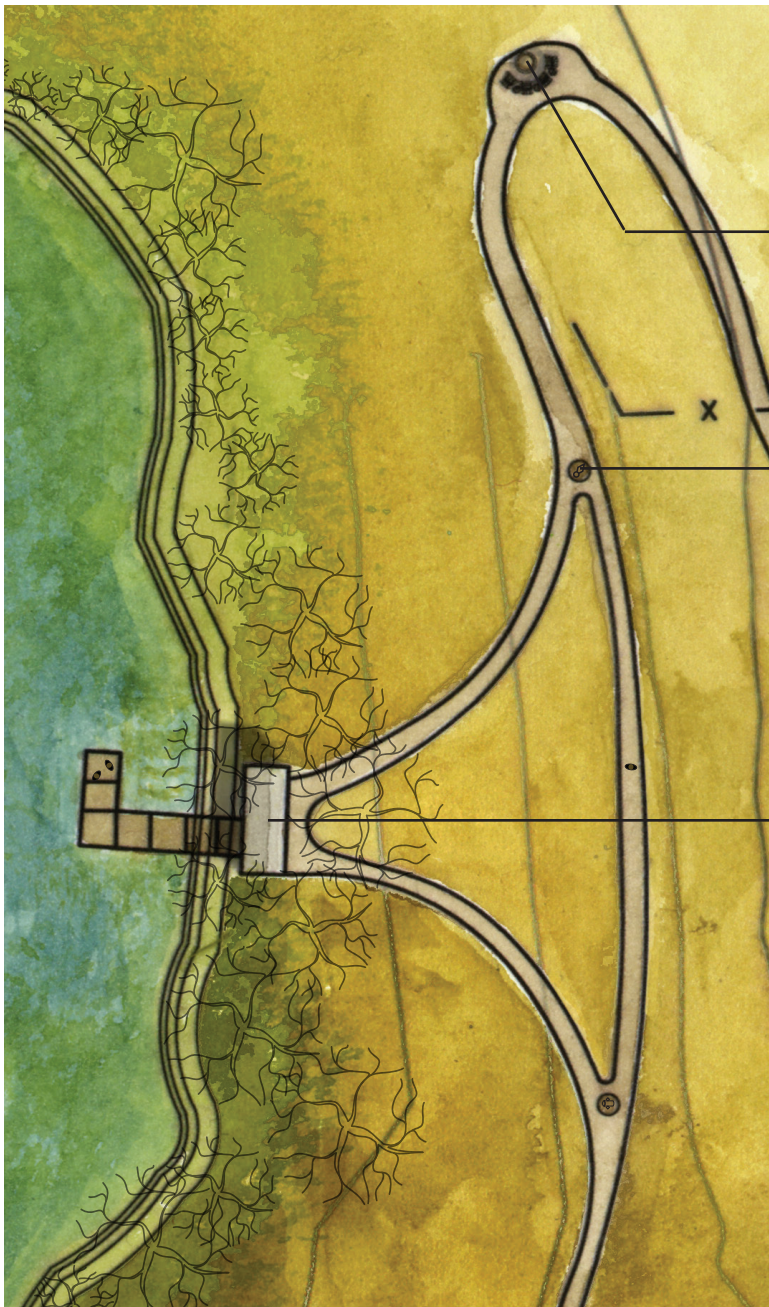
The native plants demonstration garden provides information about plants which are native to the ranch. Signage along the outside explains each species and it's importance to the land.

The picnic / BBQ nook provides an area to enjoy a meal. Ranch raised beef cookouts can be held here to give the user an opportunity to taste our grass-fed, free-range beef.

The fire pits allow the user to put their feet up and relax by the fire. Each fire pit is oriented towards a certain view of importance.

Additional overflow picnic seating for larger events provides a shaded area for users to enjoy their meal as well as some nice shade from the peach-leaf willows.

