



Appendix F

Other Documentation

DOT&PF Letter to FHWA, March 19, 2012

DNR-DPOR Concurrence Letter to DOT&PF, March 16, 2011

ADF&G Internal Memo, July 24, 2009

ADF&G Letter to Director King, ASP, March 23, 2009

ADF&G Letter to Director King, ASP, September 23, 2010

Detailed Design Timeline, June 6, 2014

Historical Cost Estimate Worksheets

Great Land Trust, MOA Wetlands Costs

STATE OF ALASKA

SEAN PARNELL, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

4111 AVIATION AVENUE
P.O. BOX 196900
ANCHORAGE, ALASKA 99519-6900
(907) 269-0650 (FAX 269-0654)

CENTRAL REGION-Design & Engineering Services Highway Design

March 19, 2012

RE: **AMATS: Eagle River Greenbelt Access
& Pathway
CA-TEA-0001(265)/55715
Project Closeout**

Christopher W. Riley, P.E.
Central Region Area Engineer
Federal Highway Administration
Alaska Division
P.O Box 21648
Juneau, Alaska 99802-7418

Dear Mr. Riley:

I request your concurrence to close out the subject project with full federal participation for the approximate \$598,000 in expenses incurred to date as eligible costs. The project has greater challenges than were initially anticipated and the Department expects that the no-build alternative would be selected at the conclusion of the environmental document effort.

Explanation and Justification for Project Close-Out

Original Project Scope & Funding

The Eagle River Greenbelt Access and Pathway project (ERGAP) was first included in the Anchorage Metropolitan Area Transportation Solution (AMATS) Transportation Improvement Plan (TIP) in 2002. The project development is a cooperative effort between the Municipality of Anchorage (MOA), Alaska Department of Transportation and Public Facilities (ADOT&PF) and Alaska Department of Natural Resources Division of Parks and Outdoor Recreation (ADNR DPOR). ADNR DPOR took the lead on the preliminary design/environmental document effort with the ADOT&PF providing oversight.

The proposed scope is to build nearly 14 miles of 8 foot wide hardened surface (compacted D-1) bicycle/pedestrian pathway within the Eagle River Greenbelt. The project begins at Milepost (MP) 13.4 of the Glenn Hwy. and ends at the Eagle River Nature Center located at MP 12.7 of Eagle River Rd. Four trailheads, one parking area, eight viewing areas, two caretaker cabins, and six bridges are included in the preliminary design. Elevated pathway, bridges, and culverts will be used to minimize impacts to water bodies and wetlands. Easements and right-of-way (ROW) acquisition is required.

In March of 2002, \$616,000 was programmed with authority to proceed through environmental document. The class of action was determined to be an Environmental Assessment (EA). Preliminary engineering and alternative alignments were developed. Public and Agency scoping was conducted and first draft of the EA was prepared.

Justification for Project Closeout

"Get Alaska Moving through service and infrastructure"

The project was put on hold in late 2007 following review of the draft EA and the Department's assessment that the conclusion of the environmental document process would result in selection of the no-build alternative. Build alternative challenges include:

- Conflict between the proposed pathway location and the Alaska Department of Fish and Game's request for a half mile buffer zone from salmon spawning areas.

This was requested for public safety to minimize bear attacks. The Alaska Department of Fish and Game (ADF&G) indicates the Eagle River Greenbelt is one of the most likely areas in Alaska for someone to be attacked by a brown bear. From 1995 through 2004 (when ADF&G provided their comments) there were 9 brown bear attacks in the vicinity of the proposed trail.

The half mile buffer zone would also reduce habitat fragmentation. Research shows that during the peak of the salmon run and foraging period in August, most bears travel small distances between foraging sites on streams and resting sites.

- An inability to obtain needed additional right-of-way from Eklutna, Inc. for a recreational facility.

ADNR DPOR acknowledged the removal of the project from the TIP in their March 16, 2011 letter to ADOT&PF. A notice indicating the Department's intent to close the project was placed in the Anchorage Daily News on March 8, 2012.

If you have any questions or require additional information, please contact me at 269-0641.

Sincerely,

Kevin L. Jackson, P.E.
Project Manager
Highway Design
Central Region

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

Division of Parks and Outdoor Recreation Design and Construction

SEAN PARNELL, GOVERNOR

550 W. 7th AVENUE, SUITE 1340
ANCHORAGE, ALASKA 99501

PHONE: (907) 269-8731
FAX: (907) 269-8917

March 16, 2011

Re: DOT&PF Project No. 55715
Eagle River Greenbelt Access and Pathway

To: K. Kim Rice, P.E.
Regional Preconstruction Engineer

Alaska State Parks does not disagree with the decision to remove the Eagle River Greenbelt Access and Pathway project from the TIP.

Thanks,



Mike Seidl, Chief
Alaska State Parks Design and Construction

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

DIVISION OF WILDLIFE CONSERVATION

SARAH PALIN, GOVERNOR

333 Raspberry Road
Anchorage, AK 99518-1599
PHONE: (907) 267-2185
FAX: (907) 267-2433

MEMORANDUM

TO: Marla Carter, Division of Sport Fish, Region V
FROM: Rick Sinnott, Anchorage Area Wildlife Biologist
DATE: July 24, 2009
SUBJECT: Chugach State Park Trail Management Plan Comments

Thanks for the opportunity to comment on the July 2009 agency review draft of the Chugach State Park Trail Management Plan.

When we reviewed the plan several weeks ago, we recommended eliminating proposed new or improved trails that would facilitate access or encourage more use of the trails between the Glenn Highway and Briggs Bridge. Our recommendation was rejected by the project manager, supposedly because the department of fish and game had approved of all of the trails in a previous plan.

The division of parks has conducted several planning efforts to identify and list proposed trail projects. The department of fish and game has participated in most of these planning efforts. In general, we support trails in Chugach State Park, and we believe park staff have done a good job balancing the needs of the various user groups with wildlife conservation and public safety. However, these plans can lie fallow for decades while the conditions existing at the time change and new information on wildlife accrues. The cover letter for the agency review draft acknowledges that the previous trail management plan, adopted in 1986, is outdated. Now is the time to consider new information and make the necessary adjustments.

Before the late 1980s we have no record of anyone being mauled by a bear in the Anchorage area. Since about 1989, 16 people have been injured or killed by bears. Ten of these people were mauled in Chugach State Park and the other six were mauled near the park under similar conditions. Many more people have been attacked but not injured in Chugach State Park, either because the bear chose not to make contact or the bear was shot in defense of life or property (DLP). Many members of the public believe that bear attacks have increased in the Anchorage area because, they believe, the number of bears has increased. Although bear numbers may have increased slightly, we have no evidence that their populations are substantially higher now than in previous decades. In fact, the limited information we do have—e.g., hunter harvest reports, DLP records, anecdotal accounts dating back to the early days of Anchorage, the large and remote nature of the park compared to the number of Anchorage residents prior to its establishment—suggest that bear numbers are little different now than in the past. What has changed is the number of people, the number of people using trails, types of trail use (e.g., more bikers and runners in recent years), and the number of bears who have

become somewhat habituated to human activity, either through hunting closures in and near communities or because of the increased availability of human garbage, bird seed, and pet food in urban and near-urban areas.

Recent bear attacks in the Anchorage area have led to some accommodations to minimize unacceptable risks and avoid shooting bears in DLP. For example, in a four-year period (1995-1998), three people were injured by brown bears on Albert Loop Trail, in Chugach State Park. Since the last mauling, the trail has been closed every year from mid-July to fall to avoid surprising bears attracted to the salmon spawning in streams near the trail. Similarly, after two maulings and several other close calls in 2008, the Municipality of Anchorage closed Rover's Run Trail, in Bicentennial Park, from mid-summer to fall. These trails were established with little planning near salmon-spawning streams frequented by brown bears. It seems like a good idea to avoid doing this in the future.

We should avoid establishing new and improving existing trails in areas frequented by brown bears for three reasons. 1) The risk to recreational users, particularly those who choose to move relatively fast, is unacceptable and might make the state liable for enhancing access to and facilitating high-speed recreational activities through an area with a well-known hazard. 2) When trail users in Alaska perceive a greater-than-normal threat from wildlife, many carry firearms; this results in more dead bears, even if the bears were not an immediate threat, and discharging firearms on trails may cause collateral human injuries or deaths. 3) Many Anchorage residents—even some who don't use trails—oppose funding for trails if the trails are going to be closed to human use. All of the trail planning documents cited in my comments refer to the importance of maintaining populations of bears and other wildlife in the Eagle River greenbelt and recommend locating trails to minimize bear-human conflicts.

Since the last comprehensive review of the state park trail comprehensive plan, in the mid 1980s, conditions have changed, and we have accrued additional information on bears. In January 2004, during the last public and agency review of the Eagle River greenbelt trail, I recommended that new and improved trails be located at least ½ mile from Eagle River and its tributaries, especially the South Fork of Eagle River, Meadow Creek, and Clearwater Creek. An additional mauling occurred last summer on Meadow Creek, less than 100 yards from a proposed trailhead improvement that would lead to a proposed pedestrian bridge over Eagle River.

In the past two decades, development in the Eagle River area has constricted wildlife distribution and movements. A good example of this is illustrated by the 1992 Eagle River Greenbelt Management Plan. The plat map in the greenbelt management plan does not show Yosemite or Yellowstone drives, Eaglewood subdivision, Eagle Crossing subdivision, Briggs Bridge, Eagle River High School, Gruening Middle School, Alpenglow Elementary School, or any of the new development between Ravenwood Elementary School and the river. In other words, over 500 houses have been built within ¼ mile of Eagle River since the early 1990s.

We know that brown and black bears often use the Eagle River greenbelt, between the Glenn Highway bridges and the South Fork, because we receive many calls, from May to November, about black and brown bears making forays from the greenbelt into the neighborhoods on both sides. The residents living near Meadow Creek often report brown bears in the neighborhood, and most of them know that brown bears fish for spawning salmon in Meadow Creek in summer. The new developments along the north bank of Eagle River and along Yellowstone Drive force bears into a narrow corridor if they want to pass through the Eagle River area to foraging areas up and down the river.

In 2005-2007, Dr. Sean Farley radio-collared brown bears, collected hair samples along streams for DNA analysis, and identified critical food resources in the Anchorage area. Although most of his research was focused on Fort Richardson, Elmendorf AFB, and Campbell Tract/Bicentennial Park, Dr. Farley found at least two of the radio-collared bears appeared to pass under the Glenn Highway bridges, presumably to avoid crossing the Glenn Highway. Brown bears have been documented avoiding or minimizing road crossings on the Kenai Peninsula and in Canada. Only a small fraction of the brown bears in the Eagle River area were equipped with radio collars. Thus, it is likely that the Eagle River canyon is an important movement corridor for brown bears and probably other wildlife. Finally, the research demonstrated that brown bears in Anchorage will travel and feed in very close proximity to people, often remaining within yards of trails.

To gain a better understanding of bear movements and timing of visits in the Eagle River canyon, we have placed trail cameras on a number of trails between the Glenn Highway bridges and the South Fork of Eagle River. We have collected data on both bear and human use of these trails since May 2009. I've attached four pairs of images showing bear and human use of several trails at the same locations.



Running brown bear sow (followed in next frame by cub): July 4 @ 2:45 a.m.



Typical trail users: July 5 @ 3:39 p.m.



Large male black bear (followed in next frame by adult female bear): June 2 @ 8:58 p.m.



Typical trail user: May 31 @ 6:01 p.m.



Typical trail users: July 19 @ 5:59 p.m.



Female brown bear (followed in next frame by cub): July 20 @ 11:22 p.m.



Black bear sow with two cubs: June 23 @ 12:14 a.m.



Typical trail user: June 18 @ 12:35 a.m.

None of these were close encounters. However, imagine what will happen when many more people are encouraged to participate in these activities, on trails that facilitate greater speeds, at all hours of the day and night.

I will provide a final report this fall. Preliminary information has shown a great deal of bear activity around Meadow Creek and the South Fork, with brown and black bears using the greenbelt trails in between these salmon-spawning streams. We have also documented a relatively large proportion of brown bear sows with cubs: at least two family groups are using Meadow Creek and at least three family groups are using South Fork this summer. Brown bear sows with cubs are particularly dangerous in surprise encounters because they are extremely protective. Most of the serious bear attacks in Chugach State Park and nearby areas in the past 20 years have involved brown bear sows with cubs.

As we have mentioned in previous comments, improving existing trails or building new trails between the Glenn Highway bridges and South Fork will greatly increase the number of bear-human attacks in the park. The increasing human population in Eagle River, and the proximity of these trails to neighborhoods, will create a situation unique in the Anchorage area. Nowhere

else does a narrow bear-movement corridor and concentrated feeding area bisect such densely populated neighborhoods. Thousands of people live on both sides of the Eagle River canyon within easy walking, running, or biking distance of the greenbelt.

The proposed pedestrian bridge over Eagle River will greatly increase community use of the trails. Our trail cameras have documented some teens and pre-teens from Yellowstone Drive walking home from Gruening Middle School and walking to and from Wal-Mart, using the Briggs Bridge and primitive trails along Eagle River. Imagine the number of kids who would use the trails to and from Eagle River High School, Gruening Middle School, and the three nearby elementary schools if a pedestrian bridge connected both sides of the river and the trails were paved. Imagine not just a Wal-Mart on the north side of the river, but a large shopping mall near Eagle River High School that would attract kids from many neighborhoods north of the river. Imagine not dozens of people but hundreds of people using these trails day and night because they are close to home. If the trails are paved and a bridge is provided between the existing, and future, neighborhoods, people will treat the Eagle River greenbelt like an inner-city park. But the bears will still be there, because the salmon are there and the Glenn and Briggs highway bridges provide critical wildlife passages across the major highways.

Bear movement into and through the Eagle River canyon is likely greatest during the salmon-spawning season. King salmon return to Meadow Creek and South Fork in early July, where they are immediately accessible to bears. Returning sockeye, coho, chum, and pink salmon are present in Eagle River, both above and below the Eagle River canyon, later in the summer and fall. King and coho salmon also spawn in Fire Creek and sockeye, pink, and coho salmon spawn in Sixmile Creek, both downstream from the Glenn Highway bridges. Live coho salmon and carcasses are available well into October or later; however, coho salmon do not spawn in Meadow Creek and the main bear attractant, spawning king salmon, is depleted sooner. Devon Rees was mauled by a brown bear fishing for king salmon in Meadow Creek on August 4, 2008; therefore, brown bears are likely to frequent the greenbelt between Meadow Creek and South Fork from early July until mid-August or later.

