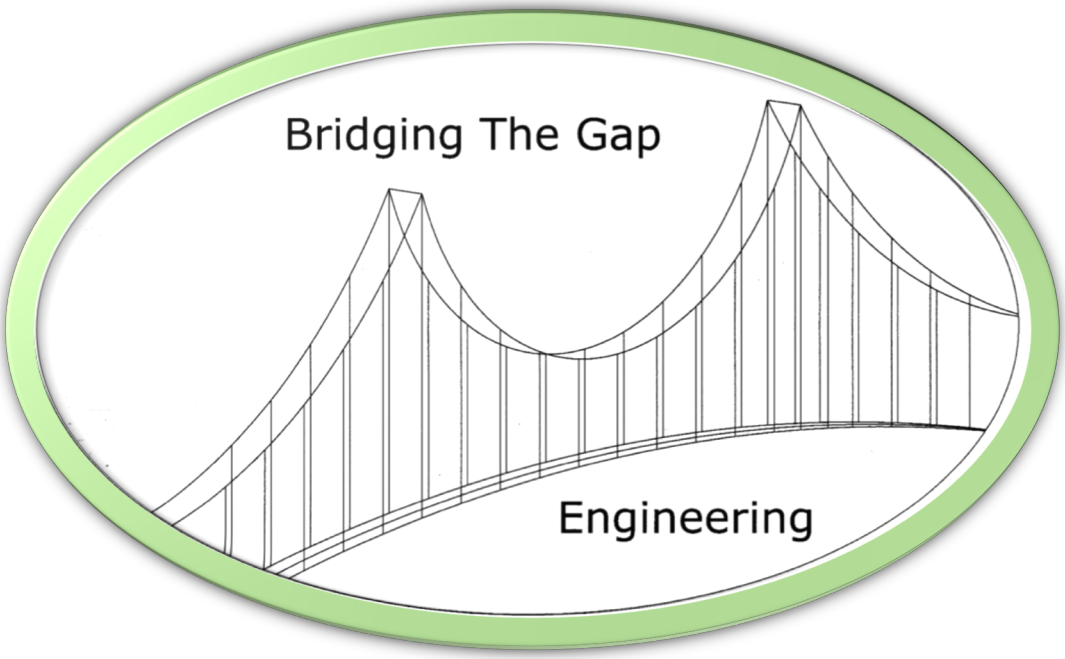


Progress Report
Week 13

Submission Date: 16 April 2019

Submitted To: Dr. Greg Michaelson
Submitted By: Natasha Napier

Table of Contents:

1. Ongoing Work (4/8/19-4/14/19)

- Incorporate provided Alternative Report comments/corrections
- Fix Rolled Steel Alternative by choosing a rolled section from the Sigma = My/I equation – to justify logic for not choosing rolled section
- Fix formatting (text, title block size, etc.) on CAD Drawings
- Confirm moment capacity is adequate for final girder selection
- Confirm shear capacity is adequate for final girder selection
- Design shear stud layout
- Calculate live load deflection and ensure that it meets the L/800 requirement
- Write the additional analysis chapter in the report
- Update cost estimate to match final design

2. Assigned Work

- John S. - Incorporate provided Alternative Report comments/corrections
- Zach & Brandon D. - Fix Rolled Steel Alternative by choosing a rolled section from the Sigma = My/I equation – to justify logic for not choosing rolled section
- Michael - Fix formatting (text, title block size, etc) on CAD Drawings
- Natasha - Confirm moment capacity is adequate for final girder selection
- Natasha - Confirm shear capacity is adequate for final girder selection
- Michael - Design shear stud layout
- Natasha - Calculate live load deflection and ensure that it meets the L/800 requirement
- Michael/Brandon A. - Write the additional analysis chapter in the report
- Brandon A. – Update final cost estimate to ensure cohesiveness with final design

3. Summary of Hours Worked

Hours Worked (4/8/19-4/14/19)		
Employee Name	**Hours (4/8/19-4/14/19)**	**Hours (To Date)**
Brandon Adams	1.00	52.00
Michael Ashworth	1.00	42.00
Zach Cumm	6.00	25.00
Brandon Dial	1.00	26.00
Natasha Napier	1.00	51.00
John Skaggs	4.00	38.50
Company Total	14.00	242.00

4. Employee Timesheets

- **Brandon Adams**

13	**Apr 8 - 14**	8-Apr	1	Meeting to review comments	**1.00**
		9-Apr			
		10-Apr			
		11-Apr			
		12-Apr			
		13-Apr			
		14-Apr			

- **Michael Ashworth**

13	**Apr 8 - 14**	8-Apr	1	Meeting to review comments	**1.00**
		9-Apr			
		10-Apr			
		11-Apr			
		12-Apr			
		13-Apr			
		14-Apr			

