NORTHEAST UTILITIES

THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

General Offices • Selden Street, Berlin, Connecticut

P.O. BOX 270
HARTFORD, CONNECTICUT 06141-0270
(203) 666-6911

April 5, 1983

Docket No. 50-423
AEC-MP3-309
B10752

Director of Nuclear Reactor Regulation
Mr. B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

References: (1) W. G. Counsil letter to B. J. Youngblood, MP-3 Response to the Requests for Additional Information that Resulted from the Acceptance Review, dated March 31, 1983.

Dear Mr. Youngblood:

Millstone Nuclear Power Station, Unit No. 3:
Transmittal of FSAR Figures
12.3-1 through 12.3-4 and 12.3-6 through 12.3-9

In Reference (1) forty (40) copies for distribution of FSAR Figures 12.3-1 through 12.3-4 and 12.3-6 through 12.3-9 were not forwarded because a typographical error was discovered just prior to the shipping of our acceptance review responses. As an interim measure we therefore attached one (1) set of figures to one (1) of the three (3) original signed versions of a response package. The remaining two (2) signed originals and thirty-seven (37) copies contained a substitute page indicating the figures would be forwarded later. Per Reference (1), we are now forwarding the remaining thirty-nine (39) sets for distribution, each of which has a copy of this transmittal memo attached.

Enclosure

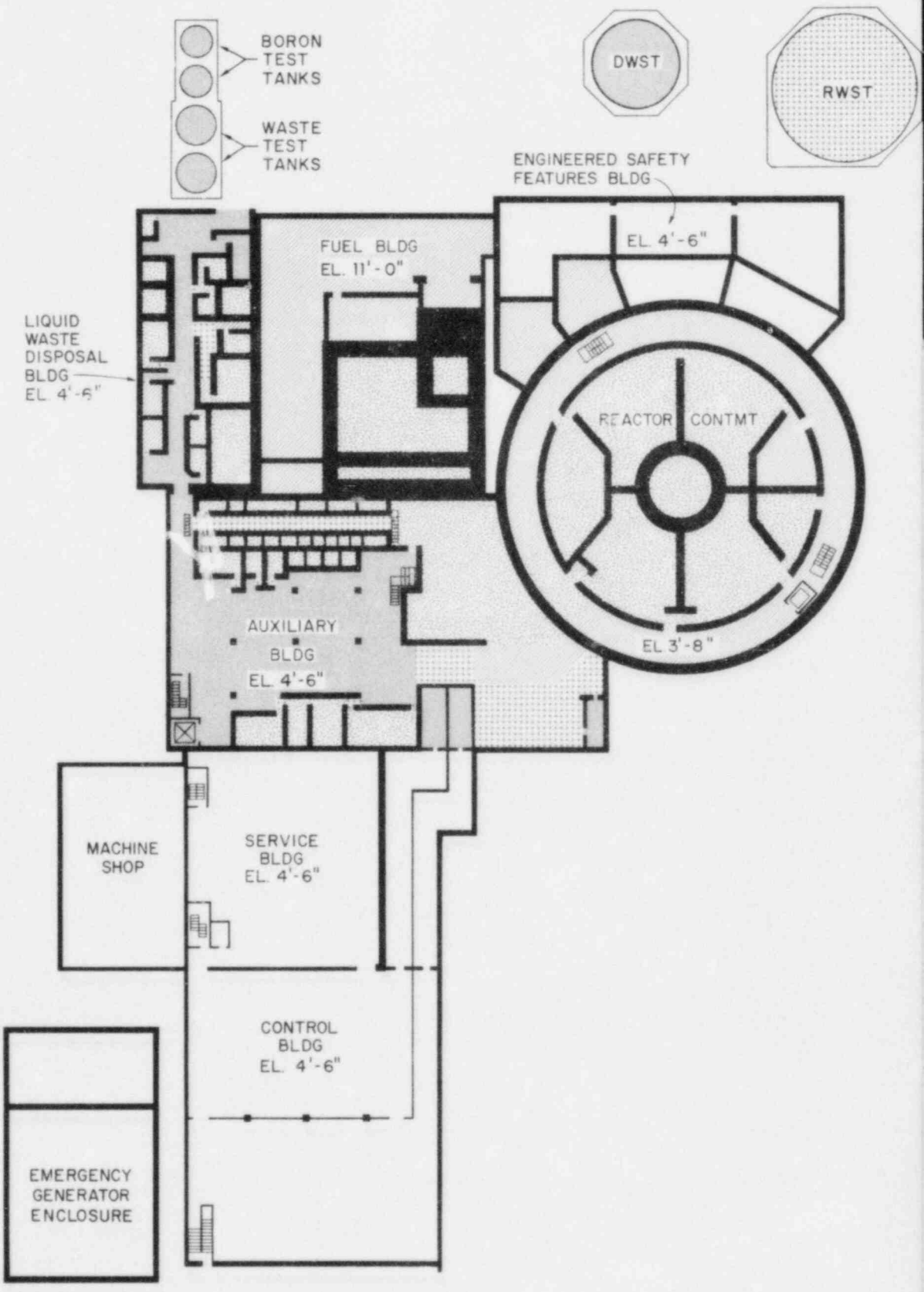
Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL

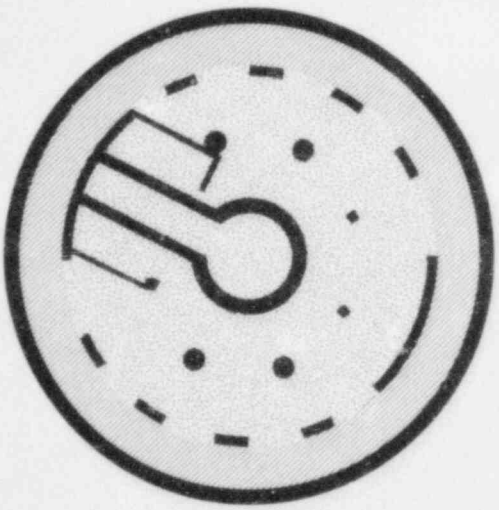
By NORTHEAST NUCLEAR ENERGY COMPANY, Their Agent

W. G. Counsil
Senior Vice President

A001
1/40


BORON
TEST
TANKS
WASTE
TEST
TANKS
DWST
RWST
ENGINEERED SAFETY
FEATURES BLDG
EL. 4'-6"
FUEL BLDG
EL. 11'-0"
LIQUID
WASTE
DISPOSAL
BLDG
EL. 4'-6"
REACTOR CONTMT
EL. 3'-8"
AUXILIARY
BLDG
EL. 4'-6"
MACHINE
SHOP
SERVICE
BLDG
EL. 4'-6"
CONTROL
BLDG
EL. 4'-6"
EMERGENCY
GENERATOR
ENCLOSURE