As I noted in my comments in 2004, Eagle River valley is one of the most likely places in Alaska to be attacked by a bear. In my experience, the number of brown bear attacks seem to be correlated with level of human recreational use. **At low levels of human use**, like that existing along most of Eagle River, **and moderate to high bear use**, we see relatively few attacks, because bears tend to avoid people and encounter rates are low. **At high levels of human use and low bear use**, we see relatively few attacks, because bears tend to avoid congregations of people (by visiting the area at night, etc.). But **at moderate levels of human use and moderate to high bear use**, the number of attacks seem to increase because bears are still using the area, often because they are attracted to critical food sources, and they find it difficult to avoid surprise encounters with people. It may be that the per capita level of bear attacks is greatest at low levels of human use and high bear use, but public perception, and the public's willingness to coexist with bears, is more dependent on the actual number of well-publicized attacks. The existing primitive trails in Eagle River canyon are used by relatively few people. Adding new trails or improving the existing trails by paving them and providing more neighborhood access points will increase the number of users to moderate levels, which is not enough to deter bears.

The agency review draft of the trail management plan proposes that new and improved trails between the Glenn Highway bridges and the South Fork (e.g., 223a, 223b, 224b, 224c) be Trail Class 5. Trail Class 5 is characterized in the plan as having 1) a surface commonly hardened with asphalt or other imported material, 2) low grades, 3) trailside amenities, 4) two-directional

travel, 5) a typically rural to urban setting, 6) intensive use, 7) users with limited trail skills and experience, and 8) a high level of accessibility. Is this really the kind of trail network and participants you want in a brown bear concentration area?

If the answer to that question is no, then my recommendations are:

- 1) Do not add new or improve existing trails in the park between the Glenn Highway and South Fork, particularly within ½ mile of any salmon-spawning stream or the river because these are the areas where there is a high likelihood of encountering brown bears.
- 2) Do not install the pedestrian bridge across Eagle River because it will increase the number of trail users even without additional improvements, and it will inevitably lead to new and improved trails throughout the Eagle River canyon.

If the answer to the question is yes, despite all the evidence to the contrary, I will make the following additional recommendations. Avoiding bear access to garbage, by providing bear-proof waste receptacles and emptying them before they are overflowing, and erecting a plethora of bear-warning signs are necessary, but will not be enough. Brown bears are in the area because it is a movement corridor and a salmon-fishing area. Surprise encounters will be inevitable and more frequent than in most parts of Chugach State Park. The only way to minimize the number of dangerous bear-human encounters will be:

- 1) Minimize the number and lengths of new trails.
- 2) Keep all trails in a primitive condition (i.e., Trail Class 1) to discourage fast-moving activities more likely to surprise bears at close range.
- 3) Close the trail network to all public use from July 1 through September 1 (maybe longer) when brown bears frequent the salmon-spawning streams and connecting trails and river banks. Instead of a seasonal trail closure, a night-time closure during this period should also minimize the number of surprise encounters because some bears appear to visit feeding areas at night to minimize encounters with trail users.
- 4) Enforce the trail closures with rangers or other on-site enforcement staff. Otherwise, the closure will be ignored.

In case it's not obvious, the last four recommendations are intended to make the best of a bad situation. My primary objective is to convince you to drop the proposed trail improvements, including the pedestrian bridge, from the trail management plan.

cc: James King, Director, Division of State Parks
Tom Harrison, Superintendent, Chugach State Park
Doug Larsen
Grant Hilderbrand

STATE OF ALASKA

SARAH PALIN, GOVERNOR

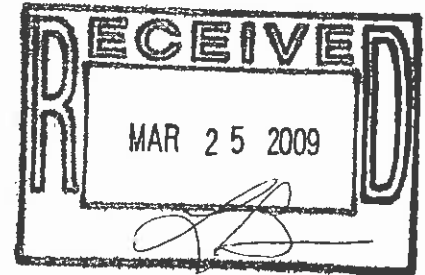
DEPARTMENT OF FISH AND GAME

DIVISION OF WILDLIFE CONSERVATION

P.O. BOX 115526
JUNEAU, AK 99811-5526
PHONE: (907) 465-4190
FAX: (907) 465-6142

March 23, 2009

Mr. James King, Director
Division of State Parks
550 W. 7th Ave., Suite 1380
Anchorage, AK 99501-3561



Dear James:

As per your request, I am writing to summarize our concerns and recommendations regarding trail development and the installation of a connecting bridge between the Eagle River campground and Alden Lane through the Eagle River greenbelt of Chugach State Park. As the wildlife management agency for the state of Alaska, we are concerned about this specific project and the potential for further trail development in this area due to expected additional interactions between bears and humans.

Brown bears utilize habitats for a variety of reasons, one being the need to meet nutritional requirements necessary to support the costs of sustenance, reproduction, and lactation. In coastal ecosystems, salmon availability is a significant source of nutrition for brown bears and the timing and availability of the fish resource is known to largely influence bear movements and habitat selection. In the areas of the Anchorage bowl where we have collared and followed brown bears, this pattern has been confirmed. Thus, we reasonably predict that this stretch of Eagle River is utilized significantly by multiple brown bears in any given year, concurrent with the presence of salmon. This is further supported by anecdotal sightings in the area and a brown bear mauling near Meadow Creek last summer. By increasing access and, we assume, human use, the potential for bear-human interactions is increased and some of these interactions are likely to result in human injury or death or deaths of brown bears. Were public safety and minimization of bear mortality the only two considerations facing State Parks, I expect the decision to deny this trail extension and bridge installation would be an easy one.

Recognizing that State Parks is weighing a variety of factors, I offer the following recommendations should you decide to approve this specific project. First, please recognize that seasonal closures (e.g. spring and summer) of the bridge and trail may be warranted. However, posting closures and placing minor physical barriers or trailhead warning signs ("you are in bear country," etc.) will not suffice as enforcement of these closures. Full-time monitoring and citation of violators will be necessary. Second, should this project pave the way for future trail developments, our concerns become even greater and our cautions more urgent. We suggest you seriously reconsider any plans to construct the bridge and connecting trails, or even any plans to expand or improve existing trails near the river itself.

While the Alaska Department of Fish and Game (ADF&G) is opposed to further trail development in the Eagle River corridor because of our concerns about human-bear interactions, we recognize

that DNR may nonetheless proceed with such development. If trail construction occurs, we encourage the trail to be as wide and straight as possible, in consideration of improving visibility by trail users. Further, we recommend that the trail exit the canyon and climb to elevated terrain as quickly as possible. Of particular concern is the area near Meadow Creek as it is home to a natural run of king salmon, as well as the site of a recent mauling and multiple bear-human encounters. We understand that while the trail head may be set several hundred yards from the confluence of Meadow Creek and Eagle River, parking is potentially planned for an area next to the creek. Constructing the parking lot next to the creek will inevitably result in human traffic to or in close proximity to the creek. We urge you to consider signage, vegetation clearing within at least 50 yards on either side of the trail to improve visibility, and physical barriers to minimize human access to this stretch of stream.

As you are aware, public safety is not the primary mandate for our department and our staff is presently overleveraged with wildlife management activities, which limits our ability to respond to all of the wildlife-related issues in Anchorage. Thus, State Parks needs to be prepared to respond to and deal with all aspects of negative wildlife-human interactions and public safety issues should incidents occur and if ADF&G staff is unable to respond. Please recognize that many of these interactions occur after business hours and often in the middle of the night during the summer.

Also, please be aware that the bridge and connecting trails are very close to adjacent neighborhoods, and children can be expected to frequently play or ride bicycles in the area if the bridge is built. We have noted this pattern in nearby Eagle Crossing and other neighborhoods where children ride bicycles on interconnecting bike trails in the evenings during summer (i.e., the season and time of day brown bears tend to be most active). Thus, additional neighborhood education efforts beyond signage will likely be needed.

Finally, as you may know, the Alaska Board of Game, upon the recommendation of ADF&G, recently liberalized brown bear harvest in upper Eagle River. While this will not necessarily functionally mitigate potential conflicts in the lower stretches of Eagle River, including the proposed project site, it should be noted that we are exercising our duty and authority as managers of the GMU 14C brown bear population, recognizing the wide variety of public desires, including the opportunity to harvest brown bears.

Please feel free to contact me if you have questions or would like to discuss this issue further.

Sincerely,



Doug Larsen
Director

cc: Denby Lloyd
Cliff Judkins
Grant Hilderbrand

STATE OF ALASKA
DEPARTMENT OF FISH & GAME

DIVISION OF WILDLIFE CONSERVATION

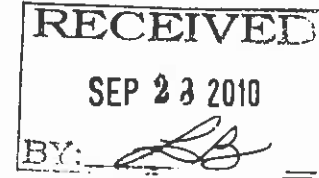
SEAN PARNELL, GOVERNOR

333 RASPBERRY ROAD
ANCHORAGE, ALASKA 99518

PHONE: (907) 267-2147
FAX: (907) 267-2477

September 23, 2010

James King, Director
Division of State Parks
550 W. 7th Ave., Suite 1380
Anchorage, AK 99501-3561



Mr. King:

Thank you for your recent letter regarding trail development and the installation of a connecting bridge near Eagle River campground. In response to your request, I am writing to clarify a few issues you raised relative to Director Larsen's March 23, 2009 letter on the same topic.

You ask for clarification of our statement that the area is used "significantly by multiple brown bears in a given year." While the remainder of that sentence makes reference to the activity being "concurrent with the presence of salmon," I realize the statement, in a temporal context, is somewhat vague. For more detail regarding the timing of such runs in Eagle River and Meadow Creek, I suggest that you contact Jim Hasbrouck of our Division of Sport Fisheries (907-267-2124).

In a spatial context, during the past two years, photos taken by trail cameras, as well as public reports and staff observations, indicate that at least eight individual brown bears frequent the Meadow Creek confluence area. These bears generally arrive after the first week in June and become more prevalent once salmon arrive in Meadow Creek. Most of their activity is in the late night hours. We estimate that at least eight black bears also utilize this area. However, black bears typically avoid areas where brown bears concentrate, and are seen more frequently in housing areas adjacent to Meadow Creek.

To aid in your decision making process, I have asked my staff to write up a short summary to provide a better understanding of the number of bears, what species, what dates, and during what time of the day they were photographed near Meadow Creek. I expect to have that summary by next week and will provide it as soon as it is available. Please note that our camera data provide only a snapshot of bear activity, and represent a minimum number of bears in an area. These data should not be considered a maximum estimate of individual bears.

Your letter also asks for clarification of our statement that the bridge and trail were "likely to result in human injury or death." That rationale was based upon the assumption that an improved trail would result in increased human activity and thus greater potential for bear-human interactions. Assuming at least some of these interactions would be negative; it was further assumed that at least some would result in human injury or death, or deaths of brown bears. However, since it is impossible to predict the precise behavior and travels of individual bears or people, we have no way of quantifying the potential for negative interactions. While the most conservative approach is to avoid all human/bear interactions, we recognize that such a

strategy would be inconsistent with the policies, programs, and projects in which each of our agencies engage daily. As you know, we are always looking to provide the public greater opportunities to access and become involved with their natural world.

Your final question involves the current human/bear use of the area near the Meadow Creek confluence. As you and I walked through that area a few weeks back, it was quite clear that the existing narrow brushy trails along Eagle River have been heavily used by bears and people for quite some time. Our previous letter made no attempt to analyze the relative risk associated with existing trail use versus that of the proposed trail and bridge system.

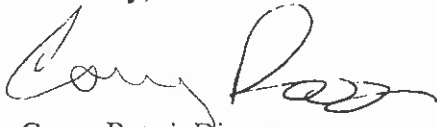
Beyond completely isolating people and bears, the most important factor in reducing negative interactions is to make the actions of people and bears as predictable as possible. We all too often hear that someone was mauled because they surprised a sow with cubs. Clearly, the existing "brushy" footpath puts the public directly in a bear movement corridor with a tremendous potential for bears and people to surprise one another. Our previous letter provided suggestions concerning design and placement of the proposed trail that should reduce the potential for "surprise" human-bear encounters. A properly designed, constructed, and maintained trail in the area may well improve public safety over existing conditions.

If your agency chooses to move forward with this project, we would recommend that the trail design incorporate a mechanism to allow an unencumbered corridor for the bears to move up and down Eagle River. Perhaps the proposed trail could be elevated on the north side of the river where the proposed bridge would terminate. The idea would be to create a trail overpass that would allow bears to pass freely under the trail, thus creating a separation from people where the bear and human trails intersect. In addition, your agency should actively discourage people from using the existing footpath along Meadow Creek and Eagle River (at least seasonally). When bear activity is high, we would be glad to advise your agency in an effort to help you provide proper notice to the public.

