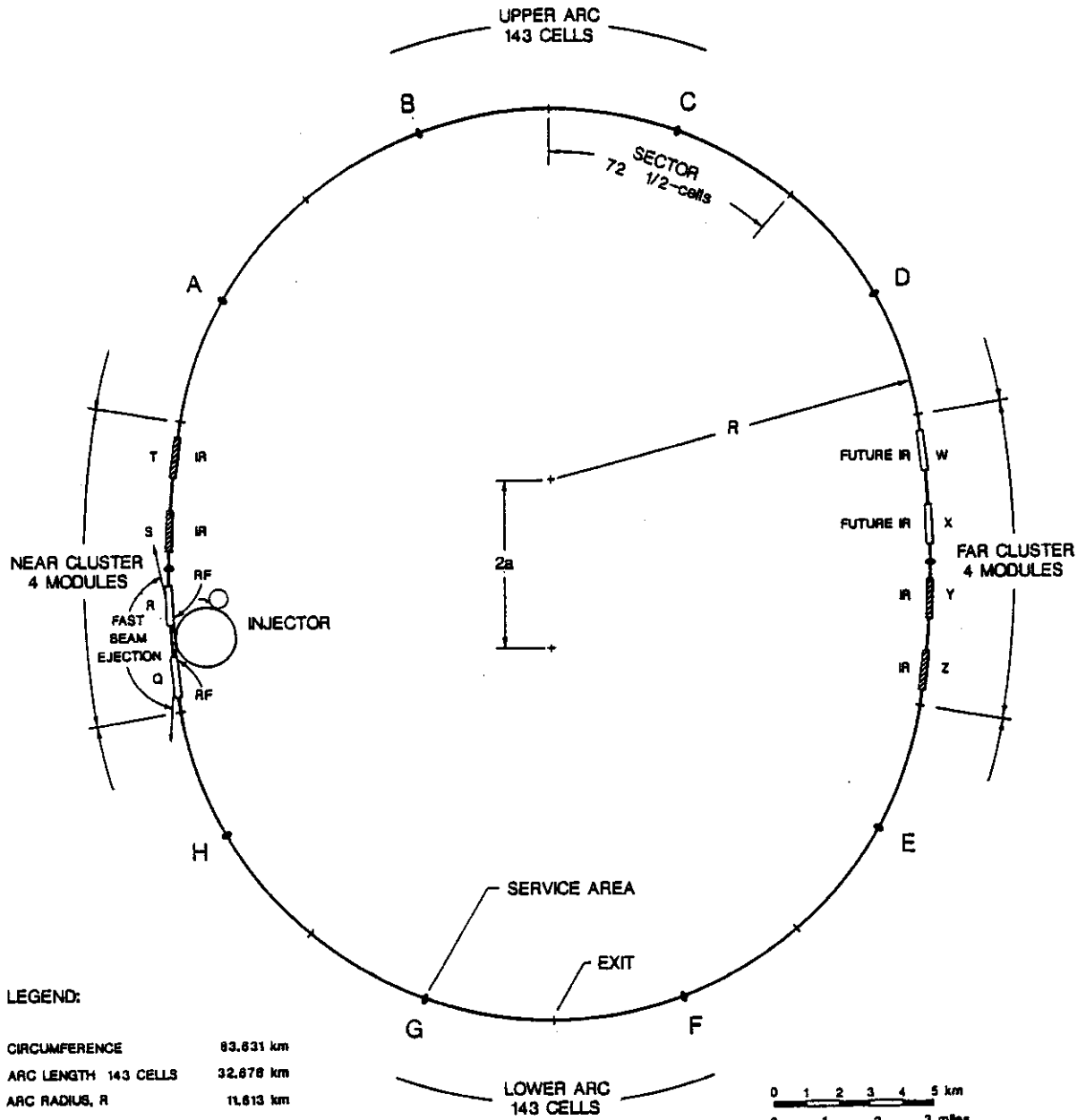


ILLUSTRATIONS: THE 90° (SEPT. 1987) SSC LATTICE
Timothy E. Toohig

Superconducting Super Collider Central Design Group

The 90° (September 1987) SSC Lattice is described in report SSC-146 by A. A. Garren and D. E. Johnson. The attached set of seven drawings characterizes the lattice in terms of parameters required for conventional facilities work.

