

Agency: Commerce, Community and Economic Development**Grants to Named Recipients (AS 37.05.316)****Grant Recipient: Alaska Zoo****Federal Tax ID: 920039344****Project Title:****Project Type: Equipment and Materials**

Alaska Zoo - Distance Education Program

State Funding Requested: \$150,000
One-Time Need**House District: Anchorage Areawide (16-32)****Brief Project Description:**

The Alaska Zoo seeks funds to establish a distance education program through video conferencing.

Funding Plan:

Total Project Cost:	\$180,000
Funding Already Secured:	(\$30,000)
FY2013 State Funding Request:	<u>(\$150,000)</u>
Project Deficit:	\$0

*Funding Details:**The Alaska Zoo has \$30,000.00 in funds for this project.***Detailed Project Description and Justification:****PROJECT ABSTRACT**

The Alaska Zoo seeks funding to create a distance education program at the zoo. We have a well- established education program capable of delivering interactive classes over the internet to classrooms and groups throughout Alaska and beyond, we just lack the technology to deliver the content. We would like to have hard-wired, video conferencing capabilities from 5 locations at the zoo and the compatible cameras, equipment, bandwidth and technical training to successfully deliver a program of 16 classes on a year-round basis. As more than 104 State libraries are going to have video conferencing equipment by 2014, it only seems natural that the Zoo, a great content provider be equipped to deliver programs.

The project aims to expand the reach of the education department through video conferencing. Video conferencing offers a viable opportunity to deliver live, interactive, educational programs on a variety of species and topics in a cost effective manner to classrooms and groups throughout Alaska and beyond.

We would work with GCI's School Access Program in Alaska, the State of Alaska Library System's Online With Libraries (OWL) program and the Center for Collaborative Learning (CILC) to get our program "out there" and to insure its quality and effectiveness.

If successful in our grant application, the Alaska Zoo would select and commission service providers to hard wire the 5 zoo locations -- the polar bear exhibit, infirmary procedure room, wolf/tiger bridge, brown bear exhibit and lecture hall beginning on August 1, 2012. We would also begin selecting and ordering the cameras and equipment needed at this time. Utilizing the fall to secure equipment, wire the locations, we would begin training staff on the equipment, publicize and market the new program for a January 2013 soft launch of the Alaska Zoo Distance Learning Program. We'd use the third quarter

(Jan-Mar, 2013) of the school year as our test program and the fourth quarter and early summer for evaluation and tweaks to the program. We would complete the grant by the end of July 2013.

The program 16 classes would introduce audiences to a particular animal species and animal. Audiences would learn about this species, their range, life span, characteristics, diet, idiosyncrasies, mating habits, cultural role, conservation status, etc. The 45 interactive minute class would invite questions and provide audience members the ability to observe the animal's behavior.

This is the opportunity for live, interactive learning with some of the most amazing species on earth with a talented staff of animal educators. It would also provide our staff with access to other zoo professionals around the country and globe for staff development and best practices in animal care and husbandry.

Project Timeline:

Program completion is one year, with work and expenditures beginning in August of 2012 and running through July of 2013.

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

Alaska Zoo

Grant Recipient Contact Information:

Name: Eileen Floyd
Title: Development Director
Address: 4731 O'Malley Road
Anchorage, Alaska 99507
Phone Number: (907)346-2133
Email: efloyd@alaskazoo.org

Has this project been through a public review process at the local level and is it a community priority? ☐ Yes ☒ No



Alaska Zoo

The Alaska Zoo is part of the fabric of our great state and community. For forty-three years, the Alaska Zoo, a private non-profit organization has provided a home to orphaned, injured, abandoned and endangered animals. Some 130 plus animals representing 53 species call the Alaska Zoo home. We have the widest variety of Alaskan animals in the State. The Alaska Zoo is located just 15 minutes south of downtown Anchorage on 25 acres in the foothills of the Chugach mountains. We are proud of our long history of service to the people and wildlife of our State.

Services Provided

Our mission is to promote the conservation of arctic, sub-arctic and like climate species through education, research and community enrichment. To this end, we continue to enhance and develop our animal habitat areas. Our educational department utilizes a variety of programs to engage a range of audiences-from toddlers to seniors, to residents and visitors. We offer programs for children on zoo grounds including adventure camps, story-time programs, sketch-n-safaris, zoo explorers for girl scouts, and organized school field trip activities. We participate in Polar Bear International to study polar bear behavior in the field and then share that first hand knowledge information with students. We host family nights twice a week with weekly lectures on Tuesday nights and live music on Friday nights.

We provide a temporary home and care for Alaskan animals heading outside to permanent homes at other zoos and facilities. We have facilitated in placing hundreds of animals over the past 43 years. We are a breeding facility for Bactrian camel. We are a holding facility for Amur tigers and Snow Leopards.

Beneficiaries

The Alaska Zoo is one of the state's most popular family destinations. Millions of people have passed through its doors in the zoo's 42 year history. Last year alone, more than 172,000 people visited and our education department provided programs to 25,000 people. That's an increase of 12,000 visitors to the zoo in one year. We work closely with the Anchorage School District, US Fish & Wildlife Service, the Department of Fish & Game and the Bird Treatment and Learning Center. We also partner with a number of organizations such as AARP, ACCESS Alaska, McLaughlin Youth Center, Anchorage's Promise and UAA to provide programs, research projects, opportunities and events for our community.