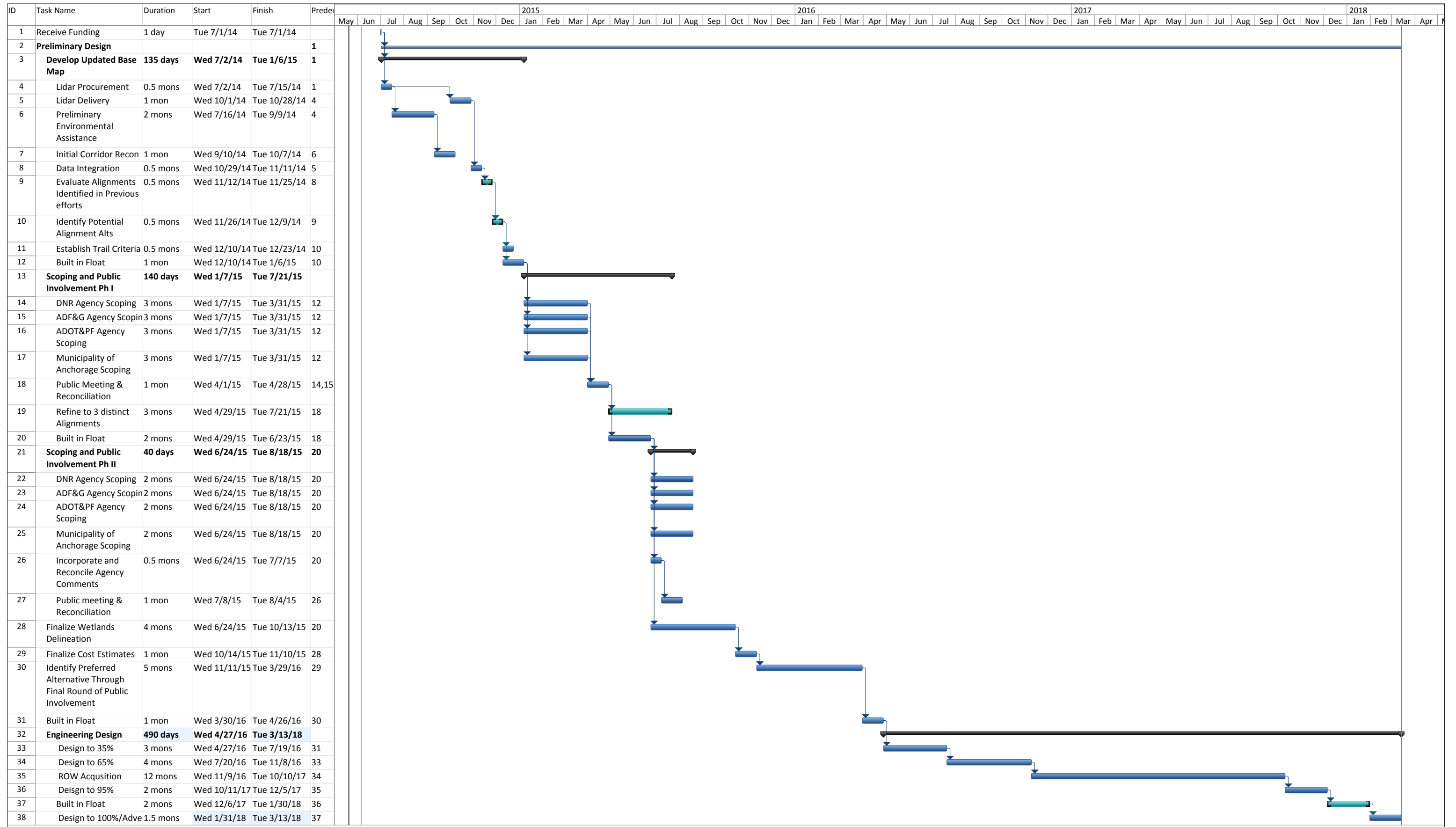
In closing, I would like to thank you for your time and thoughtfulness regarding this issue. In the end, I know both of our agencies share a desire to help the public enjoy Alaska's wonderful natural resources in a safe and responsible manner.

Should your staff have any questions or should they need further assistance evaluating options to improve human safety, please feel free to contact me or our Region II staff for assistance.

Sincerely,



Corey Rossi, Director



Project: ER Greenbelt Prelim Engi
Date: Fri 6/6/14

Task		Summary		External Milestone		Inactive Summary		Manual Summary Rollup		Finish-only	
Split		Project Summary		Inactive Task		Manual Task		Manual Summary		Deadline	
Milestone		External Tasks		Inactive Milestone		Duration-only		Start-only		Progress	

Yellow

Maintenance Item Description	Crew Size	Hr. Rate	Total Rate	Duration	Materials	Cost	Frequency	Annual Cost	Notes
Clearing and Grubbing (32)	2	\$15	\$30	82.5	\$50	\$2,525	4	\$631	Clear overgrown brush, minor landscape maintenance
Vandalism/Removal of...	2	\$15	\$30	22.5	\$50	\$725	1	\$725	Stupid people will always do stupid stuff
Asphalt Patching/Crack Sealing	2	\$15	\$30	7.5	\$75	\$300	4	\$75	
Prefabricated Steel Bridge (200')	2	\$15	\$30	15	\$100	\$550	10	\$55	Abutment repair, wood plank replacement
Timber Retaining Wall (4560 sf)	2	\$15	\$30	7.5	\$100	\$325	5	\$65	Repaint wood surfaces, fix damaged lumber
Structural Plate Arch (1)	2	\$15	\$30	7.5	\$50	\$275	2	\$138	Electrical repairs, remove spilled gravel
18-Inch CSP (21 pipes)	2	\$15	\$30	82.5	\$50	\$2,525	20	\$126	How often do these really need to be cleaned?
Standard Sign (30 sf)			\$0			\$3,900	20	\$195	Target practice, souvenirs
Picnic Table (5)	2	\$15	\$30	7.5	\$50	\$275	5	\$55	Repaint, replace damaged lumber
Park Bench (20)	2	\$15	\$30	7.5	\$50	\$275	5	\$55	With clear sealer, should be applied more often than russet
Single Entrance Gate (3)	2	\$15	\$30	7.5	\$75	\$300	5	\$60	Repaint, tighten bolts, adjust conection plate, etc.
Spotting Scope (3)	2	\$15	\$30	7.5	\$25	\$250	10	\$25	Repaint, tighten bolts
Viewing Deck (3)	2	\$15	\$30	15	\$100	\$550	5	\$110	Repaint, repair damaged lumber
Removable Barrier Post (6)	2	\$15	\$30	7.5	\$50	\$275	5	\$55	Repaint
Interpretive Kiosk (2)	2	\$15	\$30	22.5	\$100	\$775	5	\$155	Change messages and information, repaint, tighten connections
Bulletin Board (2)	2	\$15	\$30	7.5	\$50	\$275	5	\$55	Repaint, change information, clean
Orientation Sign (2)	2	\$15	\$30	7.5	\$50	\$275	5	\$55	Repaint
Interpretive Sign (10)	2	\$15	\$30	15	\$50	\$500	5	\$100	Repaint, clean
Trail Sign (5)	2	\$15	\$30	7.5	\$50	\$275	5	\$55	Repaint
Vaulted Toilet (2)	2	\$15	\$30	37.5	\$250	\$1,375	3	\$458	Cleaning, repairing/replacing hardware, general upkeep
Caretaker Cabin (2)	2	\$15	\$30	175	\$150	\$5,400	2	\$2,700	Host can keep clean for no \$\$\$, hardware and general upkeep

Blue

Clearing and Grubbing (17)	2	15	\$30	37.5	25	\$1,150	4	\$288	Clear overgrown brush, minor landscape maintenance
Vandalism/Removal of...	2	15	\$30	22.5	50	\$725	1	\$725	Stupid people will always do stupid stuff
Asphalt Patching/Crack Sealing	2	\$15	\$30	7.5	75	\$300	4	\$75	
Prefabricated Steel Bridge (70')	2	\$15	\$30	15	100	\$550	10	\$55	Abutment repair, wood plank replacement
Prefabricated Steel Bridge (72')	2	\$15	\$30	15	100	\$550	10	\$55	Repaint wood surfaces, fix damaged lumber
Prefabricated Steel Bridge (130')	2	\$15	\$30	15	100	\$550	10	\$55	Electrical repairs, remove spilled gravel
18-Inch CSP (10 pipes)	2	\$15	\$30	37.5	25	\$1,150	20	\$58	How often do these really need to be cleaned?
Standard Sign (15 sf)	2	\$15	\$30			\$1,950	20	\$98	Target practice, souvenirs
Picnic Table (3)	2	\$15	\$30	7.5	25	\$250	5	\$50	Repaint, replace damaged lumber
Park Bench (10)	2	\$15	\$30	7.5	25	\$250	5	\$50	With clear sealer, should be applied more often than russet
Single Entrance Gate (2)	2	\$15	\$30	7.5	50	\$275	5	\$55	Repaint, tighten bolts, adjust conection plate, etc.
Spotting Scope (3)	2	\$15	\$30	7.5	25	\$250	10	\$25	Repaint, tighten bolts
Viewing Deck (3)	2	\$15	\$30	15	100	\$550	5	\$110	Repaint, repair damaged lumber
Removable Barrier Post (6)	2	\$15	\$30	7.5	25	\$250	5	\$50	Repaint
Interpretive Kiosk (1)	2	\$15	\$30	7.5	50	\$275	5	\$55	Change messages and information, repaint, tighten connections
Bulletin Board (2)	2	\$15	\$30	7.5	50	\$275	5	\$55	Repaint, change information, clean
Orientation Sign (2)	2	\$15	\$30	7.5	50	\$275	5	\$55	Repaint
Interpretive Sign (5)	2	\$15	\$30	7.5	25	\$250	5	\$50	Repaint, clean
Trail Sign (2)	2	\$15	\$30	2	25	\$85	5	\$17	Repaint
Vaulted Toilet (1)	2	\$15	\$30	15	125	\$575	3	\$192	Cleaning, repairing/replacing hardware, general upkeep
Caretaker Cabin (1)	2	\$15	\$30	22.5	75	\$750	2	\$375	Host can keep clean for no \$\$\$, hardware and general upkeep

Eagle River Greenbelt Access Pathway

Yellow Route

Maintenance Item Description	2003	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Clearing and Grubbing (32)	631	800	826	845	871	897	903	956	982	1014	1040	1073	1105	1138	1177	1209	1248	1281	1320	1365	1404	1443
Vandalism/Removal of...	725	919	948	971	1001	1031	1037	1098	1128	1165	1195	1232	1269	1307	1352	1389	1434	1471	1516	1568	1613	1658
Asphalt Patching/Crack Sealing	75	95	98	100	104	107	107	114	117	121	124	127	131	135	140	144	148	152	157	162	167	171
Prefabricated Steel Bridge (200')	55	70	72	74	76	78	79	83	86	88	91	93	96	99	103	105	109	112	115	119	122	126
Timber Retaining Wall (4560 sf)	65	82	85	87	90	92	93	98	101	104	107	110	114	117	121	125	129	132	136	141	145	149
Structural Plate Arch (1)	138	174	180	184	190	195	197	208	214	221	227	234	241	248	256	263	272	279	287	297	306	314
18-Inch CSP (21 pipes)	126	160	165	169	174	179	181	191	196	203	208	215	221	228	235	242	250	256	264	273	281	289
Standard Sign (30 sf)	195	247	255	261	269	277	279	295	303	313	321	331	341	351	364	374	386	396	408	422	434	446
Picnic Table (5)	55	70	72	74	76	78	79	83	86	88	91	93	96	99	103	105	109	112	115	119	122	126
Park Bench (20)	55	70	72	74	76	78	79	83	86	88	91	93	96	99	103	105	109	112	115	119	122	126
Single Entrance Gate (3)	60	76	78	80	83	85	86	91	93	96	99	102	105	108	112	115	119	122	125	130	133	137
Spotting Scope (3)	25	32	33	33	35	36	36	38	39	40	41	42	44	45	47	48	49	51	52	54	56	57
Viewing Deck (3)	110	139	144	147	152	156	157	167	171	177	181	187	193	198	205	211	218	223	230	238	245	252
Removable Barrier Post (6)	55	70	72	74	76	78	79	83	86	88	91	93	96	99	103	105	109	112	115	119	122	126
Interpretive Kiosk (2)	155	196	203	208	214	220	222	235	241	249	255	263	271	279	289	297	307	315	324	335	345	354
Bulletin Board (2)	55	70	72	74	76	78	79	83	86	88	91	93	96	99	103	105	109	112	115	119	122	126
Orientation Sign (2)	55	70	72	74	76	78	79	83	86	88	91	93	96	99	103	105	109	112	115	119	122	126
Interpretive Sign (10)	100	127	131	134	138	142	143	151	156	161	165	170	175	180	186	192	198	203	209	216	222	229
Trail Sign (5)	55	70	72	74	76	78	79	83	86	88	91	93	96	99	103	105	109	112	115	119	122	126
Vaulted Toilet (2)	458	581	600	614	633	651	655	694	713	736	755	779	803	826	854	878	906	930	958	991	1020	1048
Caretaker Cabin (2)	2700	3421	3532	3615	3727	3838	3861	4088	4199	4338	4450	4589	4728	4867	5034	5173	5340	5479	5645	5840	6007	6174
TOTAL	\$5,948	\$7,536	\$7,781	\$7,965	\$8,210	\$8,455	\$8,506	\$9,006	\$9,251	\$9,558	\$9,803	\$10,109	\$10,416	\$10,722	\$11,089	\$11,396	\$11,763	\$12,070	\$12,437	\$12,866	\$13,234	\$13,601

What about snow removal? Done by volunteer group?
 Grooming of trail? Done by volunteer group?
 How often do culverts really need to be cleaned out? I haven't heard of this in general being a consistent problem.
 Assume ASP field staff (or ACC staff) at \$15/hr, 2-person crew, = \$30/hr
 Spotting Scope
 How much work can the host do, if there are any?