ZONE	DOSE RATE (MREM/HR)	ZONE CODE
I	≤0.25	
II	≤2.5	
III	≤15	
IV	≤100	
V	>100	

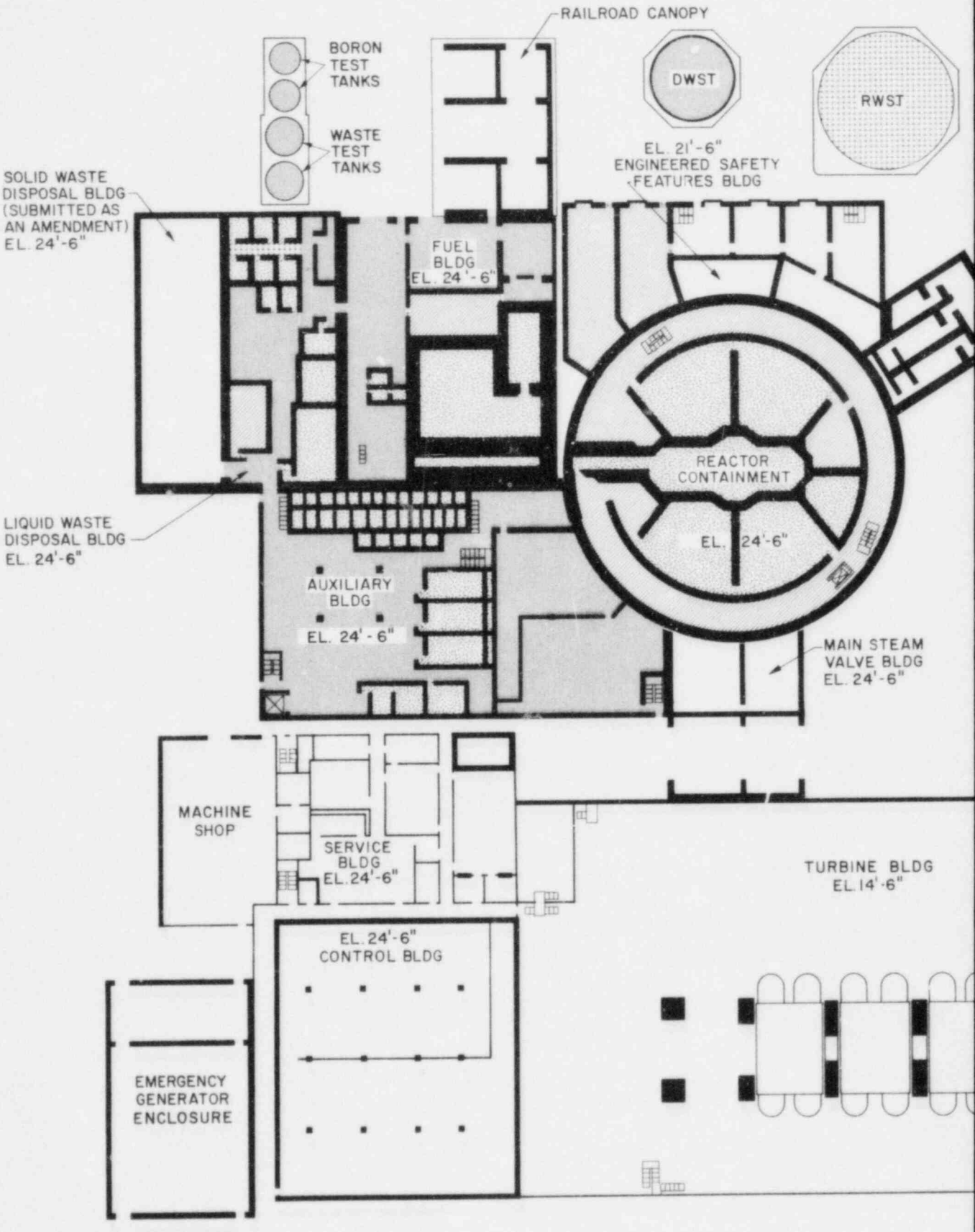


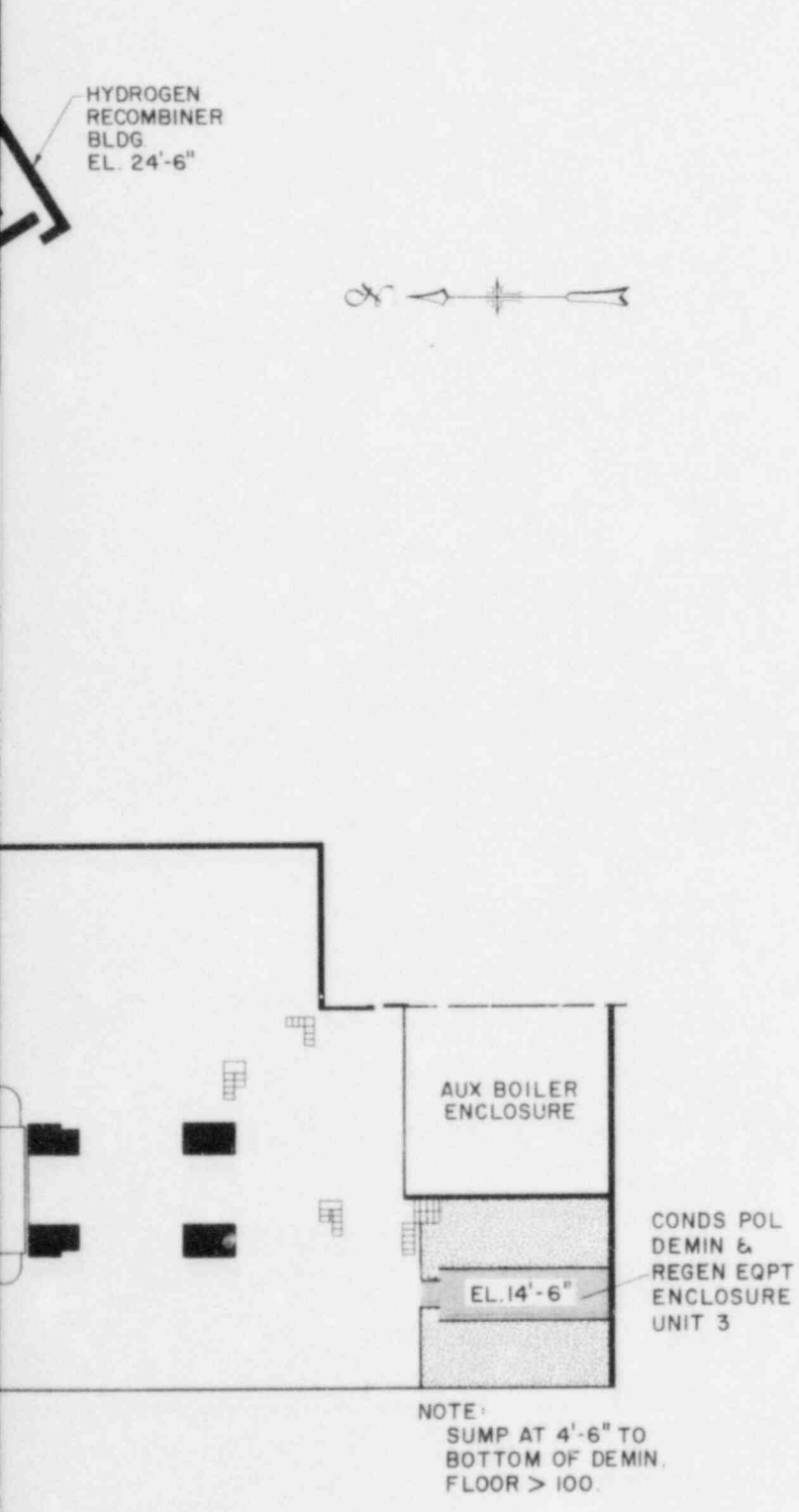
PLAN EL. (-)24'-6"

FIG. 12.3-1
DESIGN BASIS RADIATION ZONES FOR SHIELDING (NORMAL OPERATIONS)

MILLSTONE NUCLEAR POWER STATION UNIT 3

RADIATION SHIELDING DESIGN AND ANALYSIS REPORT


RAILROAD CANOPY
BORON TEST TANKS
WASTE TEST TANKS
DWST
RWST
EL. 21'-6" ENGINEERED SAFETY FEATURES BLDG
SOLID WASTE DISPOSAL BLDG (SUBMITTED AS AN AMENDMENT) EL. 24'-6"
FUEL BLDG EL. 24'-6"
REACTOR CONTAINMENT
EL. 24'-6"
LIQUID WASTE DISPOSAL BLDG EL. 24'-6"
AUXILIARY BLDG
EL. 24'-6"
MAIN STEAM VALVE BLDG EL. 24'-6"
MACHINE SHOP
SERVICE BLDG EL. 24'-6"
TURBINE BLDG EL. 14'-6"
EL. 24'-6" CONTROL BLDG
EMERGENCY GENERATOR ENCLOSURE



