



CITY OF WASILLA

290 E. HERNING AVE.

WASILLA, ALASKA 99654-7091

PHONE: (907) 373-9050

FAX: (907) 373-9085

COUNCIL MEMORANDUM NO. 97-15

From: Administration

Date: March 18, 1997

Subject: Funding for Bumpus Recreation Area.

Administration has received the following proposal from Group Three Design for Phases I & II of The Bumpus Recreation Area Project.

The amount for funding this project is \$3,960.00.

Recommend: Council give direction as to this proposal.

Sarah H. Palin, Mayor

APPROVED

DATE: 03/24/97

BY: H. Harris

\$3,960

out of FY 96 Bumpus Ballfield
Funds



GROUP THREE DESIGN

LANDSCAPE ARCHITECTURE • LAND USE PLANNING

March 5, 1997

Hon. Sarah H. Palin, Mayor
City of Wasilla
City Hall
290 E. Herning Avenue
Wasilla, Ak. 99654-7091

Re.: Services, Phases I & II, Assistance in the Implementation of The Bumpus Recreational Area.
Project No. 95003

Dear Mayor Palin:

It was a pleasure discussing your desires to expedite the Bumpus Recreation Area on Monday. This is an exciting project which will be a great asset to Wasilla.

Since our meeting, I have discussed the project with Parks, Planning, the Administration, the City's Surveyor and Aeromap, and reviewed the files.

To update and clarify matters, this is the same project that is depicted on the two color maps currently hanging in Council Chambers. One is drawn at a scale of 1" = 100' and one is at a scale of 1" = 200'. This area was originally established in 1988 on Mental Health Trust Lands which were conveyed to Wasilla. Five ballfields have already been constructed there to date. In 1995, the Parks and Recreation Commission confirmed this site for development of more fields as part of the Comprehensive Planning Program. The Council then verified this use in their preliminary acceptance of a Commission generated study on March 15, 1995. Group Three Design was then retained by the City to prepare a more detailed plan considering including other types of recreational facilities. Through study sessions involving considerable public input, Parks and Recreation Commission and Planning Commission reviews, the current Plan was completed. It was then approved by the City Council during their public hearing of March 11, 1996, Ordinance No. 96-07. The two plans on the walls are color-ups of that approved Plan.

Subsequent to Council action, a phased listing of "steps" for implementing the Plan, with recommended action items was prepared by Group Three Design for the City. Please refer to the attached June 28, 1996 outline. Responding to your request of earlier this week, we would be pleased to help coordinating most of the activities in Phases I and II of that outline. In the interest

page 1 of 4

of economy, we recommend that items 6 and 7 of Phase II be postponed and included as part of Phase III, after firm commitments are obtained from the Sports Associations.

As a separate item that we recommend the City pursue immediately, we took the liberty of acquiring a quote from Aeromap for preparing a 1" = 100', 2-foot contour interval map and a 1" = 200' aerial photograph of the site. These will be needed for detailed planning and quantity estimating by the Sports Associations and the City's engineers. Please refer to the attached Quotation.

Group Three Design, acting as Agent for the City of Wasilla will perform the following services:

PHASE I SERVICES: (Refer to, follow along with the attached "Steps for Implementing" list).

1. Further Coordination: Meet with the City's Administration and department directors, discuss services, receive input, convey discs of of the final Plan for use by the City and the City's Surveyor. (Note: The members of the Ad-Hoc Committee have already been contacted and have been given copies of the Plan). Coordinate preparation of Denali North's As-Built/ Boundary Surveys with Aeromap's photogrametric topography preparation.
2. Acquire Purchase Order from City and authorize Aeromap to proceed with topography and aerial photo.
3. Review Denali North's Boundary Survey, coordinating with City Engineer.
4. Request a quotation for Soils Testing and Reporting services. Obtain a Purchase Order from the City and authorize proceeding with testing. Coordinate with City Engineer.
5. With guidance from Dwayne Dvorak, prepare and submit an application for a "Use Permit" for developing all of the new facilities shown on the Plan. It is assumed that this application will be reviewed and approved by WASILLA'S PLANNER. Should a full public hearing be required, extra time will be billed for on an hourly basis.
6. Discuss grant resources with the City's Staff and discuss a strategy for obtaining funds for further development in the project.
7. Coordinate with Aeromap and obtain the color photograph of the site at a scale of 1" = 100' (included in item 2, above). Color infra-red is not necessary.

