



**UNION PACIFIC
RAILROAD**

FORM 24003 (Rev. 3-94)

**OFFICE OF V.P. ENGINEERING
OMAHA, NEBRASKA**

PROJECT: SHORING CHEAT SHEET

SHEET NUMBER 1 OF 1 W.O. _____

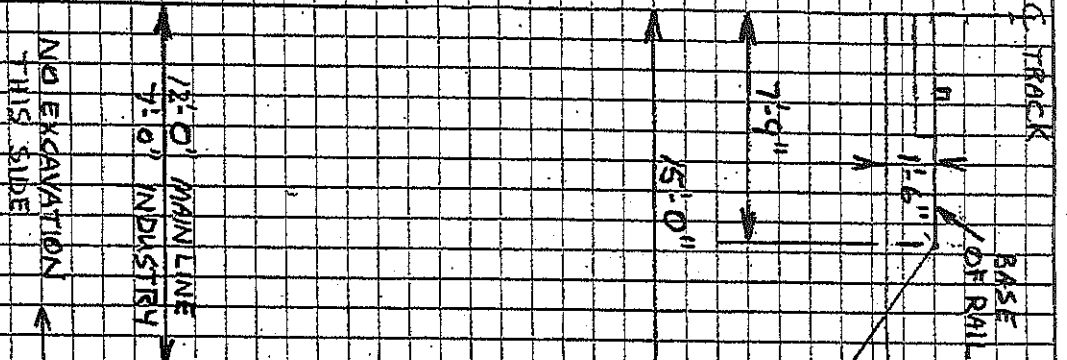
CALCULATED BY GEV DATE 1/14/02

CHECKED BY _____ DATE _____

FILE NUMBER EXHIBIT I ON SCALE GRID

NOTES:

SCALE: 1" SQUARE



ZONE A

DRAWINGS & DESIGN CALCULATIONS
STAMPED ON AREA MUST BE SUBMITTED
TO WPE FOR APPROVAL.

EXAMPLE
CORNER OF EXCAVATION

ZONE B

OSHA APPLIES
AND NO
SLOPING
CUTS

ZONE C

OSHA APPLIES

EXAMPLE GROUND
LINE

EXAMPLE: COMPANY X NEEDS TO EXCAVATE 10'-0" BELOW
NATURAL GROUND. THE TRACKS ARE ON A FILL. THE
SURVEY INDICATES 10'-0" FROM BASE OF RAIL (TOP OF
TIE) TO TOP OF GROUND. THE CLOSEST EDGE OF
EXCAVATION IS 20'-0" FROM TRACK C.
THE EXCAVATION FALLS WITHIN ZONE A.