- **Zach Cumm**

13	**Apr 8 - 14**	8-Apr	4	Corrections	**6.00**
		9-Apr	2	Corrections	
		10-Apr			
		11-Apr			
		12-Apr			
		13-Apr			
		14-Apr			

- **Brandon Dial**

13	**Apr 8 - 14**	8-Apr	1	Meeting to review report comments	**1.00**
		9-Apr			
		10-Apr			
		11-Apr			
		12-Apr			
		13-Apr			
		14-Apr			

- **Natasha Napier**

13	**Apr 8 - 14**	8-Apr	1	Meeting to discuss report comments	**1.00**
		9-Apr			
		10-Apr			
		11-Apr			
		12-Apr			
		13-Apr			
		14-Apr			

- **John Skaggs**

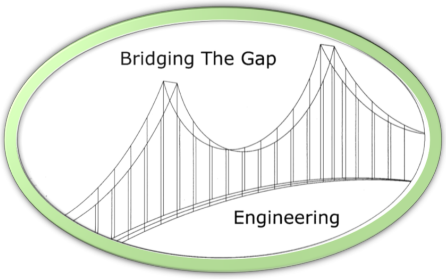
13	**Apr 8 - 14**	8-Apr	1	Meeting to review report comments	**4.00**
		9-Apr			
		10-Apr			
		11-Apr			
		12-Apr			
		13-Apr	3	Final Report Editing	
		14-Apr			

5. Meeting Minutes/Agendas

- **Meeting Minutes – 8 April 2019**
    - Members in attendance:
        - Michael Ashworth
        - John Skaggs
        - Natasha Napier
        - Zach C.
        - Brandon D.
        - Brandon A.
    - Tasks that need to be accomplished:
        - John S. - Incorporate provided Alternative Report comments/corrections
        - Zach & Brandon D. - Fix Rolled Steel Alternative by choosing a rolled section from the Sigma = My/I equation – to justify logic for not choosing rolled section
        - Michael - Fix formatting (text, title block size, etc) on CAD Drawings
        - Natasha - Confirm moment capacity is adequate for final girder selection
        - Natasha - Confirm shear capacity is adequate for final girder selection
        - Michael - Design shear stud layout
        - Natasha - Calculate live load deflection and ensure that it meets the L/800 requirement
        - Michael/Brandon A. - Write the additional analysis chapter in the report
        - Brandon A. – Update final cost estimate to ensure cohesiveness with final design
    - Upcoming Meetings to work on assigned tasks:
        - Wednesday, April 17th, 2019 at 8 am

6. **Sent Correspondence – RFI #1 (See following page)**

7. **Received Correspondence – RFI #1 Response (See attached)**



Natasha Napier
Project Manager
Bridging the Gap Engineering

Date 2/19/2019

Dr. Greg Michaelson
Principal Engineer
WV Division of Highways

Dr. Michaelson,

This letter is to address the following question which requires some context:

While conducting our preliminary design phase we have considered the following three alternatives: steel rolled beams, steel plate girders, and precast concrete girders. It has become increasingly apparent that our span length of 125 feet is becoming a limiting factor for each of these alternatives. The given span is presenting difficulties due to manufacturing limitations for the concrete beams as well as the given shipping limits. The most obvious solution to this would be to construct a pier midway through the span.

1. Given the aforementioned constraints, are we limited to a single 125 foot span or is construction of a pier with two spans an acceptable solution?

Thank you for your assistance with these matters.

Sincerely,

Natasha Napier

Natasha Napier
Project Manager

MARSHALL UNIVERSITY
Weisberg Division of Engineering
One John Marshall Drive, WAEC 2201
Huntington WV 25755

Gregory K. Michaelson, Ph.D., P.E.
Assistant Professor (Structural Engineering), Weisberg Division of Engineering
One John Marshall Drive, WAEC 2227, Huntington WV 25755
Office: (304) 696-5606
Email: michaelson@marshall.edu

Bridging the Gap Engineering
One John Marshall Drive
Huntington WV 25755

Response to Request for Information
February 27, 2019

Dear Ms. Napier:

I have received the following request for information from your firm:

1. Given the aforementioned constraints, are we limited to a single 125 foot span or is construction of a pier with two spans an acceptable solution?

In response:

1. Yes, however you would need to estimate all required construction costs associated with this option. This would include changes in the resulting superstructure, all costs associated with the pier substructure, and any geotechnical and/or hydraulic considerations for the project.

If there are any other questions or concerns, I would be happy to answer them. I can be reached through email at michaelson@marshall.edu or my office phone at (304) 696-5606.

Sincerely,

Gregory K. Michaelson, Ph.D., P.E.

CC: BRAHMS Design Group, Truss-Worthy Engineering, In the Moment Engineering, Herd Engineering