Tracks Retaining Wall Meeting Minutes- Meeting 1 (Grading Instructor) CENE 486

Meeting Time: 09/05/19, 4:00 pm-5:00pm

Meeting Location: EGR 312

Meeting Type: Grading Instructor Weekly Meeting

Meeting Purpose: Discuss the steps that need to be taken for future meetings and the project

needs/ progress.

People in Attendance:

Chris Cook

- Hunter Schnoebelen
- Josh Endersby
- Bridget Bero

Summary / Recap:

- Agenda needs to be created that identifies the meeting and the things talked about with the team and the grading instructor. This will be brought and discussed to guide the meeting.
- Soil Testing and getting in contact with Tommy to determine questionable methods.
- Complete what needs to be done for Adam to start collecting soil.

Topic/ Agenda:

Due Date	Item	Estimated Time to Completion	Team Member
09/12/2019	Create Agenda for Meetings	Weekly (One day prior to meeting)	Hunter/Josh
	Field Sampling Plan	2 hours	Josh
	Field Safety Plan	2 hours	Josh
	EHS Form (Chemical Soil Testing)	1 hour	Hunter
	Lab Binder	2 hours	Hunter
	Update schedule	0.5 hours	Chris

Comments/ Concerns:

- Need to start testing as soon as soil is collected.
- Collect soil by the end of the week (09/13/2019)

Other Information:

- September 24,2019 report and presentation is due.
- Talk wyatt about chemical testing for toxic soil

- Beginning Hydrology (09/12/2019)
- TA Meeting Friday at 10:00am (09/13/2019)
 - Discuss sampling and determine all testing that needs to be completed
- Client meeting Tuesday at 4:00pm (09/17/2019)
 - Collect Survey and Possible estimated line work for structure.

Tracks Retaining Wall Meeting Minutes- Meeting 2 (Grading Instructor) CENE 486

Meeting Time: 09/12/19, 4:00 pm-5:00pm

Meeting Location: EGR 312

Meeting Type: Grading Instructor Weekly Meeting

Meeting Purpose: Discuss the steps that need to be taken for future meetings and the project needs/ progress. The sampling plan and what is needed to collect samples to begin testing.

People in Attendance:

Chris Cook

- Hunter Schnoebelen
- Josh Endersby
- Bridget Bero

Summary / Recap:

- Agenda that identifies the meeting and the things talked about.
- Soil Testing and getting in contact with Tommy to determine questionable methods.
- Get lab access, and collect samples.
- Determine the procedure to collect soil samples and correct the sampling and safety plan per the comments.
- Soil collection and the best way to store to keep soil testing consistent.

Topic/ Agenda:

Due Date	Item	Estimated Time to Completion	Team Member
09/12/2019	Sample	2 days	ALL
	Field Sampling Plan	2 hours	Josh
	Field Safety Plan	2 hours	Josh
	Talk to Wyatt	1 hour	Hunter
	Hydrology and Hydraulics	2 hours	Hunter
	Update schedule	0.5 hours	Chris

Comments/ Concerns:

- Need to start testing as soon as soil is collected.
- Collect soil by 09/17/2019

Other Information:

- September 24,2019 report and presentation is due.
- Talk wyatt about chemical testing for toxic soil

- Beginning Hydrology (09/12/2019)
- TA Meeting Friday at 10:00am (09/13/2019)
 - Discuss sampling and determine all testing that needs to be completed
- Client meeting Tuesday at 4:00pm (09/17/2019)
 - Collect Survey and Possible estimated line work for structure.

Tracks Retaining Wall Meeting Minutes- Meeting 3 (Grading Instructor) CENE 486

Meeting Time: 09/19/19, 4:00 pm-5:00pm

Meeting Location: EGR 312

Meeting Type: Grading Instructor Weekly Meeting

Meeting Purpose: Weekly meeting to check in on the progress with the project. Discuss the requirements for the 30% submittal and presentation that is due next week. (September 24, 2019)

People in Attendance:

Chris Cook

• Hunter Schnoebelen

Josh Endersby

• Bridget Bero

Summary / Recap:

- Soil Testing was discussed on how it would be done and where it would be done. The team will be getting in contact with Tommy to determine questionable methods and find the best solution to collect soil for testing.
- Get lab access, working with Adam to finish paper work. What needs to be completed and how early can we get in is something that needs to be to be talked about with Adam.
- Determine the procedure to collect soil samples and correct the sampling and safety plan per the comments that Dr. Bero and Tommy provide.
- The best way to store, and to keep soil testing consistent with each of the samples that are collected. (Will moisture content be needed to be saved for future lab tests?
- While waiting the determination of what can be done without lab access was a question that came up. Hydrology and Hydraulics should be worked on at the same time as acquiring lab access.

Future Items:

Due Date	Item	Estimated Time to Completion	Team Member
09/19/2019	Sample	1 days	ALL
	Sieve Analysis	1 day	Hunter/ Chris
	30% Report	3 days	All
	30% Presentation	1 day	All/Chris
	Hydrology and Hydraulics	3 days	Hunter
	Update schedule	0.5 hours	Chris

Comments/ Concerns:

- Need to start testing as soon as soil is collected.
- Need to have items done for 30% to determine the amount done and adjust schedule accordingly.