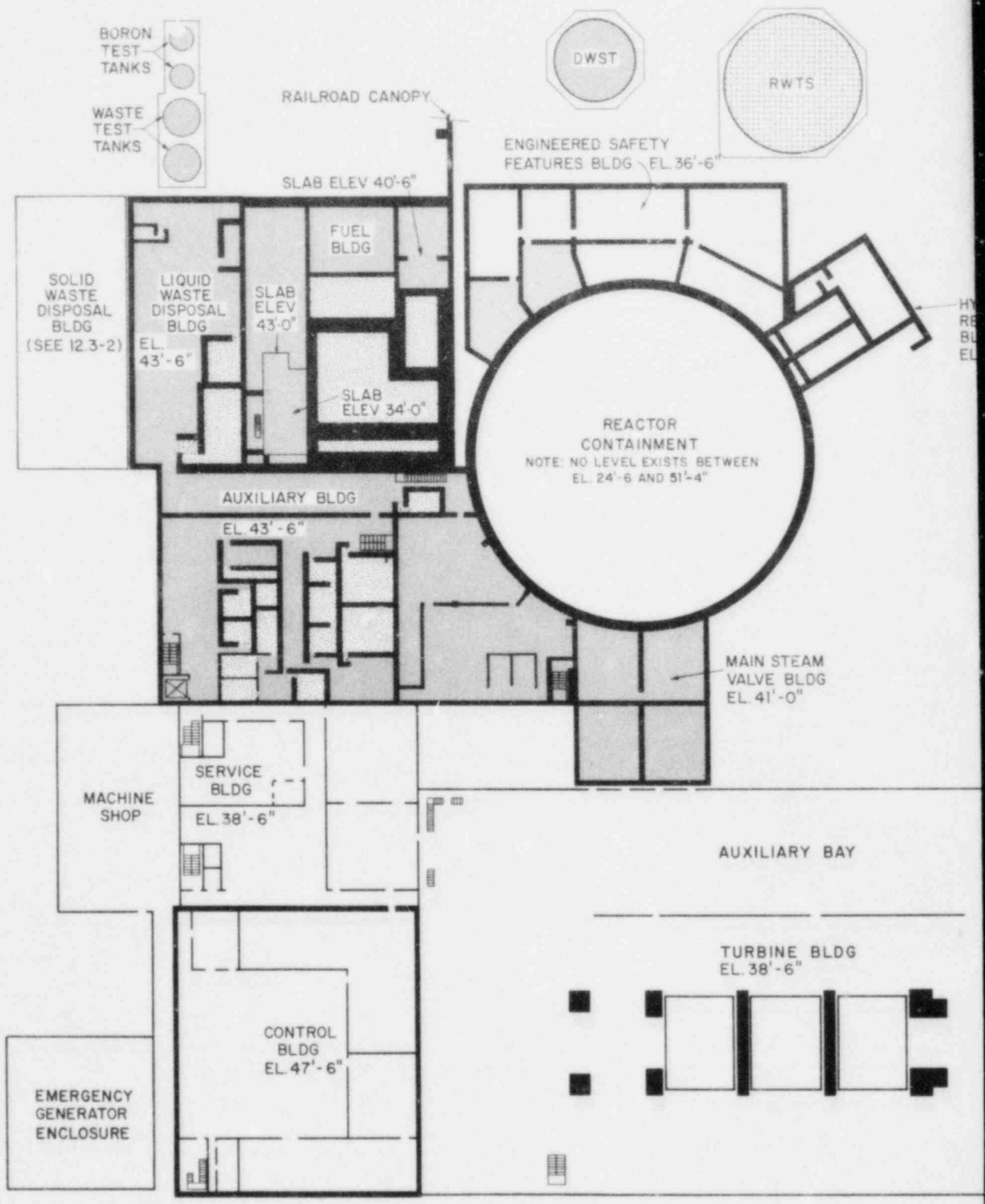
ZONE	DOSE RATE (MREM/HR)	ZONE CODE
I	≤0.25	
II	≤2.5	
III	≤15	
IV	≤100	
V	>100	