Board of Directors: Management of the Alaska Zoo Corporation, a private nonprofit, is fully vested in the Board of Directors as directed in the 1969 Articles of Incorporation.

Alaska Zoo Distance Education Program

STATEMENT OF NEED

Our goal with this project is to be more accessible to remote Alaskan communities. Our connectivity needs upgrading. We seek State support to upgrade our capabilities to provide a distance learning program through video conferencing at the Alaska Zoo to schools, libraries and groups throughout Alaska and beyond. If successful in our grant application, we would begin the project on August 1, 2012 and complete the project by July 31, 2013.

The proposed Alaska Zoo Distance Education Program is a vital link in our ability to provide educational programs to Alaskan residents and the general public. While yes, we are a physical zoo for the public to visit, we must also be a cyberspace museum that connects visitors with the animals of the North. It is important to be able to reach people where and how they live and that is online, especially in Alaska. Distance learning and the enhanced ability to connect over the internet furthers the mission of the Alaska Zoo to promote the conservation of Arctic, sub-Arctic and like climate species through education, research and community enrichment.

We live in a “connected age.” The ability to instantly connect, face-to-face is becoming standard operating procedure with the use of *Skype* and smartphones. This capability truly opens the door to visit a museum like the Alaska Zoo and connect with its mission, participate in its programs and utilize its resources. An institution’s connectivity level is the true gatekeeper of the public’s accessibility.

The Alaska Zoo is looking to get “connected” and have the ability to deliver our programs over the internet through video conferencing to Alaskans throughout the state and to other interested parties. The Alaska State Library recently received a federal grant, Online With Libraries (OWL) to establish video conferencing in some 104 libraries in Alaska by 2013. We would love to be a content provider for them. We would also like to be a content provider for the Center for Interactive Learning and Collaboration (CILC) in Indiana. We have an established education department with thirteen years of experience in presenting programs and classes.

The Alaska Zoo education department has three full-time educators and is augmented by volunteers and part time employees. In 2010, the education department served 25,000 participants through a wide range of classes, programs and outreach. In the last year, we have seen a huge increase in the number of outreach classes (we conduct classes at school sites) requested by schools as budget dollars for field trips dries up. The interest in our content is there, the ability to reach our doors is not. Video conferencing opens that door.

Just as a museum is always updating, expanding and developing its physical exhibits, it is time for us to update our internet capabilities and expand our education department’s reach. We have great content, information and unique opportunities to share with students and the public. But we do not have the connections and hardware necessary. This grant would allow us to hardwire 6 areas of the zoo to deliver live, interactive programs. We have found with past “interactive” classes on zoo property that wireless options are erratic at best and not reliable for delivering quality programming on a consistent basis, this is why we are seeking to “hardwire.” Help us open the door to video conferencing and it will advance our ability to engage the public in our mission.

Alaska Zoo Distance Education Program

The vision for the Alaska Zoo in the strategic plan calls for the Zoo to be the leading destination in Alaska to learn about species of the Arctic, Sub-Arctic and like climates. To fulfill that vision, a “well-connected” Zoo is necessary – a Zoo with video conferencing capabilities in order to serve Alaskan residents outside the rail and roadway system. This would provide a viable opportunity for thousands of Alaskans statewide to visit and utilize the services of the Alaska Zoo, let alone open the door for students and groups across the country to tap into our resources. It would also facilitate networking opportunities and collaboration between Alaska Zoo staff and those at other “connected” zoos. A distance learning program offers the capability to share our mission through a direct, interactive and exciting avenue.

The establishment of a Distance Education Program at the Alaska Zoo would be a direct investment in our institutional capacity as it would provide a link to Alaskans we have not had the capability to serve. If you will, this would provide the missing link quite literally. It would allow the Zoo to further our mission and be an even greater resource for education, information and community enrichment through the expanded reach. We would be able to collaborate with the Alaska State Library OWL program, any connected school districts throughout Alaska and the Center for Interactive Learning Collaboration as content providers

The target audience of the project is school children K-12 yet many of our classes are equally as interesting to adults. That said, we would provide a menu of our classes and programs targeting particular age groups, so teachers and participants could choose a class geared at a certain age range and topic. We routinely provide educational and informational services across the board to residents and visitors, young and old alike. This project only enhances our ability to reach a far broader audience through another medium.

A recent survey conducted by Dittman Research and Communications of Anchorage conducted in February and March of 2011 with 259 subjects found that “nearly three-out-of-four respondents (73%) feel that the Alaska Zoo is ‘very important’ or ‘somewhat important’ to the State of Alaska as a whole.

IMPACT

The distance education program would benefit the Alaska Zoo in expanding the reach of our education department, hence the Zoo. More importantly, it would greatly benefit the people of Alaska. It would benefit our target audience by providing direct access to educational programs of the Alaska Zoo. As much of Alaska is off the roadway system, a distance learning program is the only viable option for providing interactive services and programs to remote Alaskan communities. Through collaborative efforts with the State of Alaska’s OWL project, Alaska Zoo Distance Learning Program could provide content to these under-served communities as well as local schools.

