

DELPHI MUNICIPAL AIRPORT  
BOARD OF AVIATION COMMISSIONERS  
DECEMBER 14, 2023  
MINUTES

The Board of Aviation Commissioners meeting was called to order by President Larry Gruber at 7:00 PM in the Delphi Municipal Airport conference room, December 14, 2023.

Members participating were Larry Gruber, Jim Yost, and Ronda Cassens

Member absent: Brent Flory and Ethan Beery

Guests were Ed Nagle and Ken Ross

#### APPROVAL OF MINUTES

The minutes of the November Meeting were reviewed and approved by the board.

#### REVIEW FINANCIAL REPORT

The financial reports were reviewed and discussed.

#### ENGINEERS REPORT:

Ken Ross airport engineer gave a report of the fuel farm funds indicating that the final pay request is pending and the funds should be received in a short period of time.

The needs and purpose of a master plan was presented and discussed. NGC is prepared to begin working on the master plan and to accelerate the process even though the funding source is not in place. NGC is also willing to work on the master plan and defer their invoices until such time as an FAA grant is in place.

For help in preparing the master plan some work needs to be done with the traffic counting system. It is necessary to have a good internet signal, so efforts are going to be made to assure positive internet connections and also the installation of the exterior antenna.

Attached to the minutes is the AGREEMENT FOR CONSULTING SERVICES, AMENDMENT #2 that was presented at the meeting for NGC to continue as the airport engineering service.

A motion was made by Ronda Cassens to extend the NGC 2013 General Service Agreement to December 31, 2028. Seconded by Larry Gruber. Voted

on and approved by all present.

Also presented at the meeting was a GENERAL SERVICE AGREEMENT, TASK ORDER 08 for the purpose of preparing a **Complete Airport Master Plan and Airport Layout Plan**. After discussion it was decided to table the approval of this agreement so that it can be studied further by the members of the Board. Attached is a copy of this General Service Agreement.

## MANAGERS REPORT

Due to the marginal weather and the time of the year activity at the airport is very minimal.

2500 gallons of 100LL aviation was delivered the past week however there has been only one fuel sale since the beginning of December. Part of this was due to problems with the fuel system.

## OLD BUSINESS

Discussion of the possibility of a Open House/Fly-in was continued and will continue to see what might be done and when.

## NEW BUSINESS

None

## OTHER BUSINESS

None

## ATTACHMENTS

Attachment #1 Agreement for Consulting Engineering Services

**AGREEMENT FOR CONSULTING ENGINEERING SERVICES  
2013 GENERAL SERVICES AGREEMENT  
AMENDMENT 02**

THIS AMENDMENT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2023, by and between the Delphi Board of Aviation Commissioners (hereinafter referred to as the "Owner"), and NGC Corp, an Indiana corporation with its principal office at 38 Hackney Road, Ravenswood, WV 26164 (hereinafter referred to as "Engineer").

This amendment includes the extension of the contract until December 31, 2028. The purpose of this amendment is for the facilitation of the completion of a new Master Plan and to construct a new parallel taxiway. NGC hereby agrees to hold the current fee structure with those established in the 2013 Contract Rates through the end of this contract extension. All other terms and conditions of the agreement shall remain in force as previously agreed.

ENGINEER:  
NGC Corp.

OWNER:  
Delphi Board of Aviation Commissioners

By: \_\_\_\_\_  
Kenneth A. Ross, P.E.  
Vice President

By: \_\_\_\_\_  
Larry Gruber  
President

Date: \_\_\_\_\_, 2023

Date: \_\_\_\_\_, 2023

Attachment #2 General Services Agreement Task Order 08

**GENERAL SERVICES AGREEMENT  
TASK ORDER 08  
AIP-023 PROJECT, FY 2023**

THIS AGREEMENT, made this \_\_\_\_\_ day of \_\_\_\_\_, 2023 by and between the Delphi Municipal Airport Board of Aviation Commissioners, hereinafter referred to as the "Owner" and NGC Corp an Indiana business with its principal office at 38 Hackney Road, Ravenswood, West Virginia 26164, hereinafter referred to as "Engineer" is being executed by Owner and Engineer in order to accomplish airport improvement program requirements.

WHEREAS, Owner desires consulting services for airport development projects at Delphi Municipal Airport; and

WHEREAS, Engineer has heretofore represented to the Owner that it has the ability to perform such tasks for the Owner and is willing to do so.

NOW, THEREFORE, in reliance upon the representations of the Engineer and in consideration of the terms, conditions and covenants contained or incorporated herein, and the mutual promises hereinafter enumerated, the parties agree as follows:

WHEREAS, the Owner intends to complete the following projects:

**1. Complete Airport Master Plan and Airport Layout Plan**

NOW, THEREFORE, in reliance upon the representations of the Engineer and in consideration of the terms, conditions and covenants contained or incorporated herein, and the mutual promises hereinafter enumerated, the parties agree as follows:

#### **ARTICLE 1. ENGINEER'S BASIC & ADDITIONAL SERVICES**

##### 1.1 Scope of Work

The scope of work shall be as described in the "DELPHI AIRPORT MASTER PLAN - SCOPE & FEE" DATED December 14, 2023 and attached under Article 4 as a part of this task order.