Plan Details



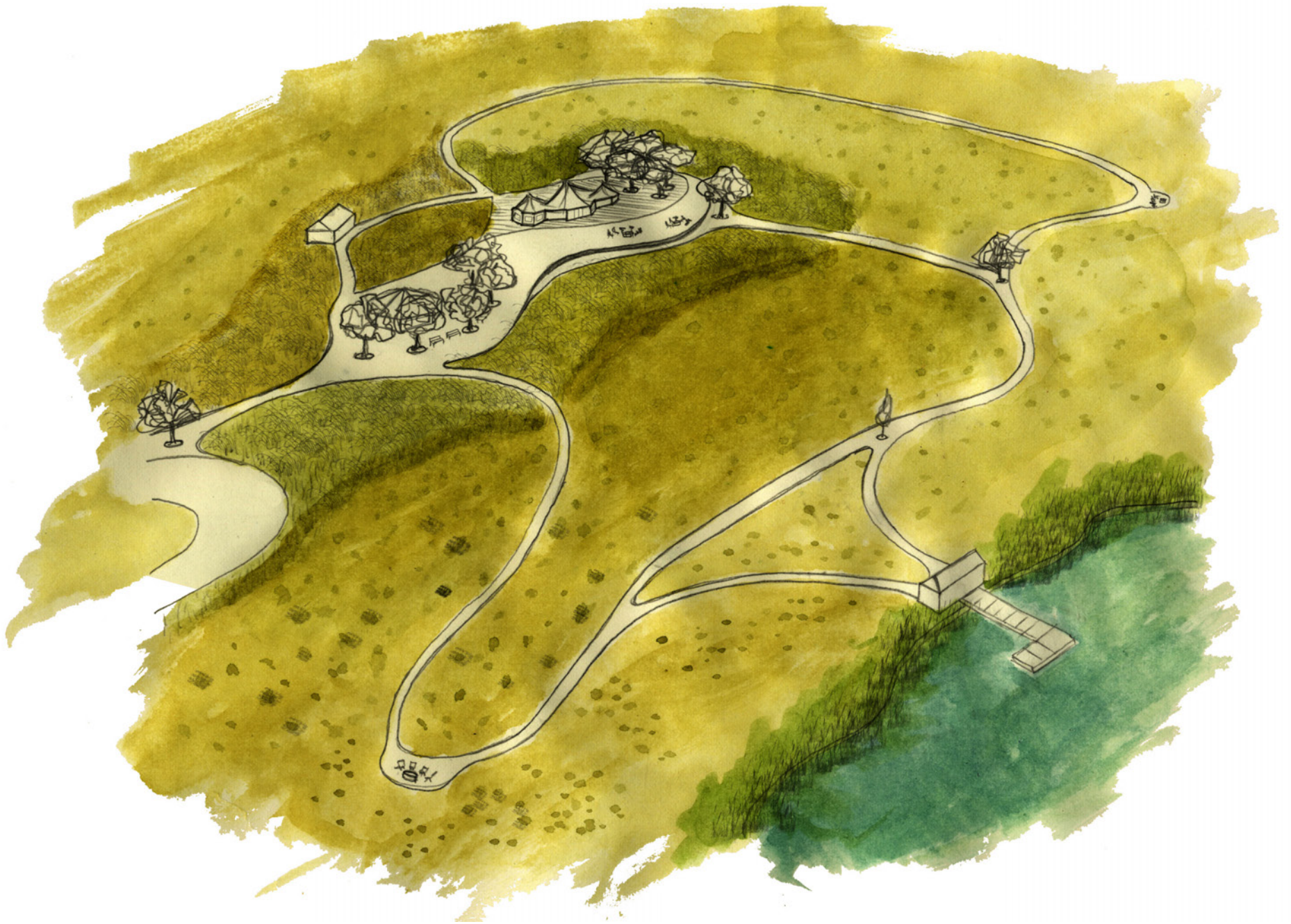
Fire pit nooks along the path give the walker a chance to sit down and enjoy the spectacular view of the peaks to the west.

Art displays will be placed along the pathways in circular planters. Sinage will talk about the significance of each piece to the ranch and what we do.