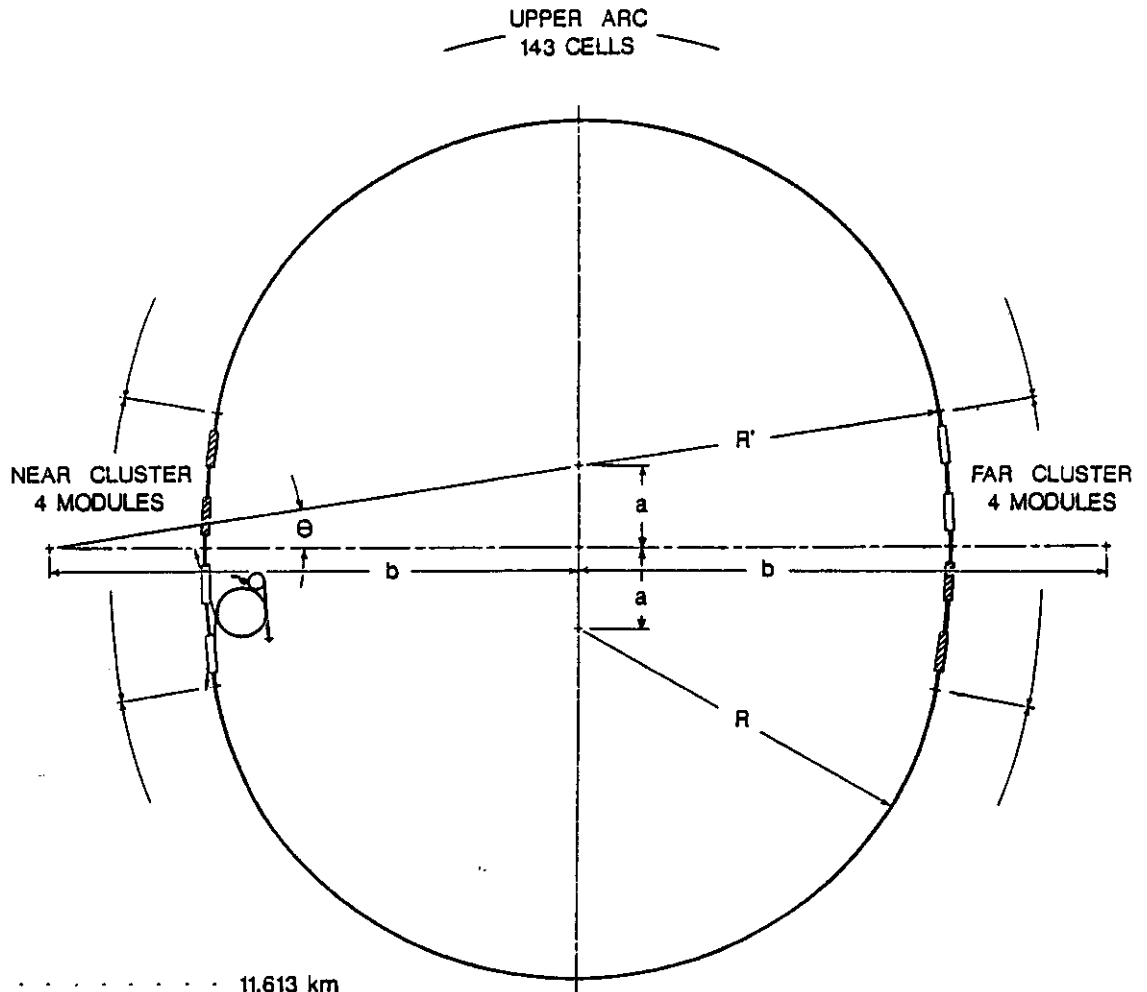
Revisions to the earlier version are: slight labeling change in site layout, addition of the Simplified Ring Template, redefinition of section lengths within a sector (per SSC-N-491), and rotation and clarification of the two cluster layouts.