Our education department’s formal programming for the Distance education Program would begin with a menu of 16 classes for K-12 grade students and interested adults. The classes would serve the specified age ranges. Classes would range in time from 30 minutes for the younger children to 60 minutes for more advanced classes. Zoo staff would provide teachers and class coordinators any supporting materials via email prior to the class.

Alaska Zoo Distance Education Program

This grant would provide the all the necessary equipment to hard wire the Zoo with 6 on-site locations, provide the cameras, cabling, gear, and marketing tools to establish the program. Our education staff is already providing content on a regular basis, the only learning curve is to train staff on the particular equipment selected. Once in place, this would give us the ability to connect. From there our interest would turn to fulfilling the goals of the program to deliver classes via the internet that educate, engage and connect students to our mission. To that end, we would solicit feedback from teachers through an email evaluation form send after every class. We would also record some informational classes to put on our website and expand our live web cam program for the public.

We are not looking to this as a huge revenue source, but as the natural next step in the development and expansion of our education department to provide more services to Alaskans in the most cost efficient way. We would be satisfied if the money raised would offset the additional bandwidth costs. We believe the true program success will be measured in the additional reach and interest generated in our mission, measured in the number of programs delivered via the internet and program partnerships.

While it would greatly enhance our Zoo's ability to reach "bush" Alaska, it would also provide a tool for staff development. The ability to connect face-to-face with other zoo professionals, tour other zoo's habitats, discuss animal care, behavioral issues, enrichment tools and like topics of interest would greatly enhance our staff development and enrich the zoo as a whole. It is cost prohibitive to send our staff "outside" or to bring up many experts on a regular basis for conferences and classes. Video conferencing would offer an unparalleled opportunity in staff development.

This grant would open the door for the Alaska Zoo to connect as never before to residents of the state of Alaska with the simultaneous establishment of video conferencing program in 104 public libraries in the state. And with the Zoo coming online - we could connect with many of the school districts already wired for video conferencing – our reach would literally mushroom. Ideally, we would have to hire more education staff to feed the demand for services.

Work on this project will start in August of 2012, which will provide enough time prior to winter to finish all the infrastructure work needed. The content preparation and design will commence in fall, a slower time for us at the zoo having just finished the busy visitor season, giving staff the time to do the planning and program content work to successfully launch the "test" program in January-March, 2013 and allow for ample evaluation and program tweak time.

PROJECT DESIGN

The overall goal of this project is to establish a distance learning program at the Alaska Zoo through video conferencing. The Distance Education Program at the Alaska Zoo is headed by our education director, Stephanie Hartman. Behind her is a team of staff members, board members, teachers, volunteers, consultants and community members dedicated to the project's success. To accomplish this goal; activities are divided into 4 areas of concentration:

Alaska Zoo Distance Education Program

1. Hardware/software Assessment & Procurement
2. Content Development/Delivery /Staff Training/Modifications
3. Program Marketing and Outlet Development
4. Program Delivery, Evaluation, Reviews and Tweaks

Hardware Assessment & Procurement:

Identifying the hardware and connectivity needs is step one. The goal is to have the zoo hard wired in 6 distinct locations then providing a fully equipped video conferencing cart equipped so that we can go live from any of these 6 locations. This requires identifying the cable runs, digging the cable trenches, running the cable and providing endpoints to plug into the video conferencing cart. The cart itself would house all the necessary video conferencing equipment and would need to be easily movable throughout zoo grounds. We are working with vendors and other content providers to identify equipment needs and assess the site for cabling.

1. Zoo staff under the direction of zoo facility manager, Kevin Pickel, would work with vendors to establish the cabling and equipment needs.
2. Zoo education director, Stephanie Hartman, would oversee the zoo's team review of vendors' video conferencing equipment for purchase.
3. A final review of equipment just prior to purchase would be made in order to provide for equipment updates from time of project development and purchase date.

Content/Curriculum Development

The Alaska Zoo's Education Department will develop a menu of courses best suited for this medium of delivery, the varying age levels, interests of participants and needs of teachers and organizations. To develop its menu of courses, the Education Department will work with CILC consultants, other content providers, teachers and interested parties. We would also prepare the supporting materials for these outreach classes. Our equipment vendors would train staff on equipment use and best practices for successful and engaging use of the medium. Our education department has 13 years of experience in providing classes and presentations. We have a great track record for programs and strive to make each and every class a rewarding experience for participants. We work hard to tailor classes and programs to meet the needs and expectations of participants. Class evaluation forms would be distributed following every class and modifications made as needed.

Program Marketing & Outlet Development: Development director will work with project manager and graphic designer to develop collateral materials and marketing plan for the program. Development director will work to develop network of outlets such as OWL system in Alaska, school districts across state, service providers and CILC.

Program Delivery/ Review/ Evaluation/Modifications

Our goal is to be up and delivering classes by January of 2013 to meet the 3rd quarter of the school year in Alaska. We would use this quarter as our "test" time. We would solicit as much feedback as possible from participants, partners, other providers to assess our program and content delivery for adjustments and tweaks. We are going to work with the Center for Interactive Learning and Collaboration (CILC) on our content design, tailor evaluation forms and establish our evaluation process using their guidance, as they are the "industry leader" in this field.