Eagle River Greenbelt Access Pathway

Blue Route

Maintenance Item Description	2003	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Clearing and Grubbing (17)	\$288	364	376	385	397	409	411	435	447	462	474	489	503	518	536	551	569	583	601	622	640	657
Vandalism/Removal of...	\$725	919	948	971	1001	1031	1037	1098	1128	1165	1195	1232	1269	1307	1352	1389	1434	1471	1516	1568	1613	1658
Asphalt Patching/Crack Sealing	\$75	95	98	100	104	107	107	114	117	121	124	127	131	135	140	144	148	152	157	162	167	171
Prefabricated Steel Bridge (70')	\$55	70	72	74	76	78	79	83	86	88	91	93	96	99	103	105	109	112	115	119	122	126
Prefabricated Steel Bridge (72')	\$55	70	72	74	76	78	79	83	86	88	91	93	96	99	103	105	109	112	115	119	122	126
Prefabricated Steel Bridge (130')	\$55	70	72	74	76	78	79	83	86	88	91	93	96	99	103	105	109	112	115	119	122	126
18-Inch CSP (10 pipes)	\$58	73	75	77	79	82	82	87	89	92	95	98	101	104	107	110	114	117	120	124	128	131
Standard Sign (15 sf)	\$98	124	128	131	135	139	139	148	152	157	161	166	171	176	182	187	193	198	204	211	217	223
Picnic Table (3)	\$50	63	65	67	69	71	72	76	78	80	82	85	88	90	93	96	99	101	105	108	111	114
Park Bench (10)	\$50	63	65	67	69	71	72	76	78	80	82	85	88	90	93	96	99	101	105	108	111	114
Single Entrance Gate (2)	\$55	70	72	74	76	78	79	83	86	88	91	93	96	99	103	105	109	112	115	119	122	126
Spotting Scope (3)	\$25	32	33	33	35	36	36	38	39	40	41	42	44	45	47	48	49	51	52	54	56	57
Viewing Deck (3)	\$110	139	144	147	152	156	157	167	171	177	181	187	193	198	205	211	218	223	230	238	245	252
Removable Barrier Post (6)	\$50	63	65	67	69	71	72	76	78	80	82	85	88	90	93	96	99	101	105	108	111	114
Interpretive Kiosk (1)	\$55	70	72	74	76	78	79	83	86	88	91	93	96	99	103	105	109	112	115	119	122	126
Bulletin Board (2)	\$55	70	72	74	76	78	79	83	86	88	91	93	96	99	103	105	109	112	115	119	122	126
Orientation Sign (2)	\$55	70	72	74	76	78	79	83	86	88	91	93	96	99	103	105	109	112	115	119	122	126
Interpretive Sign (5)	\$50	63	65	67	69	71	72	76	78	80	82	85	88	90	93	96	99	101	105	108	111	114
Trail Sign (2)	\$17	22	22	23	23	24	24	26	26	27	28	29	30	31	32	33	34	34	36	37	38	39
Vaulted Toilet (1)	\$192	243	251	257	265	272	274	290	298	308	316	326	336	345	357	367	379	389	401	415	426	438
Caretaker Cabin (1)	\$375	475	491	502	518	533	536	568	583	603	618	637	657	676	699	718	742	761	784	811	834	857
	\$2,546	\$3,226	\$3,331	\$3,409	\$3,514	\$3,619	\$3,641	\$3,855	\$3,960	\$4,091	\$4,196	\$4,327	\$4,458	\$4,589	\$4,747	\$4,878	\$5,035	\$5,166	\$5,324	\$5,507	\$5,665	\$5,822

Segment	Section	Section Areas (ft ²)				Length (ft)	yd ³ Ton Ton yd ³			
		Borrow	CABC	AC	Excavation		Borrow	CABC	AC	Excavation
A7	V	100.2	9	1.67	32.8	960	3562.67	540.00	116.23	1166.22
A2	I	66.9	9	1.67	0	2880	7136.00	1620.00	348.70	0.00
	IV	84.8	9	1.67	18.8	540	1696.00	303.75	65.38	376.00
	VI	142.3	9	1.67	40.2	480	2529.78	270.00	58.12	714.67
A4	I	66.9	9	1.67	0	60	148.67	33.75	7.26	0.00
	IV	84.8	9	1.67	18.8	1560	4899.56	877.50	188.88	1086.22
	VI	142.3	9	1.67	40.2	900	4743.33	506.25	108.97	1340.00
	BRIDGE						0.00	0.00	0.00	0.00
	BRIDGE						0.00	0.00	0.00	0.00
	BRIDGE						0.00	0.00	0.00	0.00
A5	VI	142.3	9	1.67	40.2	420	2213.56	236.25	50.85	625.33
						TOTAL	26929.56	4387.50	944.39	5308.44

Total Length 1.4772727

Parking Lot Summary

Assumptions

- 40-Car parking lot, each spot 12' wide.
- Little or no excavation and clearing/grubbing required.
- 220' wide x 480' long (105,600 sf)

borrow	7800	18	cy	140400
d-1	3400	35	ton	119000
asphalt	1500	100	ton	150000
signs	15	130	sf	1950
V. toilet	1		each	35000
Lndscpng				75000
Amenities				20000
Miscellaneous				<u>25000</u>
				566350

Item No	Description	Unit	Quantity	Unit Price	Amount
201(3A)	Clearing and Grubbing	Acre	6.27	\$15,000	\$94,008
202(1)	Rem. Structures/Obst.	L.S.	All Req'd	\$1,000	\$1,000
203(3)	Unclassified Excavation	C.Y.	5308.4	\$12	\$63,701
203(5A)	Borrow, Type A	C.Y.	26929.6	\$18	\$484,732
301(1)	Aggregate Base Course	Ton	4387.5	\$35	\$153,563
401(1)	Asphalt Concrete	Ton	944.4	\$130	\$122,770
501(8)	Retaining Wall	S.F.	3000.0	\$100	\$300,000
504(3A)	Prefabricated Steel Bridge (230')	Each	1	\$805,000	\$805,000
504(3B)	Prefabricated Steel Bridge (236')	Each	1	\$826,000	\$826,000
504(3C)	Prefabricated Steel Bridge (180')	Each	1	\$630,000	\$630,000
603(17-18)	18-Inch CSP	L.F.	322	\$60	\$19,320
615(1)	Standard Sign	S.F.	9	\$130	\$1,170
618(2)	Seeding	LB	315	\$120	\$37,800
620(1)	Topsoil	S.Y.	35000	\$3	\$105,000
640(1)	Mobilization/Demobilization	L.S.	All Req'd	\$100,000	\$100,000
641(1)	ESCP Administration	L.S.	All Req'd	\$7,000	\$7,000
641(2)	ESCP	C.S.	All Req'd	\$5,000	\$5,000
642(1)	Construction Surveying	L.S.	All Req'd	\$50,000	\$50,000
642(3)	Three Person Survey Party	Hour	20	\$250	\$5,000
643(2)	Traffic Maintenance	L.S.	All Req'd	\$1,000	\$1,000
644(1)	Field Office	L.S.	All Req'd	\$5,000	\$5,000
646(1)	CPM Scheduling	L.S.	All Req'd	\$500	\$500
647(2)	Wide Pad Dozer	Hour	10	\$175	\$1,750
650(1)	Picnic Table	Each	2	\$1,000	\$2,000
650(3)	Park Bench	Each	2	\$500	\$1,000
650(8)	Single Entrance Gate	Each	1	\$5,000	\$5,000
650(11)	Spotting Scope	Each	1	\$6,000	\$6,000
650(13)	Viewing Deck	Each	1	\$2,000	\$2,000
650(20)	Removable Barrier Post	Each	8	\$300	\$2,400
650(21)	Barrier Rock	Each	20	\$200	\$4,000
650(36)	Bulletin Board	Each	1	\$2,000	\$2,000
650(39)	Orientation Sign	Each	1	\$2,000	\$2,000
650(40)	Interpretive Sign	Each	3	\$1,200	\$3,600
650(41)	Trail Sign	Each	1	\$500	\$500
					Total ('03) \$4,416,164
					Total ('09) \$5,273,131

Segment	Section	Section Areas (ft ²)				Length (ft)	yd ³			
		Borrow	CABC	AC	Excavation		Borrow	CABC	AC	Excavation
B1	V	100.2	9	1.67	32.8	360	1336.00	202.50	43.59	437.33
	VI	142.3	9	1.67	40.2	960	5059.56	540.00	116.23	1429.33
B2	V	100.2	9	1.67	32.8	600	2226.67	337.50	72.65	728.89
B3	VI	142.3	9	1.67	40.2	1680	8854.22	945.00	203.41	2501.33
B4	V	100.2	9	1.67	32.8	480	1781.33	270.00	58.12	583.11
B5	VI	142.3	9	1.67	40.2	780	4110.89	438.75	94.44	1161.33
B6	VI	142.3	9	1.67	40.2	1020	5375.78	573.75	123.50	1518.67
B8	VI	142.3	9	1.67	40.2	1560	8221.78	877.50	188.88	2322.67
B9	VI	142.3	9	1.67	40.2	480	2529.78	270.00	58.12	714.67
	V	100.2	9	1.67	32.8	300	1113.33	168.75	36.32	364.44
B10	VI	142.3	9	1.67	40.2	1740	9170.44	978.75	210.67	2590.67
B11	VI	142.3	9	1.67	40.2	600	3162.22	337.50	72.65	893.33
TOTAL							52942.0	5940.0	1278.6	15245.8

Total Length 2.00

Item No	Description	Unit	Quantity	Unit Price	Amount
201(3A)	Clearing and Grubbing	Acre	8.48	\$15,000	\$127,273
202(1)	Rem. Structures/Obst.	L.S.	All Req'd	\$1,000	\$1,000
203(3)	Unclassified Excavation	C.Y.	15246	\$12	\$182,949
203(5A)	Borrow, Type A	C.Y.	52942	\$18	\$952,956
301(1)	Aggregate Base Course	Ton	5940	\$35	\$207,900
401(1)	Asphalt Concrete	Ton	1279	\$130	\$166,212
603(17-18)	18-Inch CSP	L.F.	240	\$60	\$14,400
615(1)	Standard Sign	S.F.	6	\$130	\$780
618(2)	Seeding	LB	369	\$120	\$44,280
620(1)	Topsoil	S.Y.	41000	\$3	\$123,000
640(1)	Mobilization/Demobilization	L.S.	All Req'd	\$100,000	\$100,000
641(1)	ESCP Administration	L.S.	All Req'd	\$10,000	\$10,000
641(2)	ESCP	C.S.	All Req'd	\$5,000	\$5,000
642(1)	Construction Surveying	L.S.	All Req'd	\$40,000	\$40,000
642(3)	Three Person Survey Party	Hour	20	\$250	\$5,000
643(2)	Traffic Maintenance	L.S.	All Req'd	\$1,000	\$1,000
644(1)	Field Office	L.S.	All Req'd	\$5,000	\$5,000
646(1)	CPM Scheduling	L.S.	All Req'd	\$500	\$500
647(2)	Wide Pad Dozer	Hour	20	\$175	\$3,500
650(1)	Picnic Table	Each	1	\$1,000	\$1,000
650(3)	Park Bench	Each	2	\$500	\$1,000
650(8)	Single Entrance Gate	Each	1	\$5,000	\$5,000
650(11)	Spotting Scope	Each	1	\$6,000	\$6,000
650(13)	Viewing Deck	Each	1	\$2,000	\$2,000
650(20)	Removable Barrier Post	Each	8	\$300	\$2,400
650(21)	Barrier Rock	Each	20	\$200	\$4,000
650(36)	Bulletin Board	Each	1	\$2,000	\$2,000
650(39)	Orientation Sign	Each	1	\$2,000	\$2,000
650(40)	Interpretive Sign	Each	2	\$1,200	\$2,400
650(41)	Trail Sign	Each	3	\$500	\$1,500
				Total ('03)	\$2,020,050
				Total ('09)	\$2,412,045

		Section Areas (ft ²)					yd ³ Ton Ton yd ³			
Segment	Section	Borrow	CABC	AC	Excavation	Length (ft)	Borrow	CABC	AC	Excavation
B11	VII	60.1	9	1.67	146.7	600	1335.56	337.50	72.65	3260.00
						TOTAL	1335.6	337.5	72.6	

Total Length 0.1136364

Item No	Description	Unit	Quantity	Unit Price	Amount
201(3A)	Clearing and Grubbing	Acre	0.48	\$15,000	\$7,231
202(1)	Rem. Structures/Obst.	L.S.	All Req'd	\$1,000	\$1,000
203(3)	Unclassified Excavation	C.Y.	0	\$12	\$0
203(5A)	Borrow, Type A	C.Y.	1336	\$18	\$24,040
301(1)	Aggregate Base Course	Ton	338	\$35	\$11,813
401(1)	Asphalt Concrete	Ton	73	\$130	\$9,444
506(5)	Timber Retaining Wall	S.F.	4125	\$60	\$247,500
603(17-18)	18-Inch CSP	L.F.	80	\$60	\$4,800
615(1)	Standard Sign	S.F.	3	\$130	\$390
618(2)	Seeding	LB	24.3	\$120	\$2,916
620(1)	Topsoil	S.Y.	2700	\$3	\$8,100
640(1)	Mobilization/Demobilization	L.S.	All Req'd	\$10,000	\$10,000
641(1)	ESCP Administration	L.S.	All Req'd	\$1,000	\$1,000
641(2)	ESCP	C.S.	All Req'd	\$5,000	\$5,000
642(1)	Construction Surveying	L.S.	All Req'd	\$5,000	\$5,000
642(3)	Three Person Survey Party	Hour	5	\$250	\$1,250
643(2)	Traffic Maintenance	L.S.	All Req'd	\$1,000	\$1,000
644(1)	Field Office	L.S.	All Req'd	\$5,000	\$5,000
646(1)	CPM Scheduling	L.S.	All Req'd	\$500	\$500
647(2)	Wide Pad Dozer	Hour	5	\$175	\$875
650(3)	Park Bench	Each	1	\$500	\$500
650(8)	Single Entrance Gate	Each	1	\$5,000	\$5,000
650(21)	Barrier Rock	Each	10	\$200	\$2,000
650(39)	Orientation Sign	Each	1	\$2,000	\$2,000
650(41)	Trail Sign	Each	1	\$500	\$500
				Total ('03)	\$356,859
				Total ('09)	\$426,108

Segment	Section	Section Areas (ft ²)				Length (ft)	yd ³ Ton Ton yd ³			
		Borrow	CABC	AC	Excavation		Borrow	CABC	AC	Excavation
O13	V	100.2	9	1.67	32.8	480	1781.33	270.00	58.12	583.11
O12	I	66.9	9	1.67	0	600	1486.67	337.50	72.65	0.00
	V	100.2	9	1.67	32.8	1380	5121.33	776.25	167.08	1676.44
TOTAL							8389.3	1383.8	297.8	2259.6