- 1.2 The Engineer shall notify the Owner in writing at the time the Engineer's services reach 85% of the upset limit. Written approval from the Owner shall be required in order to authorize the Engineer to proceed with services above the upset limit.

#### **ARTICLE 3. PAYMENTS TO THE ENGINEER**

- 3.1 The Owner agrees to pay the Engineer as compensation for his basic services, as defined in Article 1.1 Scope of Work, on the basis of a lump sum fee of Three Hundred Thirty Three Thousand Three Hundred Thirty Three Dollars and 34 Cents (\$333,333.34): which fee covers all costs or reimbursable expenses as described herein.

- 3.2 The Owner agrees to pay the Engineer as compensation for his additional services, as defined in Article 1.1 Scope of Work, on an hourly rate or at-cost basis in accordance with the attached schedules identified in Attachment 2, with an upset limit of Zero Dollars and No Cents (\$0.00).

- 3.3 Payment on account of the Engineer's Services shall be made monthly upon receipt of an itemized claim. The Engineer shall provide progress payment requests using percentage-based fees for lump sum services and/or unit-based fees as set forth in Attachment 2 of this Task Order.

- 3.4 The Owner and Engineer acknowledge that an FAA Grant will be obtained in the future and that no billing will be made by the Engineer until the Grant is secured.

#### **ARTICLE 4. ATTACHMENTS**

- 4.1 The following Attachments are incorporated and made a part of this Agreement, by reference, as though the same is fully set forth herein:

- 4.1.1 Agreement for General Airport Consulting Engineering Services and all attachments
- 4.1.2 Attachment 1 "Scope of Services"
- 4.1.3 Attachment 2 "Estimated Fee Schedule"

- 4.2 All terms and conditions set forth in the above referenced attachments shall apply and are made part of this Agreement and are fully incorporated herein.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first written above and such Agreement is hereby effected.

CONSULTANT:

OWNER:

NGC CORP

DELPHI BOAC

By: \_\_\_\_\_  
Ken Ross, Vice President

By: \_\_\_\_\_  
Larry Gruber, President

ADDRESS FOR GIVING NOTICES:

ADDRESS FOR GIVING NOTICES:

