ANNEXURE 11

WRITEUP ON PDMS

CUSTOMIZATION DONE AT TBG

- CREATION OF CATALOGS FOR EQUIPMENTS
- USER FRIENDLY FORMS FOR CREATING SWITCHYARD MODELS
- AUTOMATED BOM GENERATION
- AUTOMATIC ELECTRICAL INTERFERENCE CHECKING

CUSTOMIZATION DETAILS

- FORM BASED PLACEMENT OF EQUIPMENTS, STRUCTURES & FOUNDATIONS
- AUTOMATED CONDUCTOR STRINGING
- FORM BASED CONNECTION OF ALL EQUIPMENTS

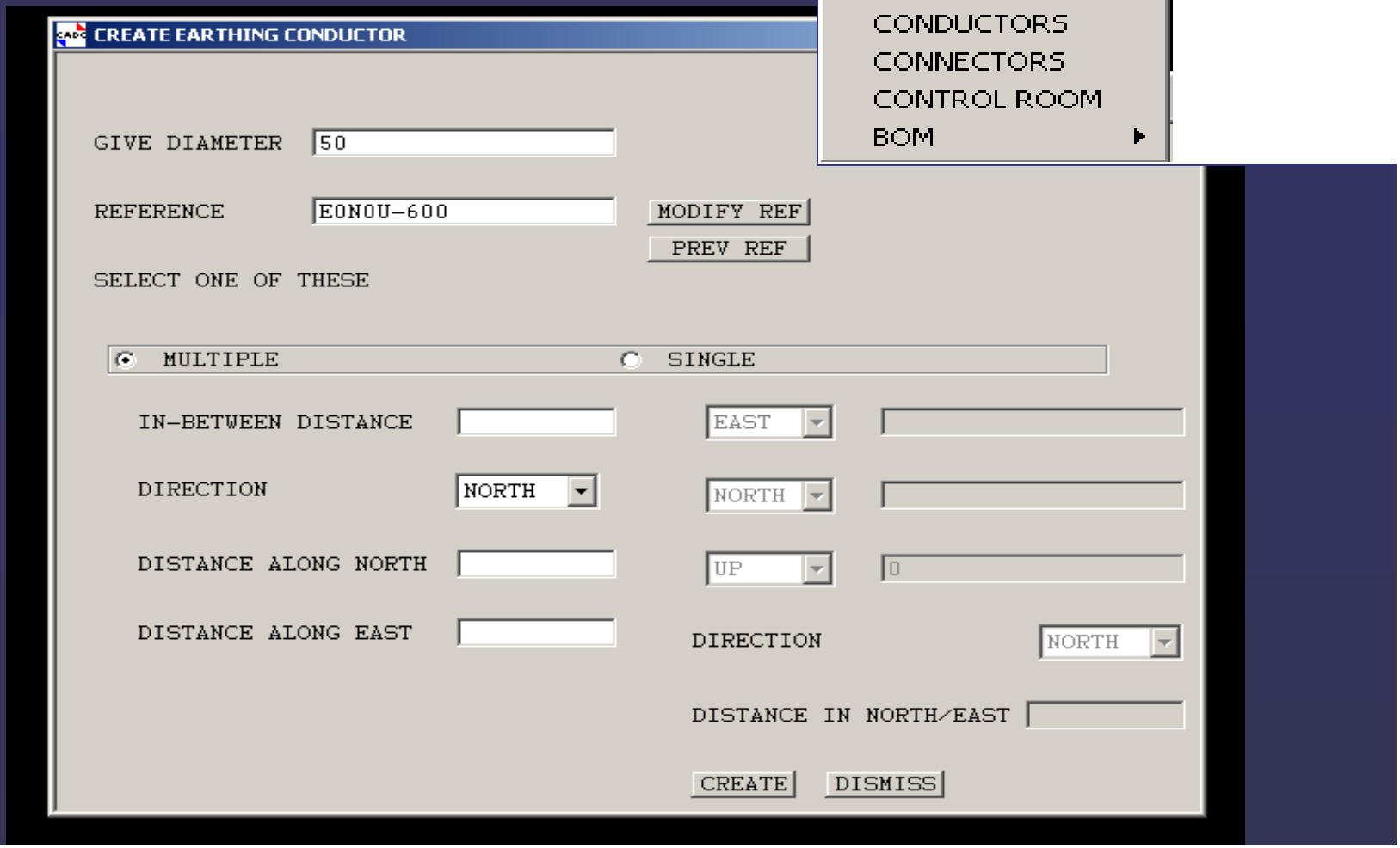
- FORM BASED CREATION OF ROAD LAYOUT

- FORM BASED SWITCHYARD EARTHING LAYOUT
- AUTOMATED EQUIPMENT EARTHING

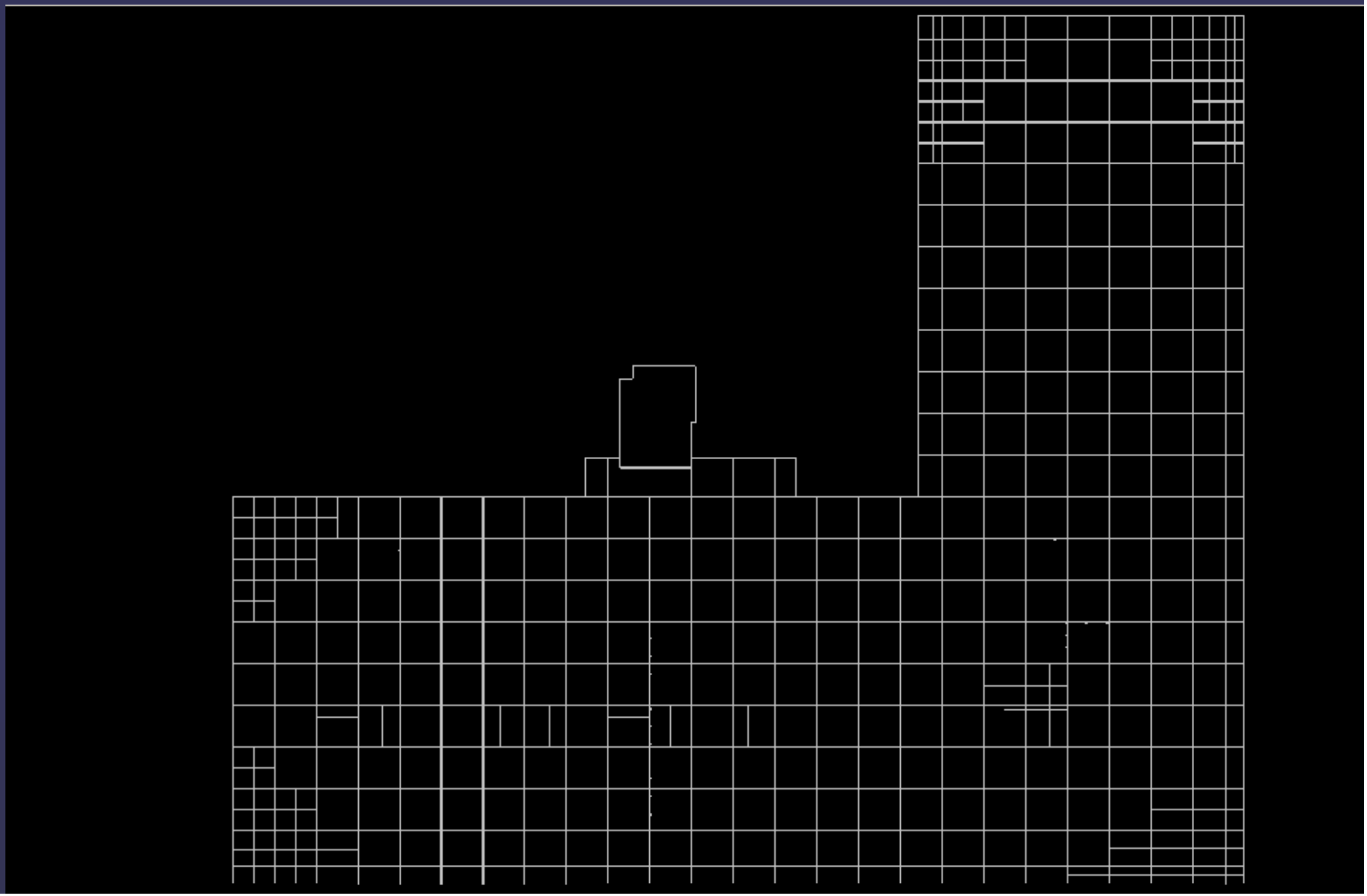
- AUTOMATED CABLE TRENCH ROUTING
