



Minnesota Department of Transportation - Bridge Office

**PILE DRIVING REPORT**  
(MPF12)



SEE INSTRUCTIONS ON BACK SIDE

|                                |                |  |                            |           |
|--------------------------------|----------------|--|----------------------------|-----------|
| <b>PILE HAMMER DATA</b>        |                | <b>Use with MPF12</b><br>$R_n = 20 \times \sqrt{\frac{W \times H}{1000}} \times \log\left(\frac{10}{S}\right)$ | <b>PROJECT DESCRIPTION</b> |           |
| TYPE: SINGLE ACTING<br>(Power) | MAKE:          |  | BRIDGE NO.:                | LOCATION: |
| MODEL:                         |                | COUNTY: SELECT A COUNTY  | DIST.: SELECT A DISTRICT   |           |
| WT. OF RAM (PISTON): (lbs.)    | CUT-OFF ELEV.: | S.P. (OR S.A.P.) NO.:  |                            |           |
| MAX. RATED ENERGY: (ft. lbs.)  | CONTRACTOR:    | <b>SUBSTRUCTURE</b>  |                            |           |
|                                |                | ABUTMENT:  | N/A                        |           |
|                                |                | PIER NO.:  | N/A                        |           |

| 1              | 2        | 3                            | 4                           | 5                             | 6                            | 7                                | 8                                | 9                      | 10           | 11             | 12             |
|----------------|----------|------------------------------|-----------------------------|-------------------------------|------------------------------|----------------------------------|----------------------------------|------------------------|--------------|----------------|----------------|
| DATE DRIVEN    | PILE NO. | FINAL LENGTH IN LEADS (feet) | FINAL CUT-OFF LENGTH (feet) | DISTANCE BELOW CUT-OFF (feet) | HEIGHT OF FALL OF RAM (feet) | FINAL ENERGY PER BLOW (ft. lbs.) | PENET. OF LAST 10 BLOWS (inches) | NOMINAL BEARING (tons) | AUTH. SPLICE | HEAT NUMBER(S) | REMARK/REDRIVE |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
|                |          |                              |                             |                               |                              |                                  |                                  |                        |              |                |                |
| <b>Totals:</b> |          |                              |                             | 0                             |                              |                                  |                                  | 0                      | 0            |                |                |

13. OTHER REMARKS (IDENTIFY BY PILE NO.)

| SUMMARY                          |                           |                            |  | PAY QUANTITIES             |                            |
|----------------------------------|---------------------------|----------------------------|--|----------------------------|----------------------------|
| PLAN NUMBER AND LENGTHS          |                           | SETUP INCREASE (%)         |  | PILING DRIVEN (L.F.)       | NO. OF REDRIVES            |
| TEST PILE(S) LENGTH AND BEARING  |                           |                            |  | NO. OF PILE TIP PROTECTION | NO. OF SPLICES             |
| 14. AVERAGE DRIVEN LENGTH (L.F.) |                           |                            |  | NO. OF TEST PILE(S)        | NO. OF TEST PILE SPLICE(S) |
| MPF12 R <sub>n</sub> (tons)      | PDA R <sub>n</sub> (tons) | 14. AVERAGE BEARING (tons) |  | OTHER                      | NO. OF PDA's               |

|                     |                            |          |
|---------------------|----------------------------|----------|
| INSPECTOR SIGNATURE | PROJECT ENGINEER SIGNATURE | DATE:    |
|                     |                            | SHEET OF |

## INSTRUCTIONS FOR COMPLETING PILE DRIVING REPORT

### General:

Fill in all shaded fields. The sheet has formulas that will automatically fill-in calculated areas.  
Field measurements to be to the nearest 0.1 ft.

### Pile Data:

(Numbers correspond with numbers on front of form)

1. **DATE DRIVEN:** Use date on which driving was completed for each pile.
2. **PILE NO.:** Show number assigned to each pile (usually the same as the driving sequence).
3. **FINAL LENGTH IN LEADS (feet):** Use the actual total length in leads used for final driving of the pile.
4. **FINAL CUT-OFF LENGTH (feet):** Actual cut-off for each pile.
5. **DISTANCE BELOW CUT-OFF (feet):** Actual length driven below cut-off.
6. **HEIGHT OF FALL OF RAM (feet):** Actual drop of ram or piston.
7. **FINAL ENERGY PER BLOW (ft. lbs.):** Energy developed during final blows for computing final bearing. For single acting power-driven hammers, the energy per blow is equal to WH.
8. **PENETRATION OF LAST 10 BLOWS (inches):** Calculate to three significant digits (1.25, 0.625 etc.) based on the last ten blows for power-driven hammers.
9. **NOMINAL BEARING (tons):** Show to the nearest ton.
10. **AUTHORIZED SPLICE:** Number of splices eligible for payment. (see Spec. 2452)
11. **HEAT NUMBER(S):** Heat Number identifying each pile below cut-off.
12. **REMARK:** Indicate depth of jetting or preboring and diameter of auger used, hit obstruction, butt splitting, sequence of lengths used to make up actual total length in leads, butt and tip diameters for timber piles, setup percent increase, etc.  
**REDRIVE:** Use date on which redriving was completed. Show bearing after redrive to the nearest ton.
13. **OTHER REMARKS:** To be used for other pertinent information.
14. **AVERAGE DRIVEN LENGTH AND BEARING:** Do not include test piles.

---

### SHOW SKETCH BELOW

Show sketch indicating location of test pile. Show North arrow. Indicate test piles with prefix "T".  
Indicate direction of batter with arrows and note amount of batter.

### **DISTRIBUTION:**

#### **State Projects:**

Original: MNDOT Bridge Const. & Maint. Engineer (MS 610)

Email: BridgeForms.DOT@state.mn.us

#### **County or Municipal Projects:**

Original: County or Municipal Engineer

#### **Railroad Projects:**

Copy: Railroad

Copy: Engineer