

8 7 6 5 4 3 2 1

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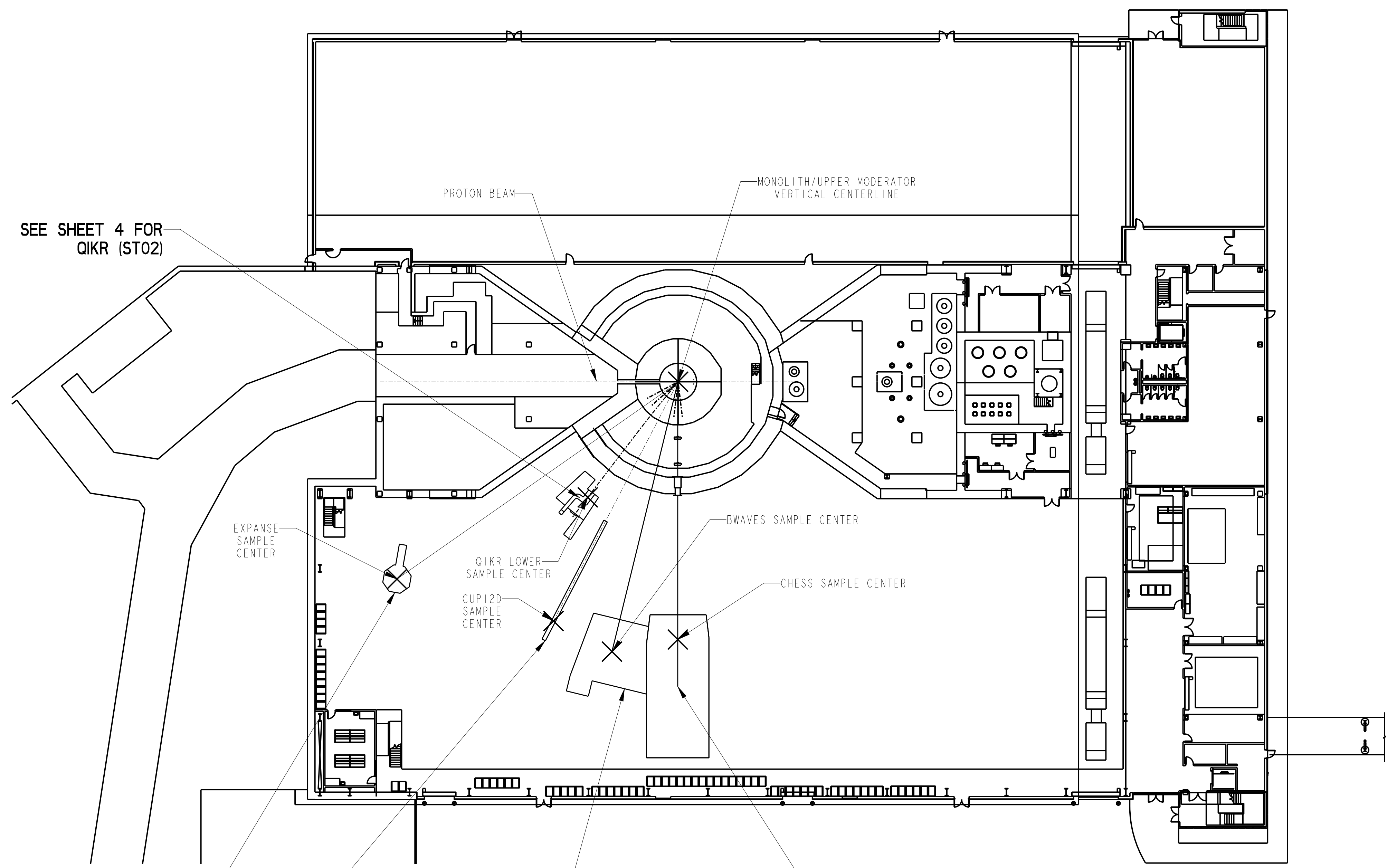
APPROVAL BLOCK

REV	DESCRIPTION OF CHANGE	DES	CHK	ENG	API	AP2	AP3	DATE
0	ORIGINAL ISSUE	KLW	WJT		VBG			02/28/2024
1	RESIVED POSITIONS OF INSTRUMENTS AND CHSS INSTRUMENT PIT WAS 1.7M DEEP	KLW	WJT		VBG			02/28/2024
2	ADDED MODERATOR DETAIL VIEWS, CHANGED DIMENSIONING SCHEME, MODIFIED QIKR PIT GEOMETRY	KLW	WJT		VBG	MES		04/19/2024
3	ADDED MISSING DIMENSION ON QIKR AND CHANGED OVERALL DIMENSION DECIMAL PLACES	KLW	WJT		VBG	MES		06/06/2024
4	MODIFIED EXPANSE AND QIKR PIT GEOMETRY. BWAVES AND CHSS PITS MERGED	KLW	WJT		VBG	MES		08/08/2024
5	CHANGED DIMENSIONING SCHEME ON QIKR AND EXPANSE, ADDED SHEETS AND VIEWS FOR GREATER DETAIL							

NOTES:

- ANGULAR DIMENSIONS ARE TAKEN FROM PROTON BEAM.
- ORTHOGONAL DIMENSIONS FOR PITS ARE TAKEN FROM THE VERTICAL SAMPLE CENTERLINE.
- ALL DEPTHS ARE TAKEN FROM INSTRUMENT FLOOR ELEVATION.
- THESE DIMENSIONS DEFINE SAMPLE CENTER AND FINAL STRAIGHT SECTION OF QIKR LOWER BEAMLINE. FOR FULL BEAM PATH DEFINITION SEE DRAWING S04020000-B8U-8840-A10000 INSTRUMENT CONTROL DRAWING.

D
C
B
A



SEE SHEET 4 FOR QIKR (ST02)

EXPANSE SAMPLE CENTER

QIKR LOWER SAMPLE CENTER

CUPI2D SAMPLE CENTER

BWAVES SAMPLE CENTER

CHSS SAMPLE CENTER

SEE SHEET 7 FOR CUPI2D (ST03)

SEE SHEET 9 FOR CHSS (ST05)

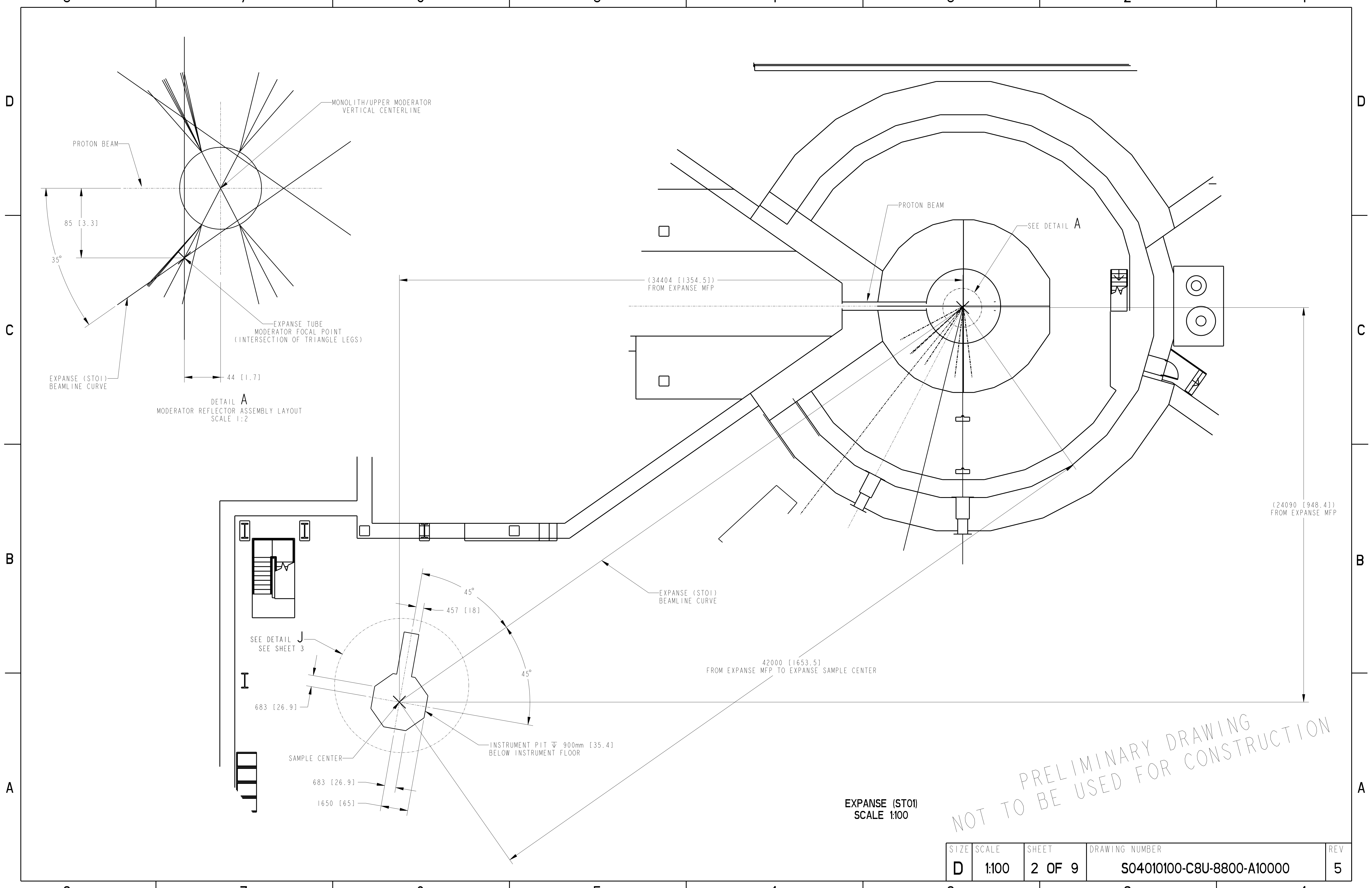
SEE SHEET 2 FOR EXPANSE (ST01)