FIG. 12.3-2

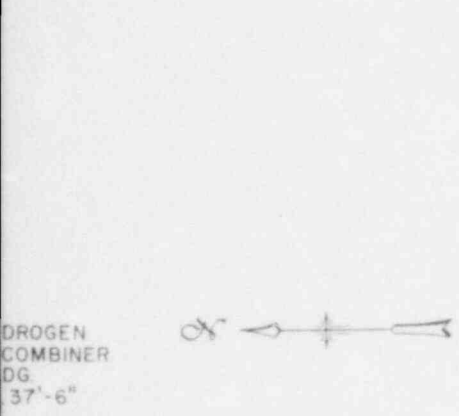
DESIGN BASIS RADIATION ZONES FOR SHIELDING (NORMAL OPERATIONS)

MILLSTONE NUCLEAR POWER STATION
UNIT 3

RADIATION SHIELDING DESIGN
AND ANALYSIS REPORT


BORON TEST TANKS
WASTE TEST TANKS
DWST
RWTS
RAILROAD CANOPY
ENGINEERED SAFETY FEATURES BLDG EL. 36'-6"
SLAB ELEV 40'-6"
FUEL BLDG
SOLID WASTE DISPOSAL BLDG (SEE 12.3-2)
LIQUID WASTE DISPOSAL BLDG EL. 43'-6"
SLAB ELEV 43'-0"
SLAB ELEV 34'-0"
REACTOR CONTAINMENT
NOTE: NO LEVEL EXISTS BETWEEN EL. 24'-6 AND 51'-4"
AUXILIARY BLDG
EL. 43'-6"
MAIN STEAM VALVE BLDG EL. 41'-0"
MACHINE SHOP
SERVICE BLDG
EL. 38'-6"
AUXILIARY BAY
TURBINE BLDG EL. 38'-6"
CONTROL BLDG EL. 47'-6"
EMERGENCY GENERATOR ENCLOSURE