Alaska Zoo Distance Education Program

BUDGET

The total budget to get this program up and running is \$180,000.00. We are seeking \$150,000.00 from the State to get this program up and running. The costs reflect the planning and program development, laying of cable, equipment purchase, staff training, software support, collateral development, content development, evaluation and marketing costs. The cost of laying wire and setting up the locations is \$95,500.00 and another \$72,000.00 in camera and video conferencing equipment. Another \$8,500.00 is for program development consultants. The Zoo can fund \$30,000.00 towards this program. We are committed to establishing this program for the benefit of Alaskans living in remote areas of our state and interested parties outside Alaska.

TIMELINE

If successful in the grant request, the zoo is committed to getting this program up and running in a year. We would begin laying the lines in fall of 2012 and be purchasing the camera equipment and software to begin testing the program in spring of 2013.

Program Name	Grade Levels	Program Length	Description
Critter Tales	PreK-1st	~30 minutes	Students will be immersed into great animal stories with some favorite animal characters. Once the stories are done, view the Alaska Zoo's ambassador species that goes with your tale and learn a little about them as well! Choose from Amur Tiger, Ball Python, Box Turtle, Gray Wolf, Great Horned Owl, Goshawk*, Polar Bear, Porcupine, Red Fox, Red-Tailed Hawk or Snowy Owl*.
Polar Bears 101	1st-3rd	30-45 minutes	Go behind-scenes at Polar Bear to learn all about the arctic bear from their cute nose to the tips of their furry toes.
Amur Tiger 101	1st-3rd	30-45 minutes	Get a great view of the largest tiger species in the world while learning all about the amazing cold weather cat.
Gray Wolf 101	1st-3rd	30-45 minutes	View the Alaska Zoo's wolf pack from above in their own natural habitat! Learn all about wolves and the adaptations that make them such a spectacular species.
Animal Detectives	K-5th	30-45 minutes	Based in our new zoo classroom, education staff will guide students through various items from our hands-on collection (furs, feathers, skulls, etc.) to explore and discover various arctic animal adaptations that make these animals such great survivalists.
Alaska Owl Antics Zoo School	3rd-12th	45-60 minutes	Students will learn all about our Alaskan owls and the adaptations that allow them to survive in such harsh conditions. Meet Peabody, our Great Horned Owl or Freya, our Snowy Owl*.
Animal Training 101	3rd-12th	45-60 minutes	Learn about the training required for captive animal care. Meet a trainer and discuss the importance of training in all animal care environments from your home to the Alaska Zoo as well as getting to view a Polar Bear training session!
Arctic Ecosystems	3rd-12th	45-60 minutes	Students will learn about the Arctic Ecosystem and the animals found within it. Arctic Adaptations and food webs are just the beginning. Students will also get to meet the largest land predator, the Polar Bear.
Behavioral Enrichment 101 (Toys for Animals)	3rd-12th, Adults	45-60 minutes	Learn the importance of mental and physical stimulation for healthy captive animal care through toys! Put young minds to the test with what works best for each individual animal by learning about different animals needs, and get to view an animal experiencing it right in front of you. It's fun, educational and unforgettable. Choose from Amur Tiger, Gray Wolf or Polar Bear.
Moose Madness	3rd-12th	45-60 minutes	Students will learn all about the largest member of the deer family from their antlers to their four-chambered stomach. This and more, all while they are browsing right next to us.

Polar Bears and Climate Change	3rd-12th, Adults	45-60 minutes	Learn about the world of Polar Bears, how it's changing and the role that people play in that change. Hear about first-hand experiences with Polar Bears in Churchill, Manitoba and ways that you can get involved too. Students will get a Polar Bear encounter of their own because they will be joining us for the presentation.
Snow Cat Conservation	3rd-12th, Adults	45-60 minutes	Amur Tigers, Canadian Lynx and Snow Leopards are the snow cats of the Alaska Zoo. Learn about each of the adaptations that allow them to survive in cold climates, as well as their conservation status, and ways to create a change to help preserve them for future generations.
Wild About Wolves	3rd-12th, Adults	45-60 minutes	Students will join the Alaska Zoo wolf pack as they discover the amazing abilities of gray wolves to survive in Alaska. Learn about pack dynamics and behavior as well as the important role wolves play in the ecosystems in which they live.
Zookeeping 101	3rd-12th	45-60 minutes	Do you have what it takes to be a zookeeper? Test your knowledge on captive animal care while learning about the job of a zookeeper at the Alaska Zoo. From nutrition, to training and enrichment, we cover it all with a little help from the location of your choice. Choose from the new zoo classroom or infirmary, Amur Tiger, Gray Wolf or Polar Bear.
Animal Ambassadors!	K-12th, Adults	30-45 minutes	Based in the new zoo classroom with the ambassador species of your choice, this program details a wide variety of information about the focus species as well as the ambassador animal's history. Choose from Ball Python, Box Turtle, Goshawk*, Great Horned Owl, Porcupine, Red Fox, Red-Tailed Hawk and Snowy Owl*.
Guest Speaking!	3rd-12th, Adults	~45 minutes	Looking out for the best interest of the animals at the Alaska Zoo takes a great team effort. Hear from one of our amazing staff members on what their job includes and their personal experiences with some of the animals that they work with. Choose to hear from our Animal Curator, Zoo Director, Zoo Veterinarian*, Zoo Keeper or Animal Handler.