NGC CORP  
38 Hackney Road  
Ravenswood, WV 26164

Delphi BOAC  
201 S. Union Street  
Delphi, IN 46923

1	A	B	C	D	E	F	G	H	I	J	K
2	Task Number	Delphi Municipal Airport Master Plan Update - Scope and Fee Estimate	Project Manager	Project Engineer	Senior (CADD) Technician	Aviation Planner	Grant Administrator	Geospatial & Survey	Expenses	(Sub-consultant)	Total Costs
3	1	<b>PROJECT ADMINISTRATION</b>	\$152	\$134	\$65	\$81	\$75	\$0	\$0	\$0	\$25,670
4	1.1	<b>Project Scope Development.</b> This task includes a scoping exercise to define the project goals, preparing a project plan, team meetings and any special issues associated with the proposed planning project.	8								\$1,280
5	1.2	<b>Project Meetings.</b> This task includes project and/or Airport Board meetings occurring as needed including coordination, not to exceed 9 meetings. Airport Planner will attend only virtually, while Indianapolis based Project Engineer will attend occasionally in person. NGC will attend meetings either in person or virtual whenever possible.	120								\$19,200
6	1.3	<b>Contract Administration.</b> This task involves the processing of invoices, sub-consultant invoicing and applicable reports.	24					18			\$5,190
7	2	<b>PUBLIC INVOLVEMENT PROGRAM</b>	40		24	76		\$0	\$1,000	\$0	\$15,212
8	2.1	<b>Public Information Meeting.</b> A public information meeting will be held to share information with the public on the Master Plan findings and Airport Sponsor's preferred alternatives. This meeting will be the only on-site public information meeting, with virtual/in-person capability. It will occur after the draft alternatives analysis section is completed and will allow for comment on alternatives for the facilities needed to meet aviation demand at the airport. (1 Mtg @ 4 Hrs for meeting). Note: The Sponsor is responsible for working with the Consultant in providing and funding for venue location and advertising. NGC will attend all meetings.	16		16	40			\$1,000	\$0	\$7,804
9	2.2	<b>Tenant User Meeting.</b> The second meeting will be a virtual user meeting with Key Tenants that will occur after the aviation activity forecasts are completed and a draft of facility requirements are determined. This meeting will provide the opportunity for key users of the facility to have input into the facility requirements (1 Mtg @ 2 Hrs). NGC will attend all meetings.	16		8						\$0
10	2.3	<b>User Survey.</b> This task will provide the opportunity for all users of the facility to have input into the facility requirements by means of a survey via Survey Monkey.com (or similar online survey service). Note: Airport responsible for initial data collection and outreach, advertising the survey, and any direct electronic distribution of survey link.	8			20					\$2,900
11	2.4	<b>Prepare Appendix.</b> Documentation of the public involvement program will appear in an appendix to the Master Plan.				16					\$1,296
12	3	<b>ENVIRONMENTAL OVERVIEW</b> - This element includes an environmental overview of the airport property and immediate surrounding area. It is not intended to provide the detail of a categorical exclusion, environmental assessment, or environmental impact statement. Rather it provides a summary of potential environmental impact associated with airport improvements. Special Notes: 1. The Environmental Overview will not include a Noise Study. Should a Noise Study be required, the Engineer reserves the right to present the Owner with additional scope and fee. 2. The Environmental Overview will not include any coordination with jurisdictional agencies (e.g. IDEM, DNR, etc.). Should such coordination be required, the Engineer reserves the right to present the Owner with additional scope and fee. 3. A wildlife hazard evaluation is not included. 4. This effort will be a desktop study only, with no on-site, coordination, or outreach efforts.	16			28		\$0	\$91	\$0	\$4,919
13	3.1	<b>Environmental Research.</b> This task will include environmental research in each of the NEPA environmental review categories via public sources and previous studies completed at the airport. 119 to provide previous studies (e.g. wildlife management studies). Note: No field reconnaissance (e.g. wetland delineation) or new Part 150 noise studies will be included under this task.	8			24			\$91		\$3,315
14	3.2	<b>Prepare Draft Chapter.</b> A draft chapter of the environmental overview will be prepared and submitted to the Owner and FAA for comment.	8			4					\$1,604
15	4	<b>INVENTORY OF EXISTING CONDITIONS</b> - This element consists of collecting, researching, and compiling data, and analyzing information obtained from the inventory process. Where possible, this effort will be a cursory summary of the overall airport facilities with a focus on the proposed east runway. This includes the following tasks:	8	72		24		\$0	\$82	\$0	\$12,954
16	4.1	<b>History of Airport.</b> A brief overview of the history of the airport will be prepared.	2			4					\$644
17	4.2	<b>Regional Setting.</b> The regional setting of the airport and surrounding land use will be briefly described.	2			4					\$644
18	4.3	<b>Inventory and Description of Existing Facilities.</b> The existing facilities at the airport will be described including the runways, taxiways, lighting, markings, signage, aprons, fueling, terminal, and parking. A hangar inventory will also be conducted that includes dimensions and existing storage capacity. Additionally, the primary runway PCNs will be calculated with Owner provided information. Update from existing Master Plan accordingly.		64							\$8,570
19	4.4	<b>On-Site Inventory Validation.</b> Provide for one day of on-site validation of the Inventory and Existing Facilities identified above to ensure the accuracy of the technical report.		8							\$1,072
20	4.5	<b>Describe Surrounding Airports.</b> The surrounding airports will be described including their activity, primary runways, and best navigational aids.				4					\$324
21	4.6	<b>Review Airspace/Air Traffic Control Considerations.</b> The existing runway approach surfaces and obstructions, runway protection zones, runway safety areas, obstacle free zones and runway/taxiway spacing.	4			4					\$964
22	4.7	<b>Prepare Draft Chapter.</b> The documentation of existing airport conditions will be summarized into drawings, tables, aerial photographs, and exhibits, where possible, for ease of understanding and use. A draft chapter will be prepared and submitted to the Owner and FAA for comment.				8			\$82		\$730