SEE SHEET 8 FOR BWAVES (ST04)

PRELIMINARY DRAWING
NOT TO BE USED FOR CONSTRUCTION

UNITS: MILLIMETERS		OAK RIDGE National Laboratory	HIGH FLUX ISOTOPE REACTOR SPALLATION NEUTRON SOURCE
DEFAULT TOLERANCES 0-6 ±0.1 >6-120 ±0.2 >120 ±0.5 ANGULAR ±0.5°			
BREAK ALL SHARP EDGES EXCEPT AS NOTED: 15 MAX SURFACE ROUGHNESS: 3.2 Ra UNO.		SECOND TARGET STATION INTERFACE CONTROL DRAWING INSTRUMENT PITS	
DRAFTING STD: ASME Y14.100 D & T: ASME Y14.5 WELD SYMBOLS: AWS A2.4			
THIRD ANGLE PROJECTION		DRAWING NUMBER S04010100-C8U-8800-A10000	REV 5
SIZE D	SCALE 1:1600	WEIGHT N/A	SHEET 1 of 9

8 7 6 5 4 3 2 1

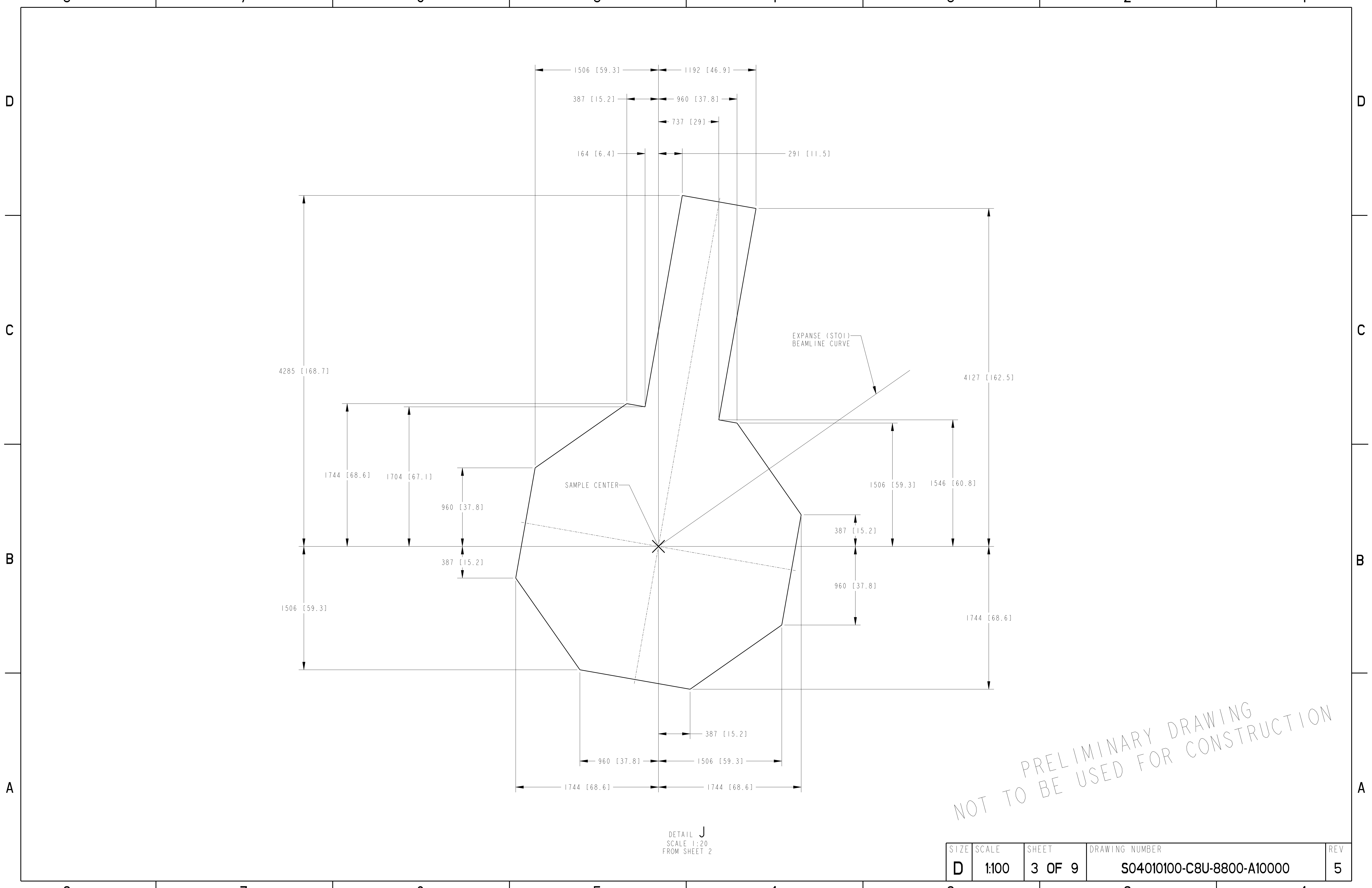


DETAIL A
MODERATOR REFLECTOR ASSEMBLY LAYOUT
SCALE 1:2

EXPANCE (ST01)
SCALE 1:100

PRELIMINARY DRAWING
NOT TO BE USED FOR CONSTRUCTION

SIZE	SCALE	SHEET	DRAWING NUMBER	REV
D	1:100	2 OF 9	S04010100-C8U-8800-A10000	5



PRELIMINARY DRAWING
NOT TO BE USED FOR CONSTRUCTION

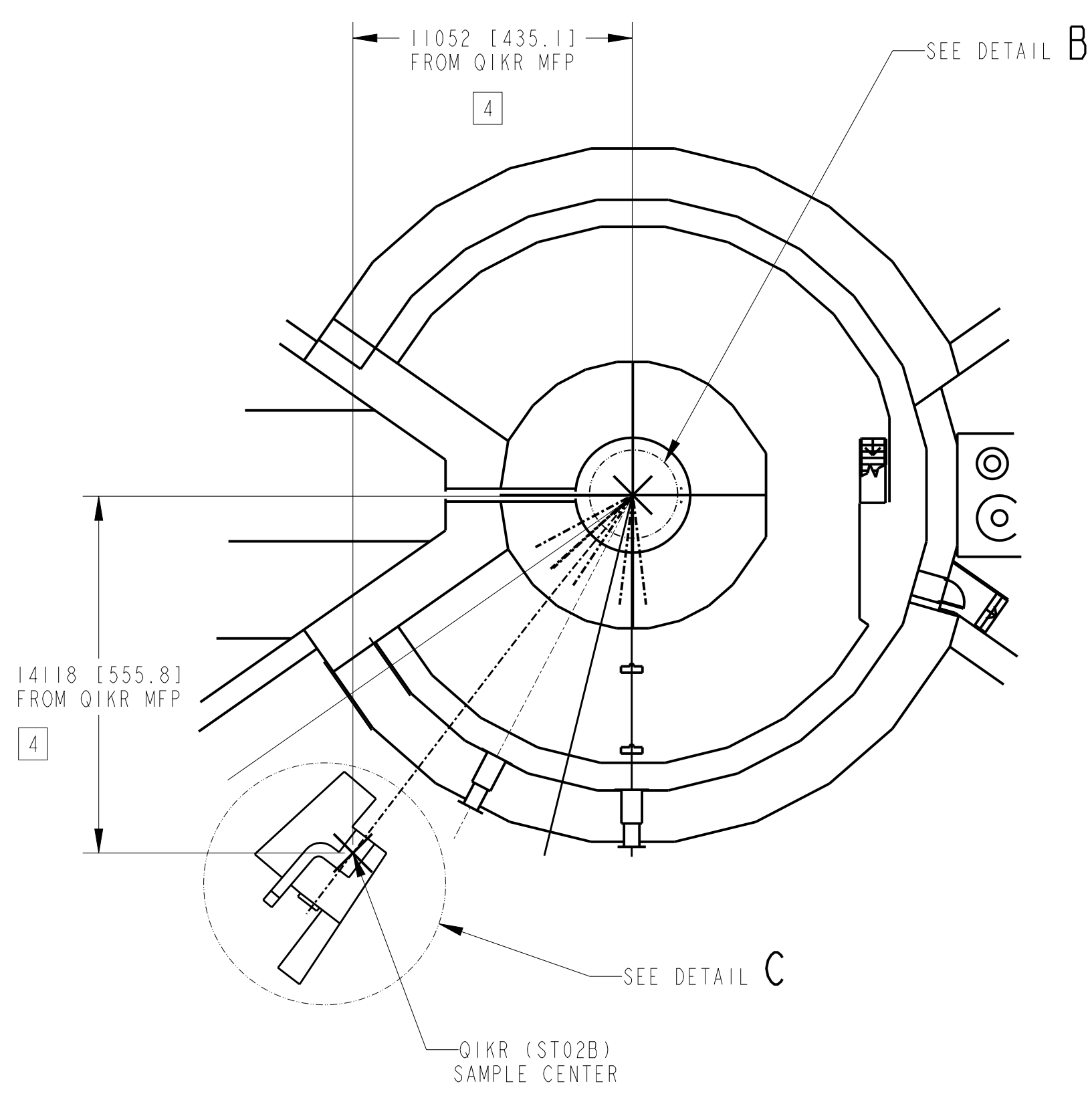
DETAIL J
SCALE 1:20
FROM SHEET 2

SIZE	SCALE	SHEET	DRAWING NUMBER	REV
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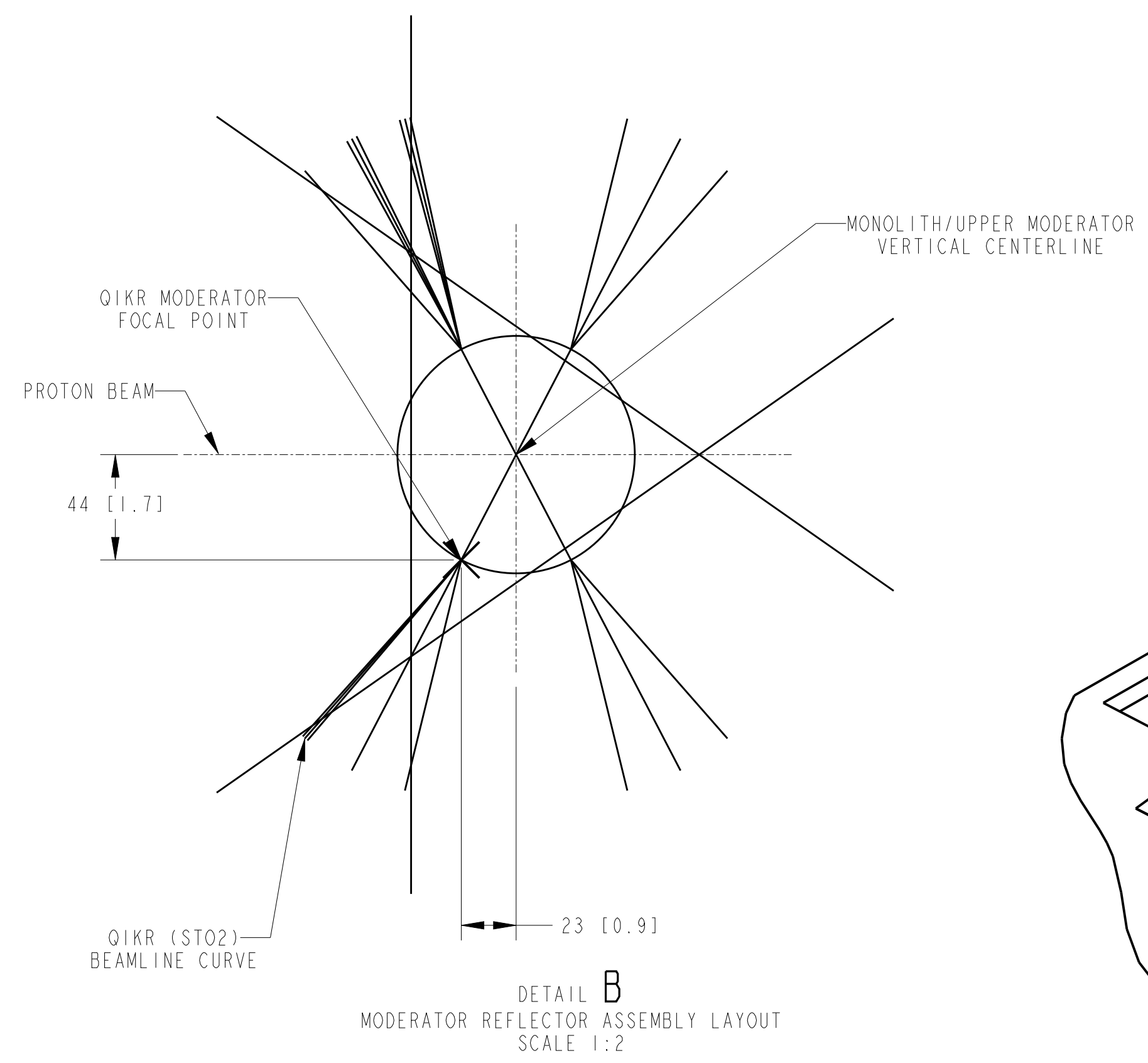
8 7 6 5 4 3 2 1