- AUTOMATED CABLE LAYING

EARTHING LAYOUT

- EARTHMAT
- RISERS & FLATS
- AUTOMATIC BENDS



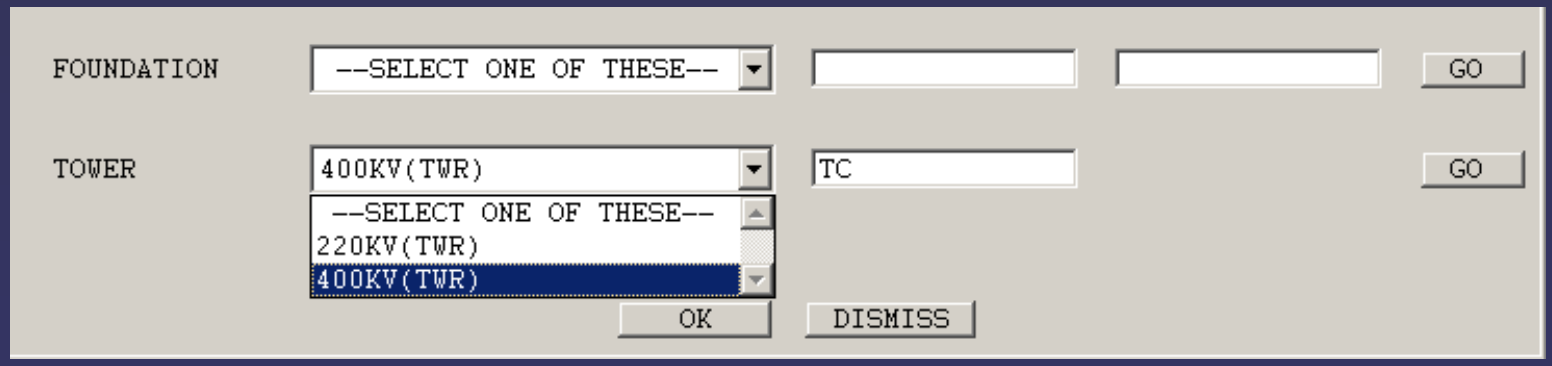
EARTHING LAYOUT PREPARED FOR PGCIL PATIALA PROJECT USING THE FORM

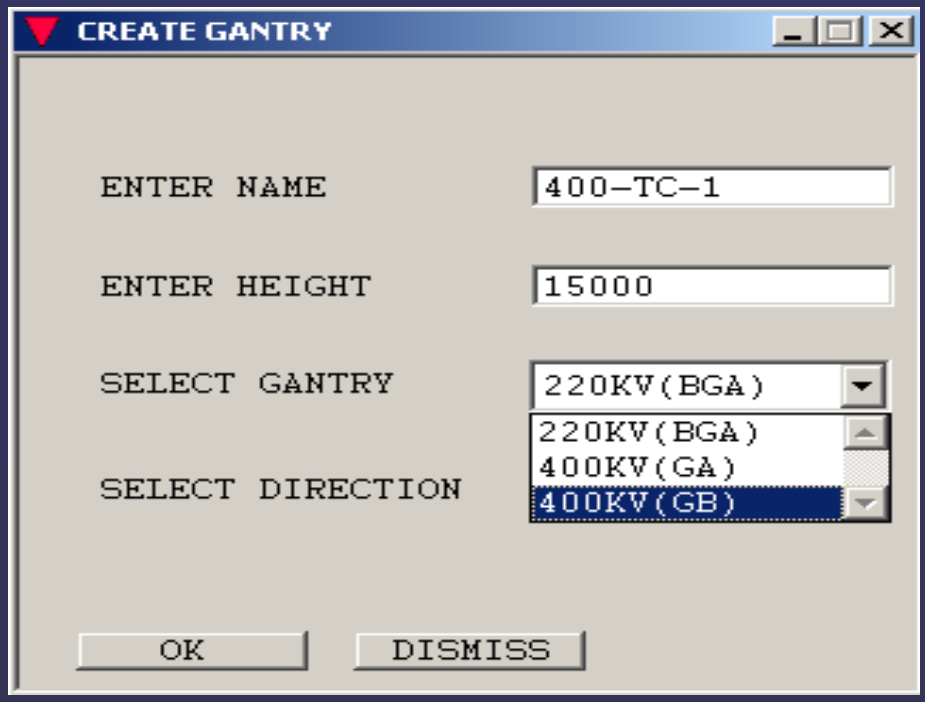


PLACEMENT OF STRUCTURES

- PLACEMENT OF TOWERS ALONG WITH THE FOUNDATIONS THROUGH FORM
  - SELECT THE TYPE OF TOWER TO BE PLACED
  - SELECT THE FOUNDATION FOR THE TOWER
  - GIVE THE CO-ORDINATES WHERE TOWER HAS TO BE PLACED
- CONNECTING GANTRIES BETWEEN TWO TOWERS
  - SELECT THE TYPE OF GANTRY TO PLACED
  - PICK THE TWO TOWERS BY CLICKING ON THEM

