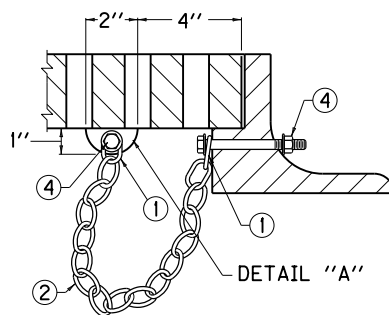
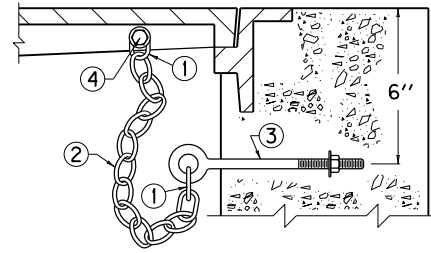


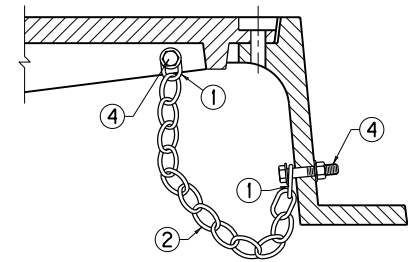
GRATE CONNECTED TO WALL



GRATE CONNECTED TO FRAME



LID CONNECTED TO WALL

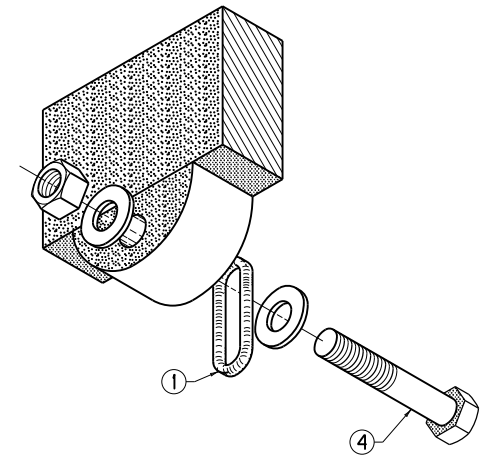


LID CONNECTED TO FRAME

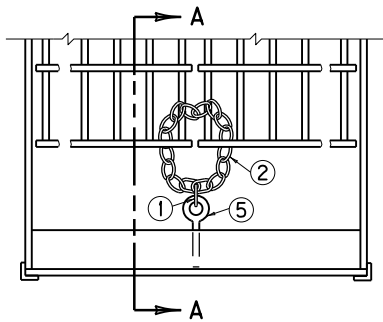
TYPICAL ILLUSTRATIONS FOR CASTINGS

~ NOTES ~

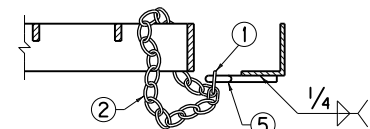
- ① CHAIN SHACKLE, OR COLD SHUT OF AN APPROVED TYPE.
- ② 3/16" PROOF COIL CHAIN OF SUFFICIENT LENGTH TO ALLOW REMOVAL AND DISPLACEMENT OF GRATE OR LID.
- ③ 3/8" x 6" EYE BOLT, NUT, AND WASHER.
- ④ 3/8" HEX HEAD CAP SCREW (GRADE 2), NUT AND WASHERS. LENGTH DETERMINED BY THICKNESS OF FRAME OR GRATE. 1/16" DIA. HOLE FOR CAP SCREW. BATTER THREADS ON CAP SCREW TO PREVENT REMOVAL OF NUT.
- ⑤ 3/8" EYE BOLT (LENGTH DETERMINED BY THE FRAME DIMENSION).
6. ALL EYE BOLTS SHALL HAVE A CONTINUOUS OR SOLID EYE.
7. ALL HARDWARE SHALL BE GALVANIZED AND OF COMMERCIAL QUALITY AND SHALL BE APPROVED BY THE ENGINEER.
8. THE COST OF THE COMPLETE SECURITY DEVICE, INSTALLED, SHALL BE INCIDENTAL TO THE COST OF THE STRUCTURE.
9. THE DESIGNS SHOWN ARE ACCEPTABLE; HOWEVER ARE SUBJECT TO CHANGE IF APPROVED IN WRITING BY THE ENGINEER.



DETAIL A  
LUG ON CENTER CROSS MEMBER  
AND BOLT ASSEMBLY  
(AXONOMETRIC VIEW)

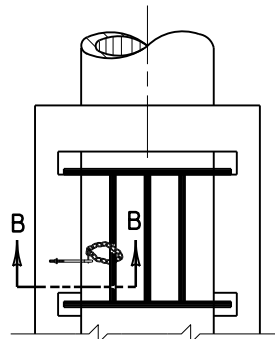


PLAN VIEW



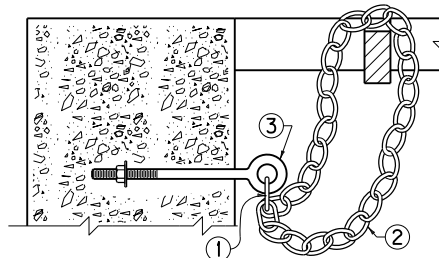
SECTION A-A

GRATE CONNECTED TO FRAME

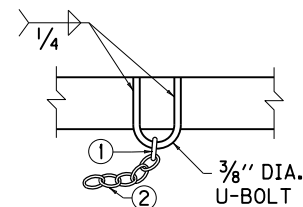


PLAN VIEW

GRATE CONNECTED TO WALL



SECTION B-B



ALTERNATE FOR  
STRUCTURAL STEEL  
MEMBERS

TYPICAL ILLUSTRATIONS FOR STRUCTURAL STEEL UNITS

|   |   |                  |
|---|---|------------------|
| <b>KENTUCKY<br/>DEPARTMENT OF HIGHWAYS</b>                  |   |                  |
| <b>SECURITY DEVICES FOR<br/>FRAMES, GRATES<br/>AND LIDS</b> |   |                  |
| STANDARD DRAWING NO. RDX-160-06                             |   |                  |
| SUBMITTED   | <i>William P. Gullett</i><br>DIRECTOR, DIVISION OF DESIGN | 12-01-15<br>DATE |
| APPROVED  | <i>[Signature]</i><br>STATE HIGHWAY ENGINEER              | 12-01-15<br>DATE |