PHASE II SERVICES:

1. Prepare a listing of general development standards which ALL sponsors will have to adhere to and review with Parks and Planning.
- 2 through 5, inclusive: Review all Survey and Topographical data mylars prepared by the City's Surveyor. Coordinate with City Engineer.
- 6 and 7. (Postpone these engineering activities to Phase III, as mentioned above).
8. Prepare notes for input to City Attorney's Drafts of "Agreements". The "Agreements" would be the understandings between the City and the various Sports Associations and would cover such concerns as security, maintenance, hours of operation, etc.
9. Review, comment on Agreement(s) Draft(s).
10. Arrange for and conduct an "Action Meeting" with City representatives and the Sports Association's leaders with the goal of executing the Agreements at the earliest possible time.
11. Check executed Agreements for completeness and prepare a schedule to be a guide for the first season's construction activities. Review schedule with City officials. Revise schedule as required, copy and distribute to all City Departments, Sports Associations and the Equipment Operators Union.
12. As an input to the above mentioned schedule, Assist the City in arranging an acceptable date for the tree cutting activity. Advise regarding ribboning and staking for tree protection. Prepare an advertisement, advertise in the local media and participate in security activities to protect trees which are not supposed to be cut - two of us with City officials.

Assisting Group Three Design in providing a few of the above outlined services will be Dan A. Scott, also a landscape architect. Dan is very active in sports, excellent in dealing with youth as a Boy Scout Executive and is a past Coach for the Wasilla Little League.

We will provide the above outlined services, including providing the two electronic disc copies of the Plan, for compensation not-to-exceed three thousand nine hundred sixty dollars (\$3,960.00).

Palin/Bumpus/95003
3/5/97

Progress billings will be submitted monthly for time and expenses and extra printing shall be billed at cost plus 10% handling. To expedite matters, as your approval and notice to proceed, simply attach this Proposal to an Engineering Work Order and we will immediately start work.

Mayor Palin, thank you very much for considering Group Three Design for continuing to provide services on this ambitious project. We have worked hard on it so far and we believe in it. We appreciate your desire to keep it moving forward.

Sincerely,
GROUP THREE DESIGN



Burdett B. Lent, Owner, ASLA
Landscape Architect/Park Planner

encl.: Resumes, Implementation List, Aeromap Quote.

Recommended

Steps for Implementing The
BUMPUS RECREATIONAL AREA GENERAL DEVELOPMENT PLAN

Prepared by Burt Lent, Group Three Design

PHASE I, COORDINATION; SURVEYING:

Note: Items 1 through 6, following, should be commenced simultaneously, as soon as possible. All of this work should be done through the City - not the Sports Associations.

1. Coordination: Conduct telephone contacts with the residential, environmental and sports groups Ad-Hoc Committee members who participated in the study sessions and issue each one of them a Revised General Plan. Explain that all meeting comments have been addressed and that this Plan is a refinement of the Council-approved Plan. Burt Lent and Dwayne Dvorak. Also verify that the revised Plan does not impact wetlands.
2. Topography: Prepare a 1"=100', 2' contour-interval topography map of the property from Aeromap 92/95 stereo-pair data. Plot on disk and plot on mylar at 1"=100'. By Aeromap.
3. Boundary Survey: Retain a surveyor to review land status and property records for easements, restrictions, etc. Re-trace and survey exterior boundaries of the 120-acre property - either recover or re-establish monuments which determine exterior boundaries. Monuments shall be set or recovered at primary corners and at edges of the right-of-way of Mystery Avenue, and markers shall be set intervisibly along the boundaries, or at 660 foot intervals, whichever is least distance. Burt Lent has copies of all surrounding subdivision Plats from the Recorder's office. City hires a surveyor.
4. Soils Testing: Retain a soils testing laboratory to take samples throughout the undeveloped portions of the property and along the proposed center line of Mystery and prepare a Soils Report, including logs of the test pits or borings. City retains a soils engineer.
5. Rezoning; Development Permit: Prepare Rezoning-to-I.P.L. District and Development Permit Applications, together, and process through the City's hearing and approval. Burt Lent and Dwayne Dvorak.
6. Funding: Investigate the availability of Grant, or Matching-Grant funding for the development of recreational facilities. By the City's Administration and Departments.
7. (optional) Aerial Infra-Red Color Photography: Obtain a print of the area of the property to further aid in the detailed Plans preparation process and reveal information on vegetative health and soils. Can be ordered at the same time the Topo is ordered from Aeromap.