D
C
B
A

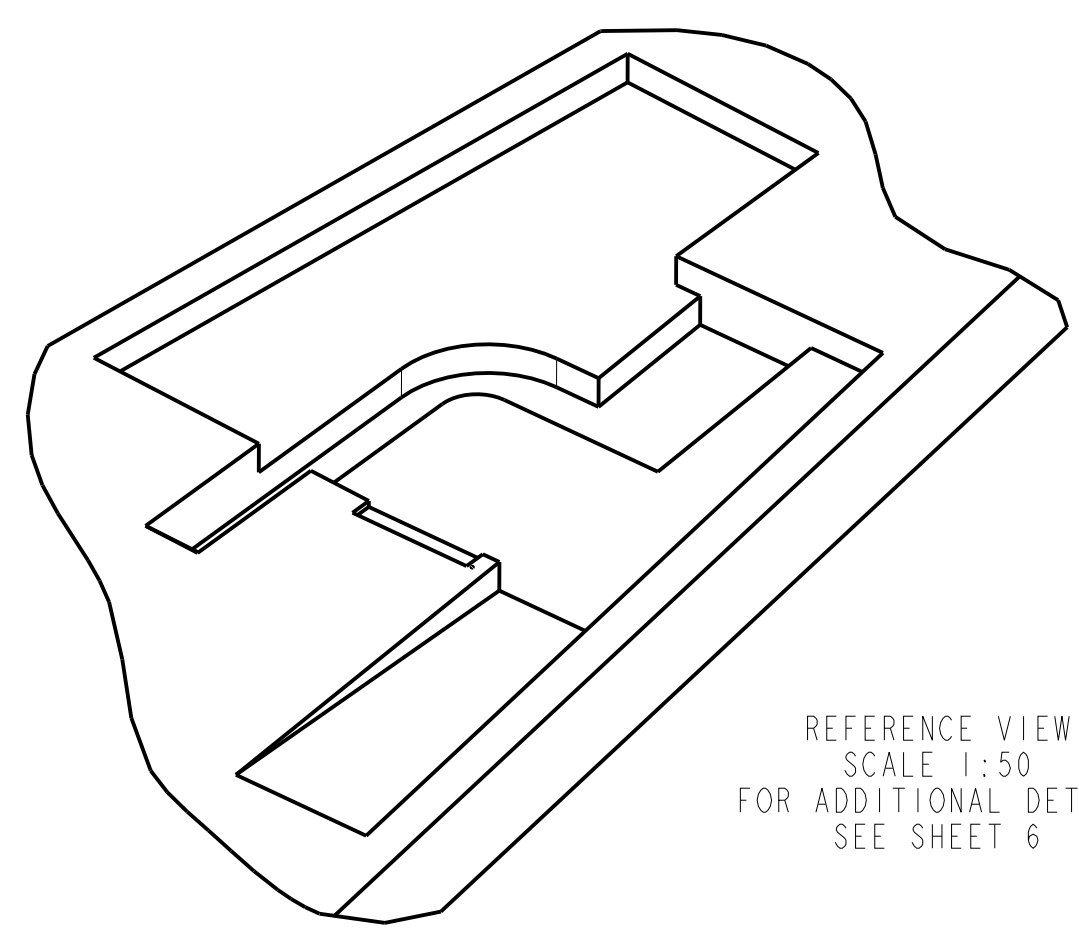
D
C
B
A



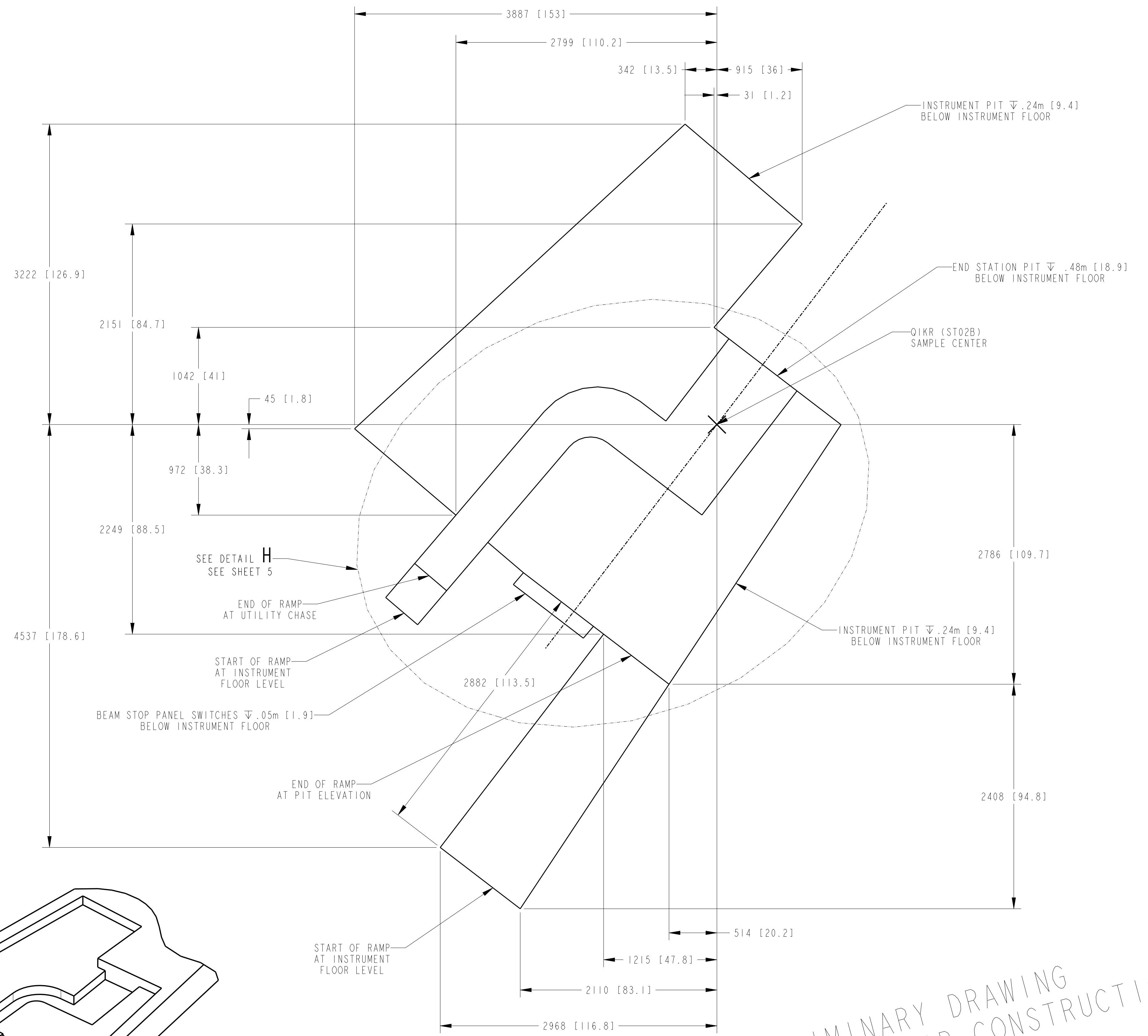
QIKR (ST02)
SCALE 1:200



DETAIL B
MODERATOR REFLECTOR ASSEMBLY LAYOUT
SCALE 1:2



REFERENCE VIEW
SCALE 1:50
FOR ADDITIONAL DETAIL
SEE SHEET 6

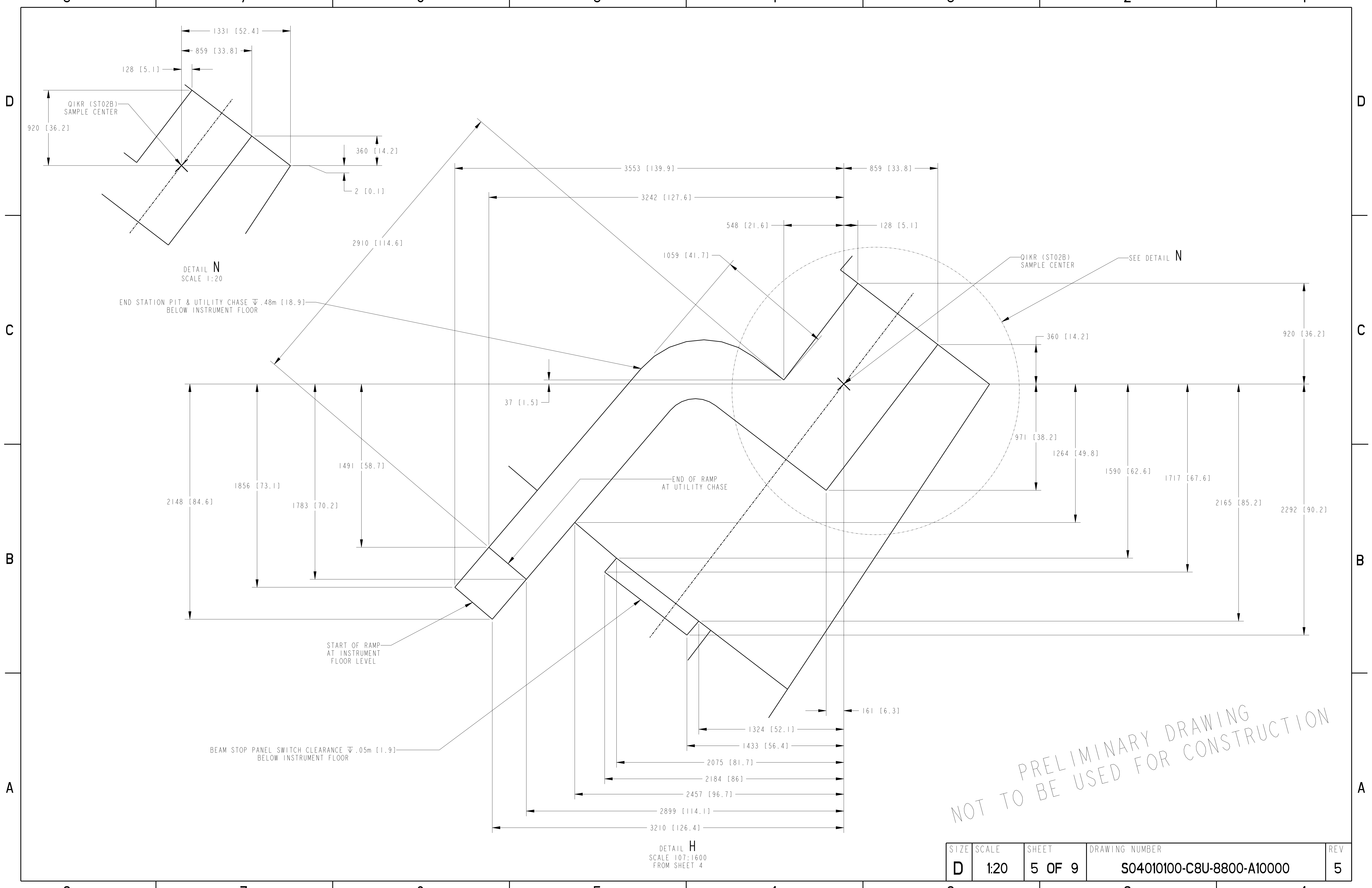


DETAIL C
SCALE 1:25