SSC SITE LAYOUT
90°(SEPT. '87) LATTICE

- EXPERIMENTAL STRAIGHT
- UTILITY STRAIGHT
- SERVICE AREA
- EXIT

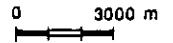
SSC CENTRAL DESIGN GROUP			
TITLE: SSC SITE LAYOUT 90°(SEPT. '87) LATTICE		DRAWING NO. B4A289	
OWN. BY: T. M.	REV. DATE:	DATE: 2-2-87	
APPR. BY: T. T.		DISK:	



ARC RADIUS, R 11.613 km
 ARC CENTER SEPARATION, $2a$ 5.308 km
 CLUSTER RADIUS, R' 27.876 km
 CLUSTER CENTER SEPARATION, $2b$ 32.090 km
 CLUSTER ANGLE, θ -9.39°

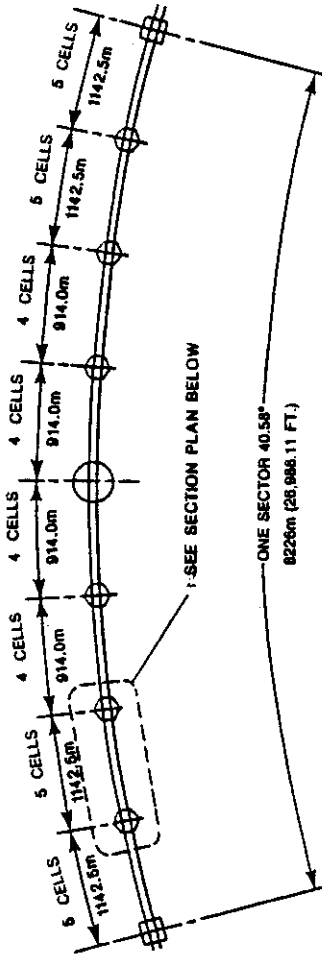
UPPER ARC
143 CELLS

LOWER ARC
143 CELLS



SIMPLIFIED RING "TEMPLATE"
 90° (SEPT. '87) LATTICE

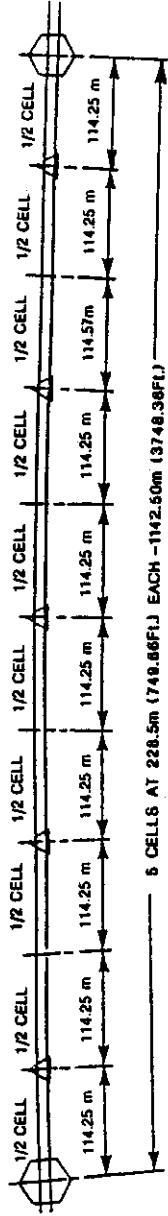
SSC CENTRAL DESIGN GROUP			
SSC COLLIDER RING TEMPLATE 90° (SEPT. '87) LATTICE			DRAWING NO. B4A291
OWN. BY: TM	REV. DATE:		
APPR. BY: TT	DATE 3-1-'88	DISK:	



0 500 1000 METERS

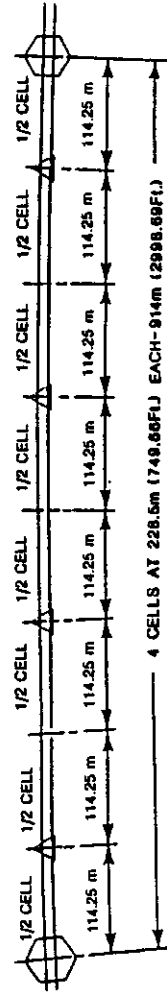
STANDARD SECTOR PLAN (= 8 SECTIONS, 36 CELLS)

- LEGEND:
- SECTOR SERVICE AREA (ABOVE AND BELOW GROUND)
 - EXIT (ABOVE AND BELOW GROUND)
 - CRYO ISOLATION POINTS AND ELECTRICAL DISTRIBUTION CENTER (BELOW GROUND)
 - △ ELECTRONICS NICHE + QB SWITCH (BELOW GROUND)