Total Length 0.4659091

Item No	Description	Unit	Quantity	Unit Price	Amount
201(3A)	Clearing and Grubbing	Acre	1.98	\$15,000	\$29,649
202(1)	Rem. Structures/Obst.	L.S.	All Req'd	\$1,000	\$1,000
203(3)	Unclassified Excavation	C.Y.	2259.6	\$12	\$27,115
203(5A)	Borrow, Type A	C.Y.	8389.3	\$18	\$151,008
301(1)	Aggregate Base Course	Ton	1383.8	\$35	\$48,431
401(1)	Asphalt Concrete	Ton	297.8	\$130	\$38,720
506(5)	Timber Retaining Wall	S.F.	4560.0	\$60	\$273,600
602(3)	Structural Plate Arch	Each	1	\$150,000	\$150,000
603(17-18)	18-Inch CSP	L.F.	240	\$60	\$14,400
615(1)	Standard Sign	S.F.	30	\$130	\$3,900
618(2)	Seeding	LB	333	\$120	\$39,960
620(1)	Topsoil	S.Y.	37000	\$3	\$111,000
640(1)	Mobilization/Demobilization	L.S.	All Req'd	\$100,000	\$100,000
641(1)	ESCP Administration	L.S.	All Req'd	\$9,000	\$9,000
641(2)	ESCP	C.S.	All Req'd	\$5,000	\$5,000
642(1)	Construction Surveying	L.S.	All Req'd	\$46,000	\$46,000
642(3)	Three Person Survey Party	Hour	20	\$250	\$5,000
643(2)	Traffic Maintenance	L.S.	All Req'd	\$1,000	\$1,000
644(1)	Field Office	L.S.	All Req'd	\$5,000	\$5,000
646(1)	CPM Scheduling	L.S.	All Req'd	\$500	\$500
647(2)	Wide Pad Dozer	Hour	20	\$175	\$3,500
650(1)	Picnic Table	Each	1	\$1,000	\$1,000
650(3)	Park Bench	Each	3	\$500	\$1,500
650(11)	Spotting Scope	Each	1	\$6,000	\$6,000
650(13)	Viewing Deck	Each	1	\$2,000	\$2,000
650(20)	Removable Barrier Post	Each	8	\$300	\$2,400
650(21)	Barrier Rock	Each	20	\$200	\$4,000
650(36)	Bulletin Board	Each	1	\$2,000	\$2,000
650(39)	Orientation Sign	Each	1	\$2,000	\$2,000
650(40)	Interpretive Sign	Each	3	\$1,200	\$3,600
650(41)	Trail Sign	Each	2	\$500	\$1,000
654(1)	Vaulted Toilet	Each	1	\$35,000	\$35,000
655(1)	Caretaker Cabin	Each	1	\$75,000	\$75,000
Total with Plate Arch ('03)					\$925,682
Total with Ret. Wall ('03)					\$1,049,282
Total with Plate Arch ('09)					\$1,105,313
Total with Ret. Wall ('09)					\$1,252,898

Segment	Section	Section Areas (ft ²)				Length (ft)	yd ³ Ton Ton yd ³			
		Borrow	CABC	AC	Excavation		Borrow	CABC	AC	Excavation
N1	I	66.9	9	1.67	0	420	1040.67	236.25	50.85	0.00
	VI	142.3	9	1.67	40.2	120	632.44	67.50	14.53	178.67
N3	VI	142.3	9	1.67	40.2	3300	17392.22	1856.25	399.55	4913.33
N18	I	66.9	9	1.67	0	840	2081.33	472.50	101.70	0.00
	VI	142.3	9	1.67	40.2	1080	5692.00	607.50	130.76	1608.00
N20	VI	142.3	9	1.67	40.2	1200	6324.44	675.00	145.29	1786.67
N11	I	66.9	9	1.67	0	1500	3716.67	843.75	181.61	0.00
C2	BRIDGE									
TOTAL							36879.8	4758.8	1024.3	8486.7

Total Length 1.6022727

Item No	Description	Unit	Quantity	Unit Price	Amount
201(3A)	Clearing and Grubbing	Acre	6.80	\$15,000	\$101,963
202(1)	Rem. Structures/Obst.	L.S.	All Req'd	\$1,000	\$1,000
203(3)	Unclassified Excavation	C.Y.	8486.7	\$12	\$101,840
203(5A)	Borrow, Type A	C.Y.	36879.8	\$18	\$663,836
301(1)	Aggregate Base Course	Ton	4758.8	\$35	\$166,556
401(1)	Asphalt Concrete	Ton	1024.3	\$130	\$133,158
504(3)	Prefabricated Steel Bridge (200')	Each	1	\$700,000	\$700,000
603(17-18)	18-Inch CSP	L.F.	80	\$60	\$4,800
615(1)	Standard Sign	S.F.	1.5	\$130	\$195
618(2)	Seeding	LB	54	\$120	\$6,480
620(1)	Topsoil	S.Y.	6000	\$3	\$18,000
640(1)	Mobilization/Demobilization	L.S.	All Req'd	\$150,000	\$150,000
641(1)	ESCP Administration	L.S.	All Req'd	\$1,000	\$1,000
641(2)	ESCP	C.S.	All Req'd	\$5,000	\$5,000
642(1)	Construction Surveying	L.S.	All Req'd	\$19,000	\$19,000
642(3)	Three Person Survey Party	Hour	10	\$250	\$2,500
643(2)	Traffic Maintenance	L.S.	All Req'd	\$1,000	\$1,000
644(1)	Field Office	L.S.	All Req'd	\$5,000	\$5,000
646(1)	CPM Scheduling	L.S.	All Req'd	\$500	\$500
647(2)	Wide Pad Dozer	Hour	20	\$175	\$3,500
650(3)	Park Bench	Each	1	\$500	\$500
650(8)	Single Entrance Gate	Each	0	\$5,000	\$0
650(11)	Spotting Scope	Each	0	\$6,000	\$0
650(13)	Viewing Deck	Each	0	\$2,000	\$0
650(20)	Removable Barrier Post	Each	6	\$300	\$1,800
650(21)	Barrier Rock	Each	10	\$200	\$2,000
650(30)	Interpretive Kiosk	Each	0	\$8,000	\$0
650(36)	Bulletin Board	Each	0	\$2,000	\$0
650(39)	Orientation Sign	Each	0	\$2,000	\$0
650(40)	Interpretive Sign	Each	1	\$1,200	\$1,200
650(41)	Trail Sign	Each	0	\$500	\$0
654(1)	Vaulted Toilet	Each	0	\$35,000	\$0
655(1)	Caretaker Cabin	Each	0	\$75,000	\$0
				Total ('03)	\$2,090,828
				Total ('09)	\$2,496,558

Segment	Section	Section Areas (ft ²)				Length (ft)	Quantities (yd ³)			
		Borrow	CABC	AC	Excavation		yd ³	Ton	Ton	yd ³
F1	IV	84.8	9	1.67	18.8	1080	3392.00	607.50	130.76	752.00
	V	100.2	9	1.67	32.8	840	3117.33	472.50	101.70	1020.44
E4	I	66.9	9	1.67	0	780	1932.67	438.75	94.44	0.00
	III	61.7	9	1.67	17.7	1620	3702.00	911.25	196.14	1062.00
	V	100.2	9	1.67	32.8	3840	14250.67	2160.00	464.93	4664.89
E1	I	66.9	9	1.67	0	360	892.00	202.50	43.59	0.00
	III	61.7	9	1.67	17.7	1080	2468.00	607.50	130.76	708.00
D10	I	66.9	9	1.67	0	6300	15610.00	3543.75	762.77	0.00
DI	I	66.9	9	1.67	0	3240	8028.00	1822.50	392.28	0.00
	IV	84.8	9	1.67	18.8	1000	3140.74	562.50	121.08	696.30
C12	I	66.9	9	1.67	0	420	1040.67	236.25	50.85	0.00
	IV	84.8	9	1.67	18.8	300	942.22	168.75	36.32	208.89
C5	III	61.7	9	1.67	17.7	1200	2742.22	675.00	145.29	786.67
	IV	84.8	9	1.67	18.8	180	565.33	101.25	21.79	125.33
	VI	142.3	9	1.67	40.2	2100	11067.78	1181.25	254.26	3126.67
C4	VI	142.3	9	1.67	40.2	1200	6324.44	675.00	145.29	1786.67
C1	VI	142.3	9	1.67	40.2	1320	6956.89	742.50	159.82	1965.33
TOTAL							86173.0	15108.8	3252.1	16903.2

Trail Length 5.0871212

Item No	Description	Unit	Quantity	Unit Price	Amount
201(3A)	Clearing and Grubbing	Acre	21.58	\$15,000	\$323,726
202(1)	Rem. Structures/Obst.	L.S.	All Req'd	\$1,000	\$1,000
203(3)	Unclassified Excavation	C.Y.	16903.2	\$12	\$202,838
203(5A)	Borrow, Type A	C.Y.	86173.0	\$18	\$1,551,113
301(1)	Aggregate Base Course	Ton	15108.8	\$35	\$528,806
401(1)	Asphalt Concrete	Ton	3252.1	\$130	\$422,770
504(3)	Prefabricated Steel Bridge	Each	0	\$0	\$0
506(5)	Timber Retaining Wall	S.F.	0.0	\$60	\$0
602(3)	Structural Plate Arch	Each	0	\$100,000	\$0
603(17-18)	18-Inch CSP	L.F.	400	\$60	\$24,000
615(1)	Standard Sign	S.F.	9	\$130	\$1,170
618(2)	Seeding	LB	837	\$120	\$100,440
620(1)	Topsoil	S.Y.	93000	\$3	\$279,000
640(1)	Mobilization/Demobilization	L.S.	All Req'd	\$175,000	\$175,000
641(1)	ESCP Administration	L.S.	All Req'd	\$20,000	\$20,000
641(2)	ESCP	C.S.	All Req'd	\$5,000	\$5,000
642(1)	Construction Surveying	L.S.	All Req'd	\$70,000	\$70,000
642(3)	Three Person Survey Party	Hour	20	\$250	\$5,000
643(2)	Traffic Maintenance	L.S.	All Req'd	\$1,000	\$1,000
644(1)	Field Office	L.S.	All Req'd	\$5,000	\$5,000
646(1)	CPM Scheduling	L.S.	All Req'd	\$500	\$500
647(2)	Wide Pad Dozer	Hour	20	\$175	\$3,500
650(1)	Picnic Table	Each	1	\$1,000	\$1,000
650(3)	Park Bench	Each	3	\$500	\$1,500
650(8)	Single Entrance Gate	Each	1	\$5,000	\$5,000
650(11)	Spotting Scope	Each	1	\$6,000	\$6,000
650(13)	Viewing Deck	Each	1	\$2,000	\$2,000
650(20)	Removable Barrier Post	Each	6	\$300	\$1,800
650(21)	Barrier Rock	Each	10	\$200	\$2,000
650(30)	Interpretive Kiosk	Each	1	\$8,000	\$8,000
650(36)	Bulletin Board	Each	1	\$2,000	\$2,000
650(39)	Orientation Sign	Each	1	\$2,000	\$2,000
650(40)	Interpretive Sign	Each	3	\$1,200	\$3,600
650(41)	Trail Sign	Each	1	\$500	\$500
654(1)	Vaulted Toilet	Each	1	\$35,000	\$35,000
655(1)	Caretaker Cabin	Each	1	\$75,000	\$75,000
				Total ('03)	\$3,865,263
				Total ('09)	\$4,615,327

Segment	Section	Section Areas (ft ²)				Length (ft)	Quantities (yd ³)			
		Borrow	CABC	AC	Excavation		yd ³	Ton	Ton	yd ³
D10	I	66.9	9	1.67	0	2100	5203.33	1181.25	254.26	0.00
DI	I	66.9	9	1.67	0	3240	8028.00	1822.50	392.28	0.00
	IV	84.8	9	1.67	18.8	1000	3140.74	562.50	121.08	696.30
C12	I	66.9	9	1.67	0	420	1040.67	236.25	50.85	0.00
	IV	84.8	9	1.67	18.8	300	942.22	168.75	36.32	208.89
C5	III	61.7	9	1.67	17.7	1200	2742.22	675.00	145.29	786.67
	IV	84.8	9	1.67	18.8	180	565.33	101.25	21.79	125.33
	VI	142.3	9	1.67	40.2	2100	11067.78	1181.25	254.26	3126.67
C4	VI	142.3	9	1.67	40.2	1200	6324.44	675.00	145.29	1786.67
C1	VI	142.3	9	1.67	40.2	1320	6956.89	742.50	159.82	1965.33
TOTAL							46011.6	7346.3	1581.2	8695.9

Trail Length 2.4734848

A6-a runs from the jct of A5/A6 to where the trail splits off and travels over a bridge, which leads to the south side of the river.

Item No	Description	Unit	Quantity	Unit Price	Amount
201(3A)	Clearing and Grubbing	Acre	10.49	\$15,000	\$157,404
202(1)	Rem. Structures/Obst.	L.S.	All Req'd	\$1,000	\$1,000
203(3)	Unclassified Excavation	C.Y.	8695.9	\$12	\$104,350
203(5A)	Borrow, Type A	C.Y.	46011.6	\$18	\$828,209
301(1)	Aggregate Base Course	Ton	7346.3	\$35	\$257,119
401(1)	Asphalt Concrete	Ton	1581.2	\$130	\$205,561
504(3)	Prefabricated Steel Bridge (200')	Each	1	\$700,000	\$700,000
506(5)	Timber Retaining Wall	S.F.	0.0	\$60	\$0
602(3)	Structural Plate Arch	Each	0	\$150,000	\$0
603(17-18)	18-Inch CSP	L.F.	400	\$60	\$24,000
615(1)	Standard Sign	S.F.	9	\$130	\$1,170
618(2)	Seeding	LB	837	\$120	\$100,440
620(1)	Topsoil	S.Y.	93000	\$3	\$279,000
640(1)	Mobilization/Demobilization	L.S.	All Req'd	\$175,000	\$175,000
641(1)	ESCP Administration	L.S.	All Req'd	\$20,000	\$20,000
641(2)	ESCP	C.S.	All Req'd	\$5,000	\$5,000
642(1)	Construction Surveying	L.S.	All Req'd	\$70,000	\$70,000
642(3)	Three Person Survey Party	Hour	20	\$250	\$5,000
643(2)	Traffic Maintenance	L.S.	All Req'd	\$1,000	\$1,000
644(1)	Field Office	L.S.	All Req'd	\$5,000	\$5,000
646(1)	CPM Scheduling	L.S.	All Req'd	\$500	\$500
647(2)	Wide Pad Dozer	Hour	20	\$175	\$3,500
650(1)	Picnic Table	Each	1	\$1,000	\$1,000
650(3)	Park Bench	Each	3	\$500	\$1,500
650(8)	Single Entrance Gate	Each	1	\$5,000	\$5,000
650(11)	Spotting Scope	Each	1	\$6,000	\$6,000
650(13)	Viewing Deck	Each	1	\$2,000	\$2,000
650(20)	Removable Barrier Post	Each	6	\$300	\$1,800
650(21)	Barrier Rock	Each	10	\$200	\$2,000
650(30)	Interpretive Kiosk	Each	1	\$8,000	\$8,000
650(36)	Bulletin Board	Each	1	\$2,000	\$2,000
650(39)	Orientation Sign	Each	1	\$2,000	\$2,000
650(40)	Interpretive Sign	Each	3	\$1,200	\$3,600
650(41)	Trail Sign	Each	1	\$500	\$500
654(1)	Vaulted Toilet	Each	1	\$35,000	\$35,000
655(1)	Caretaker Cabin	Each	1	\$75,000	\$75,000
				Total ('03)	\$3,088,653
				Total ('09)	\$3,688,013

