

AS BUILT: NO REVISIONS 9/2003

170 ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		33	43
COUNTY ROAD 18 OVER POULNEY RIVER				
WASHINGTON COUNTY, NY / RUTLAND COUNTY, VT				
TOWN OF HAMPTON, NY / POULNEY, VT				
CAPITAL PROJECT IDENTIFICATION NO. 1753.76				

CAMBER TABLE	
CAMBER DUE TO PRESTRESSED FORCE AND BEAM D.I. (WITH GROWTH)	20 mm
DEFLECTION DUE TO SLAB DEAD LOAD	5 mm
DEFLECTION DUE TO SUPERIMPOSED D.L.	1 mm
TOTAL CAMBER	15 mm
CAMBER DUE TO PRESTRESSED FORCE AND BEAM D.I. (WITHOUT GROWTH @ TRANSFER)	14 mm

DESIGN LOAD TABLE			
UNIT	LOAD	REACT. @ ABUTMENT END	MAX. MOM. MIDSPAN 00F-MD
BEAM	11.29	94.75	398.20
SLAB	4.35	36.54	153.47
SIDEWALK			
RAILINGS	0.25	2.10	8.82
FUTURE W.S.	1.12	9.41	39.51
MS-23		141.82	406.65

* BEAMS INCLUDE AN EQUIVALENT UNIFORM D.L. FOR INTERNAL DIAPHRAGMS

NOTES:
 THE PRESTRESSING STRANDS SHALL BE 13 mm DIAMETER WITH A GUARANTEED ULTIMATE STRENGTH OF 1860 MPa.
 JACKING FORCE = 138.1 kN PER STRAND
 REQUIRED MINIMUM CONCRETE STRENGTH AT TRANSFER = 35 MPa.
 REQUIRED MINIMUM CONCRETE STRENGTH AFTER 28 DAYS = 50 MPa.
 THE ALLOWABLE TENSION IN THE PRESTRESSED CONCRETE UNITS:
 AT TRANSFER = 0.62 f'c MPa
 AT 28 DAY STRENGTH = 0.51 f'c MPa

ALL TEMPORARY INSERTS SHALL BE APPROVED BY THE DEPUTY CHIEF ENGINEER (STRUCTURES) AND DETAILED ON THE PRESTRESSED CONCRETE "WORKING DRAWINGS".

ALL EXPOSED CORNERS, EXCEPT THE TOP, SHALL BE CHAMFERED 20 mm.

BAR REINFORCEMENT SHALL BE ASTM A615, GRADE 60.

THE TRANSVERSE TENDONS SHALL BE 13 mm DIAMETER STRAND WITH A GUARANTEED ULTIMATE STRENGTH OF 1860 MPa. THE TRANSVERSE TENDONS SHALL BE POLYSTRAND, GALVANIZED STRAND OR EQUAL AND SHALL BE TENSIONED TO A FORCE OF 135 kN.

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
 AS BUILT REVISIONS

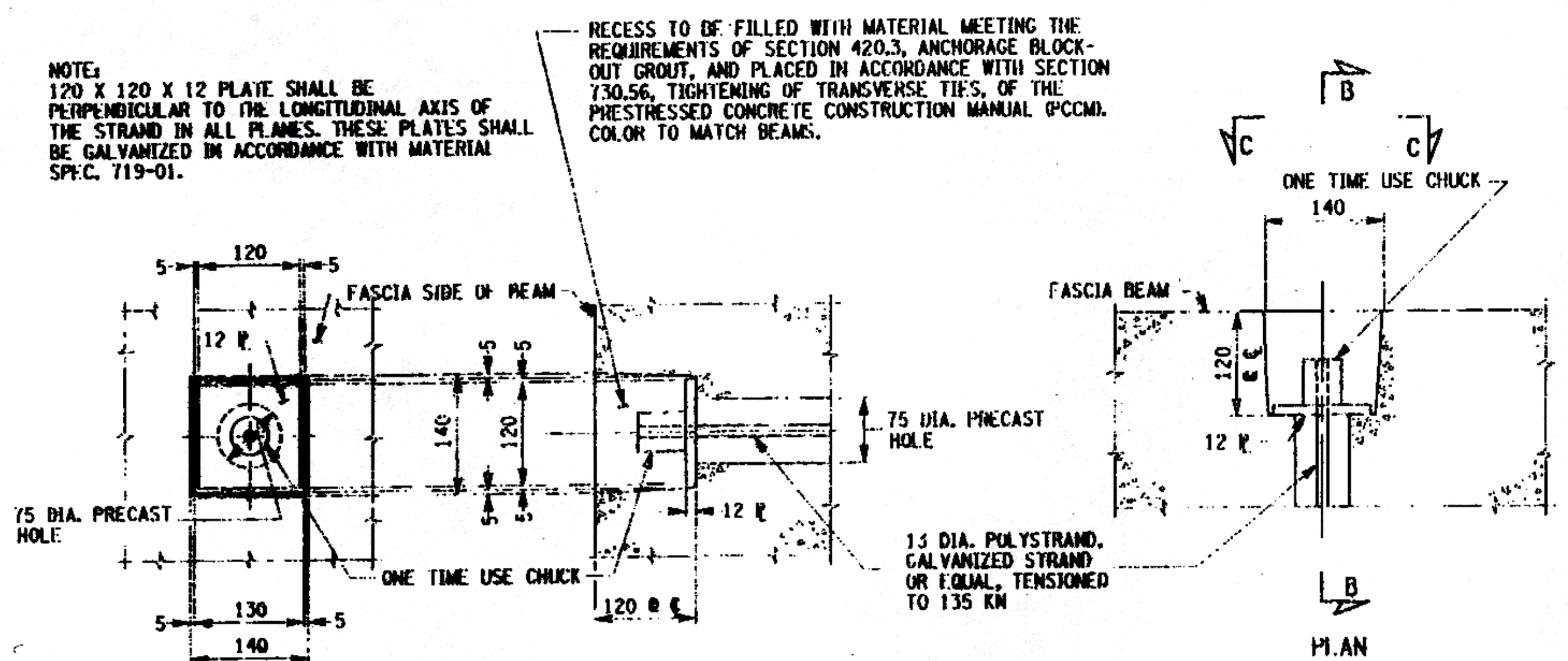
Signature: *Russell E. ...* DATE: 9/2003