FORMS FOR PLACEMENT OF TOWERS AND GANTRIES

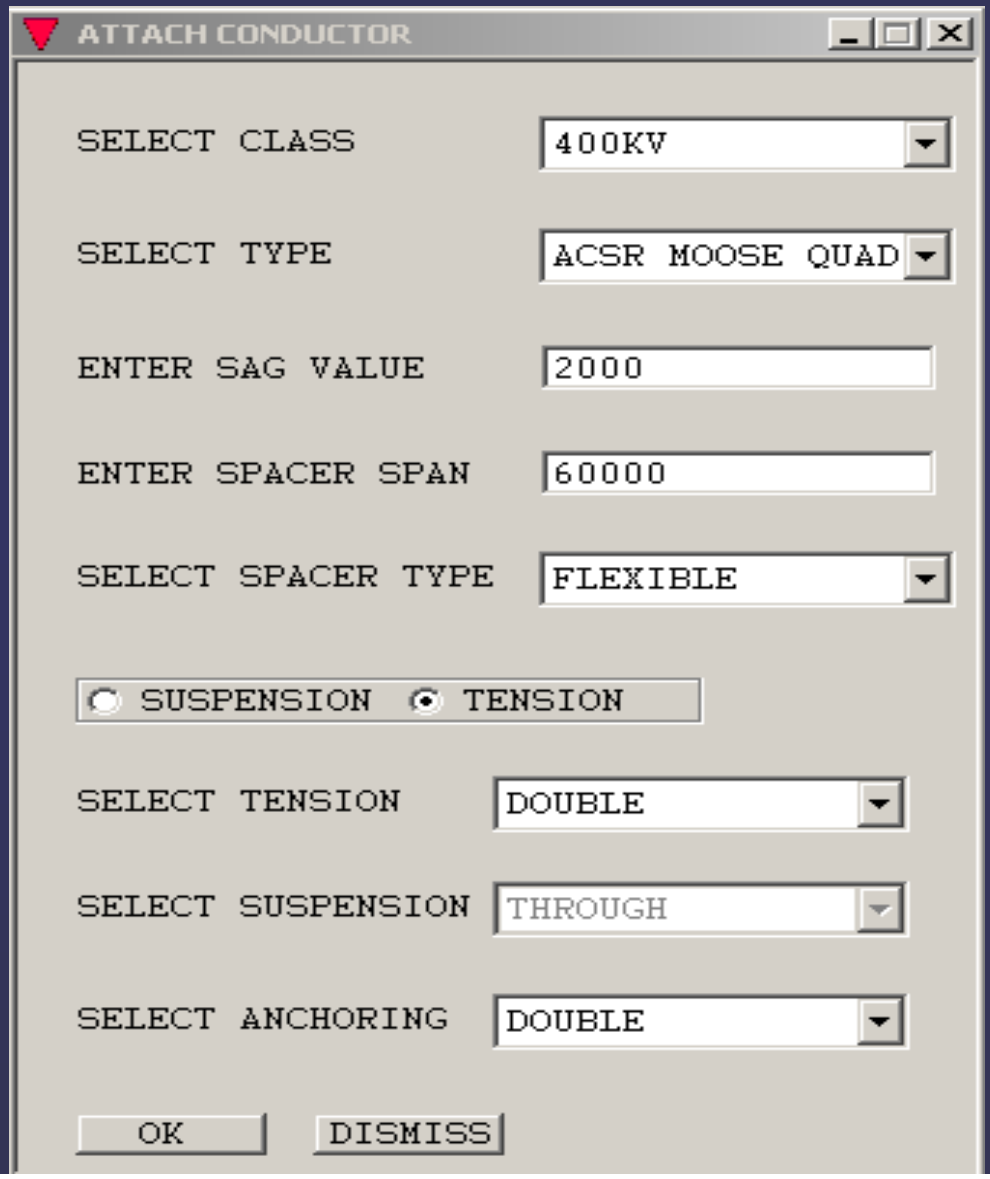




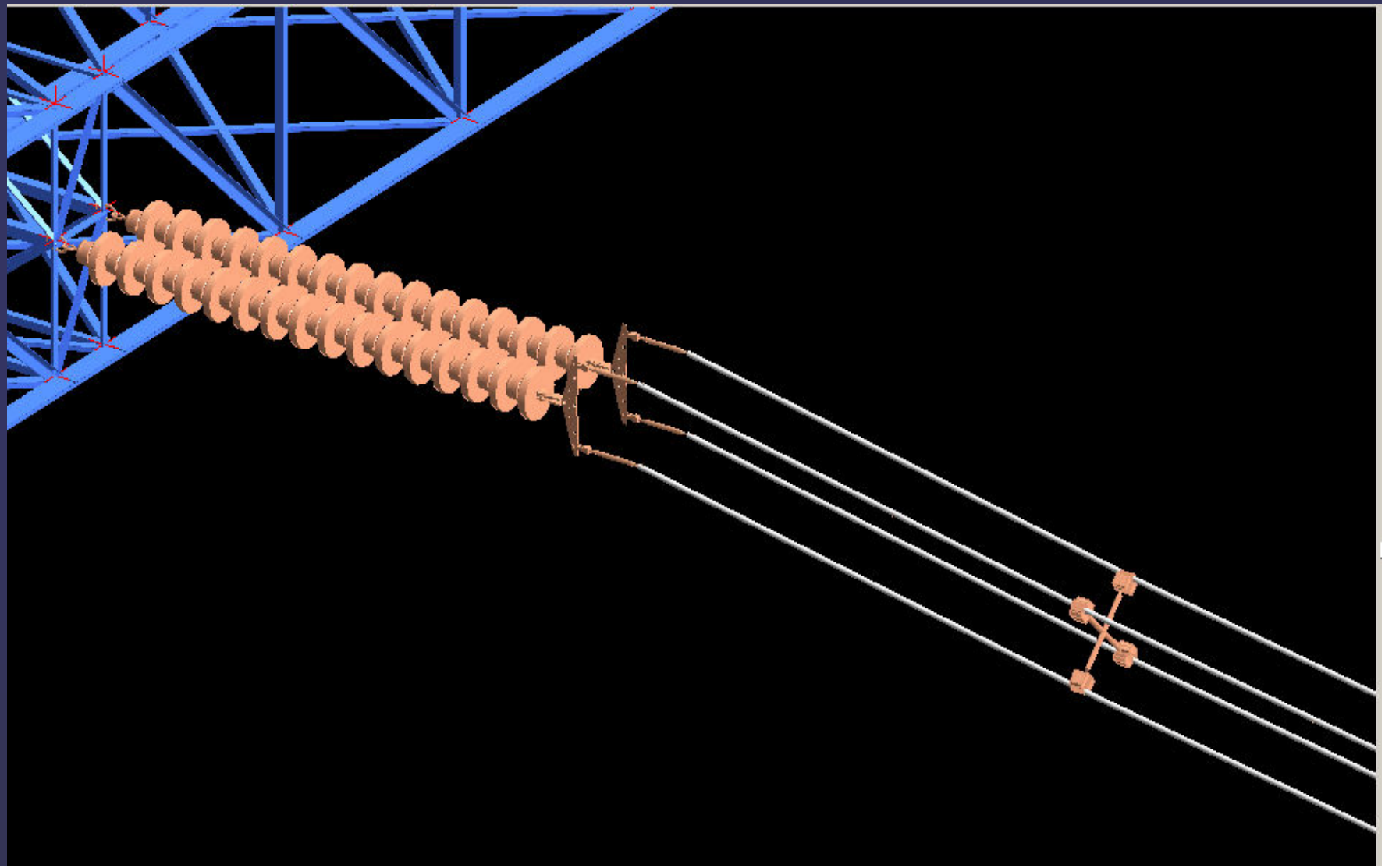
CONDUCTOR STRINGING BETWEEN GANTRIES

- SELECT THE CLASS & TYPE OF CONDUCTORS
- ENTER THE SAG VALUE
- ENTER THE SPACER SPAN
- SELECT THE TYPE OF SPACERS
- SELECT THE TYPE OF ANCHORING