Shane Southwick
Alaska State Library
344 W. 3rd Avenue
Anchorage, AK 99501

January 4, 2012

To Whom it May Concern,

My name is Shane Southwick, I am the manager of the Alaska OWL (Online With Libraries) Project. I am writing this letter in support of the Alaska Zoo seeking state funding to begin a distance education program which I believe will benefit Alaskan students throughout the state.

The OWL project is a grant funded initiative with the objective of increasing library computing capabilities throughout the state of Alaska. With the help of the United States Department of Commerce, the Bill and Melinda Gates Foundation, the Rasmuson Foundation, and the Alaska Department of Education and Early Development we have secured over \$8 million to make this project a reality.

A major piece of the project is to provide 97 libraries with videoconferencing equipment. Most of these libraries are off of the Alaskan road system and are located in extreme rural locations. With an upgrade to high speed broadband and video conferencing services in these libraries they will become connected to the world like never before. Doors to better employment will be opened, professional and workforce development will be more available and distance education opportunities will become a reality for students of all ages.

We currently have several program partners who are excited to put content onto this new videoconferencing network. Groups like the Governor's council on Special Education, the Alaska Department of Public Safety, the University of Alaska, are just a few of these partners. I have been approached by Eileen Floyd from the Alaska Zoo asking about this network and the possibilities of the Alaska Zoo using videoconferencing to distribute some distance education courses. I was provided with a list of some of the courses they would like to distribute and I am very impressed. I strongly encourage you to assist in providing them with the necessary funding to continue developing this distance education program. I see nothing but positive outcomes in Alaska as a result of this program being put into practice.

Sincerely



Shane Southwick

Alaska OWL Project Manager



September 26, 2011



Eileen Floyd
Development Director
The Alaska Zoo

To Whom It May Concern:

RE: Letter of support for The Alaska Zoo Distance Learning Service

GCI SchoolAccess is pleased to support The Alaska Zoo's endeavor to develop a video conference system for the purpose of creating a distance delivery program to provide for outreach beyond the Anchorage community. As a partner in education, GCI SchoolAccess recognizes the importance of having quality educational content deliverable to classrooms across the globe and we are excited about The Alaska Zoo having the capability to bring over 43 different species of arctic and subarctic animals into classrooms across the world.

Video conference (VC) equipment has become an integral part of the 21st Century education model, but without the dedication and outreach of community partners to work with The Alaska Zoo, the equipment's purpose would be underserved. The Alaska Zoo is dedicated to the Anchorage community and has provided numerous outreach programs to educate students, parents and community members alike. With the integration of VC technology it is easy to see how the zoo can broaden their educational outreach and connect with students and communities throughout Alaska, the United States and even the World. Using a custom video network designed by GCI SchoolAccess and Integrated Logic, students will be able to peer into the home of polar bears, see wolves roam, and tigers prowl. On-staff veterinarians can provide a glimpse of a tiger's root canal or a routine medical procedure on the snowy owl.

As a partner in providing rural Alaska with a premiere education network including Internet and Distance Learning services for over 12 years, GCI SchoolAccess is confident in our ability to support The Alaska Zoo in creating a valuable, highly demanded program. Lead by a former educator, GCI SchoolAccess understands the business of education and providing quality content to the classroom. We have partnered with organizations such as The Alaska SeaLife Center in Seward, Alaska to provide similar outreach through the Center for Interactive Learning and Collaboration, a provider of international content programs. Our established relationships with CILC and our own Education Network will connect The Alaska Zoo to partners around the world.

Overall, it is our belief that the existence of a strong educational outreach program at The Alaska Zoo creates a solid foundation to begin developing distance outreach services that will expand the Zoo's mission and bring the Alaska experience to communities and schools around the world.

Respectfully,

A handwritten signature in black ink that reads "Pam Lloyd".

Pam Lloyd, Director
GCI SchoolAccess



Alaska Zoo
Anchorage, Alaska

PROPOSAL
for
Network Infrastructure

By: Integrated Logic LLC
PO Box 2121
Palmer, AK 99645
October 6, 2011

Dave Lamothe
907-441-4714
Dave.lamothe@integratedlogicllc.com

TABLE OF CONTENTS

PROFESSIONAL RESOURCESSECTION I

SOLUTION HIGHLIGHTS.....SECTION II

SCOPE OF WORK FOR PROPOSAL.....SECTION III

COMPLETION DOCUMENTATION SECTION IV

ASSUMPTIONS AND CLARIFICATIONS SECTION V

COST FOR PROJECT SECTION VI

SCHEDULING SECTION VII

I. PROFESSIONAL RESOURCES

Dave Lamothe- will serve as the main contact for the customer for this engagement
Office (907) 761-5515 Cellular (907) 441-4714

All technicians assigned to this project will remain on the project through completion.