COUNTY ROAD 18 OVER POULNEY RIVER

PRESTRESSED CONCRETE BEAM DETAILS
(SHEET 2 OF 2)

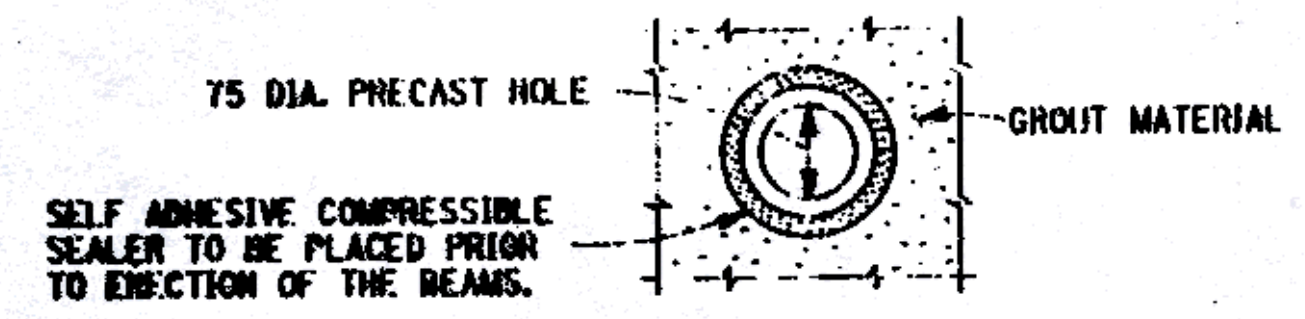
WASHINGTON COUNTY
DEPARTMENT OF PUBLIC WORKS