Other Information:

• September 24,2019 report and presentations are due.

• Determine when Wyatt can test and complete for the 60% submittal.

- Determine what needs to be done for hydrology and hydraulics to complete along with the 60% submittal
- Insure that lab is accessible for all members for testing and storing sample procedures

Tracks Retaining Wall Meeting Minutes- Meeting 4 (Grading Instructor) CENE 486

Meeting Time: 10/10/19, 4:00 pm-5:00pm

Meeting Location: EGR 312

Meeting Type: Grading Instructor Weekly Meeting

Meeting Purpose: Discuss the steps that need to be taken for future meetings and the project needs/ progress. Determine soil testing completion and analysis that needs to be done to provide a geotechnical report to client and hydrology/hydraulics report.

People in Attendance:

Chris Cook

• Hunter Schnoebelen

- Josh Endersby
- Bridget Bero

Summary / Recap:

- Determined that testing will be done by the end of the weekend and a meeting with Tommy will be set up to help with analysis and classification. This will be discussed with Tommy based on issues with the team results.
- Stuck on Hydrology and hydraulics but will talk to Tommy and Stephen to determine what is needed and what is not. Mark also is an option to determine if what is needed as he has worked in the drainage subsection in engineering.
- Team is behind and will need to start wall designs soon to stay on track with schedule that is proposed and changed. Testing will need to be completed and checked before wall design begins.
- Need to bring all items for completed results as Dr. Bero would like to help analysis the data collected. This should include all raw data and the comparison between samples.

Topic/ Agenda:

Due Date	Item	Estimated Time to Completion	Team Member
10/15/2019	Complete all Soil testing	5 days	ALL
	Begin Wall Designs	3 days	All
	Wyatt Chemical testing	1 day	Josh
	Hydrology and Hydraulics	3 days	Hunter
	Update schedule	0.5 hours	Chris

Comments/ Concerns:

- Need to analyze data to get to client and TA to determine what will be used for wall designs.
- Hydrology and Hydraulics report and determination on what needs to be completed **Other Information**:
 - October 22 ,2019 report and presentation is due. (Needs Preliminary Wall Design(s))
 - Meet with wyatt for chemical testing for toxic soil

- Future Topics and Assignments:
 60% report/ presentation
 Analysis for data and determining wall designs to be used for final decision.

Tracks Retaining Wall Meeting Minutes- Meeting 5 (Grading Instructor) CENE 486

Meeting Time: 10/15/19, 11:00 am-12:00pm

Meeting Location: EGR 312

Meeting Type: Grading Instructor Weekly Meeting

Meeting Purpose: Discuss the steps that need to be taken for future meetings and the project needs/ progress. Figure out steps for hydrology/hydraulics and determine 60% submittal.

People in Attendance:

Chris Cook

- Hunter Schnoebelen
- Josh Endersby
- Bridget Bero

Summary / Recap:

- Went over the results and analysis that was done with Dr. Bero and determine what is needed to change to place in report and presentation. Items like margins of error, descriptive titles and labels and color coding will help the data stand out and be easily read. Raw data should be left out of presentation.
- The determination of a geotechnical report as needed and a waters report so that client and TA can review. This should consist of a report describing results and this will have all the appendices filled with raw data.
- Determine the legitimacy of results and if we need to change the report to the one that SWI collected for the actual holiday inn.
- The beginning of wall design and that one preliminary design will be in the presentation and report as a cantilever wall has been decided by the team.
- Decision matrix will most likely be needed. This should be for all designs proposed and then the 3 design that we have chosen.

Topic/ Agenda:

Due Date	Item	Estimated Time to Completion	Team Member
10/22/2019	60% Report	5 days	ALL
	60% presentation	1 day	Josh/Hunter
	Geotech Report	2 days	Josh
	30% submittal review and edits	1 day	ALL
	Hydrology and Hydraulics	3 days	Hunter
	Update schedule	0.5 hours	Chris

Comments/ Concerns:

- Need to complete Geotech report, waters report, and
- Is soil legitimate or will it need to be changed, will extra testing complete analysis after talking to tommy.

Other Information:

- October 22 ,2019 report and presentation is due. (Needs Preliminary Wall Design(s))
- Soil testing with Wyatt will need help analyzing.

- 60% submittal/ Bearing capacity determination
 Hunter field trip with CENE 431L

Tracks Retaining Wall Meeting Minutes- Meeting 6 (Grading Instructor) CENE 486

Meeting Time: 10/24/19, 4:00 pm-5:00pm

Meeting Location: EGR 312

Meeting Type: Grading Instructor Weekly Meeting

Meeting Purpose: Discuss the steps that need to be taken for future meetings and the project

needs/ progress. Primarily short meeting to determine XRF data and extra testing.