Key personnel associated with this project

Chris Johnson *CEO*
CSE(907) 761-5502

Jeremy Johnson *Construction Services*
AMP/CIFO/AS Civil Engineering(907) 761-5500

Scott Konofalski *Field Engineer*
CCNA/ACA(907) 761-5507



Additional staff technicians are available as required



Integrated Logic's Performance Partners



GCI has recently made a substantial equity investment in Integrated Logic to create a high-level partnering relationship.. This close working relationship gives Integrated Logic immediate priority access to assistance with transport issues and to GCI's wide range of internal and external technical resources.



II. SOLUTION HIGHLIGHTS

Integrated Logic has a highly skilled, highly mobile staff of engineers and technicians trained to deal with challenges that run the gamut from data cabling issues to advanced IP acceleration configuration.

Integrated Logic designs, implements, and maintains mixed vendor / mixed platform environments for remote customers throughout Alaska.

III. SCOPE OF WORK FOR PROPOSAL

Customer: Alaska Zoo

Project: Physical plant and VTC Design with Wireless options

Design Team: Jeremy Johnson, Scott Konofalski

Revised: 08.09.11

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Design Highlights:

Video Teleconference Cart- There is to be a ruggedized cart constructed to allow a single instructor to move the video teleconference equipment from point to point. The cart will allow for 4 hours of un-interrupted operation without being plugged in.

Physical Plant- Integrated Logic will provide a design of pathway for the Zoo staff to install. Additionally Integrated Logic will provide support for the zoo staff during the time of construction.

Integrated Logic will return to install the media and set up the network to support the video teleconference equipment.

Design Details

- **Video Teleconference Cart**
 - Construction of a 4 wheeled cart with a wagon style handle.
 - The cart is to house internally:
 - 2- Deep Cycle 6V batteries wired in series
 - 1- 600W Power inverter and charger
 - Weather resistant housing for a Polycom HDX 7000 series Codec
 - 1- TV mount- Mount with the ability to rotate the monitor 90 degrees
 - 1- camera mount above the monitor for the VTC camera
- **Physical plant**
 - Design based on existing physical plant and existing pathways
 - Pathway Notes:
 - Entrance Facility to Seal Pen- No physical path is allowable- Wireless shot to be installed in this area. The equipment is to be terminated in the underground mechanical space. The antennas are to be mounted and painted to match the existing structures.
 - Seal Pen to Old Entrance to Infirmary- The pathway is to be attached to the existing fence as detailed in the attached drawings. Any points where the fence line is interrupted by a gate

the path is to be buried, the transition is to be as noted in the attached drawings. From the end of the fence line to the new commissary building a new path of inner-duct is to be installed to tie into the existing underground infrastructure. From the commissary to the infirmary there is an existing buried path that is to be used.

- Infirmary to Tiger Pen- A new buried path is to extend from the infirmary underground to the area between the wolf and tiger pens. Once at the wolf pen the path is to extend along the base of the wolf pen fence until it reaches the raised viewing platform. The path is to transition to the underside of the platform to its point of termination.
- Infirmary to maintenance office (old entry)- The pathway for this location is to be part of the seal pen to the infirmary pathway.
- Coffee shop to the Polar Bear Pen- The existing path between the Coffee shop and the gate to the polar bear area is to be used. From the fence line to the point of termination there is to be a fence tied pathway down the moose enclosure.
- Coffee shop to the Brown Bear pen- The pathway is to be buried from the coffee shop to the rear fence line. Once the fence line has been reached the path is to continue down the fence line until it reaches the end of the caribou enclosure. At the caribou enclosure the path is to extend down the fence line until it reaches the pathway where it will then cross the stream and be terminated at the end of the bear viewing platform.
- **Media Selections**
 - All runs greater than 290' are to be OM4, multimode optical fiber
 - All runs less than 290' are to be riser rated Cat 5E UTP
- **Points of termination**
 - All points are to have a weather tight NEMA enclosure a minimum of 20x20x8
 - The enclosure is to house a 6 port MUTOA block for cat 5E terminations if copper is to be terminated
 - 1- Corning SPH-01P
 - all fiber is to be terminated to an SC termination
 - 1- Tripplite Smart 750 UPS
- **Network Design**
 - Network is to be built as per attached network drawing
 - Highlights by location
 - Coffee Shop-
 - 1- 8 port Cisco Compact 3560 switch
 - 1-Aruba 105 interior access point

- Entry Building
 - 1-8 port Cisco Compact 3560 switch
 - 1-Aruba 650 controller
 - 1- Aruba 105 interior access point
 - 1-Aruba 175P exterior access point to be used for wireless access at the seal house
 - 1-Aruba 175 to be used to bridge to the seal house
- Seal House
 - 1-8 port Cisco Compact 2960 switch
 - 1-Aruba 175P to be used as a bridge to the entry building
- Infirmary
 - 1- 8 port Cisco Compact 2960 switch
 - 1-Aruba 105 interior access point
- Tiger Pen
 - 1-Aruba 175P exterior access point to be used for wireless access at the seal house
- Polar Bear Pen
 - 1- 8 port Cisco Compact 2960 switch
 - 1-Aruba 175P exterior access point to be used for wireless access at the polar bear pen
 - 1-Axis Q6035E PTZ Camera
- Brown Bear
 - 1- 8 port Cisco Compact 2960 switch
 - 1-Aruba 175P exterior access point to be used for wireless access at the polar bear pen
 - 1-Axis Q6035E PTZ Camera
- **Options**
 - Wireless upgrade
 - Design allows for there to be wireless “Hot Spots” at the following locations
 - Tiger Viewing platform, Infirmary, the old entry court yard, seal pen viewing area, polar bear viewing area, coffee shop, brown bear and snow cat viewing areas.
 - The VTC cart would be upgraded to be wirelessly connected in the “hot Spot” areas
 - There will be 2 available networks one private and one secured.