PHASE II, STANDARDS; ENGINEERING (Initial Engineering by City):

1. Development Standards: Write clearing/disposal, development and maintenance Standards for the separate sports associations to follow in the preparation of their plans and the building and maintenance of their facilities. These would basically refer to the Wasilla Development Code and Standard Details and expand upon them to cover subjects unique to this project such as ongoing maintenance. Burt Lent, Dwayne Dvorak, John Cooper.
2. Topography - Boundary Survey Reconciliation: Obtain the Aeromap Topography described above and authorize a surveyor to tie the aerial survey controls to their boundary survey controls so that they match. City Engineer, surveyor retained for boundary survey.
3. As-Built Survey: Field-proof the accuracy of locations of existing facilities shown on the Aeromap topo and conduct an As-Built Survey of those existing facilities, roads, utilities, well and cleared areas not shown on the Aeromap Topo. City retains surveyor.
4. Parcel Map: Prepare boundaries and accurate parcel legal descriptions for the sports-use parcels shown on the General Development Plan. These would include the Baseball, Little League, Softball, Soccer, 4-Alternative Use Parcels and the Mystery Avenue Right-of-Way - - 9 parcels total. City retains Engineer.
5. Base Map: Complete an up-dated, survey-corrected "Base Map" for use in the preparation of detailed development Plans by the sports associations. This map would show all natural and man-made features, cleared areas, 2' contours, as well as the new sports-use parcels and the Mystery Avenue R.O.W., complete with dimensions, bearings and curve data for all lines shown. Provide original 1"=100' scale map on mylar as well as a disk, compatible with the City's Autocad 13 software. City retains Engineer.
6. Mass Earthwork Grading Study: Prepare a mass-earthwork study to determine validity of Concept Plan grades and phasing. Revise grades on the Concept Plan, only, as necessary to assure an on-site balance of cut and fill. City retains Engineer.
7. Mystery Ave. Plan/Profile: Prepare Plan and Profile to City sub-collector standards for Mystery Avenue at a scale of 1"=50' from the western boundary of the property all the way to Lucas. Plans are to show the tops and toes of all slopes, and all storm water culverts and swales which may be outside the Mystery Ave. R.O.W. Convey Plans, disks to City. City retains Engineer.
8. "Agreement": Prepare a DRAFT Agreement between the City and the Sports Associations incorporating Development Standards and Parcel Descriptions shown on the Base Map. City Attorney. Note - Agreement needs to ~~stress~~ stress performance during construction and subsequent maintenance, with hopefully some sort of reasonable enforcement mechanisms to insure it.

(PHASE II, cont'd.)

9. Agreement Review: Review, comment and revise Agreement Draft. Burt Lent and all City Departments.
10. Initial Implementation Meeting: Conduct a meeting with Sports Association Sponsors. Convey Soils Report, Concept Plan, Draft Agreement, Development Standards, the new Base Map and Plan and Profile to each Association. Discuss and make determinations on:
 - a. utility requirements
 - b. schedule for preparing and processing Associations' Plans
 - c. terms of Draft Agreement
 - d. earthwork considerations and need to work together

PHASE III, P.S.&E.; PROCESSING (Engineering by both the Associations and the City):