Segment	Section	Section Areas (ft ²)				Length (ft)	yd ³ Ton Ton yd ³			
		Borrow	CABC	AC	Excavation		Borrow	CABC	AC	Excavation
L5	V	100.2	9	1.67	32.8	1500	5566.67	843.75	181.61	1822.22
	VI	142.3	9	1.67	40.2	2520	13281.33	1417.50	305.11	3752.00
L2	I	66.9	9	1.67	0	540	1338.00	303.75	65.38	0.00
	VI	142.3	9	1.67	40.2	1980	10435.33	1113.75	239.73	2948.00
L1	V	100.2	9	1.67	32.8	300	1113.33	168.75	36.32	364.44
	VI	142.3	9	1.67	40.2	1800	9486.67	1012.50	217.94	2680.00
M16	V	100.2	9	1.67	32.8	660	2449.33	371.25	79.91	801.78
	VI	142.3	9	1.67	40.2	120	632.44	67.50	14.53	178.67
M*	II	66.9	9	1.67	91.8	1920	4757.33	1080.00	232.46	6528.00
TOTAL							49060.4	6378.8	1373.0	19075.1

Total Length 2.1477273

Item No	Description	Unit	Quantity	Unit Price	Amount
201(3A)	Clearing and Grubbing	Acre	9.11	\$15,000	\$136,674
202(1)	Rem. Structures/Obst.	L.S.	All Req'd	\$1,000	\$1,000
203(3)	Unclassified Excavation	C.Y.	19075.1	\$12	\$228,901
203(5A)	Borrow, Type A	C.Y.	49060.4	\$18	\$883,088
301(1)	Aggregate Base Course	Ton	6378.8	\$35	\$223,256
401(1)	Asphalt Concrete	Ton	1373.0	\$130	\$178,489
504(3)	Prefabricated Steel Bridge	Each	0	\$0	\$0
506(5)	Timber Retaining Wall	S.F.	0.0	\$60	\$0
602(3)	Structural Plate Arch	Each	0	\$100,000	\$0
603(17-18)	18-Inch CSP	L.F.	160	\$60	\$9,600
615(1)	Standard Sign	S.F.	7.5	\$130	\$975
618(2)	Seeding	LB	225	\$120	\$27,000
620(1)	Topsoil	S.Y.	25000	\$3	\$75,000
640(1)	Mobilization/Demobilization	L.S.	All Req'd	\$65,000	\$65,000
641(1)	ESCP Administration	L.S.	All Req'd	\$8,000	\$8,000
641(2)	ESCP	C.S.	All Req'd	\$5,000	\$5,000
642(1)	Construction Surveying	L.S.	All Req'd	\$25,000	\$25,000
642(3)	Three Person Survey Party	Hour	20	\$250	\$5,000
643(2)	Traffic Maintenance	L.S.	All Req'd	\$1,000	\$1,000
644(1)	Field Office	L.S.	All Req'd	\$5,000	\$5,000
646(1)	CPM Scheduling	L.S.	All Req'd	\$500	\$500
647(2)	Wide Pad Dozer	Hour	20	\$175	\$3,500
650(1)	Picnic Table	Each	1	\$1,000	\$1,000
650(3)	Park Bench	Each	3	\$500	\$1,500
650(8)	Single Entrance Gate	Each	0	\$5,000	\$0
650(11)	Spotting Scope	Each	0	\$6,000	\$0
650(13)	Viewing Deck	Each	0	\$2,000	\$0
650(20)	Removable Barrier Post	Each	6	\$300	\$1,800
650(21)	Barrier Rock	Each	10	\$200	\$2,000
650(30)	Interpretive Kiosk	Each	0	\$8,000	\$0
650(36)	Bulletin Board	Each	0	\$2,000	\$0
650(39)	Orientation Sign	Each	0	\$2,000	\$0
650(40)	Interpretive Sign	Each	1	\$1,200	\$1,200
650(41)	Trail Sign	Each	2	\$500	\$1,000
654(1)	Vaulted Toilet	Each	1	\$35,000	\$35,000
655(1)	Caretaker Cabin	Each	0	\$75,000	\$0
				Total ('03)	\$1,925,483
				Total ('09)	\$2,299,127

Segment	Section	Section Areas (ft ²)				Length (ft)	yd ³			
		Borrow	CABC	AC	Excavation		Borrow	CABC	AC	Excavation
F3	II	66.9	9	1.67	91.8	900	2230.00	506.25	108.97	3060.00
	IV	84.8	9	1.67	18.8	120	376.89	67.50	14.53	83.56
F4	II	66.9	9	1.67	91.8	1020	2527.33	573.75	123.50	3468.00
L8	II	66.9	9	1.67	91.8	2100	5203.33	1181.25	254.26	7140.00
	IV	84.8	9	1.67	18.8	1500	4711.11	843.75	181.61	1044.44
L7	VI	142.3	9	1.67	40.2	240	1264.89	135.00	29.06	357.33
TOTAL							16313.6	3307.5	711.9	15153.3

Total Length 1.1136364

Item No	Description	Unit	Quantity	Unit Price	Amount
201(3A)	Clearing and Grubbing	Acre	4.72	\$15,000	\$70,868
202(1)	Rem. Structures/Obst.	L.S.	All Req'd	\$1,000	\$1,000
203(3)	Unclassified Excavation	C.Y.	15153.3	\$12	\$181,840
203(5A)	Borrow, Type A	C.Y.	16313.6	\$18	\$293,644
301(1)	Aggregate Base Course	Ton	3307.5	\$35	\$115,763
401(1)	Asphalt Concrete	Ton	711.9	\$130	\$92,550
504(3)	Prefabricated Steel Bridge (150')	Each	1	\$525,000	\$525,000
506(5)	Timber Retaining Wall	S.F.	0.0	\$60	\$0
602(3)	Structural Plate Arch	Each	0	\$100,000	\$0
603(17-18)	18-Inch CSP	L.F.	40	\$60	\$2,400
615(1)	Standard Sign	S.F.	4.5	\$130	\$585
618(2)	Seeding	LB	207	\$120	\$24,840
620(1)	Topsoil	S.Y.	23000	\$3	\$69,000
640(1)	Mobilization/Demobilization	L.S.	All Req'd	\$35,000	\$35,000
641(1)	ESCP Administration	L.S.	All Req'd	\$5,000	\$5,000
641(2)	ESCP	C.S.	All Req'd	\$5,000	\$5,000
642(1)	Construction Surveying	L.S.	All Req'd	\$15,000	\$15,000
642(3)	Three Person Survey Party	Hour	20	\$250	\$5,000
643(2)	Traffic Maintenance	L.S.	All Req'd	\$1,000	\$1,000
644(1)	Field Office	L.S.	All Req'd	\$5,000	\$5,000
646(1)	CPM Scheduling	L.S.	All Req'd	\$500	\$500
647(2)	Wide Pad Dozer	Hour	20	\$175	\$3,500
650(1)	Picnic Table	Each	1	\$1,000	\$1,000
650(3)	Park Bench	Each	2	\$500	\$1,000
650(8)	Single Entrance Gate	Each	0	\$5,000	\$0
650(11)	Spotting Scope	Each	0	\$6,000	\$0
650(13)	Viewing Deck	Each	0	\$2,000	\$0
650(20)	Removable Barrier Post	Each	6	\$300	\$1,800
650(21)	Barrier Rock	Each	10	\$200	\$2,000
650(30)	Interpretive Kiosk	Each	1	\$8,000	\$8,000
650(36)	Bulletin Board	Each	0	\$2,000	\$0
650(39)	Orientation Sign	Each	0	\$2,000	\$0
650(40)	Interpretive Sign	Each	1	\$1,200	\$1,200
650(41)	Trail Sign	Each	1	\$500	\$500
654(1)	Vaulted Toilet	Each	0	\$35,000	\$0
655(1)	Caretaker Cabin	Each	0	\$75,000	\$0
				Total ('03)	\$1,467,989
				Total ('09)	\$1,752,856

Segment	Section	Section Areas (ft ²)				Length (ft)	Quantities (yd ³)			
		Borrow	CABC	AC	Excavation		yd ³	Ton	Ton	yd ³
F2	I	66.9	9	1.67	0	3282	8132.07	1846.13	397.37	0.00
	V	100.2	9	1.67	32.8	660	2449.33	371.25	79.91	801.78
F7	I	66.9	9	1.67	0	600	1486.67	337.50	72.65	0.00
TOTAL						12068.1	2554.9	549.9	801.8	

Total Length 0.8602273
4542

Item No	Description	Unit	Quantity	Unit Price	Amount
201(3A)	Clearing and Grubbing	Acre	3.65	\$15,000	\$54,742
202(1)	Rem. Structures/Obst.	L.S.	All Req'd	\$1,000	\$1,000
203(3)	Unclassified Excavation	C.Y.	801.8	\$12	\$9,621
203(5A)	Borrow, Type A	C.Y.	12068.1	\$18	\$217,225
301(1)	Aggregate Base Course	Ton	2554.9	\$35	\$89,421
401(1)	Asphalt Concrete	Ton	549.9	\$130	\$71,490
504(3)	Prefabricated Steel Bridge (165')	Each	1	\$577,500	\$577,500
506(5)	Timber Retaining Wall	S.F.	0.0	\$60	\$0
602(3)	Structural Plate Arch	Each	0	\$100,000	\$0
603(17-18)	18-Inch CSP	L.F.	80	\$60	\$4,800
615(1)	Standard Sign	S.F.	6	\$130	\$780
618(2)	Seeding	LB	225	\$120	\$27,000
620(1)	Topsoil	S.Y.	25000	\$3	\$75,000
640(1)	Mobilization/Demobilization	L.S.	All Req'd	\$50,000	\$50,000
641(1)	ESCP Administration	L.S.	All Req'd	\$2,500	\$2,500
641(2)	ESCP	C.S.	All Req'd	\$5,000	\$5,000
642(1)	Construction Surveying	L.S.	All Req'd	\$25,000	\$25,000
642(3)	Three Person Survey Party	Hour	20	\$250	\$5,000
643(2)	Traffic Maintenance	L.S.	All Req'd	\$1,000	\$1,000
644(1)	Field Office	L.S.	All Req'd	\$5,000	\$5,000
646(1)	CPM Scheduling	L.S.	All Req'd	\$500	\$500
647(2)	Wide Pad Dozer	Hour	10	\$175	\$1,750
650(1)	Picnic Table	Each	0	\$1,000	\$0
650(3)	Park Bench	Each	1	\$500	\$500
650(8)	Single Entrance Gate	Each	0	\$5,000	\$0
650(11)	Spotting Scope	Each	0	\$6,000	\$0
650(13)	Viewing Deck	Each	0	\$2,000	\$0
650(20)	Removable Barrier Post	Each	6	\$300	\$1,800
650(21)	Barrier Rock	Each	10	\$200	\$2,000
650(30)	Interpretive Kiosk	Each	0	\$8,000	\$0
650(36)	Bulletin Board	Each	1	\$2,000	\$2,000
650(39)	Orientation Sign	Each	0	\$2,000	\$0
650(40)	Interpretive Sign	Each	2	\$1,200	\$2,400
650(41)	Trail Sign	Each	1	\$500	\$500
654(1)	Vaulted Toilet	Each	0	\$35,000	\$0
655(1)	Caretaker Cabin	Each	0	\$75,000	\$0
				Total ('03)	\$1,233,529
				Total ('09)	\$1,472,898

Segment	Section	Section Areas (ft ²)				Length (ft)	yd ³ Ton Ton yd ³			
		Borrow	CABC	AC	Excavation		Borrow	CABC	AC	Excavation
F9	I	66.9	9	1.67	0	5340	13231.33	3003.75	646.54	0.00
G1	I	66.9	9	1.67	0	1740	4311.33	978.75	210.67	0.00
	IV	84.8	9	1.67	18.8	1620	5088.00	911.25	196.14	1128.00
G2	I	66.9	9	1.67	0	600	1486.67	337.50	72.65	0.00
	IV	84.8	9	1.67	18.8	1980	6218.67	1113.75	239.73	1378.67
G4	I	66.9	9	1.67	0	1020	2527.33	573.75	123.50	0.00
	III	61.7	9	1.67	17.7	480	1096.89	270.00	58.12	314.67
TOTAL						33960.2	7188.8	1547.3	2821.3	

Total Length 2.4204545
12780

Item No	Description	Unit	Quantity	Unit Price	Amount
201(3A)	Clearing and Grubbing	Acre	10.27	\$15,000	\$154,029
202(1)	Rem. Structures/Obst.	L.S.	All Req'd	\$1,000	\$1,000
203(3)	Unclassified Excavation	C.Y.	2821.3	\$12	\$33,856
203(5A)	Borrow, Type A	C.Y.	33960.2	\$18	\$611,284
301(1)	Aggregate Base Course	Ton	7188.8	\$35	\$251,606
401(1)	Asphalt Concrete	Ton	1547.3	\$130	\$201,154
504(3)	Prefabricated Steel Bridge (165')	Each	1	\$577,500	\$577,500
506(5)	Timber Retaining Wall	S.F.	0.0	\$60	\$0
602(3)	Structural Plate Arch	Each	0	\$100,000	\$0
603(17-18)	18-Inch CSP	L.F.	400	\$60	\$24,000
615(1)	Standard Sign	S.F.	6	\$130	\$780
618(2)	Seeding	LB	666	\$120	\$79,920
620(1)	Topsoil	S.Y.	74000	\$3	\$222,000
640(1)	Mobilization/Demobilization	L.S.	All Req'd	\$130,000	\$130,000
641(1)	ESCP Administration	L.S.	All Req'd	\$15,000	\$15,000
641(2)	ESCP	C.S.	All Req'd	\$5,000	\$5,000
642(1)	Construction Surveying	L.S.	All Req'd	\$55,000	\$55,000
642(3)	Three Person Survey Party	Hour	20	\$250	\$5,000
643(2)	Traffic Maintenance	L.S.	All Req'd	\$1,000	\$1,000
644(1)	Field Office	L.S.	All Req'd	\$5,000	\$5,000
646(1)	CPM Scheduling	L.S.	All Req'd	\$500	\$500
647(2)	Wide Pad Dozer	Hour	20	\$175	\$3,500
650(1)	Picnic Table	Each	1	\$1,000	\$1,000
650(3)	Park Bench	Each	4	\$500	\$2,000
650(8)	Single Entrance Gate	Each	1	\$5,000	\$5,000
650(11)	Spotting Scope	Each	1	\$6,000	\$6,000
650(13)	Viewing Deck	Each	1	\$2,000	\$2,000
650(20)	Removable Barrier Post	Each	5	\$300	\$1,500
650(21)	Barrier Rock	Each	20	\$200	\$4,000
650(30)	Interpretive Kiosk	Each	0	\$8,000	\$0
650(36)	Bulletin Board	Each	1	\$2,000	\$2,000
650(39)	Orientation Sign	Each	0	\$2,000	\$0
650(40)	Interpretive Sign	Each	3	\$1,200	\$3,600
650(41)	Trail Sign	Each	2	\$500	\$1,000
654(1)	Vaulted Toilet	Each	0	\$35,000	\$0
655(1)	Caretaker Cabin	Each	0	\$75,000	\$0
				Total ('03)	\$2,405,229
				Total ('09)	\$2,871,969

