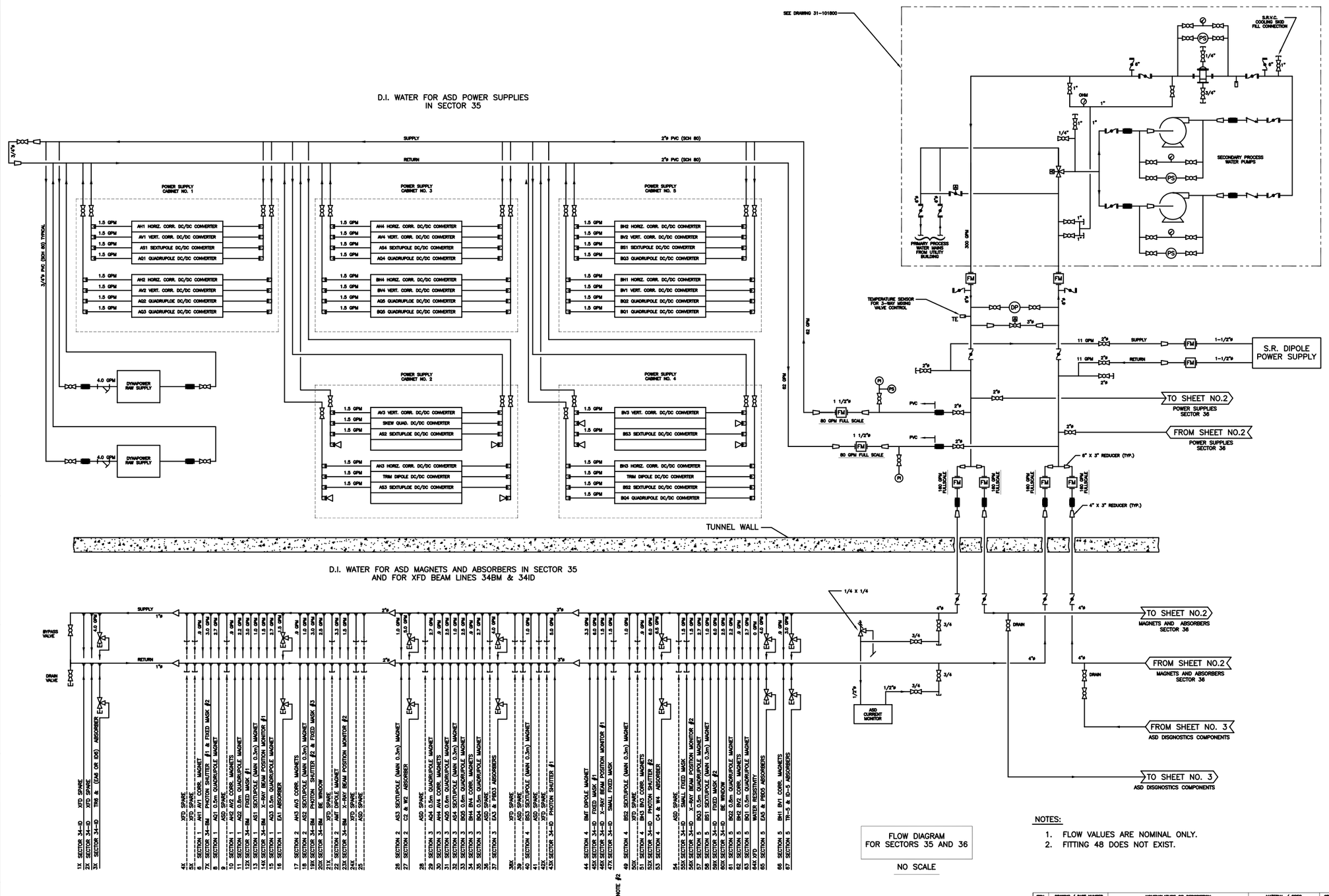
| REVISIONS | | | | | |
|---|---|---|---|---|---|
| ZONE | REV | DESCRIPTION | BY | APPROVED | DATE |