FORM FOR CONDUCTOR STRINGING



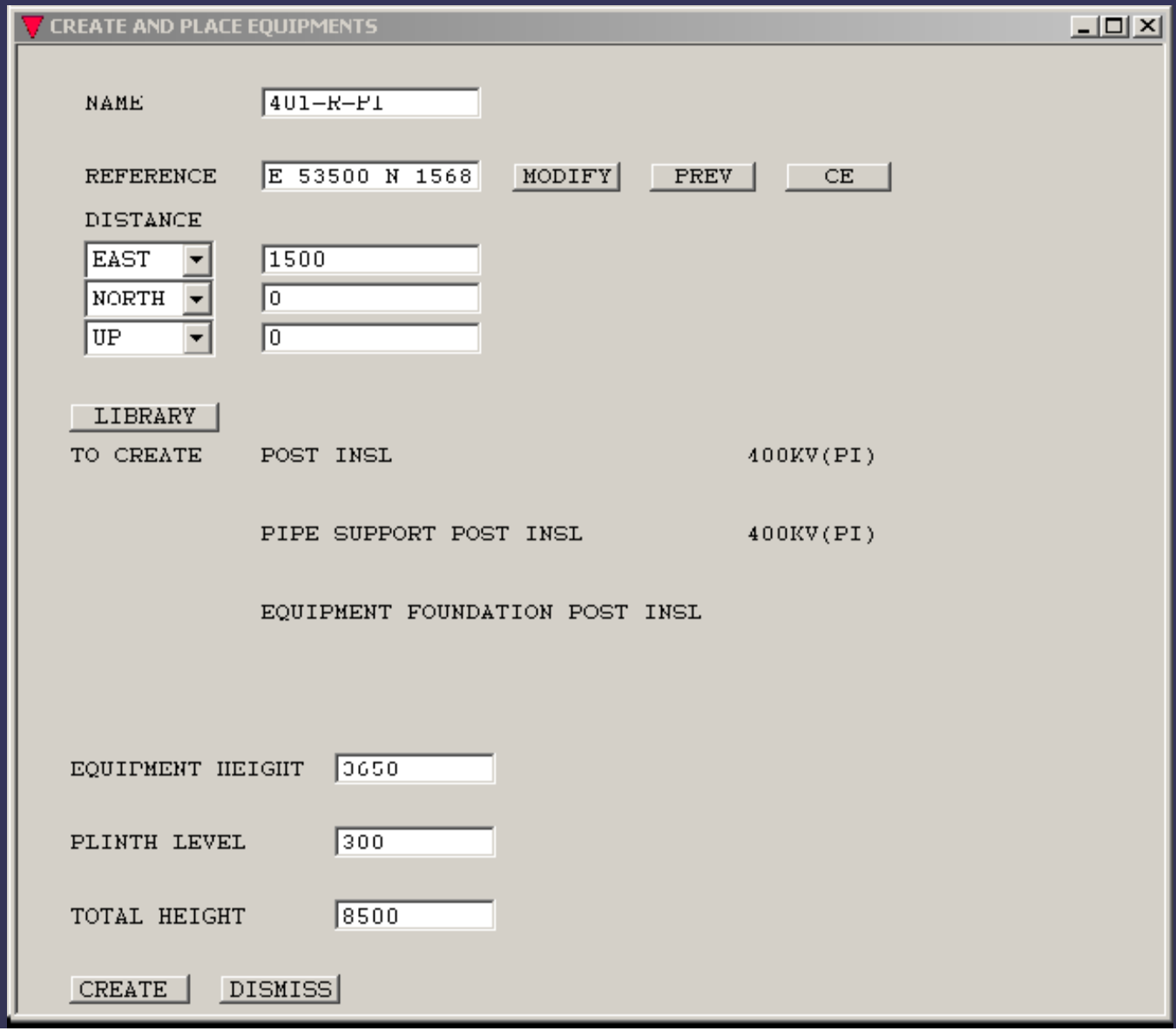
400 KV CONDUCTOR STRINGING WITH INSULATORS AND SPACER CONNECTIONS



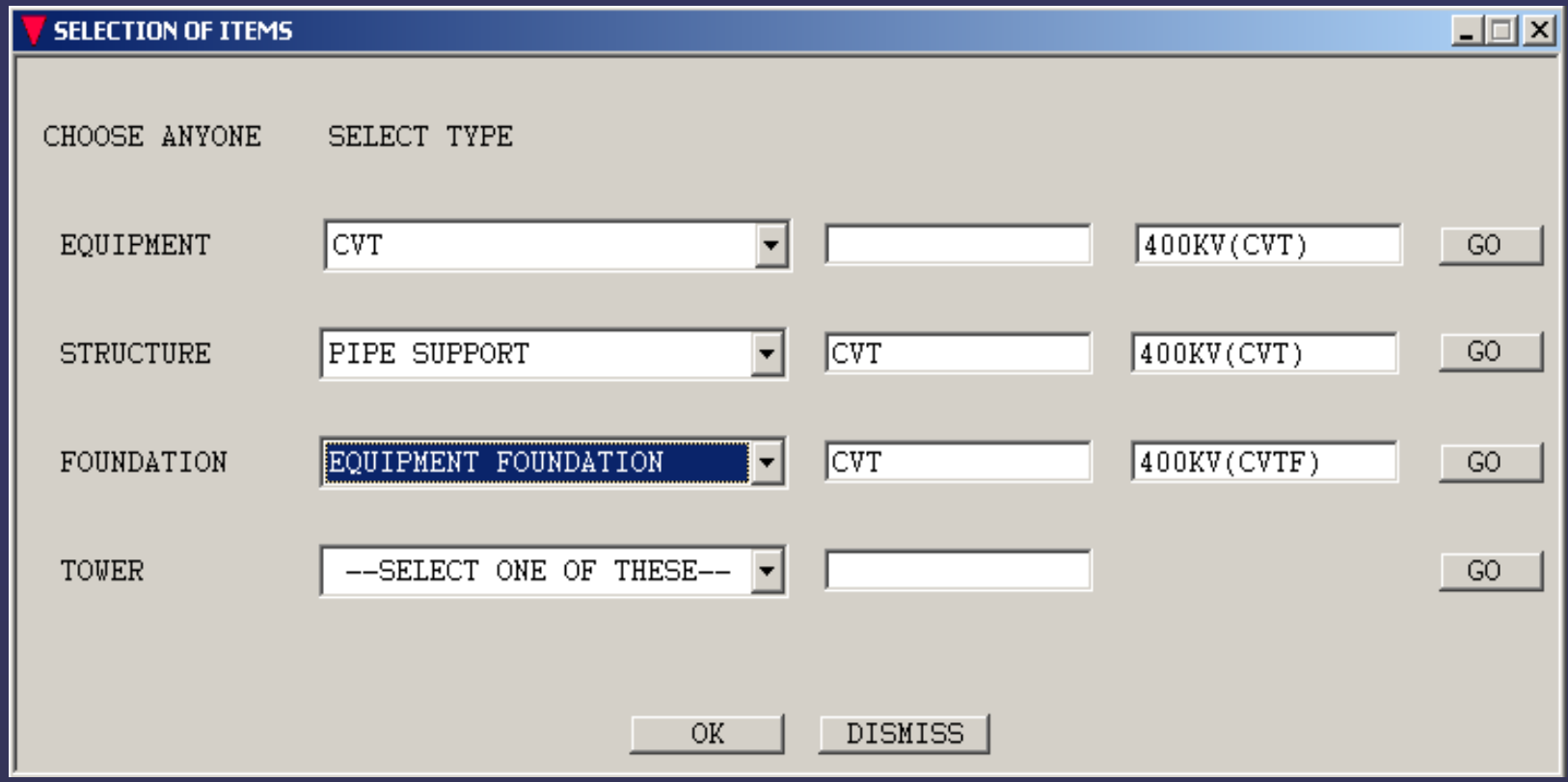
EQUIPMENT, SUPPORT STRUCTURE & FOUNDATION LAYOUT

- SELECT THE EQUIPMENT TO BE PLACED FROM THE LIBRARY
- SELECT THE SUPPORT STRUCTURE AND FOUNDATION FOR THE EQUIPMENT
- GIVE THE CO-ORDINATES WHERE EQUIPMENT HAS TO BE PLACED