Segment	Section	Section Areas (ft ²)				Length (ft)	yd ³ Ton Ton yd ³			
		Borrow	CABC	AC	Excavation		Borrow	CABC	AC	Excavation
K1	V	100.2	9	1.67	32.8	1680	6234.67	945.00	203.41	2040.89
	VI	142.3	9	1.67	40.2	2640	13913.78	1485.00	319.64	3930.67
K4	V	100.2	9	1.67	32.8	1440	5344.00	810.00	174.35	1749.33
	VI	142.3	9	1.67	40.2	780	4110.89	438.75	94.44	1161.33
K6	V	100.2	9	1.67	32.8	1980	7348.00	1113.75	239.73	2405.33
TOTAL							36951.3	3678.8	791.8	8882.2

Total Length 1.6136364

Item No	Description	Unit	Quantity	Unit Price	Amount
201(3A)	Clearing and Grubbing	Acre	6.85	\$15,000	\$102,686
202(1)	Rem. Structures/Obst.	L.S.	All Req'd	\$1,000	\$1,000
203(3)	Unclassified Excavation	C.Y.	8882.2	\$12	\$106,587
203(5A)	Borrow, Type A	C.Y.	36951.3	\$18	\$665,124
301(1)	Aggregate Base Course	Ton	3678.8	\$35	\$128,756
401(1)	Asphalt Concrete	Ton	791.8	\$130	\$102,938
504(3)	Prefabricated Steel Bridge	Each	0	\$0	\$0
506(5)	Timber Retaining Wall	S.F.	0.0	\$60	\$0
602(3)	Structural Plate Arch	Each	0	\$100,000	\$0
603(17-18)	18-Inch CSP	L.F.	240	\$60	\$14,400
615(1)	Standard Sign	S.F.	6	\$130	\$780
618(2)	Seeding	LB	297	\$120	\$35,640
620(1)	Topsoil	S.Y.	33000	\$3	\$99,000
640(1)	Mobilization/Demobilization	L.S.	All Req'd	\$70,000	\$70,000
641(1)	ESCP Administration	L.S.	All Req'd	\$7,500	\$7,500
641(2)	ESCP	C.S.	All Req'd	\$5,000	\$5,000
642(1)	Construction Surveying	L.S.	All Req'd	\$28,000	\$28,000
642(3)	Three Person Survey Party	Hour	20	\$250	\$5,000
643(2)	Traffic Maintenance	L.S.	All Req'd	\$1,000	\$1,000
644(1)	Field Office	L.S.	All Req'd	\$5,000	\$5,000
646(1)	CPM Scheduling	L.S.	All Req'd	\$500	\$500
647(2)	Wide Pad Dozer	Hour	20	\$175	\$3,500
650(1)	Picnic Table	Each	0	\$1,000	\$0
650(3)	Park Bench	Each	3	\$500	\$1,500
650(8)	Single Entrance Gate	Each	0	\$5,000	\$0
650(11)	Spotting Scope	Each	0	\$6,000	\$0
650(13)	Viewing Deck	Each	0	\$2,000	\$0
650(20)	Removable Barrier Post	Each	6	\$300	\$1,800
650(21)	Barrier Rock	Each	10	\$200	\$2,000
650(30)	Interpretive Kiosk	Each	0	\$8,000	\$0
650(36)	Bulletin Board	Each	0	\$2,000	\$0
650(39)	Orientation Sign	Each	0	\$2,000	\$0
650(40)	Interpretive Sign	Each	1	\$1,200	\$1,200
650(41)	Trail Sign	Each	2	\$500	\$1,000
654(1)	Vaulted Toilet	Each	0	\$35,000	\$0
655(1)	Caretaker Cabin	Each	0	\$75,000	\$0
				Total ('03)	\$1,389,911
				Total ('09)	\$1,659,626

Segment	Section	Section Areas (ft ²)				Length (ft)	yd ³ Ton Ton yd ³			
		Borrow	CABC	AC	Excavation		Borrow	CABC	AC	Excavation
K9	V	100.2	9	1.67	32.8	60	222.67	33.75	7.26	72.89
	VI	142.3	9	1.67	40.2	3600	18973.33	2025.00	435.87	5360.00
J1	VI	142.3	9	1.67	40.2	2340	12332.67	1316.25	283.32	3484.00
J2	II	66.9	9	1.67	91.8	3540	8771.33	1991.25	428.61	12036.00
G4	II	66.9	9	1.67	91.8	1020	2527.33	573.75	123.50	3468.00
	III	61.7	9	1.67	17.7	480	1096.89	270.00	58.12	314.67
TOTAL							43924.2	6210.0	1336.7	24735.6

Total Length 2.0909091

Item No	Description	Unit	Quantity	Unit Price	Amount
201(3A)	Clearing and Grubbing	Acre	8.87	\$15,000	\$133,058
202(1)	Rem. Structures/Obst.	L.S.	All Req'd	\$1,000	\$1,000
203(3)	Unclassified Excavation	C.Y.	24735.6	\$12	\$296,827
203(5A)	Borrow, Type A	C.Y.	43924.2	\$18	\$790,636
301(1)	Aggregate Base Course	Ton	6210.0	\$35	\$217,350
401(1)	Asphalt Concrete	Ton	1336.7	\$130	\$173,767
504(3)	Prefabricated Steel Bridge (200')	Each	2	\$700,000	\$1,400,000
506(5)	Timber Retaining Wall	S.F.	0.0	\$60	\$0
602(3)	Structural Plate Arch	Each	0	\$100,000	\$0
603(17-18)	18-Inch CSP	L.F.	240	\$60	\$14,400
615(1)	Standard Sign	S.F.	30	\$130	\$3,900
618(2)	Seeding	LB	387	\$120	\$46,440
620(1)	Topsoil	S.Y.	43000	\$3	\$129,000
640(1)	Mobilization/Demobilization	L.S.	All Req'd	\$175,000	\$175,000
641(1)	ESCP Administration	L.S.	All Req'd	\$8,000	\$8,000
641(2)	ESCP	C.S.	All Req'd	\$5,000	\$5,000
642(1)	Construction Surveying	L.S.	All Req'd	\$75,000	\$75,000
642(3)	Three Person Survey Party	Hour	20	\$250	\$5,000
643(2)	Traffic Maintenance	L.S.	All Req'd	\$1,000	\$1,000
644(1)	Field Office	L.S.	All Req'd	\$5,000	\$5,000
646(1)	CPM Scheduling	L.S.	All Req'd	\$500	\$500
647(2)	Wide Pad Dozer	Hour	20	\$175	\$3,500
650(1)	Picnic Table	Each	1	\$1,000	\$1,000
650(3)	Park Bench	Each	3	\$500	\$1,500
650(8)	Single Entrance Gate	Each	0	\$5,000	\$0
650(11)	Spotting Scope	Each	1	\$6,000	\$6,000
650(13)	Viewing Deck	Each	1	\$2,000	\$2,000
650(20)	Removable Barrier Post	Each	6	\$300	\$1,800
650(21)	Barrier Rock	Each	10	\$200	\$2,000
650(30)	Interpretive Kiosk	Each	0	\$8,000	\$0
650(36)	Bulletin Board	Each	0	\$2,000	\$0
650(39)	Orientation Sign	Each	0	\$2,000	\$0
650(40)	Interpretive Sign	Each	2	\$1,200	\$2,400
650(41)	Trail Sign	Each	2	\$500	\$1,000
654(1)	Vaulted Toilet	Each	1	\$35,000	\$35,000
655(1)	Caretaker Cabin	Each	0	\$75,000	\$0
				Total ('03)	\$3,537,077
				Total ('09)	\$4,223,455

Segment	Section	Section Areas (ft ²)				Length (ft)	yd ³ Ton Ton yd ³			
		Borrow	CABC	AC	Excavation		Borrow	CABC	AC	Excavation
H1	I	66.9	9	1.67	0	300	743.33	168.75	36.32	0.00
	III	66.9	9	1.67	91.8	600	1486.67	337.50	72.65	2040.00
	IV	84.8	9	1.67	18.8	1260	3957.33	708.75	152.55	877.33
	V	100.2	9	1.67	32.8	900	3340.00	506.25	108.97	1093.33
	IV	84.8	9	1.67	18.8	960	3015.11	540.00	116.23	668.44
H4	V	100.2	9	1.67	32.8	480	1781.33	270.00	58.12	583.11
H6	V	100.2	9	1.67	32.8	2280	8461.33	1282.50	276.05	2769.78
	VI	142.3	9	1.67	40.2	2820	14862.44	1586.25	341.43	4198.67
I1	III	66.9	9	1.67	91.8	540	1338.00	303.75	65.38	1836.00
I2	III	66.9	9	1.67	91.8	1500	3716.67	843.75	181.61	5100.00
TOTAL						42702.2	6547.5	1409.3	19166.7	

Total Length 1.9204545

Parking Lot Summary

Assumptions

- 1600'-long road
- 270' x 330' parking lot
- Total area = 127,500 sf
- 2' deep excavation
- 3' borrow on road and parking lot

	qty	\$\$\$		
clear/grub	2.92	15000	acre	43800
excavation	10000	12	cy	120000
borrow	15000	18	cy	270000
d-1	4000	35	ton	140000
asphalt	1800	100	ton	180000
signs	15	130	sf	1950
V. toilet	1		each	35000
Lndscpng				75000
Amenities				20000
Miscellaneous				<u>25000</u>
				746950

Item No	Description	Unit	Quantity	Unit Price	Amount
201(3A)	Clearing and Grubbing	Acre	8.15	\$15,000	\$122,211
202(1)	Rem. Structures/Obst.	L.S.	All Req'd	\$1,000	\$1,000
203(3)	Unclassified Excavation	C.Y.	19166.7	\$12	\$230,000
203(5A)	Borrow, Type A	C.Y.	42702.2	\$18	\$768,640
301(1)	Aggregate Base Course	Ton	6547.5	\$35	\$229,163
401(1)	Asphalt Concrete	Ton	1409.3	\$130	\$183,211
504(3)	Prefabricated Steel Bridge	Each	0	\$0	\$0
506(5)	Timber Retaining Wall	S.F.	0.0	\$60	\$0
602(3)	Structural Plate Arch	Each	0	\$100,000	\$0
603(17-18)	18-Inch CSP	L.F.	400	\$60	\$24,000
615(1)	Standard Sign	S.F.	6	\$130	\$780
618(2)	Seeding	LB	405	\$120	\$48,600
620(1)	Topsoil	S.Y.	45000	\$3	\$135,000
640(1)	Mobilization/Demobilization	L.S.	All Req'd	\$90,000	\$90,000
641(1)	ESCP Administration	L.S.	All Req'd	\$10,000	\$10,000
641(2)	ESCP	C.S.	All Req'd	\$5,000	\$5,000
642(1)	Construction Surveying	L.S.	All Req'd	\$35,000	\$35,000
642(3)	Three Person Survey Party	Hour	20	\$250	\$5,000
643(2)	Traffic Maintenance	L.S.	All Req'd	\$1,000	\$1,000
644(1)	Field Office	L.S.	All Req'd	\$5,000	\$5,000
646(1)	CPM Scheduling	L.S.	All Req'd	\$500	\$500
647(2)	Wide Pad Dozer	Hour	20	\$175	\$3,500
650(1)	Picnic Table	Each	1	\$1,000	\$1,000
650(3)	Park Bench	Each	3	\$500	\$1,500
650(8)	Single Entrance Gate	Each	1	\$5,000	\$5,000
650(11)	Spotting Scope	Each	1	\$6,000	\$6,000
650(13)	Viewing Deck	Each	1	\$2,000	\$2,000
650(20)	Removable Barrier Post	Each	6	\$300	\$1,800
650(21)	Barrier Rock	Each	10	\$200	\$2,000
650(30)	Interpretive Kiosk	Each	0	\$8,000	\$0
650(36)	Bulletin Board	Each	0	\$2,000	\$0
650(39)	Orientation Sign	Each	1	\$2,000	\$2,000
650(40)	Interpretive Sign	Each	2	\$1,200	\$2,400
650(41)	Trail Sign	Each	2	\$500	\$1,000
654(1)	Vaulted Toilet	Each	0	\$35,000	\$0
655(1)	Caretaker Cabin	Each	0	\$75,000	\$0
				Total ('03)	\$2,669,254
				Total ('09)	\$3,187,229

Segment	Section	Section Areas (ft ²)				Length (ft)	yd ³ Ton Ton yd ³			
		Borrow	CABC	AC	Excavation		Borrow	CABC	AC	Excavation
A14		115.4	9	1.67	0	24300	103860.00	13668.75	2942.12	0.00
TOTAL						103860.0	13668.8	2942.1	0.0	

Total Length 4.602273

Parking Lot Summary

Assumptions

- 1600'-long road
- 270' x 330' parking lot
- Total area = 127,500 sf
- 2' deep excavation
- 3' borrow on road and parking lot

	qty	\$\$\$		
clear/grub	2.92	15000	acre	43800
excavation	10000	12	cy	120000
borrow	15000	18	cy	270000
d-1	4000	35	ton	140000
asphalt	1800	100	ton	180000
signs	15	130	sf	1950
V. toilet	1		each	35000
Lndscpng				75000
Amenities				20000
Miscellaneous				<u>25000</u>
				746950