1	A	B	C	D	E	F	G	H	I	J	K
2	Task Number	Delphi Municipal Airport Master Plan Update - Scope and Fee Estimate	Project Manager	Project Engineer	Senior (CADD) Technician	Aviation Planner	Grant Administrator	Geospatial & Survey	Expenses	(Sub-consultant)	Total Costs
3	5	<b>AVIATION FORECASTS</b> - Forecasts of future levels of aviation activity are the basis for determining the need for new or expanded facilities including a new runway (which is currently not justified by the FAA at this time). This task will include the preparation of a reliable activity baseline, selection of an appropriate forecast methodology, development of a forecast, comparison of that to the FAA Terminal Area Forecast for reasonableness, and submission of the forecasts to the FAA for approval including justification of the new runway based on critical traffic. To be provided by the Owner with support from the Consultant. These forecasts will be for general aviation activity only; no passenger service or employees will be included since there is no scheduled passenger service at the airport nor is it anticipated in the foreseeable future. Consultant understands that FAA review of forecast is time consuming. For this proposal, we have estimated 6 months of review and occasional coordination with the FAA after initial submission. Should complete forecast be needed or coordination beyond 6 months, additional resources will be required. Specifically, the following activities are included in this task: <b>Data Collection.</b> The aviation activity measures identified for this general aviation forecasting effort are based aircraft and operations. This element included acquiring the following historical data: Historical based aircraft; FAA Data TAF; FAA Aerospace Forecast; FAA NBAI Current data to be provided by airport sponsor as only airport has access to FAA web site; IFR Flight Plans for Proceeding Year; and future projections, existing construction projects underway, and Socioeconomic Data <b>Fleet Mix.</b> The Fleet Mix of the current based aircraft will be determined from NBAI data. <b>Critical Aircraft and Current Airport Reference Code.</b> From the data collected in a previous element, Consultant will identify the category for each based aircraft and each transient aircraft on an IFR flight plan during the proceeding year. These will be tallied to determine the largest category of aircraft conducting 500 annual operations at the airport, thus indicating airport's reference code (ARC). <b>Forecasts.</b> Working from information gathered in previous elements, aviation forecasts will be prepared to include the following items: -Prepare trend forecasts for based aircraft and determine if it is statistically significant, correlated, and viable. -Prepare market share (US GA Market) forecasts for based aircraft and determine if it is statistically significant, correlated, and viable. -Based on socioeconomic data, prepare regression forecasts for based aircraft and determine if it is statistically significant, correlated, and viable. -Prepare operations forecasts including local, transient, and total operations based on operations-per-based aircraft methodology -From above, prepare based aircraft and operations forecast envelope of low, baseline, and high if applicable. -Prepare projections of peak characteristics for peak month, design day, busy day, and design hour -Prepare based aircraft fleet mix forecast -Prepare local and transient split operations forecast -Compare the final forecast envelope with the TAF describing any reasons for excessive differences	80			152		\$0	\$980	\$0	\$26,092
24	5.1	<b>Data Collection.</b> The aviation activity measures identified for this general aviation forecasting effort are based aircraft and operations. This element included acquiring the following historical data: Historical based aircraft; FAA Data TAF; FAA Aerospace Forecast; FAA NBAI Current data to be provided by airport sponsor as only airport has access to FAA web site; IFR Flight Plans for Proceeding Year; and future projections, existing construction projects underway, and Socioeconomic Data	8			16			\$500		\$3,076
25	5.2	<b>Fleet Mix.</b> The Fleet Mix of the current based aircraft will be determined from NBAI data.	8			16					\$2,576
26	5.3	<b>Critical Aircraft and Current Airport Reference Code.</b> From the data collected in a previous element, Consultant will identify the category for each based aircraft and each transient aircraft on an IFR flight plan during the proceeding year. These will be tallied to determine the largest category of aircraft conducting 500 annual operations at the airport, thus indicating airport's reference code (ARC).	8			24					\$3,224
27	5.4	<b>Forecasts.</b> Working from information gathered in previous elements, aviation forecasts will be prepared to include the following items: -Prepare trend forecasts for based aircraft and determine if it is statistically significant, correlated, and viable. -Prepare market share (US GA Market) forecasts for based aircraft and determine if it is statistically significant, correlated, and viable. -Based on socioeconomic data, prepare regression forecasts for based aircraft and determine if it is statistically significant, correlated, and viable. -Prepare operations forecasts including local, transient, and total operations based on operations-per-based aircraft methodology -From above, prepare based aircraft and operations forecast envelope of low, baseline, and high if applicable. -Prepare projections of peak characteristics for peak month, design day, busy day, and design hour -Prepare based aircraft fleet mix forecast -Prepare local and transient split operations forecast -Compare the final forecast envelope with the TAF describing any reasons for excessive differences	8			80					\$7,760
28	5.5	<b>FAA Coordination.</b> This element includes coordination with the FAA, revisions and responses to review comments, and one (1) revision to the forecast submitted to the FAA ADO.	40								\$6,400
29	5.6	<b>Forecast Report.</b> This element includes organizing background information, analyses, and findings of the forecasting work effort and preparing a summary draft report. The draft report will detail the results of the forecasts and will organize the rationale upon which selected forecasts are based. A comparison of the selected forecasts to the FAA's TAF will also be included in this draft report. The forecasts will be submitted to the Owner and then FAA for ultimate approval prior to beginning other dependent tasks by Consultant.	8			16			\$480		\$3,056
30	6	<b>FACILITY REQUIREMENTS</b> - Under this element, the focus will be the proposed and existing runways, and the runway environment (Safety area, object free, approach, departure, etc.). Any additional facilities such as hangars, fuel, or landside development that may be needed to meet the forecasted activity will not be included as part of this scope.	16	12	40	160		\$0	\$111	\$0	\$19,999
31	6.1	<b>Summarize Forecasts, Survey Results, and Airport Reference Code from Critical Aircraft.</b> This task begins with summarizing the forecast, survey results, and the ARC from the current critical aircraft. An assessment is then made of the ability of existing facilities to meet current and future demand.				8					\$648
32	6.2	<b>Wind Analysis.</b> Wind data will be acquired and runway crosswind components computed for All Weather, IFR and VFR conditions. Additionally, wind roses computed for the airport. NGC will perform all wind analysis and provide cad files or blocks of the wind rose analysis.	8			24					\$3,224
33	6.3	<b>Runway Requirements.</b> Dimensional criteria based on RDC will be assessed for each runway in accordance with the design requirements in AC 150/5300-13A. Compliance with this design criteria will be assessed for the RSA, RPZ, ROFA, and Runway Width. Runway length will be assessed based on AC 150/5325-4B. Runway orientation will be assessed based on Wind Analysis (10 year historic wind data). Historic Pavement Condition Indexes (PCI) will also be included and resulting maintenance requirements identified. Note: Letters of Intent will be required for this task.	8		8	60					\$6,692
34	6.4	<b>Taxiway Requirements.</b> Dimensional criteria based on TDG and AOC will be assessed for each taxiway in accordance with the design requirements in AC 150/5300-13A. Compliance with this design criteria will be assessed for the TSA, TOFA, TLOFA, taxiway width, taxiway separation requirements, taxiway intersection configuration requirements, holding positions, and any associated "Hot Spots".			8	8					\$1,200
35	6.5	<b>Airfield Markings, Lighting and Signage Requirements.</b> Any improvements to runway and taxiway markings and lighting systems will be assessed and improvements noted based on Standards for Instrument Approach Procedures.		8	8	4					\$1,948