0 50 100 METERS

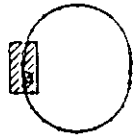
SECTION PLAN (5 CELLS)



0 50 100 METERS

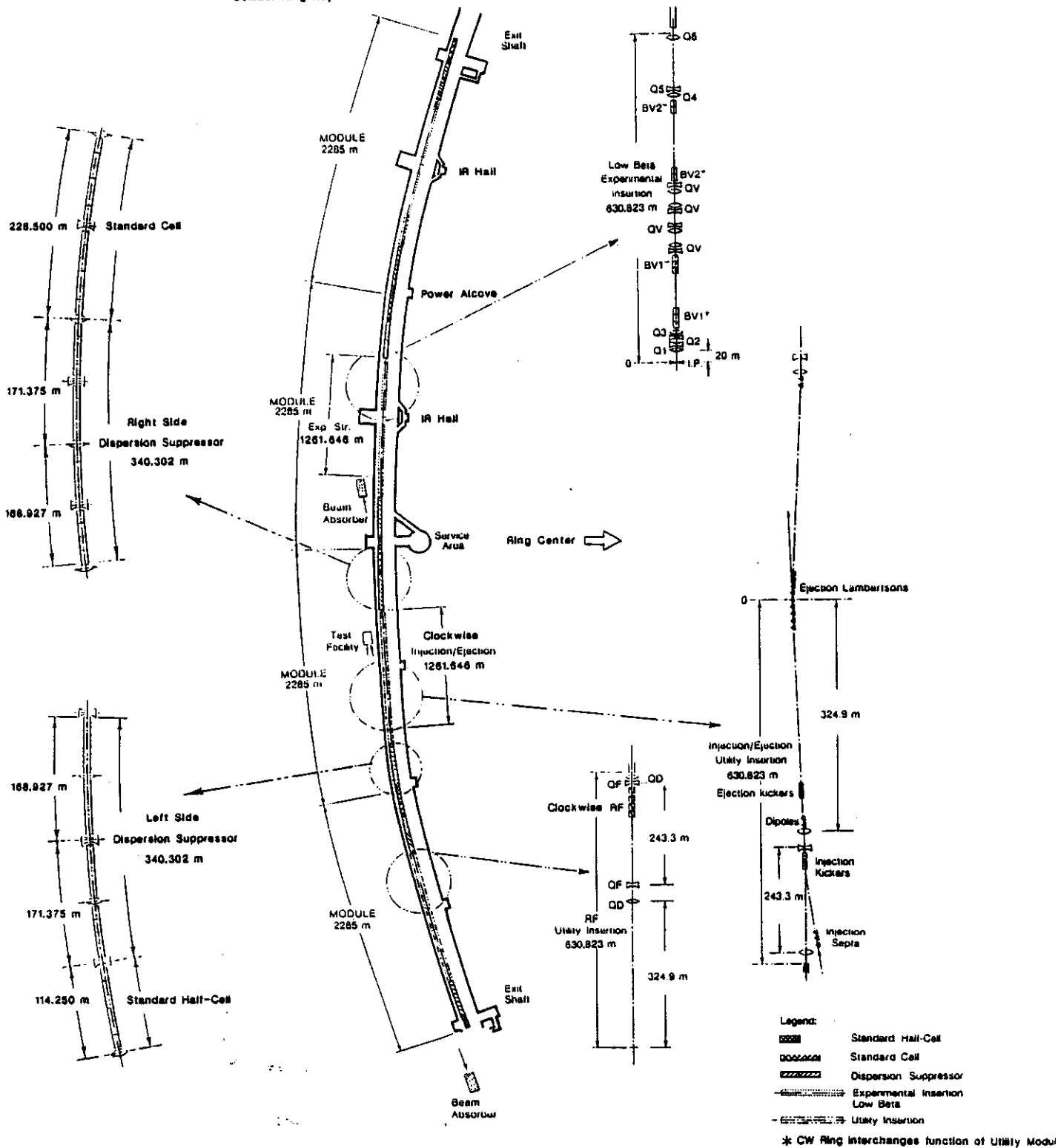
SECTION PLAN (4 CELLS)