People in Attendance:

Chris Cook

• Josh Endersby

• Bridget Bero

Summary / Recap:

- Determined errors in the XRF data that was collected and what needs to be presented when presenting to the client and the 90%
- The determination if more testing is actually needed. Yes, Direct shear and consolidation will need to be completed to determine bearing capacity and settlement of the soil.
- Settlement is slightly negligible in flagstaff, however, is needed and the bearing capacity changed as the wall was created using a safe bearing capacity.

Topic/ Agenda:

Due Date	Item	Estimated Time to Completion	Team Member
10/31/2019	Primary wall designs	5 days	ALL
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	XRF analysis	1 day	Josh
	Extra testing	3 days	All
	Update schedule	0.5 hours	Chris

Comments/ Concerns:

- Wall designs and soil legitimacy.
- Extra testing and schedule change, pushing timing back due to personal schedules.

Other Information:

• November 19,2019 report and presentation is due.

- Website changes and updates
- TA discussion on results and memo discussing the legitimacy.

Tracks Retaining Wall Meeting Minutes- Meeting 7 (Grading Instructor) CENE 486

Meeting Time: 10/31/19, 4:00 pm-5:00pm

Meeting Location: EGR 312

Meeting Type: Grading Instructor Weekly Meeting Meeting Purpose: Cancelled due to no progress

People in Attendance:

• n/a

Tracks Retaining Wall Meeting Minutes- Meeting 8 (Grading Instructor) CENE 486

Meeting Time: 11/07/19, 4:00 pm-5:00pm

Meeting Location: EGR 312

Meeting Type: Grading Instructor Weekly Meeting

Meeting Purpose: Discuss the steps that need to be taken for future meetings and the project needs/ progress. Discuss set backs and determine the work needed in the time crunch.

People in Attendance:

Chris Cook

• Hunter Schnoebelen

Josh Endersby

• Bridget Bero

Summary / Recap:

- Wall options need a decision matrix to determine why the ones were designed and why they are the best options. This should be a broad topic decision matrix with a wide selection of wall designs and then selection of 3 designs.
- Meeting minutes needed to be sent to Bero on Tuesday.
- Consolidation and direct shear need to be sent and a meeting with Stephen to determine what Geotech report to use. The issues with the direct shear is the friction angle seems too high and the consolidation/ settlement of the soil is not determined yet and will need to be determined for the design.
- Provide Preliminary wall designs by next Thursday, and a revised 60% report to make 90% better prior to submission on the 19th of November. This should include calculations that are clear and easy to read when presenting. This will be provided in excel.

Topic/ Agenda:

Due Date	Item	Estimated Time to Completion	Team Member
11/12/2019	Extra Soil Testing Results	2 days	ALL
11/14/2019	Decision Matrix	1 day	Josh/chris
	Meeting Minutes Updated	1 day	Hunter
	60% Redlined and Submitted	2 days	All
	Preliminary Wall designs (3)	3 days	All
	Update schedule	0.5 hours	Chris

Comments/ Concerns:

- Geotechnical report that will be used.
- Time, project time is coming to a close and excess amounts of work need be done.

Other Information:

- November 19,2019 report and presentation is due.
- Meeting with Stephen Thursday 8am (Chris/ Hunter)

- Impacts of the wall

Tracks Retaining Wall Meeting Minutes- Meeting 9 (Grading Instructor) CENE 486

Meeting Time: 11/14/19, 4:00 pm-5:00pm

Meeting Location: EGR 312

Meeting Type: Grading Instructor Weekly Meeting

Meeting Purpose: Discuss the steps that need to be taken for future meetings and the project needs/ progress. Discuss the wall designs and email prior to the meeting on items submitted on Tuesday the 12th.

People in Attendance:

• Chris Cook

- Hunter Schnoebelen
- Josh Endersby
- Bridget Bero

Summary / Recap:

- Wall options decision matrix needs to be more descriptive. Use a better system of identifying why it is a bad or good attribute for the wall. Finalize the walls that we want or thing will best fit in criteria.
- Meeting minutes needed to be more descriptive and have an agenda attached to each meeting minute.
- Wall designs are chosen and will need to describe the change in the matrix. (make it so they don't change) Excel is good just not presentable as too many variables and non-labeled units. This should change in the presentation and be easy to read, but still be placed in the report. (also an extra slide can be attached in case of questioning about the designs)
- Discuss with Tommy on the soil to use and change the values accordingly. And wait for comments on 60% to then fix for 90%.

Topic/ Agenda:

Due Date	Item	Estimated Time to Completion	Team Member
11/19/2019	Meeting with Tommy	1 days	ALL
	Decision Matrix edited	1 day	Hunter
	Meeting Minutes Updated	1 day	Hunter
11/25/2019	90% Submittal	4 days	All
	Wall designs (3)	3 days	All

Comments/ Concerns:

- Geotechnical report that will be used, both are good.
- Time, project time is ending and excess amounts of work need be done?

Other Information:

• November 26,2019 report and presentation is due.

- Impacts of the wall