FLOW DIAGRAM FOR SECTORS 35 AND 36

NO SCALE

NOTES:

1. FLOW VALUES ARE NOMINAL ONLY.
2. FITTING 48 DOES NOT EXIST.

LEGEND

JOHNSON CONTROLS TAG
NC – NORMALLY CLOSED
NO – NORMALLY OPEN
PRESSURE SWITCH
PUMP
FILTER
UV LIGHT
BUTTERFLY VALVE
BALL VALVE
CHECK VALVE
PRESSURE RELIEF VALVE
PRESS. REDUCG REG.
BALL CONTROL VALVE
3-WAY CONTROL VALVE
BUTTERFLY CONTROL VALVE
OHM RESISTIVITY METER
SENSOR – DIFF. PRESS.
PRESSURE GAGE
STRAINER
MANUAL 3-WAY VALVE
FLOW METER
ULTRASONIC FLOWMETER
HOSE CONNECTION
TEMPERATURE SENSOR
FLEX CONNECTOR
THERMOMETER

| ITEM | DRAWING / PART NUMBER | NOMENCLATURE OR DESCRIPTION | MATERIAL / SPEC | QTY |
|---|---|---|---|---|

PARTS LIST / BILL of MATERIALS

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES TOLERANCES
DECIMALS .XX ±.03 .XXX ±.010 .XXXX ±.0005
ANGULAR ± .5°
SURFACE ROUGHNESS √
DO NOT SCALE DRAWING
DIMENSIONS & TOLERANCES IN ACCORDANCE WITH ASME Y14.5M-1994
DIMENSIONS & TOLERANCES IN ACCORDANCE W.P. 13001 AND V14.0
MATERIAL
ELECTRONIC FILE NAME A2410200

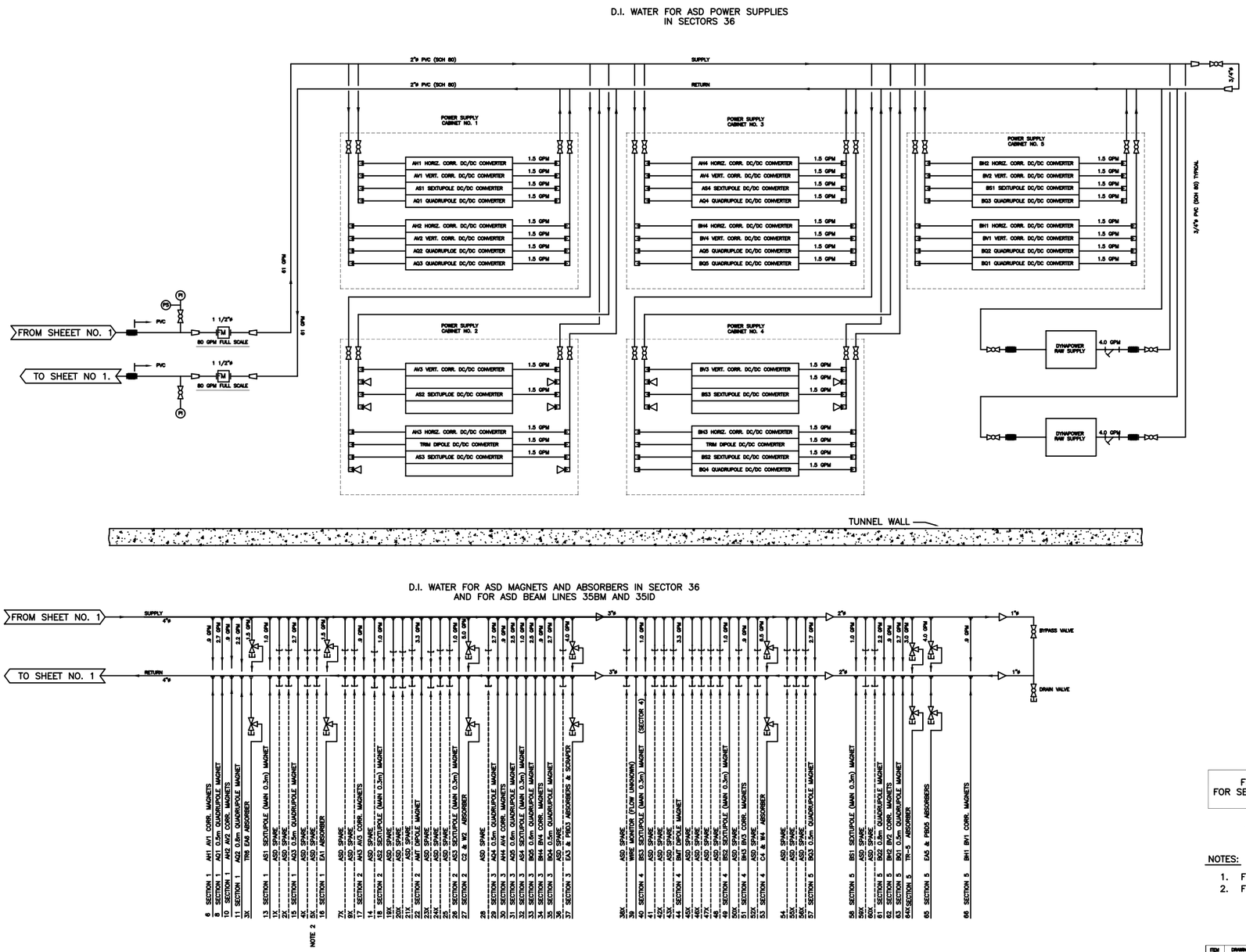
DRAWN BY T. GNIEWSKI / HPC 04/15/96
CHECKED BY: DATE
DESIGNED BY: DATE
RESPONSIBLE ENGINEER R. DORTWEGT 04/12/96
GROUP LEADER S. SHARMA 04/17/96
APPROVED BY: DATE
APPROVED BY: DATE
APPROVED BY: DATE