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2	Task	Delphi Municipal Airport Master Plan Update - Scope and Fee Estimate	Project Manager	Project Engineer	Senior (CADD) Technician	Aviation Planner	Grant Administrator	Geospatial & Survey	Expenses	(Sub-consultant)	Total Costs
3	Number	Task Description	\$160	\$134	\$69	\$81	\$75				
37	6.6	Aircraft Parking and Storage Requirements: T-hanger and conventional hanger needs will be assessed on existing proposed layouts. Review and development of alternatives for future aircraft storage and apron/ramp areas based on hangar wait list and future forecast from the Aviation Forecast chapter above. If requested, will be an additional service.			4	8	8				\$1,736
37	6.7	Other Requirements: Airport/Airside taxi facilities are new and at 12,000 gallons are assumed to be at a capacity needed to support growth for the long term. Jet-A needs will be evaluated and addressed as well. Maintenance requirements are also assumed to be minimal and adequate for the planning period. Should a new terminal or hangar facility be warranted, it will be evaluated and included in the ALP as additional services.				8	8				\$1,200
38	6.8	Draft Chapter: A draft Facility Requirements chapter will be prepared summarizing all of the above data and submitted to the Owner and FAA for comment.					40		\$111		\$3,351
40	6A	FAA MODERNIZATION & REFORM ACT OF 2012 AND SUSTAINABILITY INITIATIVE - NOT INCLUDED									
41	7	ALTERNATIVES DEVELOPMENT AND EVALUATION - This part of the master plan utilizes the results of the previous Master Plan elements to identify and evaluate critical alternatives for meeting the needs of airport users and the aviation demand, as well as the strategic vision of the airport sponsor. A parallel taxiway and a longer runway shifted to the south is anticipated. Two alternatives for the improved runway will be analyzed. The alternatives may include, but not be limited to, a new runway to the east, a parallel taxiway to the west with relocated terminal facilities as well as shifting either alternative to the south. This scope will include one revision to letter based on comments from the FAA. Any other alternatives to be analyzed will be included as additional services.  FAA guidance on developing the alternatives analysis advises that only the functional elements needed as part of the forecast should be evaluated (e.g., airline gates are not a functional part of IIR and, therefore, are not included.) Additionally, if there are no facility needs associated with a functional element, it will not be included in the analysis.  With the above guidance in mind, the functional elements to receive an alternatives analysis at IIR are the primary runway, taxiways, additional runways, and support facilities. Facility development where in the opinion of the FAA the best alternative is both non-controversial and intuitive in nature and will not be subject to an alternatives analysis. The two alternatives considered in this chapter are the only options the IIR management staff desire to be studied. Should additional alternatives, or revisions, be needed, they will be done as additional services. NCG will provide cad files of the final alternative submitted in the previously approved ALP for use as a part of one of the two alternative analyses. This will be provided at no cost.	24	64	88	64	-	\$0	\$130	\$0	\$23,802
41	7.1	Airside and Airfield: This task will include identifying airside or airfield development (runways, approaches, taxiways, aprons, etc.) alternatives and basic impacts based on the aviation forecast and facility requirement findings. The runway alternatives will be analyzed in plan view. The recommended alternative will be analyzed in profile view, contingent on sufficient survey information being available.	8	40	60	8					\$11,428
42	7.2	Landside: This task includes identifying landside development (hangars, buildings, etc.), alternatives and basic impacts to meet the aviation forecast and facility requirement findings.	4	24	24	4					\$5,836
43	7.3	Environmental Factors: As the majority of this development area is agricultural in nature with no known wetlands or streams, additional study is not included. Should an issue be identified and the FAA deems it necessary to evaluate it in the Master Plan, it will be done as part of additional services.									\$0
44	7.4	Agency Comments: This task includes identifying incorporate any early agency review comments from the FAA into the alternatives.	8			4					\$1,604
45	7.5	Exhibits: This task includes preparing and presenting required exhibits/documents to the sponsor with recommendations. The sponsor is required to identify preferred proposed development alternatives based on alternatives options. The sponsor is also required to identify	4		4	8					\$1,564
46	7.6	Draft Chapter: This task includes preparing a draft alternatives development and evaluation chapter and submit to the Owner and FAA for comment.					40		\$130		\$3,370
47											

