APPENDIX D

DATA PREPARATION AND HANDLING

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APPENDIX D

DATA PREPARATION AND HANDLING

D.1 Introduction

This appendix describes the procedures used to submit and resubmit STRUDL and STRUBAG problems to the computer. STRUDL jobs are processed on an individual job basis. Individual jobs are used because the dynamic core memory allocation capability of the ICES System allows us to specify a variable amount of computer space in core for each STRUDL job. Thus, the amount of computer space can be varied in accordance with the size or number of degrees of freedom of the structure being analyzed.

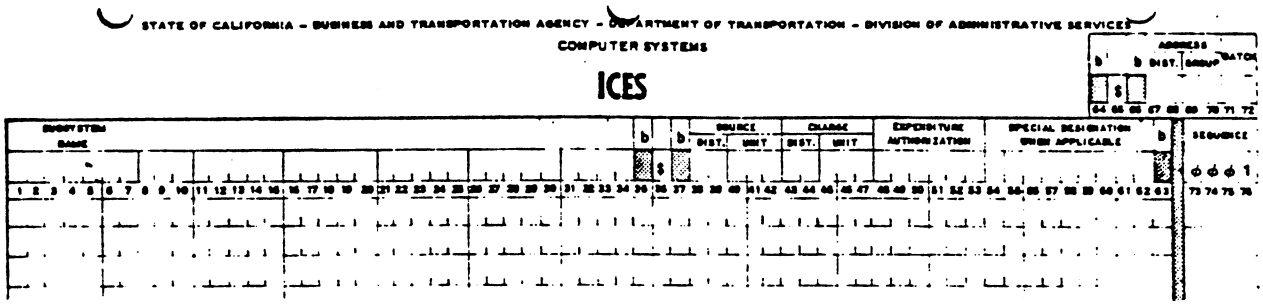
Initial STRUDL input statements may be coded on the ICES form DAS-CS-329(Rev. 1/1/78), attached to the "BRIDGE JOB CONTROL" form and submitted for key data entry and batch processing.

Initial STRUBAG input statements may be coded on the STRUBAG input form DS-D175 thru 178, (refer to Appendix E), these are attached to the "BRIDGE JOB CONTROL" form and submitted for key data entry and batch processing.

STRUBAG and STRUDL input data may also be entered initially from a VM/CMS Terminal by the user.

All input data is stored in the users VM/CMS account as filetype STRUDL or STRUBAG. These files are updated and changed and subsequent jobs processed directly from the VM/CMS terminal.

D.2 ICES Input Form



A reduced copy of the ICES form is shown above. This form may be used for initial batch submittals to the ICES subsystems. STRUDL commands consisting of prescribed words and data are entered in columns 1 thru 63. The language conventions and commands are covered in the STRUDL manuals from MIT and Mcauto. The example problems, computer results and text given in these manuals illustrate the use of these commands.

Enter your DIST, GROUP and BATCH at the top of each sheet. Each line must have a sequence number entered in columns 73 thru 76 in the order you wish to have your initial STRUDL commands processed. The subsystem command STRUDL may be entered on line 0001 or the user may enter this command on the line following if he wishes to use the optional problem title which allows a maximum of 64 characters. A good technique to develop in sequencing each line is to increment by 10, allowing for additions. The completed ICES forms are stapled behind the "BRIDGE JOB CONTROL" form and submitted to key data entry.

Subsequent runs of the STRUDL and STRUBAG program are made from the VM terminal.

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BRIDGE JOB CONTROL
DH-OSD149 (REV 1/74)

BDEJCL

PROGRAM NAME	PRIORITY	SOURCE DIST	SOURCE UNIT	CHARGE DIST	CHARGE UNIT	EXPENO AUTH	SPECIAL DESIGNATION (USE WHEN APPLICABLE)	IDENT DIST	IDENT GROUP	IDENT BATCH	PROB.	FILE STATUS	FILE ADDRESS	RETPD	PARM	CORE REGION	TIME	PLOTS	COMMENTS (NAME)	S C NO
																				7 2 7 5

USER INSTRUCTIONS

D.3 BRIDGE JOB CONTROL (shown above) for STRUDL and STRUBAG (Form DS-D149) Required one-sheet cover page for initial batch submittals.

Columns 1 - 4 Program name, enter STRU
6 - 7 Leave blank for Structure Design routing; otherwise, enter print location.
9 - 24 Enter REQUIRED accounting information.
25 - 33 Enter optional accounting information.
35 - 42 Enter Required identification (district-group-batch-prob).
48 - 53 Enter File Address (REQUIRED). Use a unique name (up to 6 alpha or numeric characters)
55 - 56 Not Used
58 PARM 0, blank Write STRUDL to a VM file AND EXECUTE STRUDL.
1 Write STRUDL to VM only.
6 Write STRUBAG and STRUDL to a VM file and EXECUTE STRUDL.
8 Write STRUBAG and STRUDL to a VM file only.

60 - 62 Enter REGION in Kilobytes.
If left blank and PARM 0, blank Default Region = 350
1 Default Region = 350
6 Default Region = 960
8 Default Region = 256

64 - 65 Enter estimated max. CPU time in min. (Default = 5 minutes)

67 Plots Y or 1 - 30 inch blank paper
2 - 30 inch grid paper
3 - 12 inch blank paper
4 - 12 inch grid paper
For no plot, leave blank

69 - 76 Enter comments (Name).

For questions see Structural and Seismic Anal. Sect., 445-1439.

D.4 STRUDL and STRUBAG VM FILES

VM FILES for STRUDL and STRUBAG input data created from batch submittals use the six character file address (Bridge Job Control Form) as the filename.

The VM FILES are directed to the users reader and must be received by the user at logon time. Files are then retained in the user account with no expiration date until deleted by the user.

D.5 Execution and Printing of STRUDL and STRUBAG VM FILES

Execution and printing of VM FILES is accomplished using either the VM/CMS system in real-time or in a batch mode on the Teale mainframe. STRUBAG runs in real time, STRUDL executes as a batch job. (See "STRUCTURES DESIGN VM/CMS SYSTEM USERS GUIDE" in the Computer Manual).