1. Finalize Agreements: Finalize the wording in the Agreements and execute the Agreements with each Association. City Staff.
2. Utility Plan: Prepare plans and specifications as necessary to provide basic utility infra-structure to the entire property. City retains Engineer.
3. Landscape Plan: Prepare a landscape plan for the City-constructed facilities in the project as well as any commons areas. Burt Lent (Associations provide their own Plans for this as part of their P.S.&E. submissions).
4. Association Plans: Each Association's planners, and engineers prepare their own Plans, Specifications and Quantity Estimates (P.S.&E.), and submits them to the City for Plan review and Approval to proceed.
5. Plans Review: City reviews P.S.&E. for conformance to Standards, mass earthwork needs, utilities considerations, landscaping and terms of the Agreements. Burt Lent and City Departments.
6. Final P.S.&E.: Associations submit their final Plans for the City's records. City reviews for any final changes and then approves them for construction upon issuing the Associations Notices to Proceed. All City Departments.
7. Advertisement of City's Construction: Advertise Phase I Mystery Avenue and utilities for construction. City Adm.
8. (Optional) The various Associations may or may not want to advertise for bids. If they do, it would be ideal to do so at the same time as the City.

PHASE IV, CONSTRUCTION (Surveying and construction by both the Associations and the City):

1. Issuance of "Notice-to-Proceed": Issue a Notice to Proceed with Surveying to at least one Association. Withhold the Notice to Proceed with Construction until their staking is inspected. City Staff.
2. Award City's Construction: AFTER N.T.P. has been issued, award the Contract(s) for construction of Phase I Mystery Avenue and the Utilities. City Staff.
3. City's Construction Surveying: The City's Contractor commences his own surveying, simultaneously, and stakes: Parcel Boundaries, Phase I Mystery Avenue and any utilities which are to be installed. City Staff and City's Contractor.
4. Association's Construction Surveying: The various Associations conduct their own surveying activities for areas to be cleared and for sports fields and facilities, but the City inspects stakes prior to any clearing or construction activity. City Staff and Associations. NOTE: Areas to be cleared should be ribboned, not staked.
5. Issuance of Construction N.T.P.: City issues first "Notice-to-Proceed with Clearing and Construction" and coordinates and dovetails Association/City work with respect to clearing and mass earthwork. City Staff/City Contractors/Association Volunteers and/or Contractors.
6. Clearing Inspection: The City must staff this operation heavily and regulate it closely, or chaos and devastation will be the result!!! Associations can retain the best logs, skin them and use them for bumper-stops in parking areas. They can also chip the smaller materials for use in landscaping as was recommended by an Ad-Hoc Committee member. City Staff.
7. Construction Inspection: The City will need to inspect their own construction and also the progress of the Association's work and conformance to PS&E, City's Standards and Agreements. This should be done completely through construction, landscaping and initial maintenance activities. City Staff with Burt Lent on landscaping.
8. Inspection for Acceptance: Upon notice by Associations, City conducts Inspection for Acceptance of the Association's Facilities. Since the City must do the same for their own construction, ideally, these could be done together. All construction should be completed and a uniform stand of mature grass should be present, or Acceptance should be postponed. City Staff with Burt Lent on landscaping.

(PHASE IV, CONSTRUCTION, cont'd):

9. Issuance of N.T.P. with Use of Fields: City would issue this Notice after all construction and landscaping had been completed by the Association(s) and the final inspection by the City has been conducted.. City will have to inspect their own construction and landscaping as well to make sure their facilities are complete enough to allow use of the fields by the Associations to proceed. City Staff.
10. Maintenance Inspections: Ongoing inspections for maintenance must be conducted by the City on a continuing basis during the growing seasons to make sure lawns and plant materials are being fertilized, cared for and watered, that grass is being mowed regularly and that any vandalism is repaired in a timely manner. City Staff.

PHASE V, P - L - A - Y B - A - L - L ! ! ! ! ! ! ! !

BURDETT B. LENT, ASLA - LANDSCAPE ARCHITECTURE GROUP III DESIGN

Education

M.S., Landscape Architecture and Planning, University of Michigan, 1963
B.S., Landscape Architecture, Cornell University, 1960
Landscape Course for California License - University of California-Los Angeles, 1965
Computer Data Applications in Planning, University of California-Berkeley, 1975
Comprehensive Community Planning, University of Alaska, 1985
AutoCAD/LandCADD Courses, Charter College and Palomar College, 1992-93

Registration

Landscape Architect, Hawaii #2792; California, #1177
Registration committee member, Alaska

Relevant Qualifications

With 32 years as a landscape architect, Mr. Lent has an extensive background in parks and recreational facilities planning and design. Of particular relevancy is his experience in sports facilities planning, preparation of contract documents for recreational facilities projects, and construction management for such facilities.