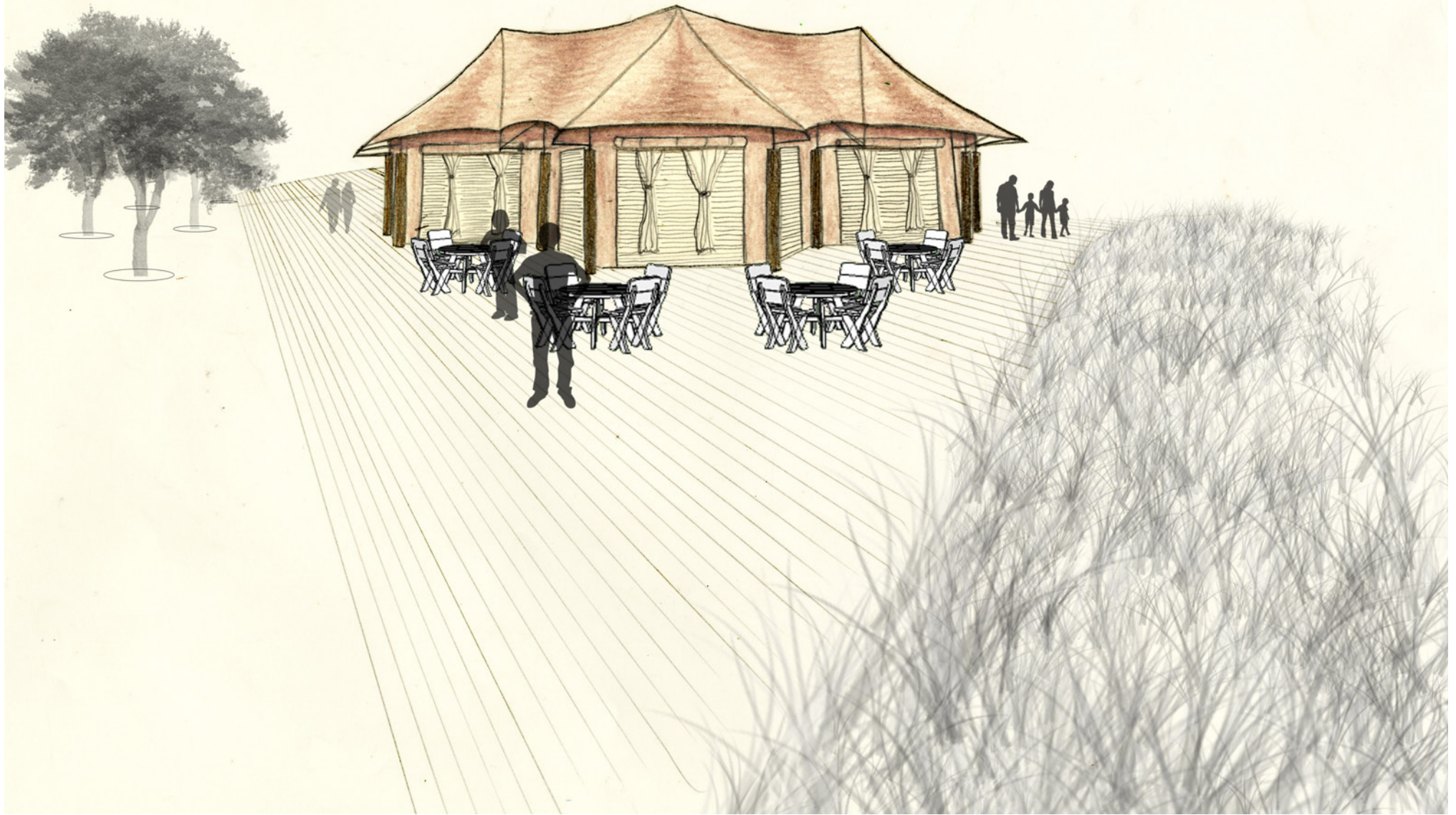
This is a pond-side bar with a dock. As a nice escape from the main lodge site, a little bar would be perfect to slip away to and enjoy a cold drink next to the water. I envision it as basically just a tin shack, with old furniture and bottles on the wall. A small watering hole, if you will.