PRELIMINARY DRAWING
NOT TO BE USED FOR CONSTRUCTION

SIZE	SCALE	SHEET	DRAWING NUMBER	REV
D	1:1600	4 OF 9	S04010100-C8U-8800-A10000	5

8 7 6 5 4 3 2 1



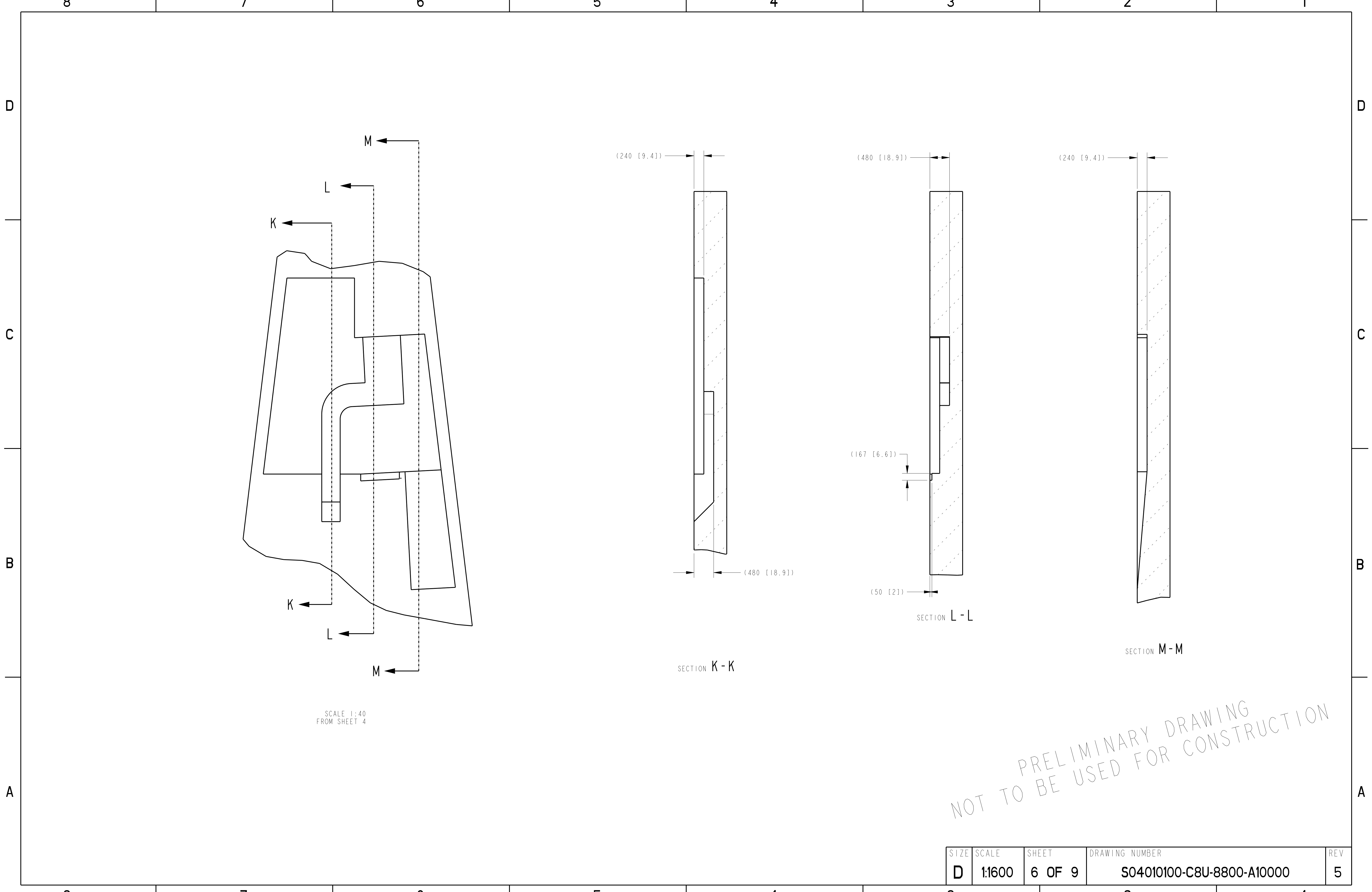
DETAIL N
SCALE 1:20

END STATION PIT & UTILITY CHASE ∇ .48m [18.9]
BELOW INSTRUMENT FLOOR

DETAIL H
SCALE 107:1600
