```
Reactions - Girder  1

Girder 1 Service Vertical Reactions - k

    Supp/Node   Noncomp   Super-    Max       Min         Sidewalk
                Dead      Imposed   Live+     Live+      Max     Min
                          Dead      Impact    Impact


  Governing

      1    1    107.28     31.33     77.30    -16.04    0.00     0.00
         Steel     28.08
         Concrete  79.20


    Global x concurrent LL+I rot.   0.0009   -0.0026 deg
    Global y concurrent LL+I rot.   0.0499   -0.0179 deg


        Max LL+I Contribution by Lane
             1         2
           60.86     16.45


        Concurrent reactions using same governing loaded lanes
        as for Max LL+I


         Concurrent at gdr  2 -      60.49

         Concurrent at gdr  3 -      48.63

         Concurrent at gdr  4 -      17.45


      2   19    289.97     84.66    145.63    -24.28    0.00     0.00
         Steel     74.61
         Concrete 215.36


    Global x concurrent LL+I rot.   0.0026   -0.0023 deg
    Global y concurrent LL+I rot.   0.0306   -0.0317 deg


        Max LL+I Contribution by Lane
             1         2
          118.49     27.14


        Concurrent reactions using same governing loaded lanes
        as for Max LL+I


         Concurrent at gdr  2 -     139.35

         Concurrent at gdr  3 -     101.87

         Concurrent at gdr  4 -      44.32


      3   53    310.63     91.06    161.06    -32.01    0.00     0.00
         Steel     78.98
         Concrete 231.65


    Global x concurrent LL+I rot.   0.0030   -0.0029 deg
    Global y concurrent LL+I rot.   0.0302   -0.0293 deg


        Max LL+I Contribution by Lane
             1         2
          130.60     30.46


        Concurrent reactions using same governing loaded lanes
        as for Max LL+I


         Concurrent at gdr  2 -     135.57

         Concurrent at gdr  3 -     103.11

         Concurrent at gdr  4 -      42.88


      4   91    282.44     81.93    148.24    -28.55    0.00     0.00
         Steel     72.52
         Concrete 209.93


    Global x concurrent LL+I rot.   0.0013   -0.0023 deg
    Global y concurrent LL+I rot.   0.0131   -0.0232 deg


        Max LL+I Contribution by Lane
             1         2
          120.24     28.00


        Concurrent reactions using same governing loaded lanes
        as for Max LL+I
```

```
        Concurrent at gdr  2 -     124.54

        Concurrent at gdr  3 -      98.22

        Concurrent at gdr  4 -      37.92

     5  121     38.83     11.11     61.65    -26.11    0.00     0.00
        Steel     11.34
        Concrete  27.49

    Global x concurrent LL+I rot.  -0.0006   -0.0008 deg
    Global y concurrent LL+I rot.  -0.0121   -0.0175 deg

        Max LL+I Contribution by Lane
            1          2
           54.36      7.29

        Concurrent reactions using same governing loaded lanes
        as for Max LL+I

        Concurrent at gdr  2 -      52.73

        Concurrent at gdr  3 -      39.32

        Concurrent at gdr  4 -      11.18


  Truck Loading

     1    1                        71.38     -9.51
     2   19                        77.81     -8.36
     3   53                        76.70    -12.12
     4   91                        82.42    -12.67
     5  121                        60.99    -15.07

  Lane Loading

     1    1                        77.30    -12.90
     2   19                       145.63    -11.65
     3   53                       161.06    -17.43
     4   91                       148.24    -17.03
     5  121                        55.36    -22.33

  Fatigue Truck

     1    1                        42.67     -7.24
     2   19                        47.65     -6.45
     3   53                        47.83     -9.20
     4   91                        49.12     -9.69
     5  121                        39.10    -11.59


Reactions - Girder  2

Girder 2 Service Vertical Reactions - k

    Supp/Node   Noncomp   Super-    Max       Min         Sidewalk
                Dead      Imposed   Live+     Live+      Max     Min
                          Dead      Impact    Impact


  Governing

     1    2    105.70     29.78     72.12     -8.01    0.00     0.00
        Steel     28.80
        Concrete  76.89

    Global x concurrent LL+I rot.  -0.0016   -0.0018 deg
    Global y concurrent LL+I rot.   0.0350   -0.0126 deg

        Max LL+I Contribution by Lane
            1          2
           39.96     32.16

        Concurrent reactions using same governing loaded lanes
        as for Max LL+I

        Concurrent at gdr  1 -      47.58

        Concurrent at gdr  3 -      49.06

        Concurrent at gdr  4 -       2.93

     2   27    325.20     94.09    149.75    -13.08    0.00     0.00
        Steel     83.84
        Concrete 241.36

    Global x concurrent LL+I rot.   0.0018   -0.0018 deg
    Global y concurrent LL+I rot.   0.0221   -0.0225 deg
```

```
      Max LL+I Contribution by Lane