1	A	B	C	D	E	F	G	H	I	J	K
2	Task	Delphi Municipal Airport Master Plan Update - Scope and Fee Estimate	Project Manager	Project Engineer	Senior (CADD) Technician	Aviation Planner	Grant Administrator	Geospatial & Survey	Expenses	(Sub-consultant)	Total Costs
3	Number	Task Description	\$160	\$134	\$69	\$81	\$75				
48	8	AIRPORT LAYOUT PLAN SET - The ALP is a set of drawings which depict the existing airport facilities and proposed developments based upon the results of the aviation activity forecasts, facility requirements, and alternatives analysis elements of the master plan. This is a third element of the airport master plan that is reviewed and approved by the FAA. Refer to Item 6A for basemap and obstacle data development scope. The final ALP sheets will be included as an appendix to the Master Plan. A separate chapter will not be developed for this task. Consultant reserves the right to combine sheets, plans, profiles or other as determined necessary for the development of the ALP set (except for the Existing and Proposed ALP which will be kept separate) and as approved by the FAA. The ALP set will meet the requirements of FAA Standard Operating Procedure 2.0 for FAA Review and Approval of Airport Layout Plans with the following conditions or exceptions: - The existing runway ends and centerline profile(s) will be based on existing data such as previous AGIS surveys (no new field survey). If not available, this will not be provided. - The Airport Airspace Drawing sheet will not include a profile view. Composite ground profile is computed based on highest ground elevation every 100 feet within the P77 approach surface for the area identified on the inner portion of the approach surface drawing only. Obstruction Data Tables will not include utility poles (unless high power tension lines) and light poles (unless provided by other source with documented source data). - The inner portion of the Approach Surface Drawing sheet: The composite ground profile will be computed based on highest ground elevation every 100 feet within the P77 approach surface for the area identified on the inner portion of the approach surface drawing only. Obstruction Data Tables will include approximate ground elevations from 2' contours. Obstruction Data Tables identify trees within 12.5 feet of surface to account for 5-year future annual normalised growth rate of 2.5 ft per year (EB-91). Runway centerline profile will include the runway centerline and extended RSA. No transverse grades will be included (not common). Surfaces evaluated on the inner portion of the approach surface drawing will include the Threshold Sling Surface, Departure Surfaces, Part 77 Approach Surface and associated Transitional Surface, and the Glideslope Qualification Surfaces if applicable. PAPI surface will be shown on the profile view only for information and evaluated for obstructions (where they are available). Obstructions are identified as highest point within: 100-foot radius for the first 10,000 ft of approach; 500-foot radius for next 10,000 ft; 500-foot radius for conical; 100-foot radius for primary surface; and beyond 20,000 ft identified by DEAAA.	124	160	384	284		\$0	\$1,000	\$0	\$91,780
48	8.1	Title Sheet: The existing cover sheet will be updated to include the following: title, index of drawings, location map, vicinity map, AIP Project Number.			8	4					\$876
49	8.2	Airport Data Sheet: This drawing sheet will be updated to include a wind rose and a wind rose table, abbreviations, airport data, runway data, list of approved modifications to FAA airport design standards.	4	8	16	40					\$6,056
50	8.3	Existing Airport Layout Drawing: This drawing sheet will be updated to include existing facilities including titles, changes in airside, landside, and road pavement, changes in building configurations and navigational aids, and legend determined from Google Earth imagery and survey information provided by the Sponsor.	4	16	40						\$5,544
51	8.4	Future Airport Layout Plan: This drawing sheet will be updated to include any future facilities identified in the alternatives analysis including titles and changes in airside. No changes to landside, road pavement, changes in building configurations, or navigational aids, are part of this scope.	8	16	40	24					\$8,128
52	8.5	Inner Portion of the Approach Surface Sheets: This task includes preparing the existing (2 Runways) and future (2 Runways) plan and profile sheets for FAR Part 77 and AC 150/5300-13 Threshold Sling Surfaces (as limited by descriptions above). Consultant to prepare the Inner Approach Surfaces and NGC to prepare the departure surface sheets using the obstruction data provided by Consultant. It is assumed that the RW 15-36 surfaces will be the same or have minor revisions.	24		96	80					\$16,944
53	8.6	Airport Airspace Drawing: This task includes preparing the Airport Airspace Drawing Sheet in plan view using a new aerial map for the 14 CFR Part 77 surfaces. This NGC will complete this task using the aerial map and obstruction data provided by the Consultant.	8	24	16	24					\$7,544
54	8.7	Terminal Area Layout: This map will show the current terminal area plan and identify critical features that support the airfield (as provided by the airport). This does not include a Utility Plan (not required by the FAA, Optional to the Owner). NGC will complete and provide a future terminal area plan assumed to be in the same general area as the existing terminal area.	8	32	40	32					\$10,920
55	8.8	Land Use Map: This map will be updated to include land uses and zoning on and surrounding the airport. Noise contours and crop restriction lines are not included.	4	32	24						\$4,782
56	8.9	Property Map: The previous ALP property map sheet prepared for the airport will be updated to SOP 2.0 standards for Exhibit A's. The effort will utilize recent boundary surveys for the existing sponsor-owned parcels not included within existing airport property description and any past clear title information. NGC will update the drawing sheet(s) for all required information including formulating to SOP requirements and securing any title certification of the sponsor-owned parcels. It will also include the preparation of parcel tables and the listing of all existing or proposed drainage, utility and aviation assessments available. The Consultant will update airport the airport property boundary description for the recently acquired properties not previously included. Owner to have attorney write title opinion based	8	64	40	16					\$13,912
57	8.10	ALP Quality Control / Quality Assurance: Ensure that each ALP sheet plan is reviewed and evaluated for completeness / second opinion of FAA design criteria applications towards future airport improvements.	40		40	40					\$12,400
58	8.11	FAA ALP Checklist Preparation and Plan Set Distribution: Ensure that the SOP Checklist that identifies the elements of a complete FAA review submittal has been reviewed against the actual ALP preparation status and the exclusions listed herein. Prepare draft sets of ALP plans for distribution as required to provide INDOOT / FAA / Client / User consultations.	16		16						\$3,664
59	8.12	ALP Preparation Direct Project Expenses: Reimburse direct project expenses.							\$1,000		\$1,000