For the past 20 years, Mr. Lent has specialized in recreational facilities design in Alaska. He is completely familiar with subarctic conditions and the ground cover and plant materials which do well in the Alaska climate.

Mr. Lent and his firm have received numerous awards for design excellence in landscape architecture from the profession, from allied professions, and from the industry. He is licensed in two states and is a member of the American Society for Landscape Architects and the National Trust.

Relevant Experience

- South Central Park Improvements, Anchorage, including Delaney Park. As subconsultant, prepared plans and specifications, for multi-use sports fields, trails, play, picnic and parking areas and prepared a Master Plan for irrigating the entire Delaney Park strip and contract documents and supervision of the Phase I installation of that system. Services included all five phases.
- Bumpus Recreation Area Expansion Master Plan, Wasilla. This is a 1995 project to expand five existing ballfields to a multi-use sports/recreation area on 120 acres in Wasilla. As prime consultant, prepared the design which included Little League, American Legion and softball fields, soccer, hockey, basketball, tennis, volleyball, football, rugby fields, running track, trails, play areas, picnic areas and parking. An ambitious project being developed on a cooperative basis between the City of Wasilla and the various sports organizations, which provided input to the Plan.
- Centennial Park Improvements, Anchorage. As a subconsultant, worked with Little League representatives and prepared plans for sports fields, ball fields, basketball/skating rink, play, picnic, parking areas and landscaping services included all five phases.
- Westside Park Improvements, Anchorage. As subconsultant, prepared plans for sports fields, play, picnic, parking areas, and landscaping for various parks on west side of Anchorage. All five phases of services were provided.
- Tudor Trail Crossing - organized the design team, prepared horizontal and vertical alignment studies, landscape architectural design, and construction documents for the Tudor Trail Crossing, Phases I and II. Because of numerous utilities and ISTEAF financing, the project was very complex. The Phase I bridge portion is nearing completion and the Phase II tunnel portion, with design completed, is scheduled for construction next year.

- Lake Otis-Abbott Road Trail was one of the original, late 70's trail projects of Anchorage's trail system. It extended a badly-needed trail to the southeastern hillside area and Service High School, providing trail linkage to the downtown area. It was 4-1/2 miles in length and separated from the roadway, with a portion through virgin forest. Mr. Lent's firm was the prime consultant for this project which included all phases of service. It was designed and constructed in record time, six months, with less than 5% overrun and at a very reasonable cost of \$32.00 per lineal foot.
- Gary Thurlow Palmer-Wasilla Bicycle/Pedestrian Trail. As a subconsultant, Mr. Lent's firm provided route selection, preliminary design, and estimating on 2-1/2 miles of trail and detail design for construction documents on the first mile of the trail with supervision of the first increment of construction. Mr. Lent was responsible for obtaining permits which included a crossing over Cottonwood Creek. The crossing incorporated a viewing deck and habitat restoration features which were heavily complimented by Alaska Department of Fish and Game.
- Black Gold Park Strip, Valdez. As subconsultant, prepared a Master Plan and Phase I construction documents for the community's park strip. Included were play fields, play areas, parking, trails and landscaping. The design was complex due to the unusually high volumes of snow storage in the park strip.

References

Rachel Rourke-Sunnell, MOA Parks and Recreation

343-4335

John Luster, President, Matanuska-Susitna Trails Council

745-2250

John C. Stein, Mayor, City of Wasilla

373-9055

Dan A. Soott
PO Box 873557
Wasilla, Alaska 99687
(907) 376-8654

*(Better copy is coming)
Burt*

OBJECTIVE

A position in Planning or Landscape Architecture that will enable me to apply my 10 years of experience in project management, design, research, and public relations.

EXPERIENCE

DISTRICT EXECUTIVE . BOY SCOUTS OF AMERICA.

- Responsible for recruiting and training adult volunteers to carry out the many and varied programs within the Scouting movement. Have recruited and been coach, counselor, and advisor for over 300 adult volunteers.
- Raised over \$60,000 in pledges from individuals and corporations to support Scouting in the Western Alaska Council.
- Created and maintained interest in Scouting through constant contact with community and civic organizations, businesses, churches, and governmental agencies.