Trail Length >>>> 4.602273

Item No	Description	Unit	Quantity	Unit Price	Amount
201(3A)	Clearing and Grubbing	Acre	2.92	\$15,000	\$43,800
202(1)	Rem. Structures/Obst.	L.S.	All Req'd	\$1,000	\$1,000
203(3)	Unclassified Excavation	C.Y.	0.0	\$12	\$0
203(5A)	Borrow, Type A	C.Y.	103860.0	\$18	\$1,869,480
301(1)	Aggregate Base Course	Ton	13668.8	\$35	\$478,406
401(1)	Asphalt Concrete	Ton	2942.1	\$130	\$382,476
504(3)	Prefabricated Steel Bridge	Each	0	\$0	\$0
506(5)	Timber Retaining Wall	S.F.	0.0	\$60	\$0
602(3)	Structural Plate Arch	Each	0	\$100,000	\$0
603(17-18)	18-Inch CSP	L.F.	540	\$60	\$32,400
615(1)	Standard Sign	S.F.	25	\$130	\$3,250
618(2)	Seeding	LB	1050	\$120	\$126,000
620(1)	Topsoil	S.Y.	77500	\$3	\$232,500
640(1)	Mobilization/Demobilization	L.S.	All Req'd	\$0	\$175,000
641(1)	ESCP Administration	L.S.	All Req'd	\$0	\$20,000
641(2)	ESCP	C.S.	All Req'd	\$0	\$5,000
642(1)	Construction Surveying	L.S.	All Req'd	\$0	\$70,000
642(3)	Three Person Survey Party	Hour	10	\$250	\$2,500
643(2)	Traffic Maintenance	L.S.	All Req'd	\$0	\$1,000
644(1)	Field Office	L.S.	All Req'd	\$0	\$5,000
646(1)	CPM Scheduling	L.S.	All Req'd	\$0	\$500
647(2)	Wide Pad Dozer	Hour	10	\$175	\$1,750
650(1)	Picnic Table	Each	0	\$1,000	\$0
650(3)	Park Bench	Each	0	\$500	\$0
650(8)	Single Entrance Gate	Each	0	\$5,000	\$0
650(11)	Spotting Scope	Each	0	\$6,000	\$0
650(13)	Viewing Deck	Each	0	\$2,000	\$0
650(20)	Removable Barrier Post	Each	0	\$300	\$0
650(21)	Barrier Rock	Each	0	\$200	\$0
650(30)	Interpretive Kiosk	Each	0	\$8,000	\$0
650(36)	Bulletin Board	Each	0	\$2,000	\$0
650(39)	Orientation Sign	Each	0	\$2,000	\$0
650(40)	Interpretive Sign	Each	0	\$1,200	\$0
650(41)	Trail Sign	Each	0	\$500	\$0
654(1)	Vaulted Toilet	Each	0	\$35,000	\$0
655(1)	Caretaker Cabin	Each	0	\$75,000	\$0
				Total ('03)	\$4,197,012
				Total ('09)	\$5,011,452

Eagle River Greenbelt Access Pathway

Segment	2003 Construction Cost	2009 Construction Cost	Length (mi)	Disturbance (ac)	Wetlands (ac)	
A1	\$4,416,164	\$5,273,131	1.48	6.27	0.86	
A2	\$2,020,050	\$2,412,045	2.00	8.48	0.00	
A3	\$356,859	\$426,108	0.11	0.48	0.00	
A4	\$925,682	\$1,105,313	0.47	1.98	0.00	
A5	\$2,090,828	\$2,496,558	1.60	6.80	0.28	
A6	\$3,865,263	\$4,615,327	5.09	21.58	2.91	
A6-a	\$3,088,653	\$3,688,013	2.47	10.49	0.02	
A7	\$1,925,483	\$2,299,127	2.15	9.11	1.05	
A8	\$1,467,989	\$1,752,856	1.11	4.72	1.16	
A9	\$1,233,529	\$1,472,898	0.86	3.65	0.00	
A10	\$2,405,229	\$2,871,969	2.42	10.27	0.00	
A11	\$1,389,911	\$1,659,626	1.61	6.85	0.17	
A12	\$3,537,077	\$4,223,455	2.09	8.87	0.17	
A13	\$2,669,254	\$3,187,229	1.92	8.15	0.00	
A14	\$4,197,012	\$5,011,452	4.60	2.92	0.00	
Route						
1	\$17,962,809	\$21,448,533	13.95	59.17	4.04	A1-A4-A5-A3-A6-A9-A10-A1
2	\$15,851,809	\$18,927,889	13.35	40.03	4.04	A1-A4-A5-A3-A6-A14
3	\$21,867,901	\$26,111,417	15.02	63.72	3.70	A1-A4-A5-A3-A6-a-A7-A8-A'

Bridge Note: Assume all bridges to be 14 feet wide and \$250/sf.

Segment	Ken's Sheet	Wetlands (sq ft)	Wetlands (ac)	Access Pathway	Total Length (ft)
Alternative I					
A1	A	936.0	0.86		10,542.0
A4	N	0.0	0.00		2,460.0
A5	N	300.0	0.28		10,800.0
A3	C	0.0	0.00		600.0
A6	C	390.0	0.36		6,900.0
A6	D	936.0	0.86		9,900.0
A6	E	1,500.0	1.38		8,520.0
A6	F	336.0	0.31		2,136.0
A9	F	0.0	0.00		4,536.0
A10	F	0.0	0.00		2,742.0
A10	G	0.0	0.00		8,580.0
A13	G	0.0	0.00		540.0
A13	H	0.0	0.00		7,620.0
A13	I	0.0	0.00		3,000.0
		Total	4.04		
Alternative II					
A1	A	936.0	0.86		10,542.0
A4	N	0.0	0.00		2,460.0
A5	N	300.0	0.28		10,800.0
A3	C	0.0	0.00		600.0
A6	C	390.0	0.36		6,900.0
A6	D	936.0	0.86		9,900.0
A6	E	1,500.0	1.38		8,520.0
A6	F	336.0	0.31		2,136.0
A14	I	0.0	0.00		1,800.0
A14	H	0.0	0.00		7,548.0
A14	G	0.0	0.00		7,800.0
A14	F	336.0	0.00		7,200.0
			4.04		
Alternative III					
A1	A	936.0	0.86		10,542.0
A4	N	0.0	0.00		2,460.0
A5	N	300.0	0.28		10,800.0
A3	C	0.0	0.00		600.0
A6-a	M	900.0	0.83		8,700.0
A6-a	N	0.0	0.00		2,580.0
A7	M	0.0	0.00		2,700.0
A7	L	1,140.0	1.05		8,820.0
A8	L	1,140.0	1.05		2,640.0
A8	F	120.0	0.11		1,680.0
A11	L	0.0	0.00		1,560.0
A11	K	180.0	0.17		6,900.0
A12	K	0.0	0.00		3,180.0
A12	J	180.0	0.17		6,900.0
A13	J	0.0	0.00		2,340.0
A13	H	0.0	0.00		7,620.0
A13	I	0.0	0.00		3,000.0
			4.50		

Eagle River Greenbelt Access Pathway

		A1	A3	A4	A5	A3/A4/A5	(A3/A4/A5-A1)
201(3A)	Clearing and Grubbing	\$94,008	\$7,231	\$29,649	\$101,963	\$138,843	\$44,835
202(1)	Rem. Structures/Obst.	\$1,000	\$1,000	\$1,000	\$1,000	\$3,000	\$2,000
203(3)	Unclassified Excavation	\$63,701	\$0	\$27,115	\$101,840	\$128,955	\$65,253
203(5A)	Borrow, Type A	\$484,732	\$24,040	\$151,008	\$663,836	\$838,884	\$354,152
301(1)	Aggregate Base Course	\$153,563	\$11,813	\$48,431	\$166,556	\$226,800	\$73,238
401(1)	Asphalt Concrete	\$122,770	\$9,444	\$38,720	\$133,158	\$181,322	\$58,552
501(8)	Retaining Wall	\$300,000	\$247,500	\$0	\$0	\$247,500	-\$52,500
504(3A)	Prefabricated Steel Bridge	\$805,000	\$0	\$0	\$700,000	\$700,000	-\$105,000
504(3B)	Prefabricated Steel Bridge	\$826,000	\$0	\$0	\$0	\$0	-\$826,000
504(3C)	Prefabricated Steel Bridge	\$630,000	\$0	\$0	\$0	\$0	-\$630,000
602(3)	Structural Plate Arch	\$0	\$0	\$150,000	\$0	\$150,000	\$150,000
603(17-18)	18-Inch CSP	\$19,320	\$4,800	\$14,400	\$4,800	\$24,000	\$4,680
615(1)	Standard Sign	\$1,170	\$390	\$3,900	\$195	\$4,485	\$3,315
618(2)	Seeding	\$37,800	\$2,916	\$39,960	\$6,480	\$49,356	\$11,556
620(1)	Topsoil	\$105,000	\$8,100	\$111,000	\$18,000	\$137,100	\$32,100
640(1)	Mobilization/Demobilization	\$100,000	\$10,000	\$100,000	\$150,000	\$260,000	\$160,000
641(1)	ESCP Administration	\$7,000	\$1,000	\$9,000	\$1,000	\$11,000	\$4,000
641(2)	ESCP	\$5,000	\$5,000	\$5,000	\$5,000	\$15,000	\$10,000
642(1)	Construction Surveying	\$50,000	\$5,000	\$46,000	\$19,000	\$70,000	\$20,000
642(3)	Three Person Survey Party	\$5,000	\$1,250	\$5,000	\$2,500	\$8,750	\$3,750
643(2)	Traffic Maintenance	\$1,000	\$1,000	\$1,000	\$1,000	\$3,000	\$2,000
644(1)	Field Office	\$5,000	\$5,000	\$5,000	\$5,000	\$15,000	\$10,000
646(1)	CPM Scheduling	\$500	\$500	\$500	\$500	\$1,500	\$1,000
647(2)	Wide Pad Dozer	\$1,750	\$875	\$3,500	\$3,500	\$7,875	\$6,125
650(1)	Picnic Table	\$2,000	\$0	\$1,000	\$0	\$1,000	-\$1,000
650(3)	Park Bench	\$1,000	\$500	\$1,500	\$500	\$2,500	\$1,500
650(8)	Single Entrance Gate	\$5,000	\$5,000	\$0	\$0	\$5,000	\$0
650(11)	Spotting Scope	\$6,000	\$0	\$6,000	\$0	\$6,000	\$0
650(13)	Viewing Deck	\$2,000	\$0	\$2,000	\$0	\$2,000	\$0
650(20)	Removable Barrier Post	\$2,400	\$0	\$2,400	\$1,800	\$4,200	\$1,800
650(21)	Barrier Rock	\$4,000	\$2,000	\$4,000	\$2,000	\$8,000	\$4,000
650(36)	Bulletin Board	\$2,000	\$0	\$2,000	\$0	\$2,000	\$0
650(39)	Orientation Sign	\$2,000	\$2,000	\$2,000	\$0	\$4,000	\$2,000
650(40)	Interpretive Sign	\$3,600	\$0	\$3,600	\$1,200	\$4,800	\$1,200
650(41)	Trail Sign	\$500	\$500	\$1,000	\$0	\$1,500	\$1,000
654(1)	Vaulted Toilet	\$0	\$0	\$35,000	\$0	\$35,000	\$35,000
655(1)	Caretaker Cabin	\$0	\$0	\$75,000	\$0	\$75,000	\$75,000
misc.	Parking Lot	\$566,350	\$0	\$0	\$0	\$0	-\$566,350
TOTAL		\$4,416,164	\$356,859	\$925,682	\$2,090,828	\$3,373,370	-\$1,042,795



GREAT LAND TRUST
SOUTHCENTRAL ALASKA

*Working with willing
landowners and other
partners to conserve
Southcentral Alaska's
lands and waterways.*

YOUR LAND. YOUR TRUST.

Board of Directors

Dick LeFebvre
Chair

Molly McCammon
Vice Chair

Shelda Duff
Treasurer

Cathie Straub
Secretary

John Baker

Gary Baugh

Mark Dalton

Caryn Rea

Marty Rutherford

Corinne Smith

Jim Stratton

Ken Taylor

Staff

Phil Shephard
Executive Director

David Mitchell
Conservation Director

Kim Sollien
Mat-Su Program Director

Shane Prosser
Office Manager

John Wros
Lands Manager

1007 W. 3rd Ave
Suite 302
Anchorage, AK 99501
Tel (907) 278-4998
Fax (907) 278-4997
www.greatlandtrust.org

As of February 1, 2013 the following rates are charged by the Great Land Trust for fee-based compensatory mitigation through GLT's In Lieu Fee program.

Within the Municipality of Anchorage:

REV 1 Credit: \$166,719

REV 2 Credit: \$166,719

REV 3 Credit: \$ 19,823

Within the Matanuska Susitna Borough:

\$23,897 per credit

February 1, 2013

As required in the September 21, 2011 agreement with the U.S. Army Corps of Engineers establishing the In Lieu Fee Program, Great Land Trust is responsible for determining the rates for wetland credits. This amount reflects the cost to purchase, manage, and preserve fee ownership and/ or conservation easements for a combined Relative Ecological Value equal to or greater than the Relative Ecological Value of the debits permittees accrue.

As stated in the 2011 agreement, the Great Land Trust wetland mitigation program is overseen by an interagency review team (IRT) of Anchorage and Matanuska Susitna Borough wetland and aquatic specialists including members from the Army Corps of Engineers, the US Fish and Wildlife Service, the Environmental Protection Agency, and NOAA. Great Land Trust, under the guidance of each IRT, annually updates the fees charged for wetland credits. This annual update is necessary to reflect the yearly increase in costs associated with completing conservation projects due to changes in real estate market, inflation, etc. The rates for the Matanuska Susitna Borough are subject to change more frequently as the methodology for determining and valuing credits continues to change.

The Great Land Trust is pleased to announce the new fees and to continue to work with the Army Corps of Engineers on this successful program. We anticipate continuing to update our rates on an annual basis. Please direct questions to David Mitchell, Conservation Director at 278-4995 or dmitchell@greatlandtrust.org.