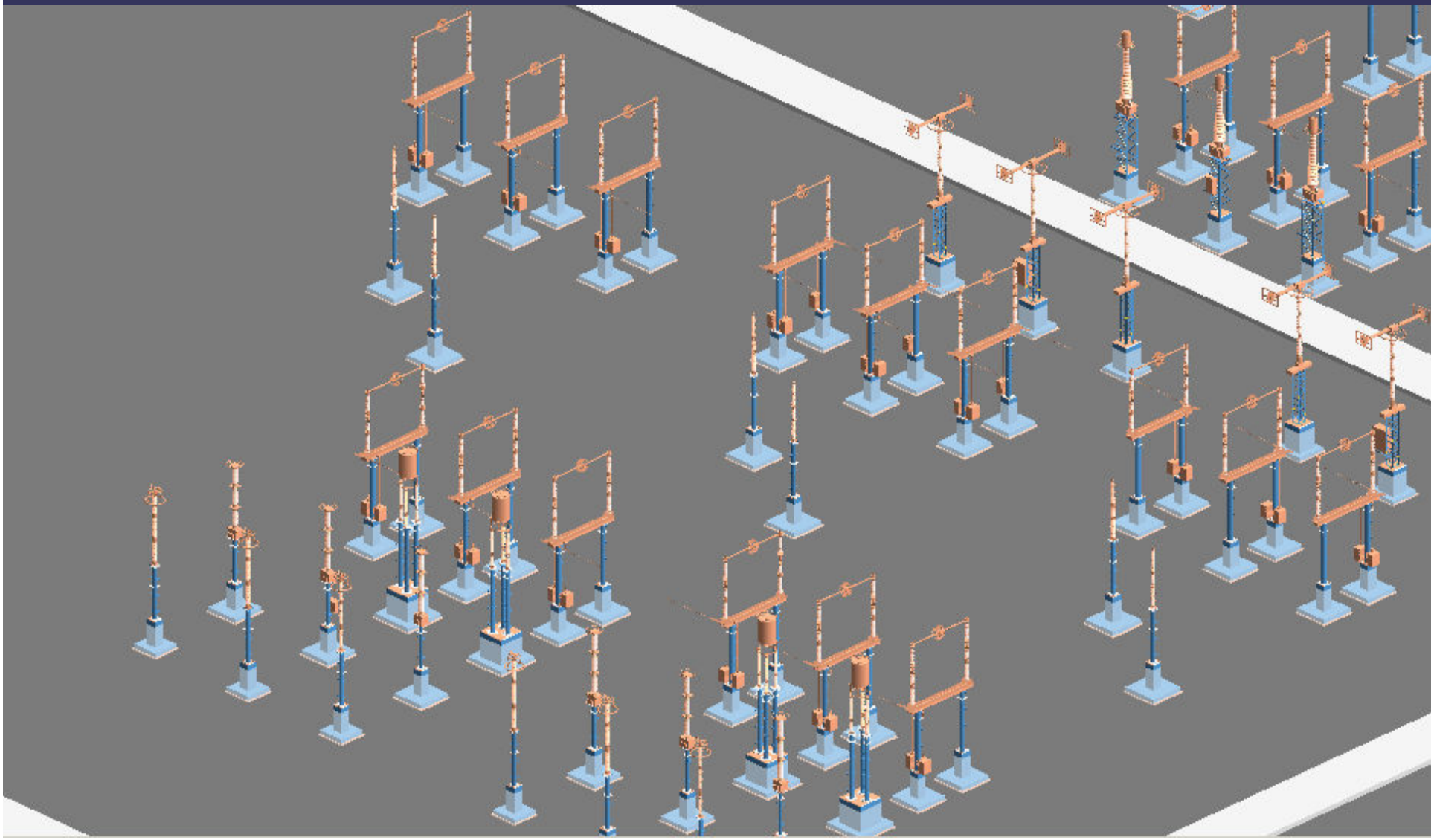
MAIN FORM FOR LAYOUT



FORM FOR SELECTION FROM LIBRARY



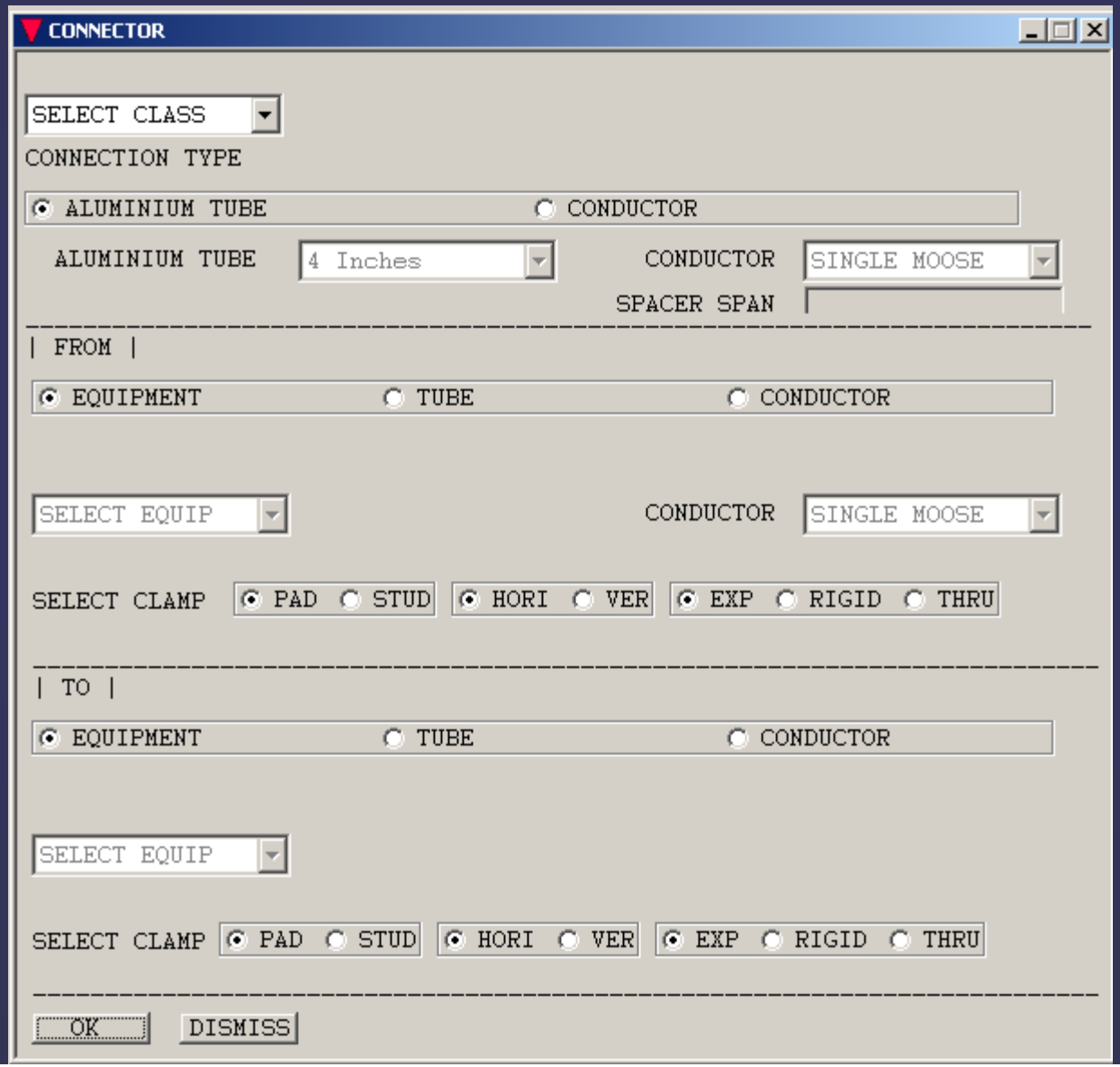
EQUIPMENT, SUPPORT STRUCTURES & FOUNDATION LAYOUT PREPARED FOR PATIALA PROJECT USING THE FORMS



