

MND Physics

Bridge Project Grading Sheet

Name _____ Class _____

Date _____

Weight applied _____ gms.

Bridge weight _____ gms.

RATIO: (weight held in gms / bridge weight in gms) = _____

RAW POINTS EARNED (see chart):

DEDUCTIONS (APPLIES FOR ALL BRIDGES):

1. Clearance infractions: (underside height, pier width, car clearance, -1 pt. each):

No deductions -1 -2 -3

2. Bridge deviates from approved drawings (-1 to -10 pts):

No deductions -1 -2 -3 -4 -5 -6 -7 -8 -9 -10

3. Force analysis: F_g calculated incorrectly (-1 pt.), F_N not correct (-1 pt. for each pier calculation), clockwise and counterclockwise torque not correct (-1 pt each)

No deductions -1 -2 -3 -4 -5

IF BRIDGE FAILS UNDER LOAD, COMPLETE THE FOLLOWING:

4. Collapse analysis (explain how, where, and why bridge failed... make suggestions to improve design ...use copy of drawing to clearly indicate failure points, -1 to -10 pts):

No deductions -1 -2 -3 -4 -5 -6 -7 -8 -9 -10

Raw Points Earned:

Less Deductions:

NET PROJECT GRADE =