FROM SHEET 4

PRELIMINARY DRAWING
NOT TO BE USED FOR CONSTRUCTION

SIZE	SCALE	SHEET	DRAWING NUMBER	REV
D	1:20	5 OF 9	S04010100-C8U-8800-A10000	5



SCALE 1:40
FROM SHEET 4

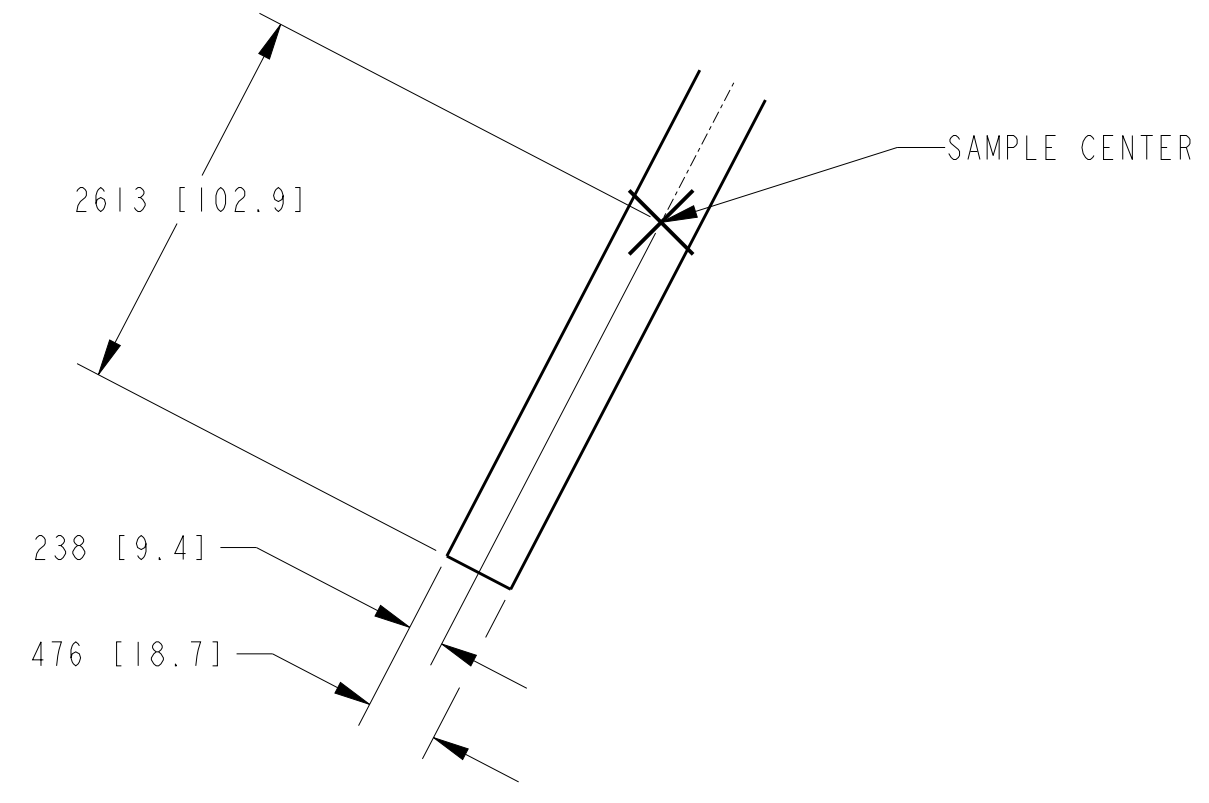
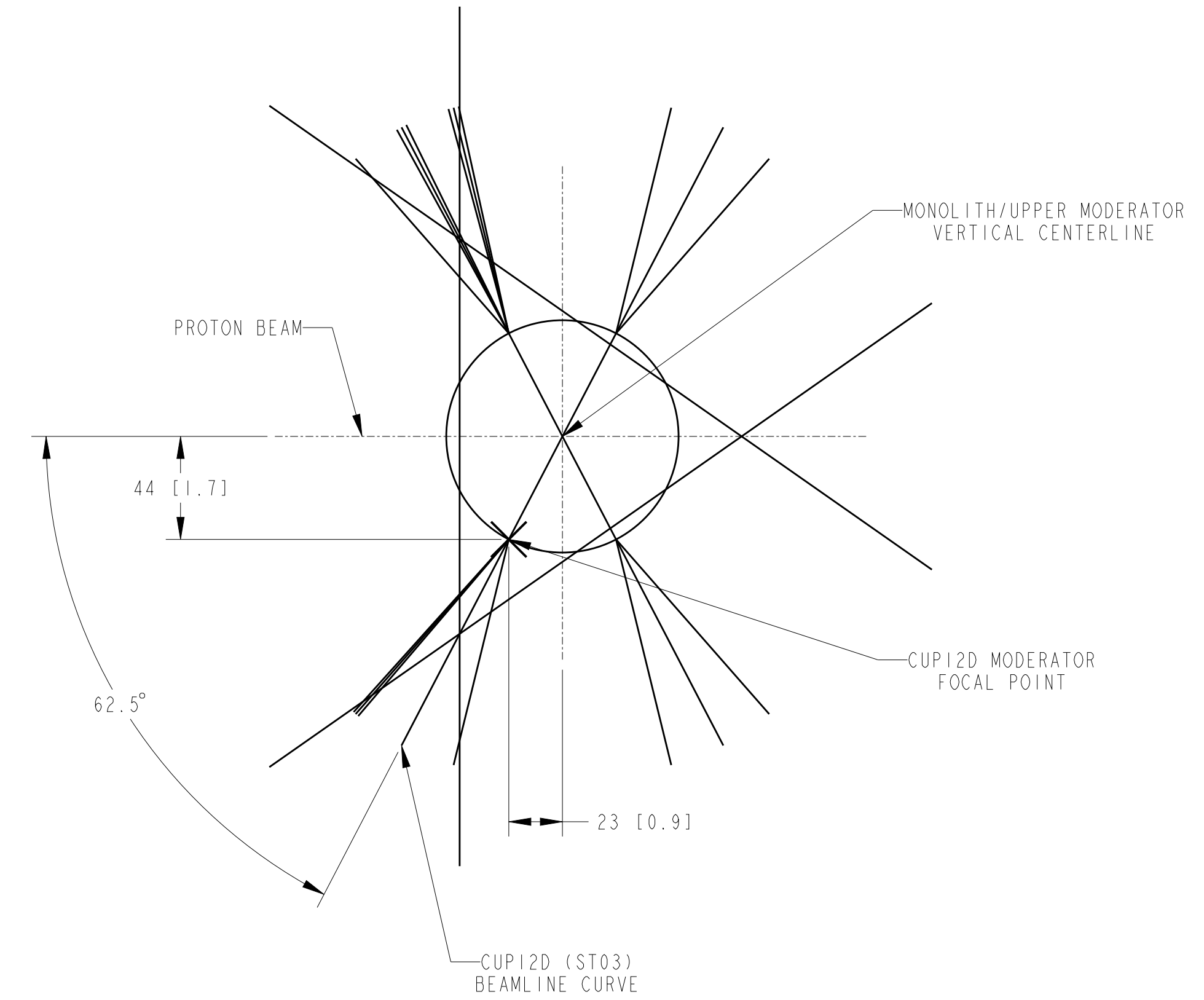
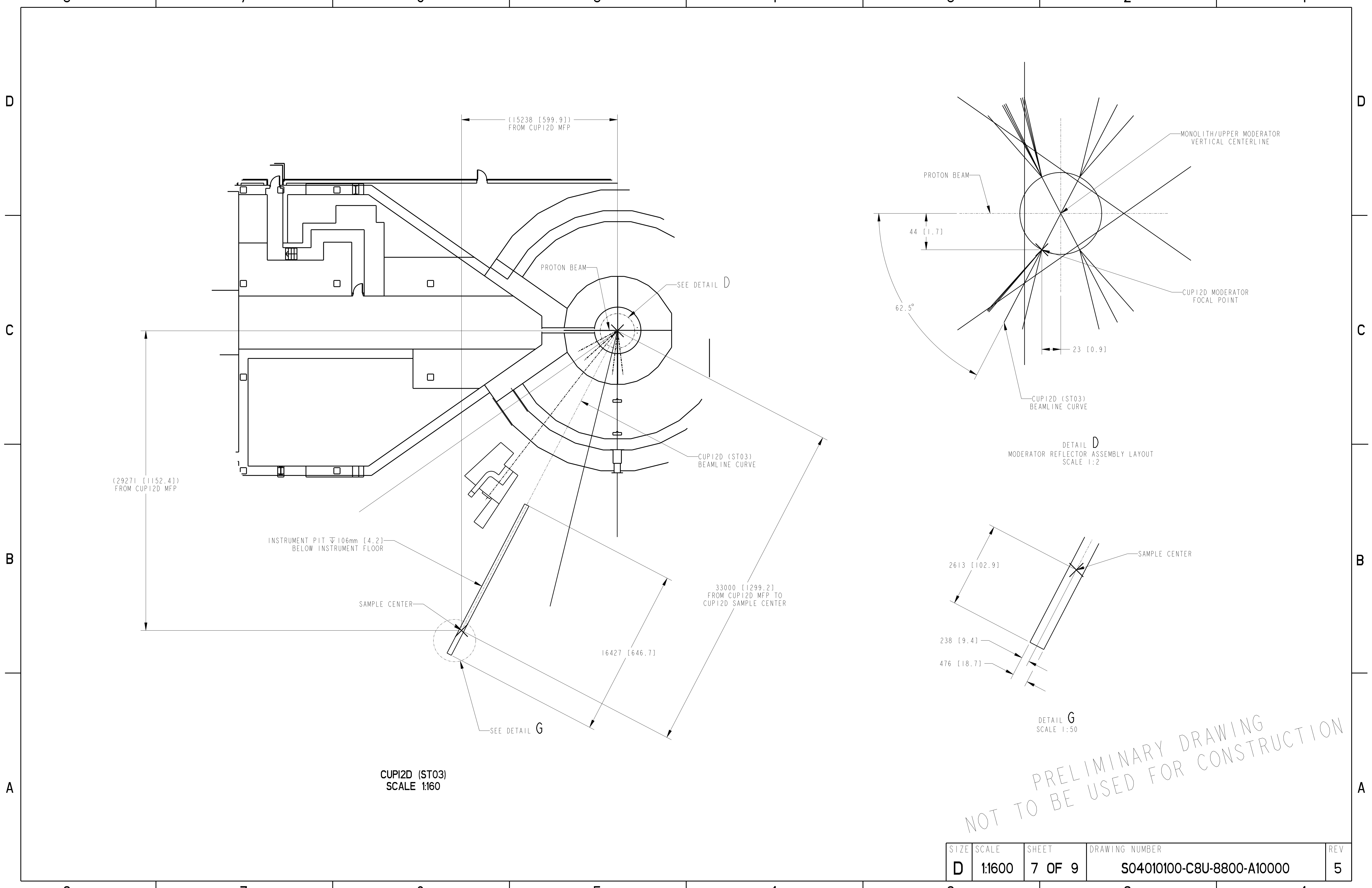
SECTION K-K