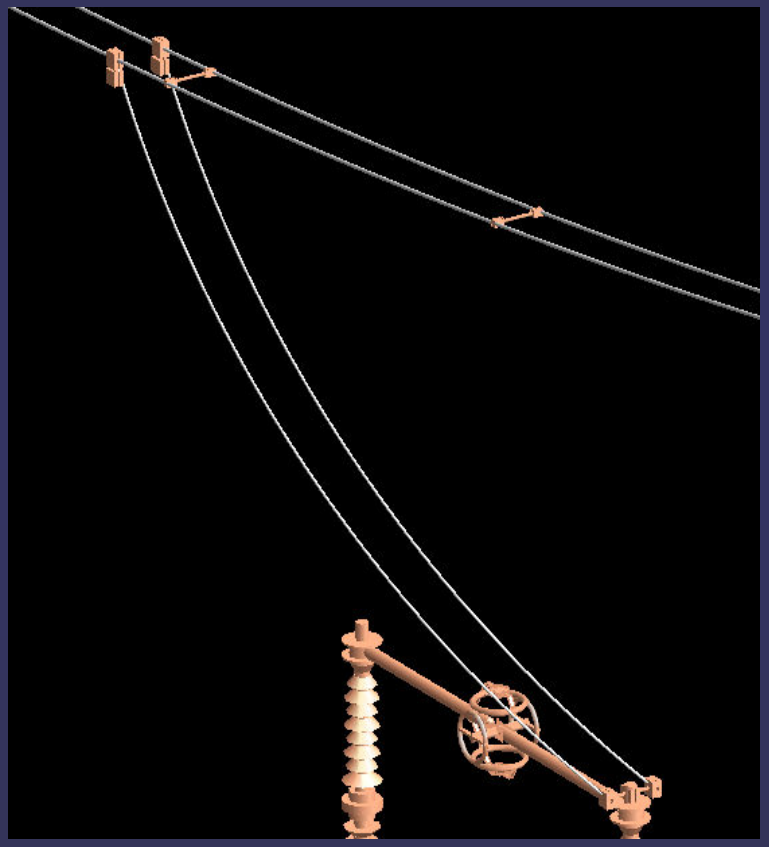
EQUIPMENT CONNECTION

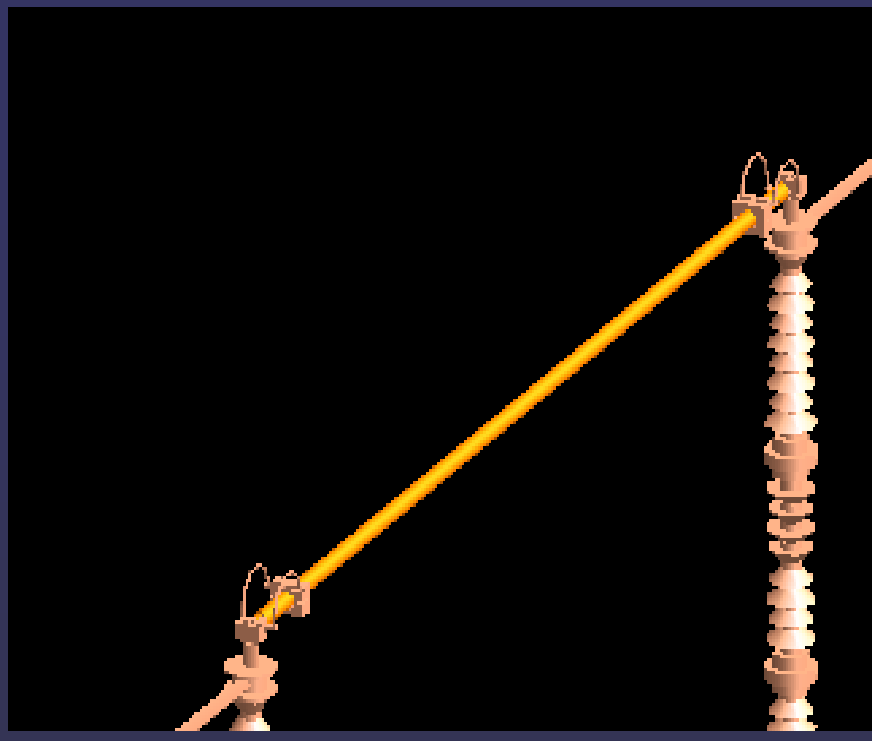
- SELECT THE CONNECTION TYPE
- SELECT THE TWO POINTS BETWEEN WHICH THE CONNECTION HAS TO BE MADE
- SELECT THE TYPE OF CLAMP