OWNER AND GENERAL MANAGER OF CONSULTING FIRM (1988-1990) Evergreen, Colorado

- Successfully managed sole proprietor Landscape Architectural firm.
- Implemented search for potential design projects and successfully negotiated a contract with the City of Evergreen Parks and Recreation Department to create a design for a multi-use park and recreation area along the Municipal Golf Course and city reservoir. Improvements included multi-purpose trails, parking area, grading and drainage, and wetlands mitigation.

LANDSCAPE ARCHITECT 'INTERN' (1989), Denver, Colorado

- Successfully completed a 6 month Internship with the State of Colorado Parks and Recreation Department by demonstrating my capability to work on a wide variety of design projects. Such projects included: boat ramp design, parking areas, picnic shelters design, and site analysis to include surveying with theodolite and levels.
- Prepared graphics for reports and presentations utilizing Macintosh computer programs.

DESIGNER, DRAFTER, GRAPHICS PREPARATION (1989-1990), DeLeuw, Cather, Inc., Denver, Colorado

- Prepared drawings for transportation engineering projects in the Denver area for a major Traffic Engineering Consulting firm.
- Created graphics for reports and presentations utilizing Macintosh computer programs and various other visual mediums.

PROJECT MANAGER, DESIGNER, MARKETER, DRAFTER (1984-1988)
Kramer, Chin, and Mayo, Inc.
Anchorage, Alaska

- Responsible for the management of design contracts for major Municipal Parks and Recreation improvements. Improvements on parks totaled over \$2,500,000.
- Successfully prepared engineers' estimates for bid proposals and prepared permit applications for the Corps of Engineers and other agencies.
- Researched leads for possible new design contracts for KCM and produced proposals to submit in response to Request for Proposals for various governmental agencies.
- Creatively photographed Architectural and Engineering projects for publication in corporate calendars and pamphlets. Photographed construction progress on various projects for KCM.

OWNER and GENERAL MANAGER for CONSULTING FIRM (1983-1984), Wasilla, Alaska

- Successfully managed Landscape Architect firm, working closely with other local Landscape Architects, Architects, and Engineers in planning various Parks and Recreation Improvement projects in Alaska.
- Prepared all drawings utilizing ink on mylar and color rendered blue-line prints for presentation. Utilized own skills in surveying to collect needed site data to include transit, level, and tape.

LANDSCAPE ARCHITECT, CONSTRUCTION INSPECTOR (1981-1982), Gorder Landscaping
Anchorage, Alaska

- Responsible for construction inspection on major Municipal Parks and Recreation projects in Anchorage. Worked closely with design consultant to the Municipality of Anchorage to ensure that all construction was in accordance with the plans and within the scope of the negotiated contract.

EDUCATION

- Master of Science, Landscape Architecture, (Pending), 1979, Oklahoma State University
- Bachelor of Science, Forestry, 1976, Oklahoma State University
- Continuing Education Biology Department, University of Alaska, Anchorage, 1987

AEROMAP U.S.

INTERNATIONAL PHOTOGRAMMETRIC CONSULTANTS

March 5, 1997

Mayor Sarah --

Mr. Burdett Lent
374 Sarah's Way
Wasilla Alaska 99654

*Corrected
Copy addressed
to you is
"in the mail"*

Subj: Wasilla Bell Fields Digital Mapping

Post-It™ brand fax transmittal memo 7671		# of pages = 4	
To	BURDETT LENT	From	D. CIMITTI
Co.	GROUP III DESIGN	Ca.	AEROMAP
Dept.		Phone #	272-4495
Fax #	1-907-324-6676	Page	274-3265

F697067

Dear Mr. Lent:

AeroMap U.S. is pleased to respond to your request for proposal regarding the Wasilla project. This proposal is a statement of our current understanding of the products, the uses, and the standards that your project requires. We will also provide you with our estimated time to complete the project. If my understanding does not accurately reflect your own project requirements, please contact me. I will be happy to meet with you to work out scope of work details to your satisfaction.

SCOPE OF WORK

AeroMap Responsibilities

Planning

AeroMap will layout the Wasilla project using existing 1992 B/W photography. Mapping limits are clearly defined on the attached photocopy.