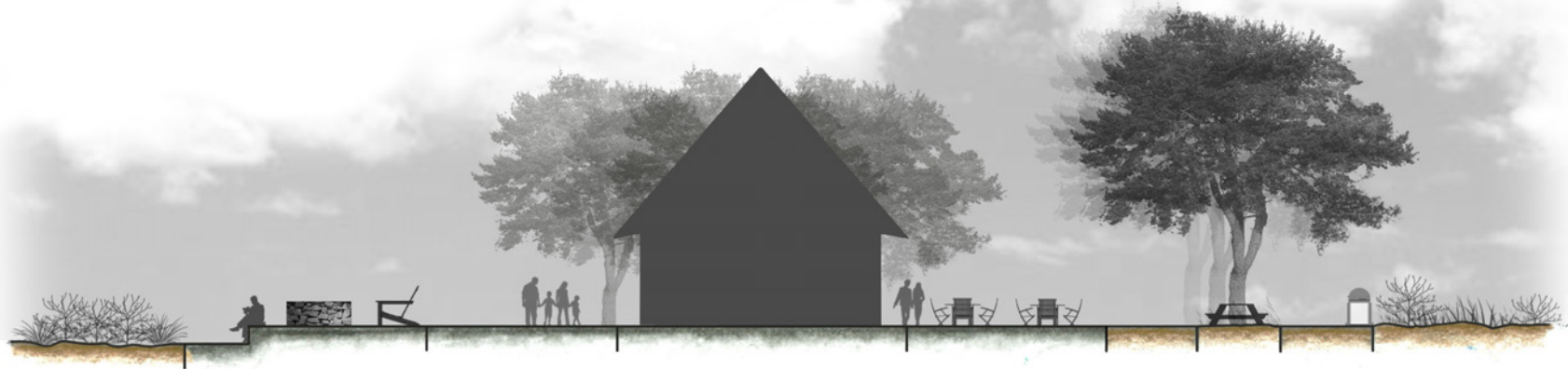
The solar farm will be enough to power the initial phase. More panels can be added as the later phases are completed.



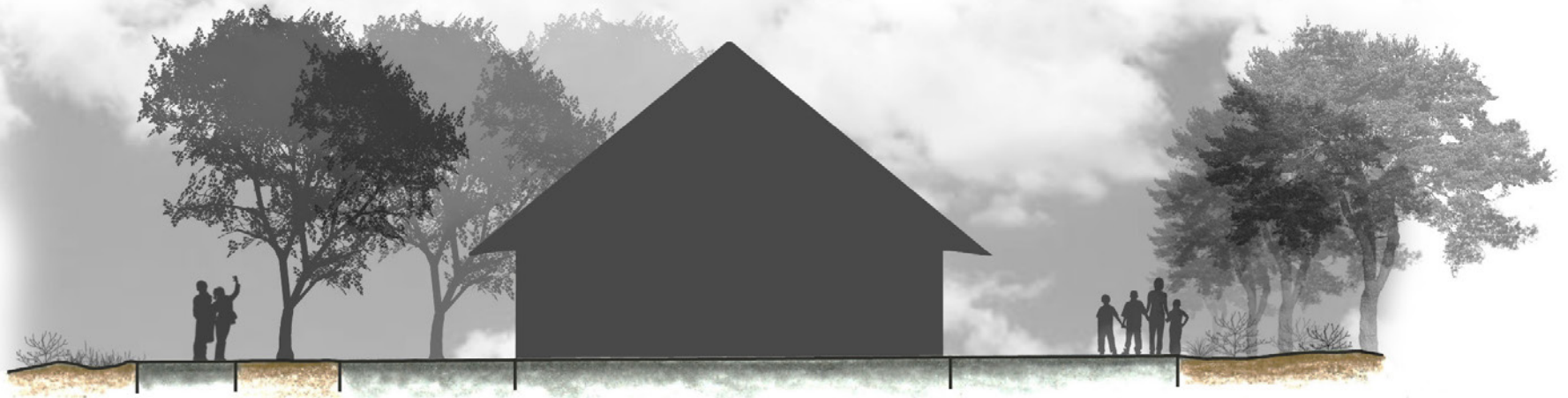
Perspective



Perspective



B - B' Scale: 1" = 20'



A - A' Scale: 1" = 15'