THIS DRAWING IS THE PROPERTY OF
ARGONNE NATIONAL LABORATORY
ADVANCED PHOTON SOURCE

TITLE: PROCESS WATER FLOW DIAGRAM OF STORAGE RING FOR SECTORS 35 AND 36

SIZE E | FSCM No. OHRH5 | DRAWING NUMBER 31-103700 | REV. 00
SCALE: 1:1 | DO NOT SCALE DRAWING | SHEET: 1 of 3

| REVISIONS | | | | | |
|---|---|---|---|---|---|
| ZONE | REV | DESCRIPTION | BY | APPROVED | DATE |




FLOW DIAGRAM
FOR SECTORS 35 AND 36

NO SCALE

NOTES:

1. FLOW VALUES ARE NOMINAL ONLY.
2. FITTING 12X DOES NOT EXIST.

LEGEND

JOHNSON CONTROLS TAG
NC – NORMALLY CLOSED
NO – NORMALLY OPEN
PRESSURE SWITCH
PUMP
FILTER
UV LIGHT
BUTTERFLY VALVE
BALL VALVE
CHECK VALVE
PRESSURE RELIEF VALVE
PRESS. REDUCG REG.
BALL CONTROL VALVE
3-WAY CONTROL VALVE
BUTTERFLY CONTROL VALVE
OHM RESISTIVITY METER
SENSOR – DIFF. PRESS.
PRESSURE GAGE
STRAINER
MANUAL 3-WAY VALVE
FLOW METER
ULTRASONIC FLOWMETER
HOSE CONNECTION
TEMPERATURE SENSOR
FLEX CONNECTOR
THERMOMETER

| ITEM | DRAWING / PART NUMBER | NOMENCLATURE OR DESCRIPTION | MATERIAL / SPEC | QTY |
|---|---|---|---|---|

PARTS LIST / BILL of MATERIALS

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES
TOLERANCES
DECIMALS ANGULAR
.X ± ±
.XX ± ±
.XXX ± ±
SURFACE ROUGHNESS: ✓
REMOVE ALL BURRS AND BREAK SHARP EDGES .02 MAX.
REMOVE MATERIAL TO BE IN ACCORDANCE WITH LASER AND SMALL
CONNECTORS & TRANSDUCERS IN ACCORDANCE WITH LASER AND SMALL
MATERIAL:
ELECTRONIC FILE NAME: A2410200