1	A	B	C	D	E	F	G	H	I	J	K
2	Task	Delphi Municipal Airport Master Plan Update - Scope and Fee Estimate	Project Manager	Project Engineer	Senior (CADD) Technician	Aviation Planner	Grant Administrator	Geospatial & Survey	Expenses	(Sub-consultant)	Total Costs
3	Number	Task Description	\$160	\$134	\$69	\$81	\$75				
4	8A	ALP IMAGERY ACQUISITION, CRITICAL OBSTRUCTION DATA, AND CONTOUR DATA DEVELOPMENT - The Consultant recognizes that the airport has a previous airport layout plan and a previous Aeronautical Survey (2018). One of the primary objectives of the ALP is to immediately move forward with the new parallel taxiway. It is the desire of the Owner to utilize this existing data as much as possible to develop the new ALP for FAA approval while not duplicating future work where ever possible (e.g. Aeronautical Survey for Approach Procedure Work on New Runway). Therefore the consultant is focused on the minimum critical data that is required for completion of the ALP but collected in compliance of FAA AC 150/5300 16B, 17C, and 18C requirements. The minimum data includes collecting Obstruction Data (through an aeronautical survey) and Analysis of only the P77 Surfaces, Threshold Siting Surfaces and Runway Departures (truncated at 4,000' with OE/AA obstacle data beyond 4,000') for the existing Runways 18-36 and any adjustments to location and length, topographic mapping of 2 foot contours only, and Ortho Photography as necessary for the ALP sheets (proposed and inner approach surfaces). Field survey work is limited to setting targets for aerial imagery work and does not include any safety critical survey elements (e.g. runway points, NAVAIDS, etc.) that is commonly required for an AGIS/ADIP submittal. An AGIS/ADIP submittal is NOT included in this scope of work. However, this data can be used in the event an AGIS submittal is required by the FAA for the ALP or new Runway. This would require an amendment to the scope of work and would vary based on FAA approved requirements. While this project is funded locally, FAA is required to approve all AGIS work for ALP prior to acquiring this data. We recommend this occur so that elements are not lost and the Owner can feel comfortable that the minimum, compliant data is acquired at this time. For example, the existing base map information from old ALP will be utilized. However, it is not known if this is compliant to FAA delivery requirements or if new construction around the airport is missing from the existing ALP base map. Should it be required to be made compliant or it be extracted from the new imagery, this will require an amendment to the scope of the work.	16					\$35,000	\$0	\$0	\$37,560
61	8A.1	Field Survey, Obstacle Data Collection, and Obstruction Analysis (3 Runway Conditions Only: 1 Existing and 2 Future. With one extensions planned.)	8					\$20,000			\$21,260
62	8A.2	Mapping of Contours	8					\$15,000			\$16,280
64	8A.3	New Ortho Photography required for the ALP. If needed, this will be an additional expense.	8								\$0
65	9	FACILITIES IMPLEMENTATION & FINANCIAL FEASIBILITY ANALYSIS - Facility implementation plans vary depending on the complexity of the projects and the airport sponsor's preferences. For 119 this will include the airport's Capital Improvement Program (CIP) that would be submitted to INDOT and the FAA to cover the Master Plan period (20 Years). Specifically this task includes detailed estimates and funding plans for 20 years, and an update to the current 5-year CIP.	64	40	8	40		\$0	\$28	\$0	\$19,420
66	9.1	CIP: This task include the formulation of the CIP and project sequencing.	16	16	8	4					\$5,580
67	9.2	CIP: This task include the formulation of the CIP project estimating.	16	24		12					\$6,748
68	9.3	Funding and Financial Plan. This task include identifying the sources of funding and financial plan for the CIP elements and matching local, state, and federal shares where appropriate.	24								\$3,640
69	9.4	Draft Chapter: A draft chapter will be prepared summarizing the above tasks and submitted to the Owner and FAA for comment. The document shall include a review with recommendations of existing/potential revenue development opportunities at the airport and a review of the airport budget for major expenses and possible cost reductions.	8			24			\$28		\$3,252
70	10	DRAFT AND FINAL TECHNICAL DOCUMENTS	64		80	80		\$0	\$3,762	\$0	\$26,002
71	10.1	Draft Technical Report with ALP Deliverable. This task includes the preparation of the full draft technical report and where all the separate chapters are pulled together for the complete final DRAFT document. Chapters will include Inventory, Environmental Overview, Forecast, Facility Requirements, Alternatives, and Financial Implementation. Additionally, applicable appendices will be developed, which will include the ALP Drawing set. The Master Plan chapters will serve as the Narrative Report identified in SCF 2.0 - A.1, Narrative Report. A separate narrative report or summary/executive report will not be written. Upon completion of all tasks the draft chapters will be submitted electronically as a PDF. NGC will provide an independent review of all draft and final master plan document chapters.	24		40	40			\$262	\$0	\$10,102
72	10.2	Final Technical Report with ALP Deliverable. Based upon comments from all parties, the final report will be prepared and printed. Files will be provided to the FAA and INDOT in the format required to receive approval. Up to three hard copies will be provided to the Owner.	40		40	40			\$3,500		\$15,900
73	TOTAL							\$35,000	\$7,184	\$0	\$303,410
74		Hours	604	348	624	908	18				
75		Totals	\$ 96,640	\$ 46,632	\$ 43,696	\$ 73,548	\$ 1,350	\$35,000	\$7,184	\$0	\$303,410