AeroMap will develop a control plan showing approximate locations for postmarks or photo identification points to be surveyed. We will coordinate with your surveyor to be sure he has a clear understanding of the ground control survey requirements. This project requires six (6) photo identifiable ground control points surveyed horizontally and vertically.

Aerotriangulation

AeroMap shall conduct all aerotriangulation necessary for densification of project survey control to sufficiently cover each stereo model for mapping purposes. Aerotriangulation is based upon the location and quality of the control survey data which will be provided by Group Three Design.

Aerotriangulation is a necessary preparatory process in mapping which does not provide an independently useful product, but does give us the first indication of expected map quality relative to the surveyed control.

Topographic Map

AeroMap uses DAT/EM software and analytical stereoplotters instruments to generate digital map files. Topography is often collected as a digital terrain model to define the relief. Vegetation limits, drainage and water bodies are collected as planimetric detail along with infrastructure and other cultural features to complete the topographic collection. Other planimetric features such as roads, trails, streets, fences, buildings, and drainage features are collected to accurately portray the relative locations with respect to the

Page 2
Wasilla Ball Fields

control survey. Planimetric features and details are collected commensurate with the final output map scale and the ability of the operator to see and interpret these features in the photography.

Our operators may employ DAT/EM Superimposition features on our stereoplotter instruments which allow them to visually see the planimetric and TTN development over the 3D photo image. Superimposition saves operator time by preventing overcollection, but also is a quality control measure in that it allows the operator to see how well the collected planimetry and the TTN fits the 3D image.

Deliverables

During the course of the project, or upon completion, AeroMap shall deliver the following items to Group Three Design:

- One set of topographic map files with 2' contours and planimetric detail in AutoCad R.12.
- One set of ink on mylar manuscripts in AeroMap format at a map scale of 1"=100'.
- One (1) 1"=200' color enlargement print.

CLIENT RESPONSIBILITIES

The successful completion of this project in a timely manner is dependent upon a number of elements and work tasks, some of which will be completed by. It shall be incumbent upon Group Three Design to provide survey control services which may include, post marking, photo identification, horizontal and vertical surveying. If Group Three Design wishes for property boundary to be displayed with the mapping data, corner position coordinates shall also be provided. It is understood that AeroMap will rely upon this survey control, without independent verification, in the performance of our work and therefore the accuracy of the resultant map products is directly related to the quality of these survey functions.

It is further understood that for AeroMap to meet National Map Accuracy Standards, the survey, at minimum, must be conducted to Third Order, Class I Standards as specified by the National Geodetic Control Committee.

Vertical control points will be accurate to within one-tenth contour interval specified herein.

DATUM

Group Three Design may select the horizontal and vertical datums for this project. The control data should be provided to AeroMap in the form of three-dimensional plane coordinates. The data may be in the form of state plane, Universal Transverse Mercator (UTM), or local coordinate values.

Layer schemes, symbols, title blocks, and sheet layout will be based on AeroMap standards unless Group Three Design delivers their own alternate standards to AeroMap with the notice to proceed.

QUALITY STANDARDS

AeroMap agrees to use reasonable care and the standards of practice ordinarily exercised by the photogrammetric profession. Mapping accuracy shall meet or exceed National Map Accuracy Standards for 2' contour interval mapping with 1"=100' scale, relative to the control survey.

Page 3
Wasilla Ball Fields

SCHEDULE

Mapping Schedule

Mapping for this project, including aerotriangulation and related tasks will be completed and delivered within 20 days from receipt of suitable control survey data.

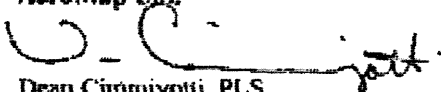
COST & PAYMENT TERMS

Compensation for the above services will be a lump sum of **\$3,327.00**

Compensation for the above services w/out sheet format and ink on mylar manuscripts **\$2,777.00**

AeroMap is pleased to offer our professional mapping services in response to your request for proposal. We look forward to working with you and your staff to complete this project in a timely and cost efficient manner. Should you have any questions, please call me at 272-4495.

Sincerely,
AeroMap U.S.


Dean Cimmiyotti, PLS
Project Manager

cc: AeroMap
attach: map limits

