NAU Steel Bridge

Client Meeting #1 - Meeting Minutes

Date / Time: October 12, 2017 / 12:45 PM – 1:30 PM Meeting Called By: Isaac Block

Present Team Members: Isaac Block, Ian Connair, Taylor Erdmann, Matt Parrish Present Advisors: Mark Lamer, Client

Item Description

- 1. Introductions. (5 min)
- 2. Is there a particular type of bridge that you see being most effective for the competition? (Ian, 10 min)
- Double stacked trusses are the most effective truss types that Mark has seen. Example: UNLV's bridge about 6 or 7 years ago. These go together quickly with the right connections (i.e. not 200 bolts).
- Deflection control is vital.
- Look into racecar chassis like those of the Baja 500 competition (tubes with holes cut into them).
- 3. What aspects of last year's bridge were you pleased with and what aspects would you like to see improved? (Isaac, 10 min)
- Last year's team functioned very well as a team. They had an expectation to compete, had solid objectives, and stuck to their objectives.
- They made an attempt to fix the issues with their connections.
- They fell behind on fabrication because Sean did all of the welding.
- They reached out to the right people in all aspects.
- 4. How concerned are you with the overall score of the bridge at the competition? (Matt, 10 min)
- *Mark expects that we should be able to get into the top 5 with the resources that we have at NAU.*
- Teams consistently overlook construction time.
- Staying on schedule is a big struggle (Don't plan to use Christmas break for work...).

- 5. Is there anything we didn't mention that you are particularly concerned with? (Taylor, 10 min)
- Not enough attention paid to connections in the past.
- <u>Must have</u> outstanding construction time and low deflection. Weight is not as big of an issue and aesthetics are not very important.
- Can model connections in RISA (Dr. T knows...). Last year's team didn't model their connections and didn't model their bridge with connections (their model was a continuous beam).
- Welding opportunity: PLAN AHEAD! Mark's brother teaches welding students and they could fabricate our entire bridge in one day <u>if</u> we are prepared to schedule in advance and will have quality shop drawings. We should do this as soon as we can and make sure that our schedule gives us enough time cushion between getting steel and fabrication.
- Contact the right person at Page Steel (Rock Lester, <u>rock@pagesteel.com</u>).
- Another possibility for steel acquisition, Mark's in-laws own a fencing company.