IV. DOCUMENTATION

Integrated Logic will generate as-built documentation of the Alaska Zoo network as part of the initial visits. Those documents will be updated as changes are made. Alaska Zoo will have access to a current copy at all times. Integrated Logic's deliverables will include a change-management plan that will allow Alaska Zoo personnel to document changes as they occur.

V. ASSUMPTIONS AND CLARIFICATIONS

- Progress billing will begin for this project once hardware is ordered.
- To offset cost the Alaska Zoo has opted to install all conduit pathways with Zoo staff.

VI. COST/RATES FOR PROJECT

Project Total	\$95,500.00
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VII. SCHEDULING

A full project time schedule will be provided as soon as a contract is executed.

Proposal submitted October 6, 2011

Integrated Logic LLC

Dave Lamothe
Account Manager

Authorized Representative of:
Alaska Zoo

Date:

Printed name of authorized:



SCHOOL ACCESSSM

Alaska Zoo

PolyCom Equipment Options - 2 Fixed Gateway Halls Cameras

1 Cart Option with 3 Year Maintenance				1 Cart Option with 5 Year Maintenance			
QTY	Description	Unit Price	Total	QTY	Description	Unit Price	Total
1	HDX 7000-720 HE Codec w/ Eagle Eye Camera	\$7,489.25	\$7,489.25	1	HDX 7000-720 HE Codec w/ Eagle Eye Camera	\$7,489.25	\$7,489.25
1	Prime Call 3 year maintenance on HDX 7000-720	\$2,177.34	\$2,177.34	1	Prime Call 5 year maintenance on HDX 7000-720	\$3,453.96	\$3,453.96
2	HDX 8000-720 HD Code w/ Eagle Eye Camera	\$11,127.30	\$22,254.60	2	HDX 8000-720 HD Code w/ Eagle Eye Camera	\$11,127.30	\$22,254.60
2	Prime Call 3 year maintenance on HDX 8000-720	\$2,831.22	\$5,662.44	2	Prime Call 5 year maintenance on HDX 8000-720	\$4,494.00	\$8,988.00
1	Elmo Document Camera	\$1,732.33	\$1,732.33	1	Elmo Document Camera	\$1,732.33	\$1,732.33
1	46" Samsung Display	\$1,400.00	\$1,400.00	1	46" Samsung Display	\$1,400.00	\$1,400.00
1	RSS 5 Port Recording and Streaming Solution	\$15,648.75	\$15,648.75	1	RSS 5 Port Recording and Streaming Solution	\$15,648.75	\$15,648.75
1	RSS Installation	\$4,708.00	\$4,708.00	1	RSS Installation	\$4,708.00	\$4,708.00
1	Prime Call 3 year maintenance on RSS	\$4,914.94	\$4,914.94	1	Prime Call 5 year maintenance on RSS	\$7,801.37	\$7,801.37
Subtotal		\$52,029.13	\$65,987.65	Subtotal		\$57,854.96	\$73,476.26
2 Cart Option with 3 Year Maintenance				2 Cart Option with 5 Year Maintenance			
QTY	Description	Unit Price	Total	QTY	Description	Unit Price	Total
2	HDX 7000-720 HE Codec w/ Eagle Eye Camera	\$7,489.25	\$14,978.50	2	HDX 7000-720 HE Codec w/ Eagle Eye Camera	\$7,489.25	\$14,978.50
2	Prime Call 3 year maintenance on HDX 7000-720	\$2,177.34	\$4,354.68	2	Prime Call 5 year maintenance on HDX 7000-720	\$3,453.96	\$6,907.92
2	HDX 8000-720 HD Code w/ Eagle Eye Camera	\$11,127.30	\$22,254.60	2	HDX 8000-720 HD Code w/ Eagle Eye Camera	\$11,127.30	\$22,254.60
2	Prime Call 3 year maintenance on HDX 8000-720	\$2,831.22	\$5,662.44	2	Prime Call 5 year maintenance on HDX 8000-720	\$4,494.00	\$8,988.00
1	Elmo Document Camera	\$1,732.33	\$1,732.33	1	Elmo Document Camera	\$1,732.33	\$1,732.33
2	46" Samsung Display	\$1,400.00	\$2,800.00	2	46" Samsung Display	\$1,400.00	\$2,800.00
1	RSS 5 Port Recording and Streaming Solution	\$15,648.75	\$15,648.75	1	RSS 5 Port Recording and Streaming Solution	\$15,648.75	\$15,648.75
1	RSS Installation	\$4,708.00	\$4,708.00	1	RSS Installation	\$4,708.00	\$4,708.00
1	Prime Call 3 year maintenance on RSS	\$4,914.94	\$4,914.94	1	Prime Call 5 year maintenance on RSS	\$7,801.37	\$7,801.37
Subtotal		\$52,029.13	\$77,054.24	Subtotal		\$57,854.96	\$85,819.47
3 Cart Option with 3 Year Maintenance				2 Cart Option with 5 Year Maintenance			
QTY	Description	Unit Price	Total	QTY	Description	Unit Price	Total
3	HDX 7000-720 HE Codec w/ Eagle Eye Camera	\$7,489.25	\$22,467.75	3	HDX 7000-720 HE Codec w/ Eagle Eye Camera	\$7,489.25	\$22,467.75
3	Prime Call 3 year maintenance on HDX 7000-720	\$2,177.34	\$6,532.02	3	Prime Call 5 year maintenance on HDX 7000-720	\$3,453.96	\$10,361.88
2	HDX 8000-720 HD Code w/ Eagle Eye Camera	\$11,127.30	\$22,254.60	2	HDX 8000-720 HD Code w/ Eagle Eye Camera	\$11,127.30	\$22,254.60
2	Prime Call 3 year maintenance on HDX 8000-720	\$2,831.22	\$5,662.44	2	Prime Call 5 year maintenance on HDX 8000-720	\$4,494.00	\$8,988.00
1	Elmo Document Camera	\$1,732.33	\$1,732.33	1	Elmo Document Camera	\$1,732.33	\$1,732.33
3	46" Samsung Display	\$1,400.00	\$4,200.00	3	46" Samsung Display	\$1,400.00	\$4,200.00
1	RSS 5 Port Recording and Streaming Solution	\$15,648.75	\$15,648.75	1	RSS 5 Port Recording and Streaming Solution	\$15,648.75	\$15,648.75
1	RSS Installation	\$4,708.00	\$4,708.00	1	RSS Installation	\$4,708.00	\$4,708.00
1	Prime Call 3 year maintenance on RSS	\$4,914.94	\$4,914.94	1	Prime Call 5 year maintenance on RSS	\$7,801.37	\$7,801.37
Subtotal		\$52,029.13	\$88,120.83	Subtotal		\$57,854.96	\$98,162.68