           1         2
         86.16     63.59


      Concurrent reactions using same governing loaded lanes
      as for Max LL+I


       Concurrent at gdr  1 -     122.43

       Concurrent at gdr  3 -     106.96

       Concurrent at gdr  4 -      42.89


    3   62    322.65     93.73    148.46    -12.47    0.00     0.00
       Steel      82.61
       Concrete 240.04


  Global x concurrent LL+I rot.   0.0022   -0.0022 deg
  Global y concurrent LL+I rot.   0.0223   -0.0216 deg


      Max LL+I Contribution by Lane
           1         2
         83.54     64.92


      Concurrent reactions using same governing loaded lanes
      as for Max LL+I


       Concurrent at gdr  1 -     136.79

       Concurrent at gdr  3 -     109.38

       Concurrent at gdr  4 -      41.76


    4  101    285.48     82.71    137.38    -12.15    0.00     0.00
       Steel      74.01
       Concrete 211.47


  Global x concurrent LL+I rot.   0.0011   -0.0017 deg
  Global y concurrent LL+I rot.   0.0107   -0.0173 deg


      Max LL+I Contribution by Lane
           1         2
         76.87     60.50


      Concurrent reactions using same governing loaded lanes
      as for Max LL+I


       Concurrent at gdr  1 -     126.80

       Concurrent at gdr  3 -     104.39

       Concurrent at gdr  4 -      36.78


    5  126     43.95     12.05     70.61    -17.03    0.00     0.00
       Steel      13.76
       Concrete  30.19


  Global x concurrent LL+I rot.  -0.0008   -0.0007 deg
  Global y concurrent LL+I rot.  -0.0177   -0.0151 deg


      Max LL+I Contribution by Lane
           1         2
         39.68     30.93


      Concurrent reactions using same governing loaded lanes
      as for Max LL+I


       Concurrent at gdr  1 -      41.87

       Concurrent at gdr  3 -      48.93

       Concurrent at gdr  4 -       4.19


Truck Loading

    1    2                          72.12     -5.82
    2   27                          82.82     -9.01
    3   62                          82.57     -8.27
    4  101                          83.21     -8.79
    5  126                          70.61    -11.15

Lane Loading

    1    2                          69.11     -7.91
    2   27                         149.75    -12.55
    3   62                         148.46    -12.03
    4  101                         137.38    -11.80
```

```
     5  126                          60.04    -16.48

  Fatigue Truck

     1    2                          28.93     -4.43
     2   27                          35.17     -6.94
     3   62                          34.90     -6.28
     4  101                          34.88     -6.72
     5  126                          28.47     -8.55


Reactions - Girder  3

Girder 3 Service Vertical Reactions - k


    Supp/Node   Noncomp   Super-    Max       Min         Sidewalk
                Dead      Imposed   Live+     Live+      Max     Min
                          Dead      Impact    Impact



  Governing

     1    3     92.17     26.74     71.55     -6.93    0.00     0.00
        Steel     25.40
        Concrete  66.77


    Global x concurrent LL+I rot.  -0.0014   -0.0014 deg
    Global y concurrent LL+I rot.   0.0307   -0.0103 deg


        Max LL+I Contribution by Lane
            1         2
           31.53     40.02


        Concurrent reactions using same governing loaded lanes
        as for Max LL+I


         Concurrent at gdr  1 -       5.99

         Concurrent at gdr  2 -      50.47

         Concurrent at gdr  4 -      44.08


     2   35    297.43     85.76    136.58    -10.49    0.00     0.00
        Steel     76.93
        Concrete 220.50


    Global x concurrent LL+I rot.   0.0016   -0.0015 deg
    Global y concurrent LL+I rot.   0.0202   -0.0190 deg


        Max LL+I Contribution by Lane
            1         2
           61.82     74.77


        Concurrent reactions using same governing loaded lanes
        as for Max LL+I


         Concurrent at gdr  1 -      37.64

         Concurrent at gdr  2 -     105.47

         Concurrent at gdr  4 -     139.91


     3   71    322.73     93.87    147.85    -10.89    0.00     0.00
        Steel     82.62
        Concrete 240.11


    Global x concurrent LL+I rot.   0.0022   -0.0021 deg
    Global y concurrent LL+I rot.   0.0222   -0.0212 deg


        Max LL+I Contribution by Lane
            1         2
           64.75     83.10


        Concurrent reactions using same governing loaded lanes
        as for Max LL+I


         Concurrent at gdr  1 -      41.57

         Concurrent at gdr  2 -     109.62

         Concurrent at gdr  4 -     136.11


     4  111    293.27     84.23    139.00    -12.18    0.00     0.00
        Steel     75.99
        Concrete 217.28


    Global x concurrent LL+I rot.   0.0011   -0.0017 deg
    Global y concurrent LL+I rot.   0.0113   -0.0175 deg
```

```
        Max LL+I Contribution by Lane
             1          2
           61.61     77.39