SSC CENTRAL DESIGN GROUP			
DRAWING NO	TITLE		
B3A297	COLLIDER RING/STANDARD SECTOR		
SHEET	OF	DWN BY: TM	REV. DATE
SCALE		APPR BY: TT	DATE: 9-28-06



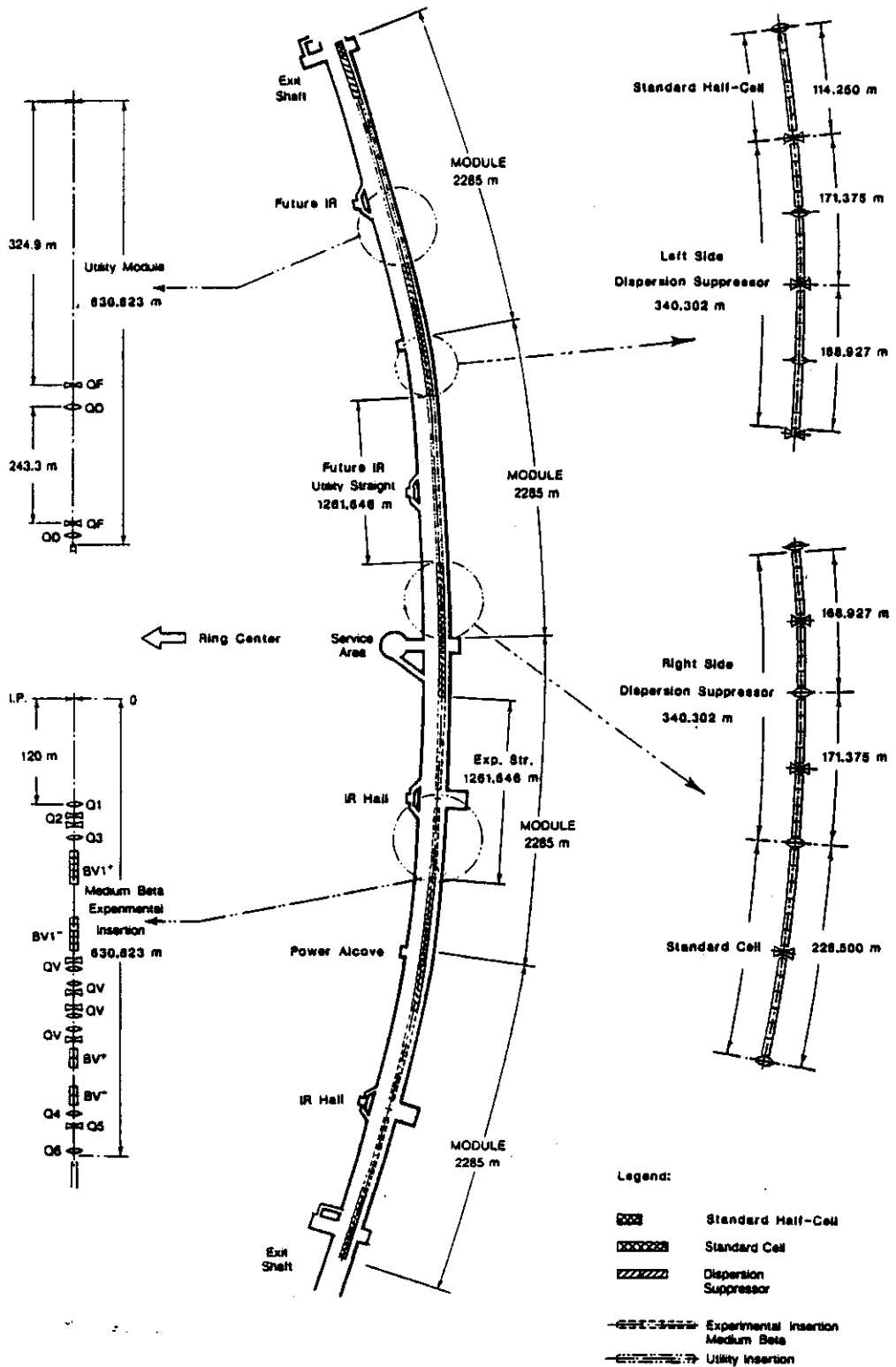
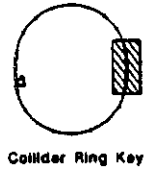
Collider Ring Key