FILENAME	REGION	DATE	DRAWING NO.
175376AA.V18	0NF	3/2007	ST-17



TRANSVERSE TENDON RECESS DETAILS

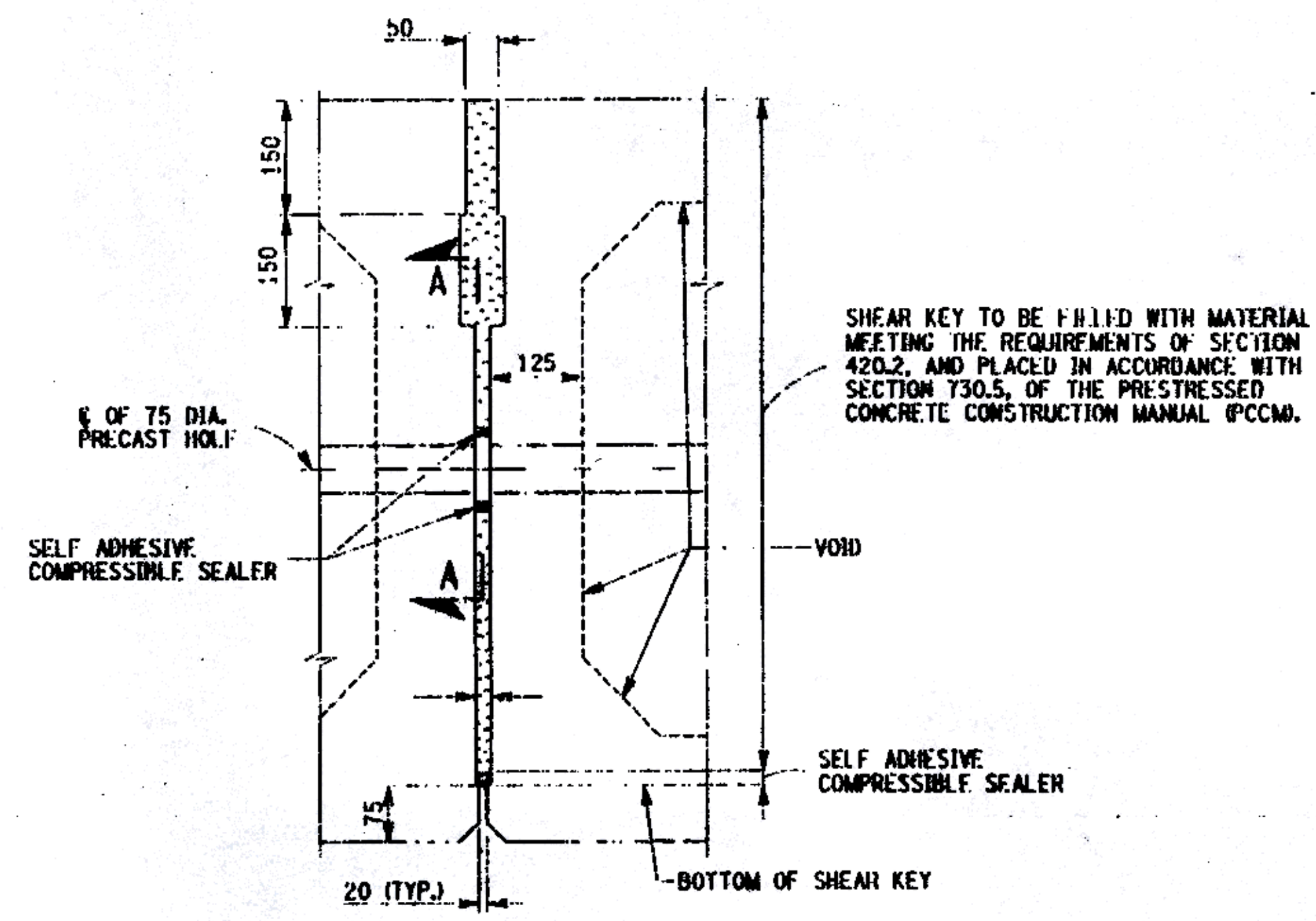
NOT TO SCALE



SECTION A-A

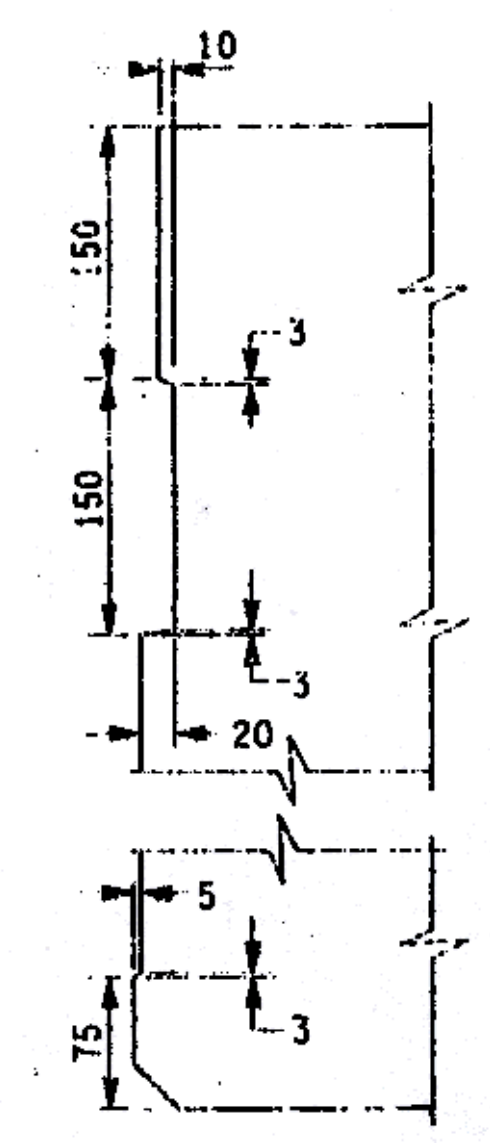
NOT TO SCALE

CONTRACTOR SHALL EXERCISE CARE THAT GROUT USED TO FILL THE SHEAR KEY SHALL NOT ENTER THE PRECAST HOLE IN CONTACT WITH THE TRANSVERSE TENDON AT ANY LOCATION (ESPECIALLY AT THE SLOPE BREAK IN THE CROSS SECTION).