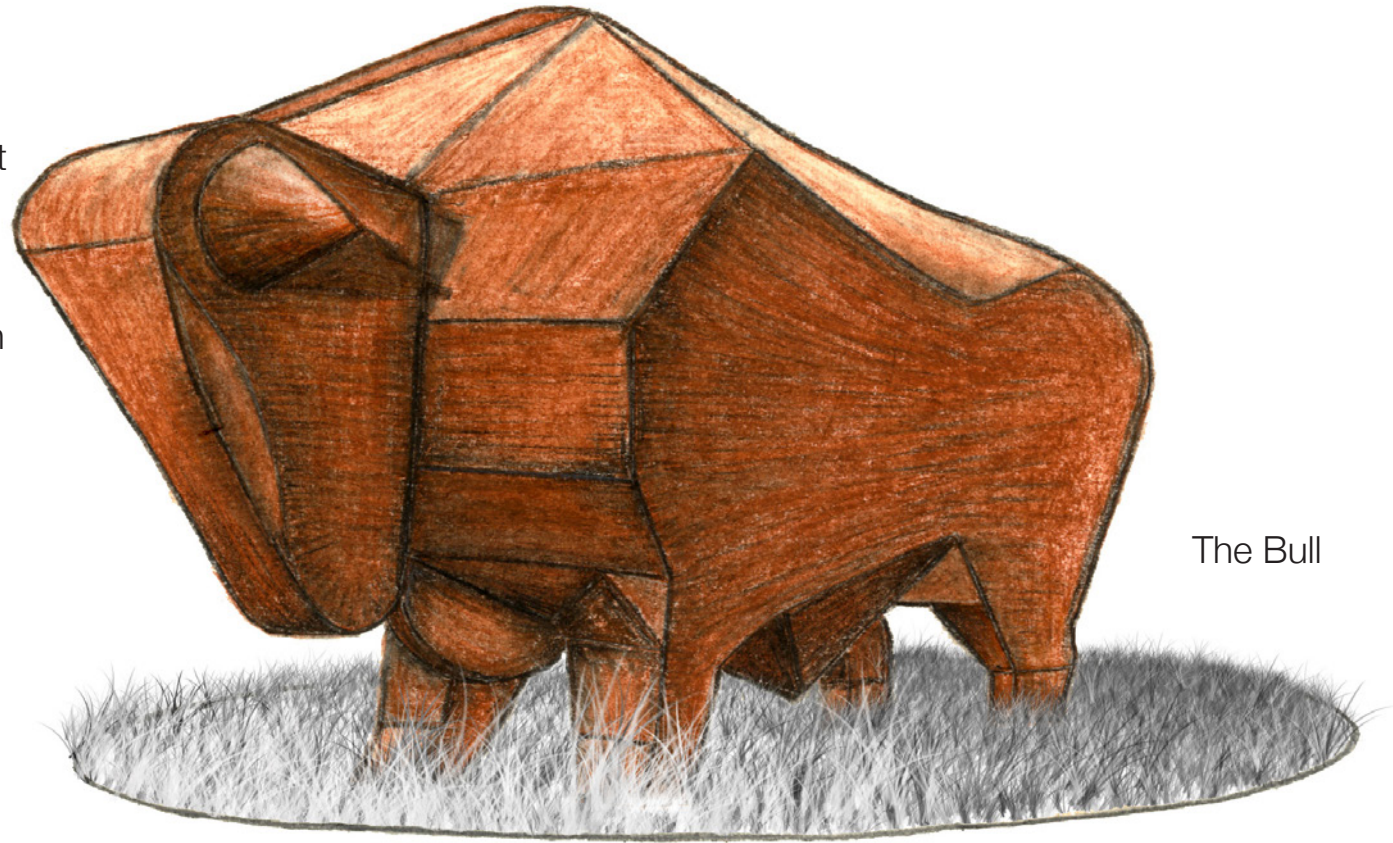
Sections

Art

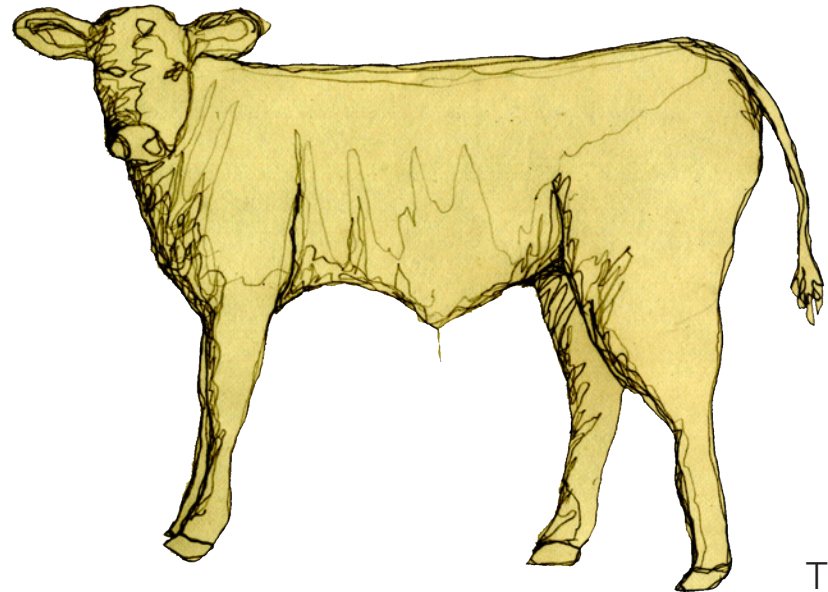
These are some sketches of potential art pieces for the site. They are sculptures depicting some important figures of the ranch. I envision them as constructed with industrial materials such as core ten steel, bronze, or even materials we find on the ranch