FORM FOR EQUIPMENT CONNECTION



CONDUCTOR AND TUBE CONNECTIONS

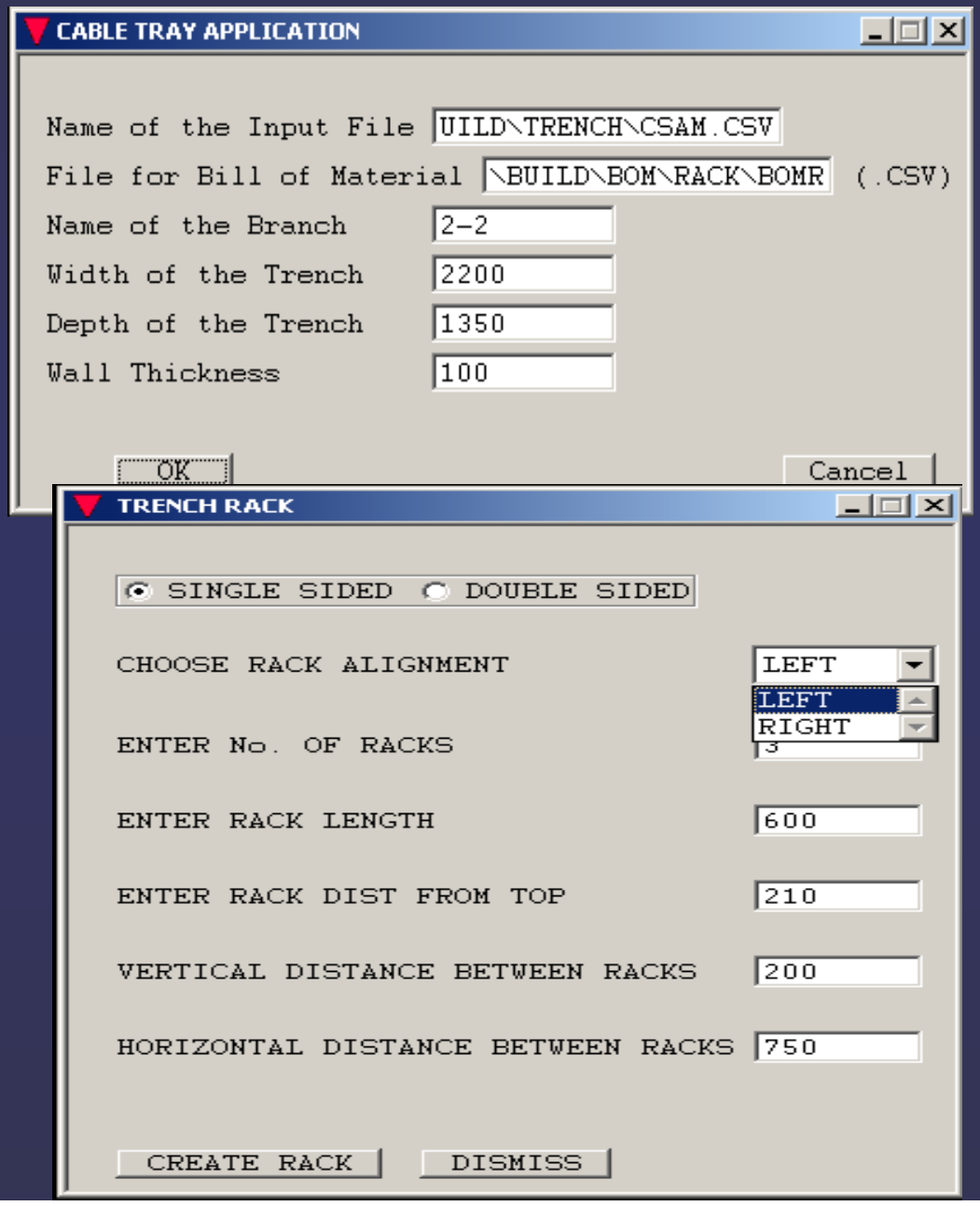




CABLE TRENCH LAYOUT

- PREPARE AN EXCEL SHEET FOR LOCATING CABLE TRENCH
- INPUT THE TRENCH SIZE IN THE FORM
- SELECT THE TYPE OF RACK ASSEMBLY TO BE PLACED IN THE TRENCHES

FORMS FOR CABLE TRENCH LAYOUT

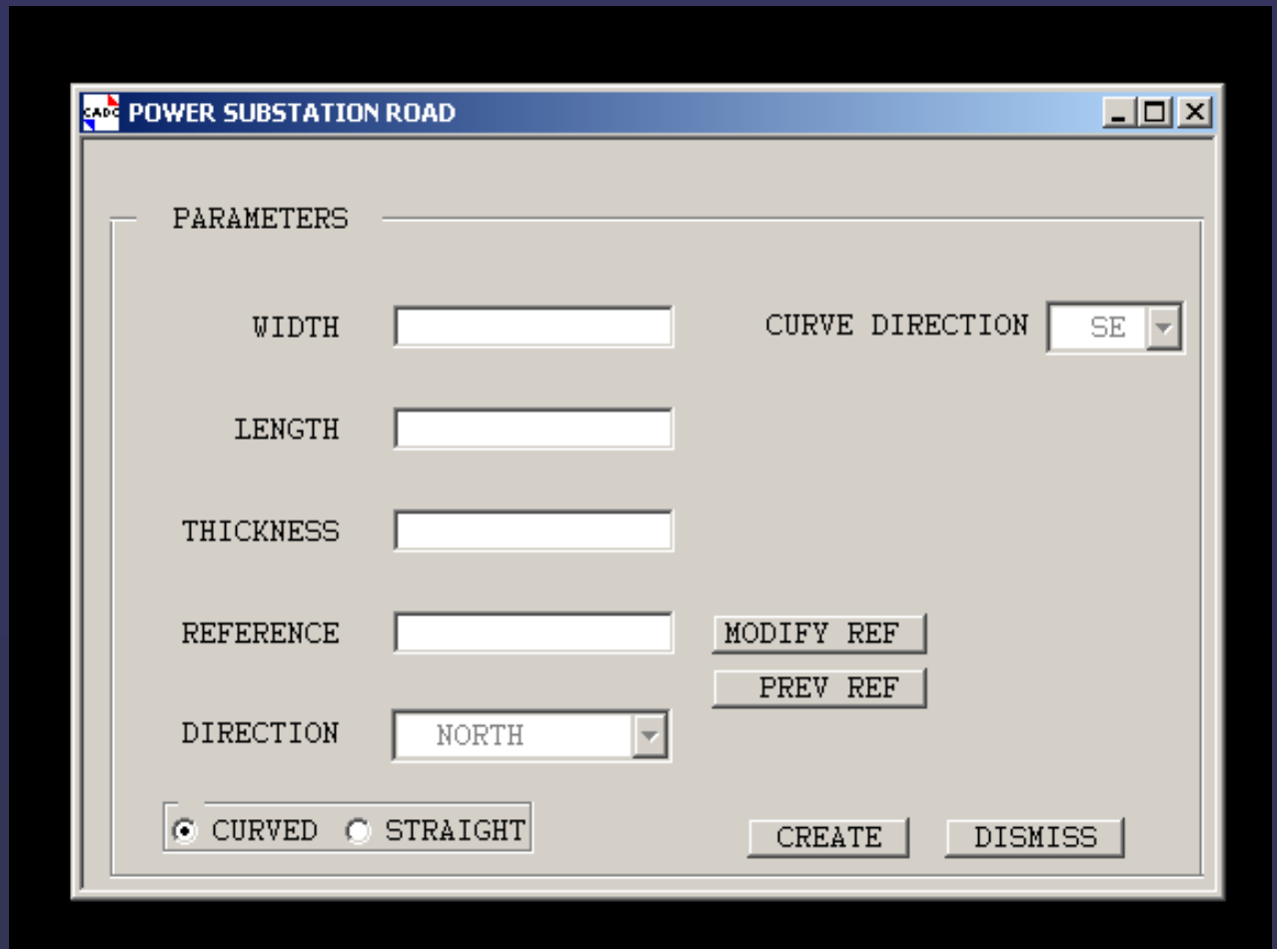


CABLE ROUTING

- CABLE ROUTING PROGRAM TAKES CABLE SCHEDULE IN EXCEL FORMAT AS INPUT
- PROGRAM READS THE CABLE SCHEDULE AND LAYS THE CABLES BETWEEN THE EQUIPMENTS LISTED IN ‘FROM’ AND ‘TO’ COLUMNS IN THE CABLE SCHEDULE
- ESTIMATES CABLE LENGTHS

ROAD LAYOUT

- INPUT THE PARAMETERS IN THE FORM
- SELECT STRAIGHT OR CURVED SECTION TYPES
- INPUT THE REFERENCE POINT



BOM

BOM IS GENERATED AUTOMATICALLY FOR THE FOLLOWING:

- EARTHMAT
- EARTHING FLATS
- TOWERS AND BEAMS
- EQUIPMENTS
- CONDUCTOR
- CONDUCTOR HARDWARE ASSEMBLY
- CONNECTORS AND CLAMPS
- TRENCH RACK ASSEMBLY
- CABLES

ADDITIONAL FEATURES

- PARAMETRIC MODELING FOR STRUCTURES AND FOUNDATIONS
- EXTENSION OF EQUIPMENT CATALOG
- CONTROL ROOM PARAMETERISATION
- GENERATION OF 2D DRAWINGS