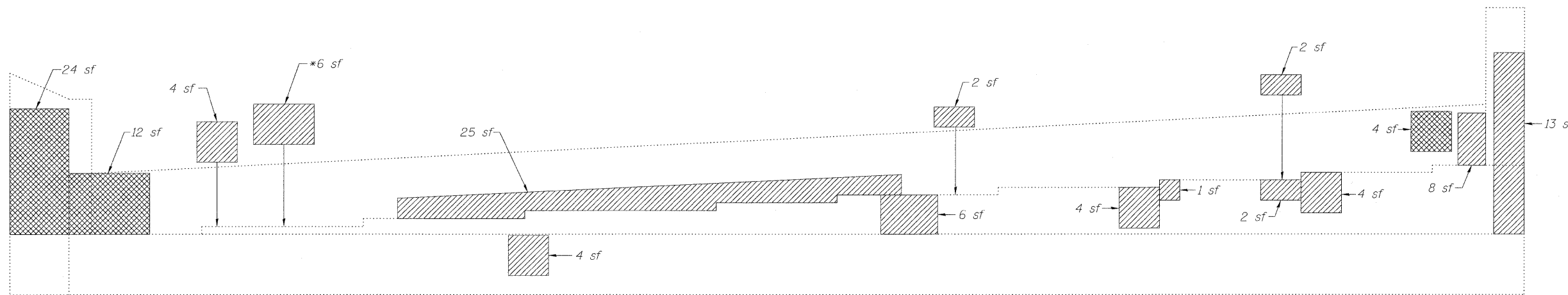


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

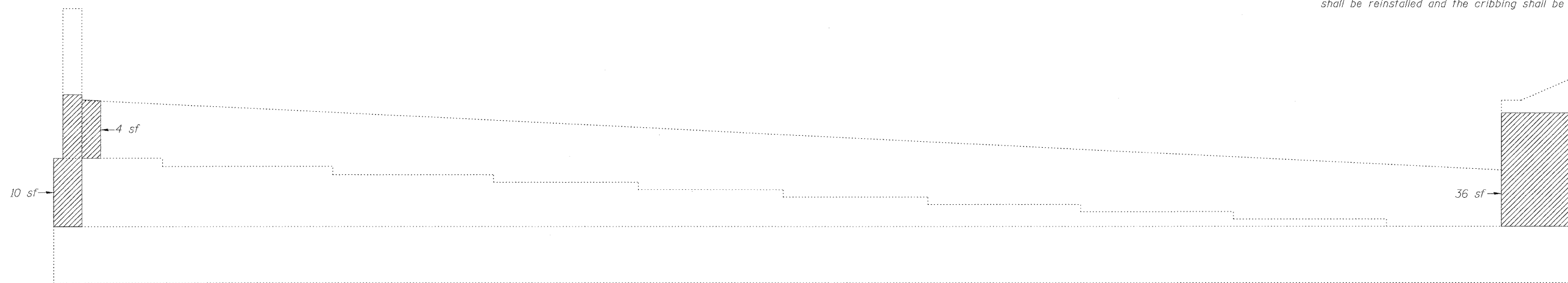


NORTH ABUTMENT
(Looking North)

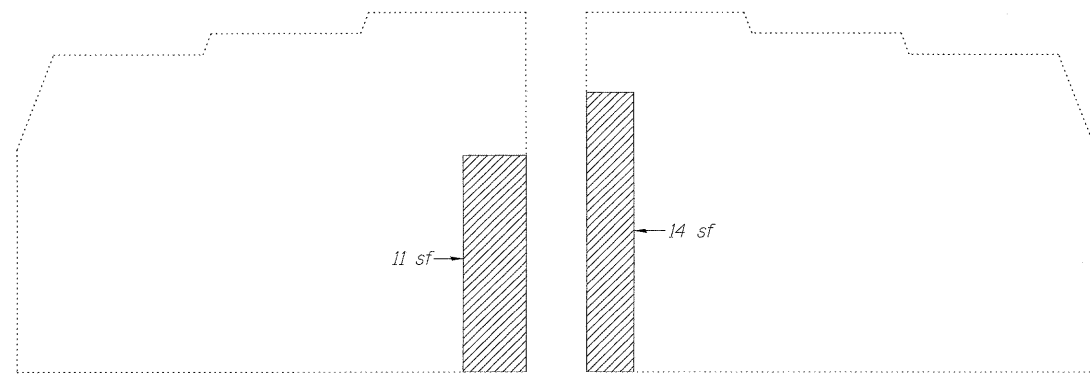
GIRDER REACTION
(from Existing Plans)

| | | |
|---------------------|-----|------|
| RQ | (k) | 16.3 |
| $R\frac{L}{2} + IM$ | (k) | 54.0 |
| R_{Total} | (k) | 70.3 |

* For spill under bearing, the beam shall be jacked and cribbed to remove bearing. The jack shall have a minimum capacity of $1.5 * (RQ + 0.5 * (R\frac{L}{2} + IM))$. See existing plans for bearing details. The concrete area shall be repaired as Structural Repair of Concrete (Depth Less Than or Equal to 5 inches). Care shall be taken not to damage anchor bolts. Once the concrete has attained the required strength and the curing period is complete, the bearing shall be reinstalled and the cribbing shall be removed.



SOUTH ABUTMENT
(Looking South)



SOUTHEAST WINGWALL

NORTHEAST WINGWALL

LEGEND

- Structural Repair of Concrete (Depth greater than 5")
- Structural Repair of Concrete (Depth equal to or less than 5")
- sf Square Feet

Note:
Repair of the existing abutments shall include but may not be limited to the areas shown. The actual areas to be repaired will be determined by the Engineer at the time of construction.

BILL OF MATERIAL

| Item | Unit | Total |
|---|---------|-------|
| Structural Repair of Concrete (Depth greater than 5 in.) | Sq. Ft. | 46 |
| Structural Repair of Concrete (Depth equal to or less than 5 in.) | Sq. Ft. | 179 |
| Temporary Shoring and Cribbing | Each | 1 |

ABUTMENT REPAIR
STRUCTURE NO. 016-0373

| | | | | | | |
|---|-------------------------------------|--------------------------------|--------------------------------|--------------------|------------------|---------------|
| LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois | SHEET NO. 3 | F.A.I. RTE. 290 | SECTION (531-3.1,0305-302)RS-5 | COUNTY COOK | TOTAL SHEETS 314 | SHEET NO. 177 |
| | 7 SHEETS | FED. ROAD DIST. NO. _ ILLINOIS | | CONTRACT NO. 60138 | | |
| Designed By: KHH Checked By: MTH Date: 12/2/02 | Drawn By: KHH File: 016-0373.dgn | FED. AID PROJECT | | | | |