NEAR CLUSTER
CLOCKWISE RING*



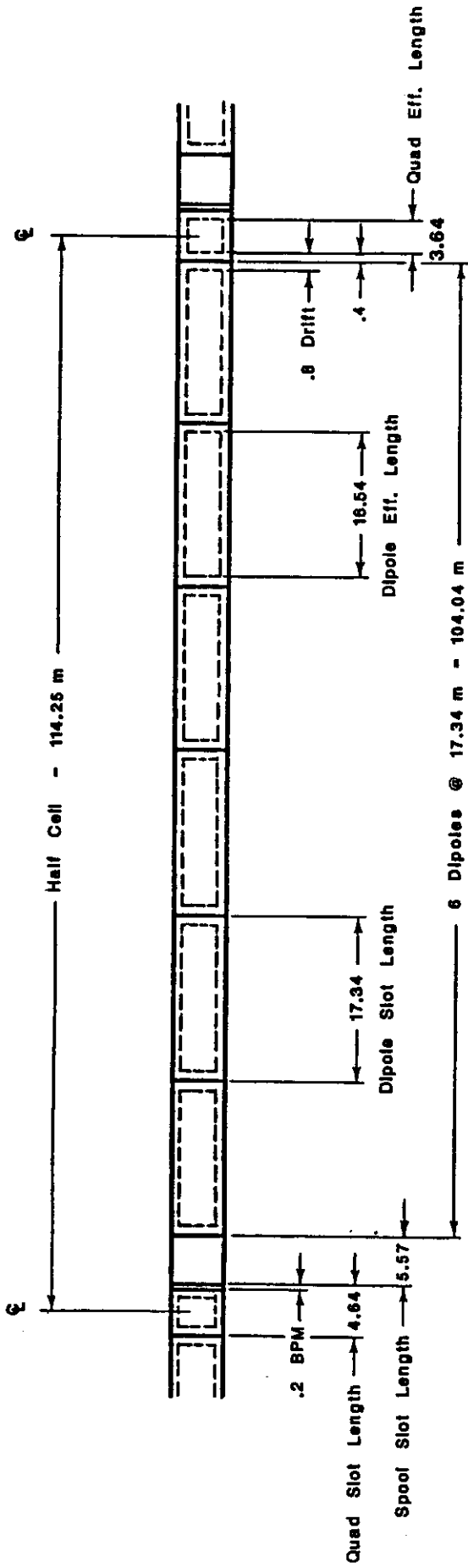
SSC CENTRAL DESIGN GROUP	
TITLE: NEAR CLUSTER 90° (SEPT. '88) LATTICE	DRAWING NO. B4A295
DWN. BY: TC/TM	REV. DATE:
APPR. BY: TT	DATE 3-24-'88 DISK:

FAR CLUSTER
CLOCKWISE RING



- Legend:
- Standard Half-Cell
 - Standard Cell
 - Dispersion Suppressor
 - Experimental Insertion Medium Beta
 - Utility Insertion

SSC CENTRAL DESIGN GROUP	
TITLE: FAR CLUSTER 90° (SEPT. '88) LATTICE	DRAWING NO. B4A296
OWN. BY: TC/TM	REV. DATE:
APPR. BY: TT	DATE: 3-24-'88 DISK:



STANDARD HALF CELL - 90° OPTION (SEPT. '87) LATTICE

(G=230 T/m, B=6.6 T)

SSC CENTRAL DESIGN GROUP			
PROJECT NO.	COLLIDER, 90° OPTION		
B3A286	STANDARD HALF CELL		
SHEET OF	DRAW BY	DATE	
	RH		
SCALE	APPROV BY	T. T.	1-28-88