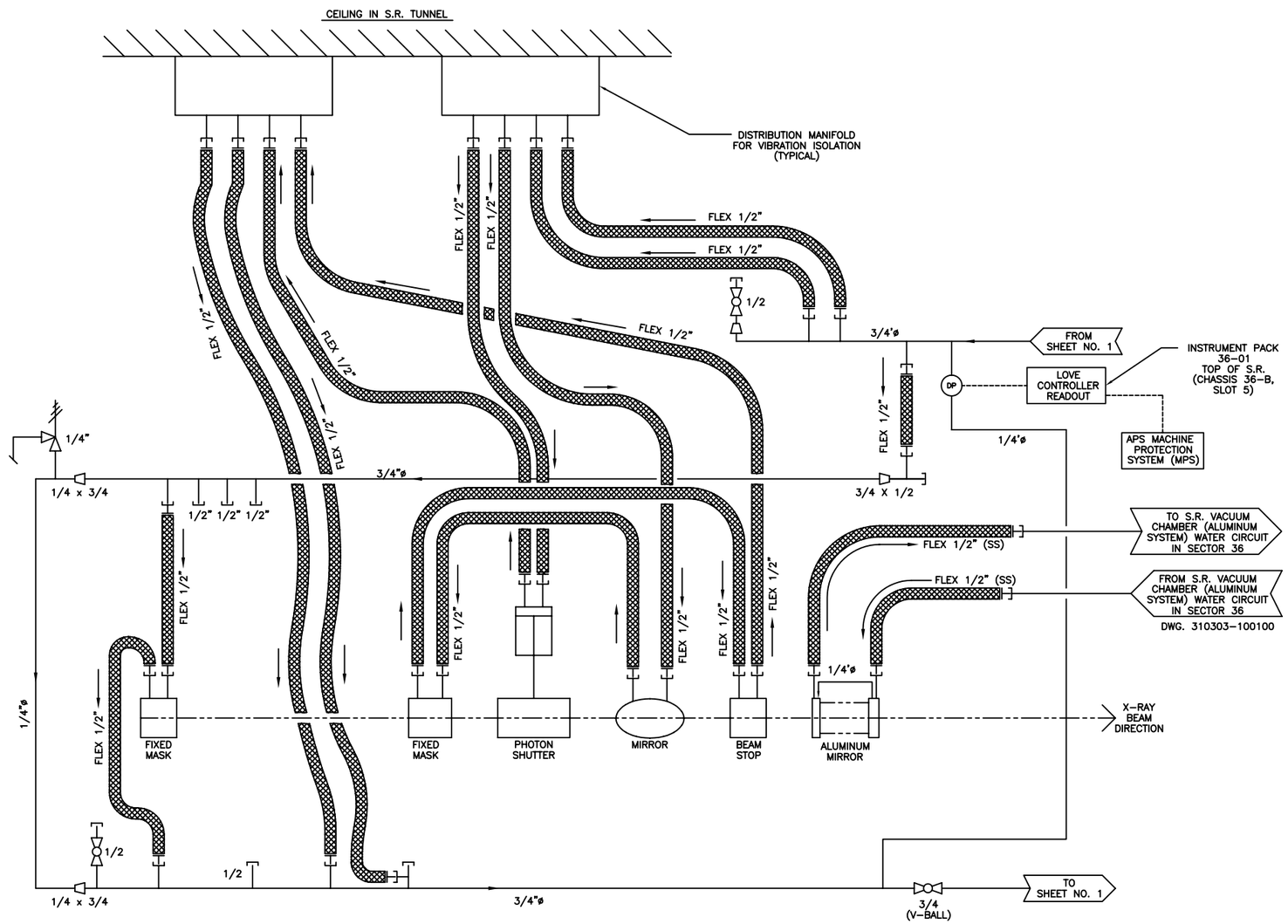
DRAWN BY: T. CHVENKOV / HPC DATE: 04/15/96
CHECKED BY: DATE
DESIGNED BY: DATE
RESPONSIBLE ENGINEER: R. DORTWEGT DATE: 04/12/96
GROUP LEADER: S. SHARMA DATE: 04/17/96
APPROVED BY: DATE
APPROVED BY: DATE
APPROVED BY: DATE

