

Vacation Rental in Lake Geneva, WI

Proposal for Desapex Engineering Consultants' Mechanical Design (HVAC) services

Hello,

We are very happy to submit our proposal for the Mechanical design services for Vacation House in Lake Geneva, WI! We have kept this simple with scope, time and fees.

Part A - Scope of work...

Although a more nuanced list of requirements will undoubtedly unfold as the project evolves, so far, on a high-level, we understand that the project will include the following...

- Heating Ventilation & Air conditioning system design with load analysis for all 3500 sft space in accordance to requirements of Wisconsin SPS 364.
- We can finalise on room to be eliminated from air conditioning

Part B - Phases & Scope of Services

• Phase 1 - Concept Design

(approximate duration/fee: 0.3 weeks / 5%)

- Understand project existing conditions
- Collect inputs for preliminary load calculation
- Identify statutory requirements for the projects

• Phase 2 - Schematic Design

(approximate duration/fee: 1.2 weeks / 20%)

- Heat gain/loss & ventilation calculation for all spaces.
- Space allocation for AC equipment
- Presenting design brief report in PowerPoint highlighting design consideration and basis of equipment selection.
- Develop single line scheme routing for AC ducting/piping
- Coordinate with Architect & other services consultants

Phase 3 - Design Development

(approximate duration/fee: 2.1 weeks / 35%)

- Develop approved design option
- Update 3D model with approx. sizes of equipment
- o Discuss the selection of air terminals/AC equipment with client/Architect
- o Discuss structural requirements for floor mounted/ceiling suspended AC units
- Developed deliverables will include:
 - Floor Plans
 - Sections detail
 - Civil requirement drawing
 - Ventilation scheme
 - Power requirement for AC equipment
- Coordinate with Architect & other services consulatnts

• Phase 4 - Tender Documentation

(approximate duration/fee: 2.1 weeks / 35%)

- Will complete the following drawings for Tender/contarctor quote:
 - Scope of work for the Mechanical/HVAC contractor.
 - Specification & performance requirements of all items in scope.
 - Bill of quantities of all items in scope
 - Equipment & Airterminal schedule
 - Tender drawings
 - Mechanical/HVAC floor plan for each floor with equipment & air distribution details.
 - Civil requirements drawing for each floor
 - Sectional details
 - Typical installation details of HVAC items in scope
 - Equipment, air terminal & damper schedules.
 - Clarify design intent to the contractor and clarify any questions in preparing bid
 - Provide technical assistance to client (if required) in comparing/evaluating

- contractor's quote.
- Continue to coordinate and communicate with Architect, other engineering consultant and contractor if necessary.

• Phase 5 - Commissioning & Closure

(approximate duration/fee: 0.3 week / 5%)

- Monitor construction progress (remotely) and coordinate with HVAC contractor on site
- coordinate with commissioning team
- Review commissioning/balancing reports submitted by commissioning team
- Review warranty & other closure documents submitted by contractor

Part C - Time, Fees and workflow

- Time required for above mentioned scope & phases is * 6 weeks * with 40 hour work week.
- 35 US\$ per hour is our hourly rate.
- Total fees shall not exceed 4200 USD
- Payment shall be linked to phases of project and invoice shall be raised at the end of each phase.
- Payment needs to be made within 30 days of invoicing date.
- We understand the project file and project communication will be hosted on Github.
 Specific location: https://github.com/OpeningDesign/Vacation_Rental
- We understand our digital content associated with this project will be licensed under an open source, 'copyleft' license: Attribution-ShareAlike 4.0 International (CC BY-SA 4.0).
 Copyright and attribution of this content will be associated with Desapex Engineering Consultants.

We (Desapex Engineering Consultants) sincerely appreciate the opportunity to provide you with this proposal and look forward to the potential of a fruitful collaboration in the future.

If any changes in scope or any other aspect needs to be made kindly let us know. If the terms of this proposal are acceptable please sign in the space offered below.

We assure you best of our services.

Kind Regards,

Shreenidhi Hungund Desapex Engineering Consultants

We agree to the terms mentioned in Part C with reference to scope of work mentioned in Part A & Part B.

We hereby appoint **Desapex Engineering Consultants** to provide design services for the project.

Authorized by:

• Title

Date

Director

04.21.2017

Representative for OpeningDesign Title Owner Date 04.19.2017 Representative for Desapex Engineering Consultants Signature