        Concurrent reactions using same governing loaded lanes
        as for Max LL+I


         Concurrent at gdr  1 -      38.14

         Concurrent at gdr  2 -     102.39

         Concurrent at gdr  4 -     123.62


      5  131     44.82     12.10     70.76    -17.53    0.00     0.00
         Steel     14.07
         Concrete  30.75


    Global x concurrent LL+I rot.  -0.0008   -0.0007 deg
    Global y concurrent LL+I rot.  -0.0184   -0.0159 deg


        Max LL+I Contribution by Lane
             1          2
           31.39     39.36


        Concurrent reactions using same governing loaded lanes
        as for Max LL+I


         Concurrent at gdr  1 -       2.74

         Concurrent at gdr  2 -      47.88

         Concurrent at gdr  4 -      44.01


  Truck Loading

      1    3                         71.55     -4.99
      2   35                         82.10     -7.41
      3   71                         82.51     -7.10
      4  111                         83.54     -8.87
      5  131                         70.76    -11.63

  Lane Loading

      1    3                         66.38     -6.78
      2   35                        136.58    -10.33
      3   71                        147.85    -10.64
      4  111                        139.00    -11.84
      5  131                         60.65    -17.09

  Fatigue Truck

      1    3                         28.74     -3.80
      2   35                         34.27     -5.70
      3   71                         34.88     -5.36
      4  111                         35.04     -6.79
      5  131                         28.32     -8.92


  Reactions - Girder  4

Girder 4 Service Vertical Reactions - k


    Supp/Node   Noncomp   Super-    Max       Min         Sidewalk
                Dead      Imposed   Live+     Live+      Max     Min
                          Dead      Impact    Impact



  Governing

      1    4     82.47     23.58     65.74    -19.62    0.00     0.00
         Steel     21.85
         Concrete  60.63


    Global x concurrent LL+I rot.  -0.0009   -0.0017 deg
    Global y concurrent LL+I rot.   0.0363   -0.0127 deg


        Max LL+I Contribution by Lane
             1          2
            9.78     55.96


        Concurrent reactions using same governing loaded lanes
        as for Max LL+I


         Concurrent at gdr  1 -      19.11

         Concurrent at gdr  2 -      43.91

         Concurrent at gdr  3 -      56.23
```

```
   2   36    307.74     89.64    162.26    -36.19    0.00     0.00
      Steel     78.65
      Concrete 229.08


  Global x concurrent LL+I rot.   0.0023   -0.0017 deg
  Global y concurrent LL+I rot.   0.0262   -0.0236 deg


      Max LL+I Contribution by Lane
          1          2
         31.55    130.71


      Concurrent reactions using same governing loaded lanes
      as for Max LL+I


       Concurrent at gdr  1 -      38.30

       Concurrent at gdr  2 -      98.23

       Concurrent at gdr  3 -     122.06


   3   72    316.38     92.67    160.17    -28.76    0.00     0.00
      Steel     80.43
      Concrete 235.95


  Global x concurrent LL+I rot.   0.0030   -0.0028 deg
  Global y concurrent LL+I rot.   0.0300   -0.0284 deg


      Max LL+I Contribution by Lane
          1          2
         30.20    129.97


      Concurrent reactions using same governing loaded lanes
      as for Max LL+I


       Concurrent at gdr  1 -      42.60

       Concurrent at gdr  2 -     103.35

       Concurrent at gdr  3 -     134.87


   4  112    279.19     81.18    145.50    -27.87    0.00     0.00
      Steel     71.96
      Concrete 207.23


  Global x concurrent LL+I rot.   0.0015   -0.0024 deg
  Global y concurrent LL+I rot.   0.0146   -0.0240 deg


      Max LL+I Contribution by Lane
          1          2
         26.48    119.02


      Concurrent reactions using same governing loaded lanes
      as for Max LL+I


       Concurrent at gdr  1 -      39.16

       Concurrent at gdr  2 -      96.43

       Concurrent at gdr  3 -     126.34


   5  132     42.64     12.35     65.09    -27.36    0.00     0.00
      Steel     12.49
      Concrete  30.15


  Global x concurrent LL+I rot.  -0.0006   -0.0009 deg
  Global y concurrent LL+I rot.  -0.0139   -0.0203 deg


      Max LL+I Contribution by Lane
          1          2
          9.40     55.69


      Concurrent reactions using same governing loaded lanes
      as for Max LL+I


       Concurrent at gdr  1 -       8.59

       Concurrent at gdr  2 -      38.57

       Concurrent at gdr  3 -      53.04


Truck Loading

   1    4                          64.58     -6.69
   2   36                          80.18    -14.82
```

3	72	77.07	-8.95
4	112	80.13	-11.42
5	132	64.28	-17.19

Lane Loading

1	4	65.66	-9.06
2	36	162.26	-20.67
3	72	160.17	-13.73
4	112	145.50	-15.18
5	132	59.55	-25.16

Fatigue Truck

1	4	40.86	-5.10
2	36	48.58	-11.43
3	72	47.91	-6.76
4	112	48.66	-8.74
5	132	40.43	-13.22