CILC Proposal Prepared for: The Alaska Zoo

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I. CILC Content Consulting

(Delivered by Julia Shildmeyer Heighway – Director Content)

Design and Delivery Workshop 2 hours

CILC will take participants through an exploration of successful techniques in the design and delivery of IVC Programming. The session will cover integration of learning theories which are successful for videoconference program design and delivery, creating cross curricular programming in order to reach a broader market, end user expectations, best practices in studio layout and presentation techniques. CILC's graphic organizer for program design will be shared and utilized during the session.

Program Development and Adaptation 3 hours

In advance of the consultation day, zoo staff will share with CILC content consultant, Julia Shildmyer Heighway, current educational programming and programming planned for the future. Staff will share their organizational goals and goals/objectives for educational programming. During the consultation, input will be offered on current needs/trends in educational videoconferencing. Discussion will include current offerings by zoos and similar organizations and how the Alaska Zoo can offer programming that is unique to videoconferencing outreach. CILC will work with staff to outline possible new programs and/or adapt current offerings. We will address incorporation of multimedia, alignment to national education standards, cross-curricular connections and grade level appropriateness.

Suggested Staff to Attend:

Education Director, Key Education Staff, Outreach Coordinator, and possible presenters

II. CILC Evaluation Services

(Two CILC staff will be assigned to the work on this portion of this project (Monica Cougan and Julia Shildmyer Heighway))

Task 1: Development of Assessment Measures

CILC will work with The Alaska Zoo to prepare assessment measure of educators, students and instructors. This portion of the project will begin with a review of current on site assessment items with Alaska Zoo (if available) to design appropriate items regarding content skills, and implementation of programs via videoconferencing technology. The combined expertise will include curriculum expertise; problem based learning expertise, museum and content delivery expertise and distance education delivery expertise. CILC is available to work with The Alaska Zoo as early as **January 2012** to complete the assessment measures.

Deliverable 1.1: Develop survey items to measure content and delivery of videoconference programs.

Deliverable 1.2: Develop assessment questions for student and educator focus groups around the delivery of the programs.

Deliverable 1.3: Develop a rubric for program review in broadcast mode of program delivery designed to match engagement levels to survey and program results.

Task 2: Data collection and analysis.

Deliverable 2.1: CILC will conference with Alaska Zoo team throughout the data collection phase in the **Fall 2012**. These meetings will address the beginning of the data collection including shared recommendations on efficiency of distribution and collection of data and integrating the research study into all efforts.

Deliverable 2.2: **In the January - March 2013**(Timing based on need of final report), analyze data and write brief reports as appropriate to the results.



Task 3: Summative Evaluation – Focus Groups/Site review

Deliverable 3.1: Phone/video focus group interviews will begin in late fall – October/November based on program implementation and sign up availability.

Deliverable 3.2: CILC will conduct program reviews as a view only participant in programs delivered throughout the fall. A response rubric will be used developed in partnership with the Alaska Zoo.

Total Proposed Cost:

\$8500 for CILC Content Consulting and CILC Evaluation.

Two CILC Staff allotted to project through **Fall/Early Winter 2012/2013**