SECTION L-L

SECTION M-M

PRELIMINARY DRAWING
NOT TO BE USED FOR CONSTRUCTION

SIZE	SCALE	SHEET	DRAWING NUMBER	REV
D	1:1600	6 OF 9	S04010100-C8U-8800-A10000	5



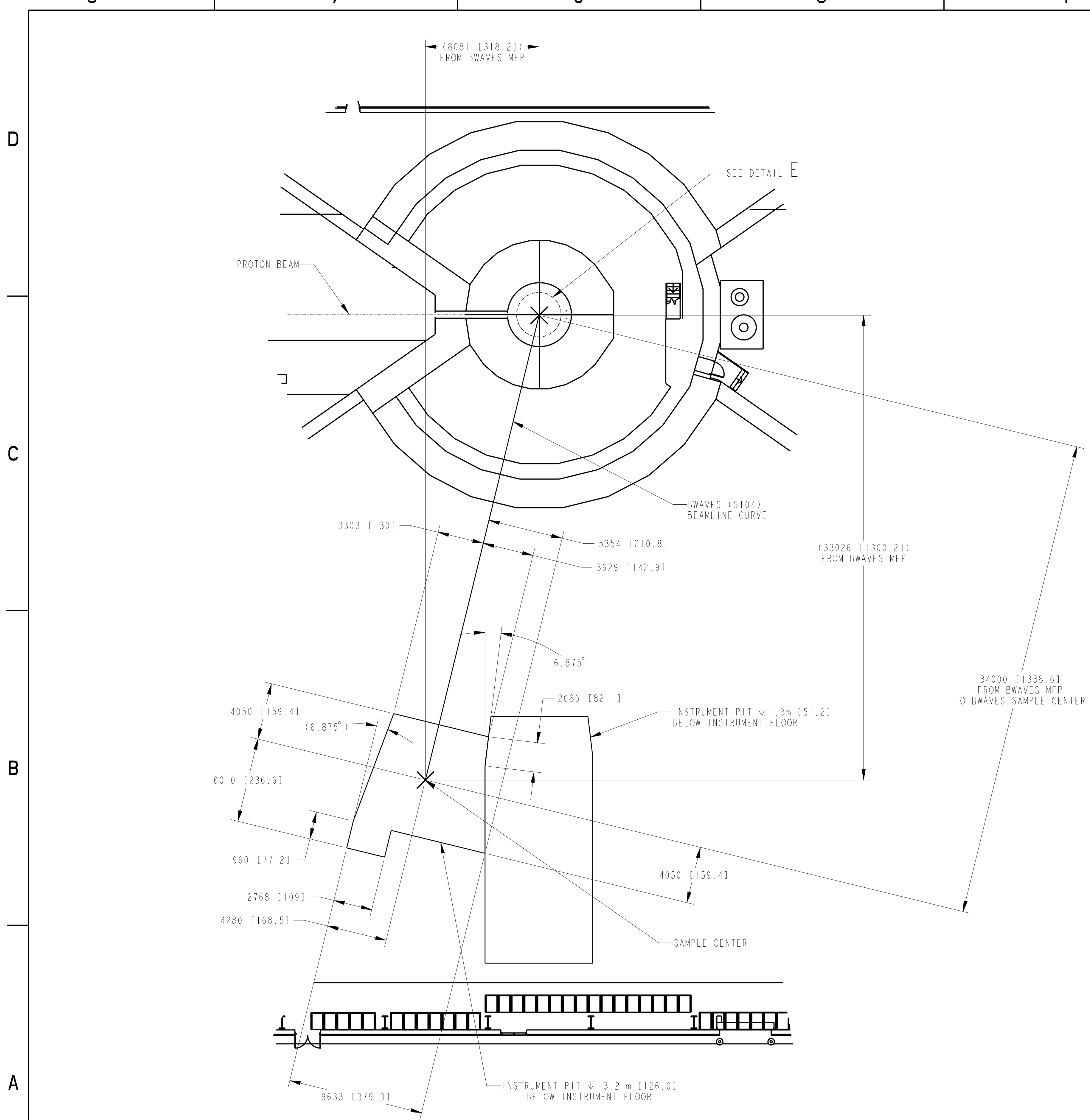
CUP12D (ST03)
SCALE 1:160

DETAIL D
MODERATOR REFLECTOR ASSEMBLY LAYOUT
SCALE 1:2

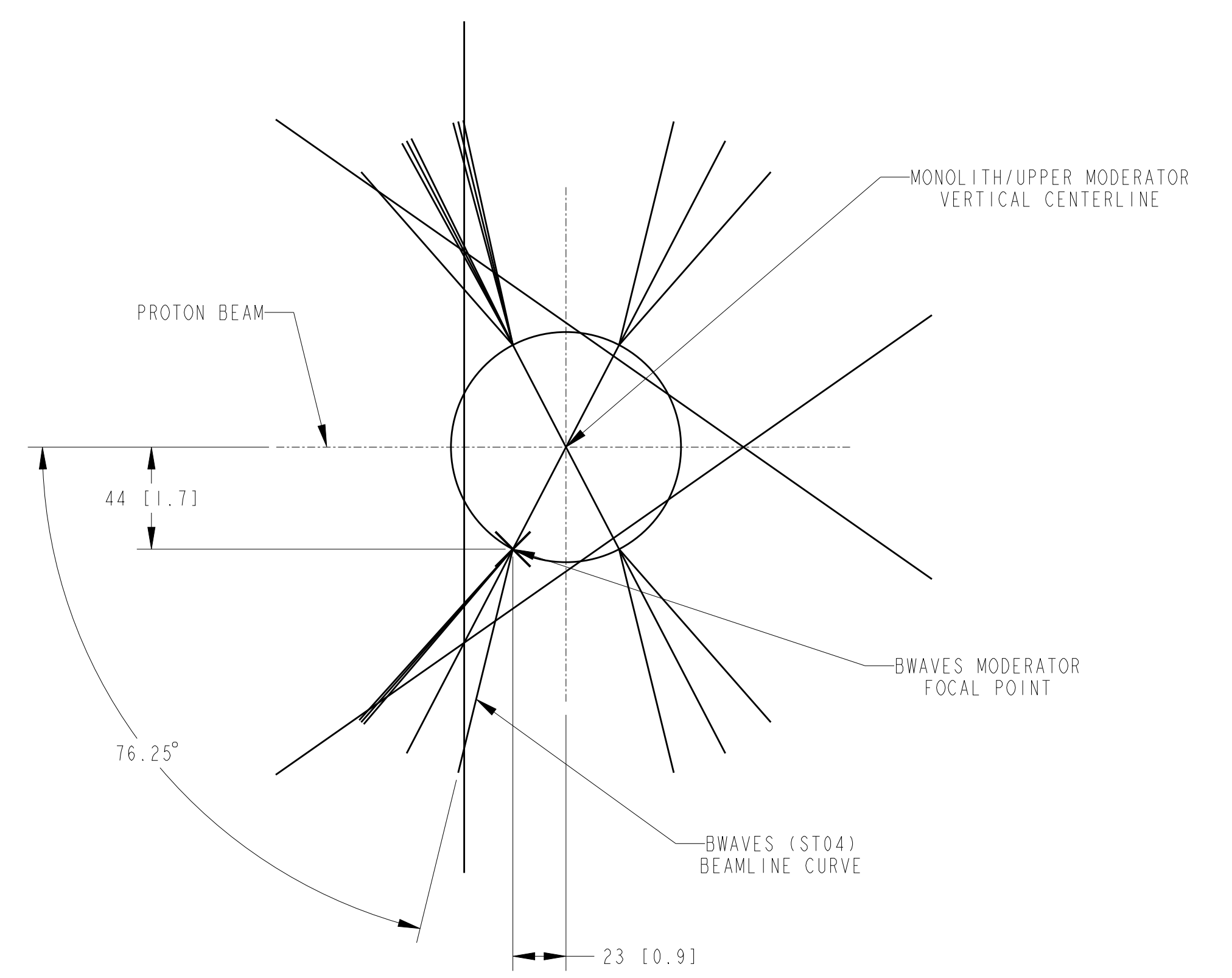
DETAIL G
SCALE 1:50

PRELIMINARY DRAWING
NOT TO BE USED FOR CONSTRUCTION

SIZE	SCALE	SHEET	DRAWING NUMBER	REV
D	1:1600	7 OF 9	S04010100-C8U-8800-A10000	5