The Cowboy



The Bull



The Calf

Plants

Due to the extreme alkalinity of the soil, the plant palette is fairly limited. I will use all native plants, most of which are grasses, to keep the site looking well established, but not out of place.



Western wheat grass (*Pascopyrum smithii*)



Green needlegrass (*Nassella viridula*)



Blue Gramma Grass (*Bouteloua gracilis*)



Alkali Sacaton (*Sporobolus airoides*)



Saltgrass (*Distichlis spicata*)

Grasses are the most important plant on the ranch. They sustain our cattle, which are the life blood of our operation. The prairie is known for its majestic golden grass rolling in the wind. I love the kinetic quality of grasses, its the closest you get to watching the ocean out here. Because of their importance, my plant palette will consist mostly of grasses.



Two-grooved milkvetch (*Astragalus bisulcatus*)



Scarlet Globemallow (*Sphaeralcea coccinea*)

Perennial Forbs are more herbaceous plants which grow low to the ground and provide good cover for small animals. They also provide stunning color.

Shrubs will be used minimally, because the landscape is already filled with cholla, sage, yucca, etc. They will primarily be used close to the buildings for spatial delineation and ornament.



Panchito Manzanita (*Arctostaphylos coloradoensis* 'Panchito')



Narrow leafed Yucca (*Yucca glauca*)



Silver plains sagebrush (*Artemisia cana* spp. *Cana*)

Pictures: USDA plant database

Trees are only found on the parts of the prairie which hold large amounts of water. They're actually quite an anomaly out here. For this reason, I will be using them very sparingly. Mainly used for shade, they will be located close to buildings, on the interior of the site.



Prairie cottonwood (*Populus deltoides*)



Peach leaf willow (*Salix amygdaloides*)



Black ash (*Fraxinus nigra*)

Pictures: USDA plant database

Conclusion & Reflection

My experience at The Chico has been life-changing to say the least. What an magnificent place to live, learn, work hard, and make life long friends. Completing this project has given me the opportunity to intensely reflect on my time here, it has been amazingly fulfilling to ponder how I have changed since being here. I have learned so much, and am forever indebted to this ranch and the people who inhabit it.



I believe that the design I have created accurately embodies the ranch as a whole. When I look at it on paper, and imagine it fully built, I picture it as a perfect addition to the ranch, a place which people love to be. I see us gaining a reputation of a prestigious hunting and fishing preserve. I see us holding concerts, art shows, cookouts and all sorts of other events. I see us after a hard day's work, surrounding the fire pit enjoying a cold beer while reflecting on the days events. I see us educating visitors about the prairie, it's plant and animal species, ecology, conservation, management techniques, western history and various other topics. I see us laughing, socializing, and genuinely enjoying our new space.



Its not often a student comes right out of college and gets the opportunity to design a project of this size, build it, and then use it on a daily basis. I would like to say thank you to Duke, Jonathan and the rest of the Chico crew for giving me this opportunity. I couldn't think of a better way to start off my career as a landscape architect. Thank you as well to Fawn Bell and Paul Poppert for assisting me along the way. Your expertise and guidance have helped immensely. Hopefully the transition from paper to reality will be smooth. It being my first time building a design of this scale, I'm anticipating some hiccups, but hey, that's how you learn.



With the July 1st ground breaking date on the horizon, I look forward to implementing the design to it's fullest potential, and have firm plans to see it all the way through to completion. I look forward to working with my friends, building something we all will enjoy for generations to come.

References

1. Chico Basin Ranch Soil Analysis. Rep. Colorado State University Soil, Water, and Plant Testing Laboratory, 1012. 13 May 2011. Web. 10 Mar. 2012.
2. Phillips, Duke. "Conservation on The Chico Basin Ranch." Web. 4 Mar. 2012. <<http://chicobasinranch.com/index.cfm?id=3b2e868f-9dd0-44d4-86bb8683448431f9&conservation.html>>.