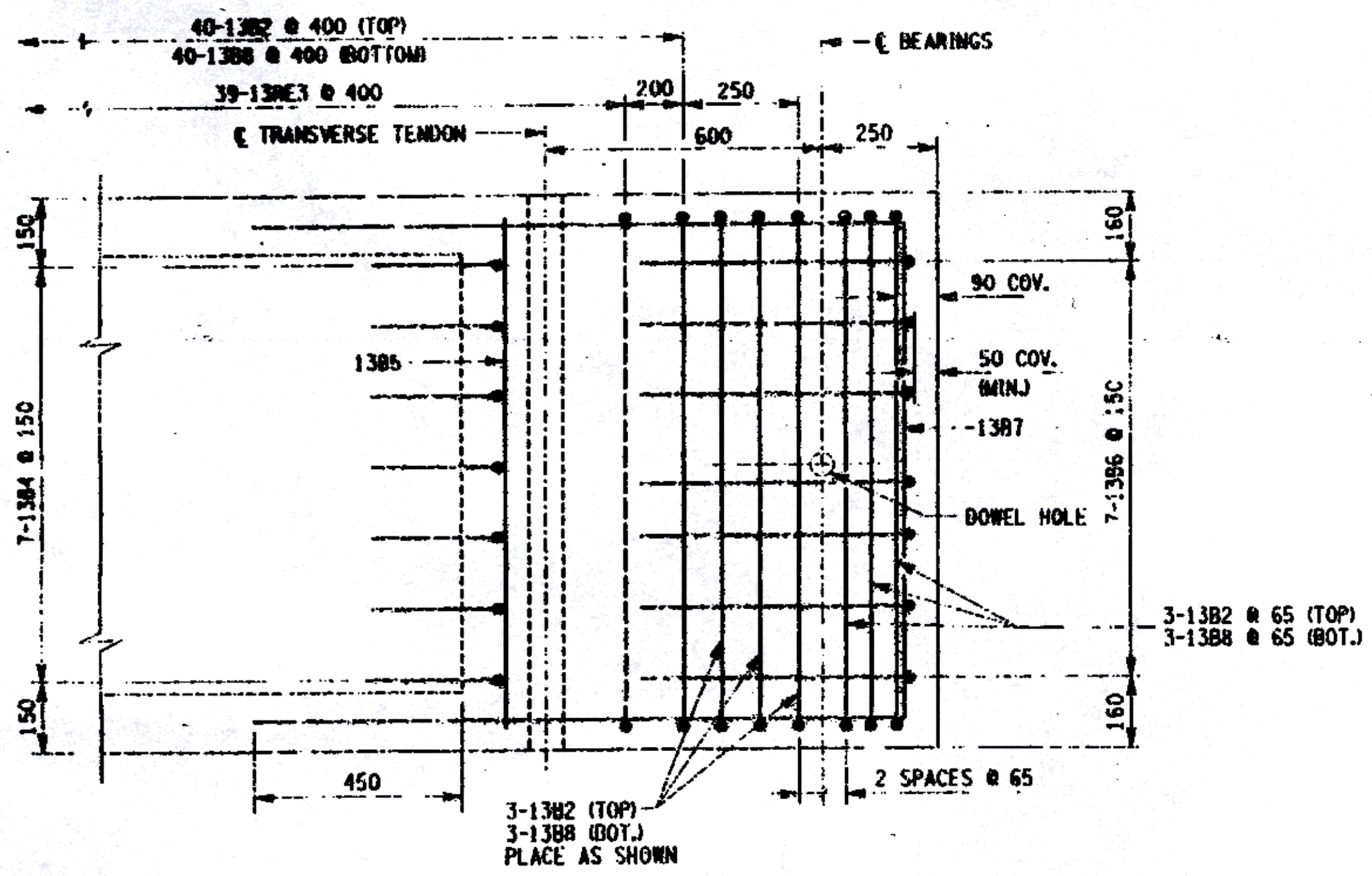
BOX BEAM SHEAR KEY DETAIL

NOT TO SCALE



BOX BEAM SHEAR KEY RECESS DETAIL

NOT TO SCALE



DETAIL A

NOT TO SCALE

FILE NAME: H:\msc\142007\CAD\142007\175376AA.V18
 DATE/TIME: 11/04/2003 10:00:00 AM
 USER: JLN

DESIGNED BY: JLN
 CHECKED BY: JLN
 ESTIMATED BY: JLN
 CRAFTED BY: JLN
 JOB MANAGER: JLN
 DESIGN SUPERVISOR: JLN