THIS DRAWING IS THE PROPERTY OF
ARGONNE NATIONAL LABORATORY
ADVANCED PHOTON SOURCE

TITLE: PROCESS WATER FLOW DIAGRAM OF STORAGE RING FOR SECTORS 35 AND 36

SIZE E | FICH No. OHRH5 | DRAWING NUMBER 31-103700 | REV. 00
SCALE: 1:1 | DO NOT SCALE DRAWING | SHEET: 2 of 3

| REVISIONS | | | | | |
|---|---|---|---|---|---|
| ZONE | REV | DESCRIPTION | BY | APPROVED | DATE |




FLOW DIAGRAM FOR ASD DIAGNOSTIC COMPONENTS IN X-RAY BEAMLINE 35-BM

NO SCALE

## LEGEND

JOHNSON CONTROLS TAG
XX-X
XXX-X
NC - NORMALLY CLOSED
NO - NORMALLY OPEN
PS
PRESSURE SWITCH

PUMP
FILTER
UV LIGHT

BUTTERFLY VALVE
BALL VALVE
CHECK VALVE
PRESSURE RELIEF VALVE

PRESS. REDUCG REG.
BALL CONTROL VALVE
3-WAY CONTROL VALVE

BUTTERFLY CONTROL VALVE
OHM RESISTIVITY METER

DP
SENSOR - DIFF. PRESS.
PRESSURE GAGE
STRAINER

MANUAL 3-WAY VALVE
FM
FLOW METER
ULTRASONIC FLOWMETER
HOSE CONNECTION

TE
TEMPERATURE SENSOR
FLEX CONNECTOR
THERMOMETER

| ITEM | DRAWING / PART NUMBER | NOMENCLATURE OR DESCRIPTION | MATERIAL / SPEC | QTY |
|---|---|---|---|---|

PARTS LIST / BILL of MATERIALS

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES
TOLERANCES
DECIMALS ANGULAR
X ± ± °
.XX ± ± ±
.XXX ± ±
SURFACE ROUGHNESS: ✓
REMOVE ALL BURRS AND BREAK SHARP EDGES OF SHAFT
SURFACE MATERIAL TO BE FREE OF ROLLED IN SCALE
DIMENSIONS & TOLERANCES IN ACCORDANCE WITH ANSI Y14.5
MATERIAL:
ELECTRONIC FILE NAME: A2410200

| | NAME | DATE |
|---|---|---|
| DRAWN BY | T. GWERSKI / HPC | 04/15/96 |
| CHECKED BY: | | DATE |
| DESIGNED BY: | | DATE |
| RESPONSIBLE ENGINEER: | R. DORTWEGT | 04/12/96 |
| GROUP LEADER: | S. SHARMA | 04/17/96 |
| APPROVED BY: | | DATE |
| APPROVED BY: | | DATE |
| APPROVED BY: | | DATE |

THIS DRAWING IS THE PROPERTY OF
ARGONNE NATIONAL LABORATORY
ADVANCED PHOTON SOURCE

TITLE:
PROCESS WATER FLOW DIAGRAM OF STORAGE RING FOR SECTORS 35 AND 36

| SIZE | FROM No. | DRAWING NUMBER | REV |
|---|---|---|---|
| E | OHRH5 | 31-103700 | 00 |

SCALE: 1:1 DO NOT SCALE DRAWING SHEET: 3 of 3