1	A	B	C	D	E	F	G	H	I	J	K
2	Task	Delphi Municipal Airport Master Plan Update - Scope and Fee Estimate	Project Manager	Project Engineer	Senior (CADD) Technician	Aviation Planner	Grant Administrator	Geospatial & Survey	Expenses	(Sub-consultant)	Total Costs
3	Number	Task Description	\$160	\$134	\$69	\$81	\$75				
77		<b>Optional Task 1.4A: Grant Administration and Coordination</b>									
78		The Consultant performed tasks will include preparing/submitting: FAA quarterly reports, FAA pay request preparation and submissions, project setup and closeout (FAA SF-429) and pay requests. The Consultant will provide supporting information to generate reports/documents. Project duration is estimated at 18 months and the Consultant is not responsible for FAA/ODOT (agency) and Owner delays.									
79		Subtask: Federal and State Grant Application	4				2				
80		Subtask: DBE Reports	24				8				
81		Subtask: FAA Quarterly Reports and SF-429 (Closeout)	4				16				
82		Subtask: FAA Grant Pay Request Preparation (and Delphi Submittals)	8				24				
83		Hours	40				50				90
84		Totals	\$ 6,400.00		\$ -	\$ -	\$ 3,750.00	\$ -	\$ -	\$ -	\$ 10,150.00
86		<b>Optional Task 8A: ALP Imagery/AGIS/ADIP submittal</b>									
87		Additional aerial photography and submission to AGIS/ADIP						\$ 20,000.00	\$ -	\$ -	\$ 20,000.00
89		Totals						\$ 20,000.00	\$ -	\$ -	\$ 20,000.00
90		<b>Optional Task 6.3A: Runway Requirements</b>									
91		An Additional Runway Alignment									
92		Totals						\$ -	\$ -	\$ -	\$ -
93											Total: \$ 333,560.00
94											USE: \$ 333,333.34
95											IFE for Matched Work = \$358,806.80
96											IFE + 10% = \$394,887.48
97											Difference = \$61,127.48
98											
99											

There being no further business the meeting was adjourned at 8:20 PM

NEXT MEETING  
JANUARY 11, 2024