

Meeting minutes

Thursday Sep 19, 2013

Discussed items:

- Rework the contract :
 - Assign group manager: Christopher
 - Finance: Steven and Kyle
 - Team name: Stand Your Ground "SYG".

- Plan new questions for the client interview:
 - Where the money come from.
 - The access size.
 - The ventilation system.
 - Client meeting time Tuesday 10:30 am same room "conference room 4th floor EP".
 - Life expectation.

- Log book what should be on it, and will be collected by Dr. Hess on the first week of October.

Action items:

- Come up with more questions about the design.
- Confirm the Client meeting.
- Set up the time for the Shop Orientation.
- Find out who is in charge for the wind tunnel.
- Facebook group for easier communication.
- Group email.
- Management Schedule.

Meeting Minuets

Sep-26-2013

Discussed items:

- Management scheduled, and some changes.
 - Add more time for the testing to resolve possible issues.
 - Overlap the data collection with math modeling.
- Search more about the wind tunnel and testing.
- Think about what we going to have on the EXPO "final model ", "prototype"
- The client phone call:
 - The information we needed to start the researching part.
 - 24" of snow.
 - The failure of the end blow and the snow collapse.
 - High tunnel
 - Weather station and electronic
 - The door enough for small skitter.
 - Break the wind / relief the pressure.

Action Items:

- Search the building Code for Idaho.
- UV and the material last for a long time "plastic ".
- Generate Ideas for next meeting:
 - Finalized the schedule.
 - Math model.
 - 3-D model.
- Problem statement. (Before Oct 15, 2013)
- Specifications. (Before Oct 15, 2013)
- Search about the structure and sheeting.
- Search about how is the plastic sheet is attached and how they leave it.
- Search more about the material of the plastic sheet.
- Why HDPE pipe (high density poly ethylene) rather than PVC contact.

Meeting minutes

10/03/2013

Discussed items:

- Structure:
 - The normal shape V.s the Gothic shape and the Gothic is more common
 - Brain storm some ideas about the door “ flipped or open like a garage”
 - The properties of PVC and the HDPE
 - The other materials can be used such as steel or wood.
 - Some ideas about breaking the wind
- There is no building code for Idaho, but the national code.
- The data for the wind speed and snow load of the area.
- Update the management time line.
- The covering material and some options.
- Snapshot day:
 - Problem statement: Given the high wind speed and the heavy snow load in the Buhl Idaho area, determine the ideal high tunnel greenhouse design to survive the surrounding environment conditions.
 - Title: Environmentally High Tunnel Greenhouse Design
 - Design Goals:
 - Wind speed sustained.
 - Snow Load sustained.
 - 10+ year structure life expectation.
 - Incorporate the client features “ door size and Deliverables”
 - Prototype
 - Design analysis
 - Cost analysis
 - Final Design
 - Specification:

Snow Load	24”
Wind Speed	65-75 mph
Life expectation	10 +
Door size	Enough for Small size skidders
- Project Learning:
 - 3-D modeling.
 - Stress analysis.

Action Items:

- Keep Searching and summarize you search on one paragraph.
- Add sketches for the snapshot day.
- More search on the covering materials and narrow it down, add the cost as well.
- Log Books are due on Tuesday by the end of the day.

Meeting Minutes

10/10/2013

Discussed items:

- Foundation design and the depth “ask the client about it”
- The material for the frame PVC and other material xxsel
- Covering material 11 mil poly
- The design Gothic or half circle and breaking the wind
- Some ideas about the door
- The wind tunnel “we couldn’t find who is on charge of it and we can get access to it”.

Action items:

- Math model for the snow load
- Math model for the wind
- 3-D analysis for the frame stresses
- Keep searching for more ideas
- Snapshot :
- Type a paragraph on the research u did
- Meet on Monday for finishing the final touches " 2:30 design suites"

Meeting Minutes

10/17/2013

Discussed items:

Things we learned from Snapshot day

- Flow chart
- Early prototype
- Material sampling
- Solid model
- Good client contact

Design concept

- Solid Modeling and the force math model.
- Snow load calculation
- Wind speed data.
- Cone shape at the end face "break the wind".
- Door ideas.
- More solid modeling and simulations
- Wind force
- Cost of Steel and Aluminum
- Cost of plastic panel
- Hydraulic part, and the cost of it.
- Cost and economic analysis

Client Questions

- Type of foundation?
- How large is the head room on the side?
- How large is the door? " max height"
- What construction methods?
- The used of the HDPE?

Action Items:

- Search on Steel and Aluminum Cost. "Square and cylindrical"
- Search on Plastic panel Cost. " Different thickness "
- The hydraulic cost.
- Economic analysis.
- Meet on Tuesday 10/22, at 12:30 for the wind tunnel.
- Cone shape for the end.
- Solid model.

Meeting Minutes

10/24/2013

Discussed Items:

- Math Model:
 - Wind Beaker attached to the end : (rounded , Square)
 - Ideas for the door.
 - The height.
- The steel Vs. Aluminum tubes.
 - Cost.
 - Strength.
- Specifications for the PVC
- Covering materials
 - The 11 mil
 - The panel
- The wind Tunnel: information that we learned.
- Ways of attaching the wind break to the gothic shape.
- Wiki page:
 - Collect the information that needed from the snapshot.
 - Team picture.
- We are still waiting for the client to answer the question that we emailed him.
- The upcoming presentation.
- Logbooks are due on the 11th of Nov.

Action Items:

- More research in the PCV:
 - Specifications.
 - Cost.
- More search on the Covering materials :
 - Cost.
 - Specifications.
- More search on and data for the gas spring.
- Math modeling of the wind break.
- Look for ways to attach the wind break to the end.
- The cost analysis.
- Finalize the materials that will be used.
- Arrange with the mentor to know more about the wind tunnel for testing.
- Prototype to testing
- Gather the needed information, the pictures for the Wiki page. "email Chris a picture "
- Start working on the PowerPoint for the presentation
- Logbook are due by the end of day of Nov, 11.