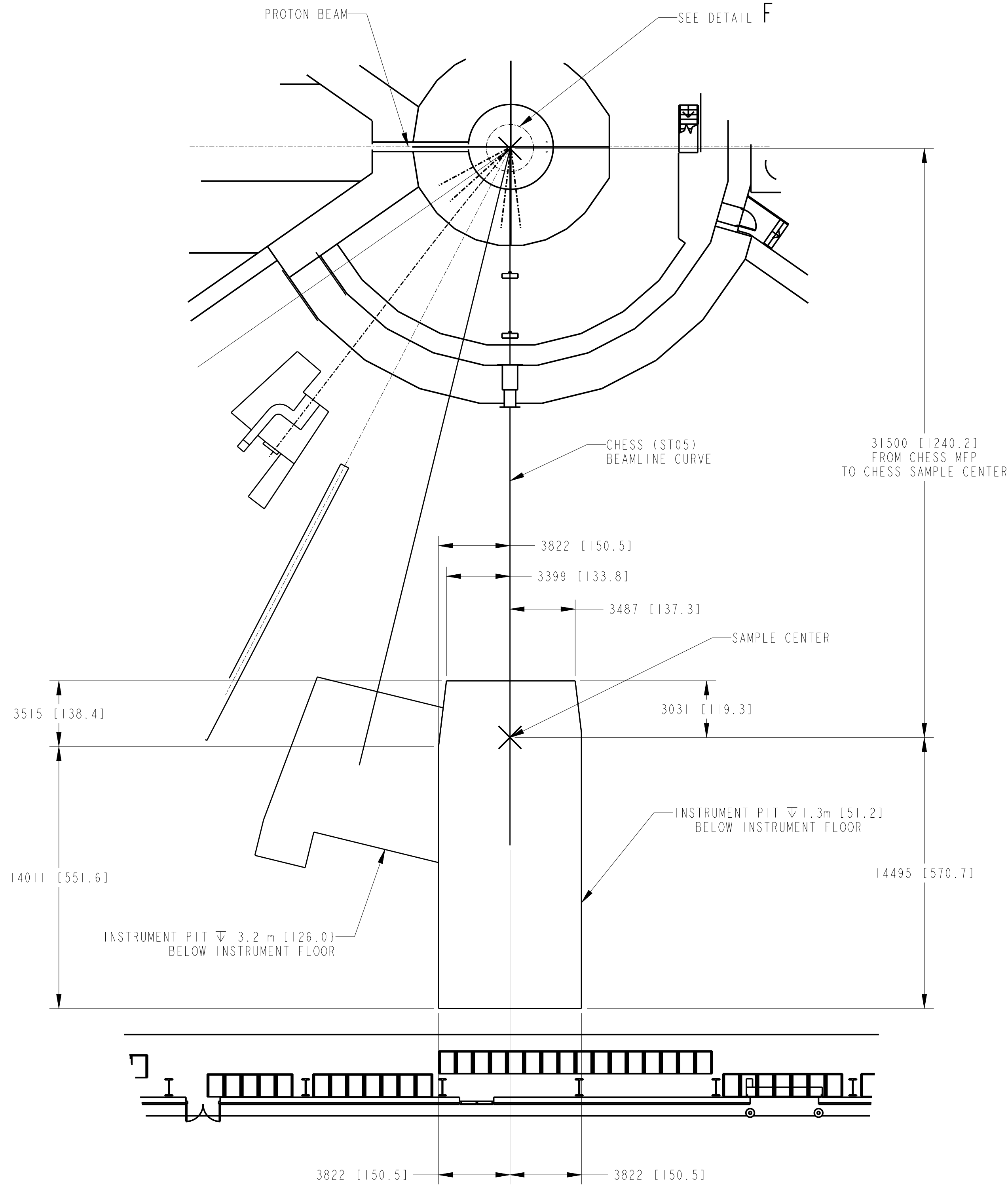
BWAVES (ST04)
SCALE 1:160



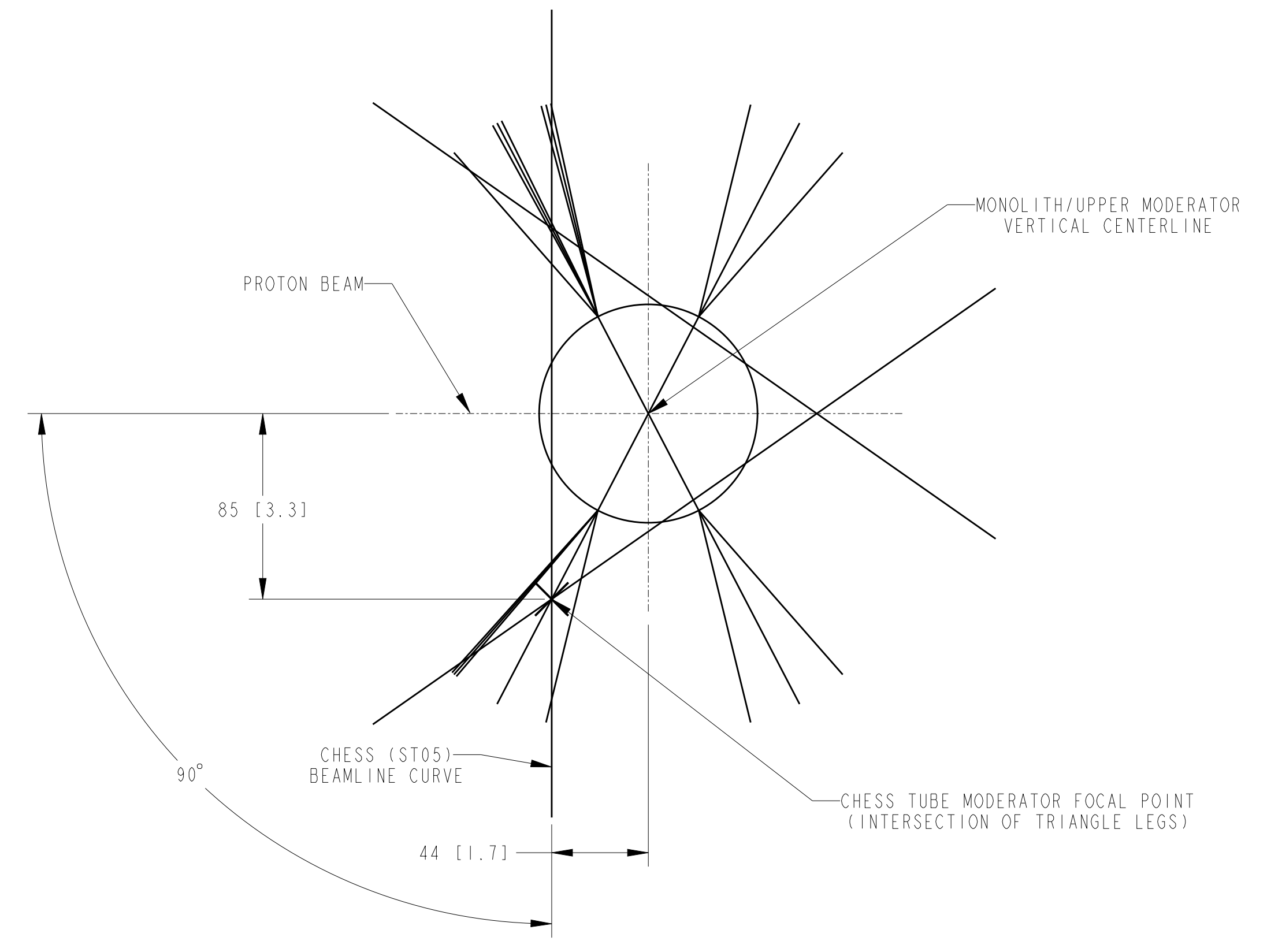
DETAIL E
MODERATOR REFLECTOR ASSEMBLY LAYOUT
SCALE 1:2

PRELIMINARY DRAWING
 NOT TO BE USED FOR CONSTRUCTION

SIZE	SCALE	SHEET	DRAWING NUMBER	REV
D	1:1600	8 OF 9	S04010100-C8U-8800-A10000	5



CHES (ST05)
SCALE 1:160



DETAIL F
MODERATOR REFLECTOR ASSEMBLY LAYOUT
SCALE 1:2

PRELIMINARY DRAWING
NOT TO BE USED FOR CONSTRUCTION

SIZE	SCALE	SHEET	DRAWING NUMBER	REV
D	1:1600	9 OF 9	S04010100-C8U-8800-A10000	5