ZONE	DOSE RATE (MREM/HR)	ZONE CODE
I	≤0.25	
II	≤2.5	
III	≤15	
IV	≤100	
V	>100	



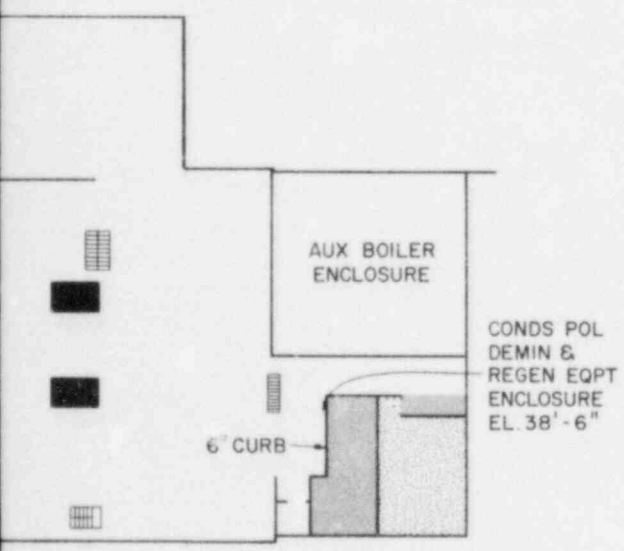
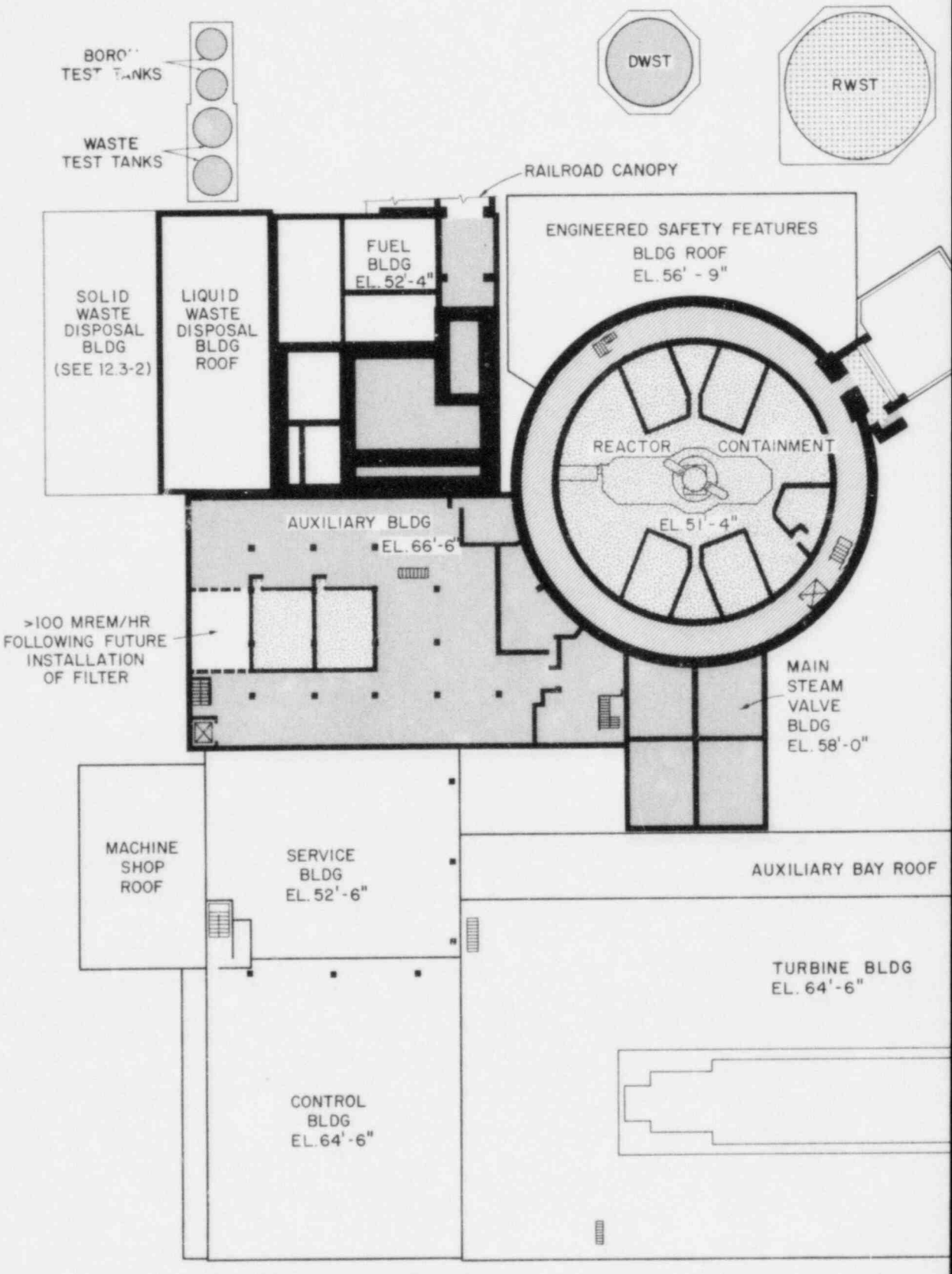


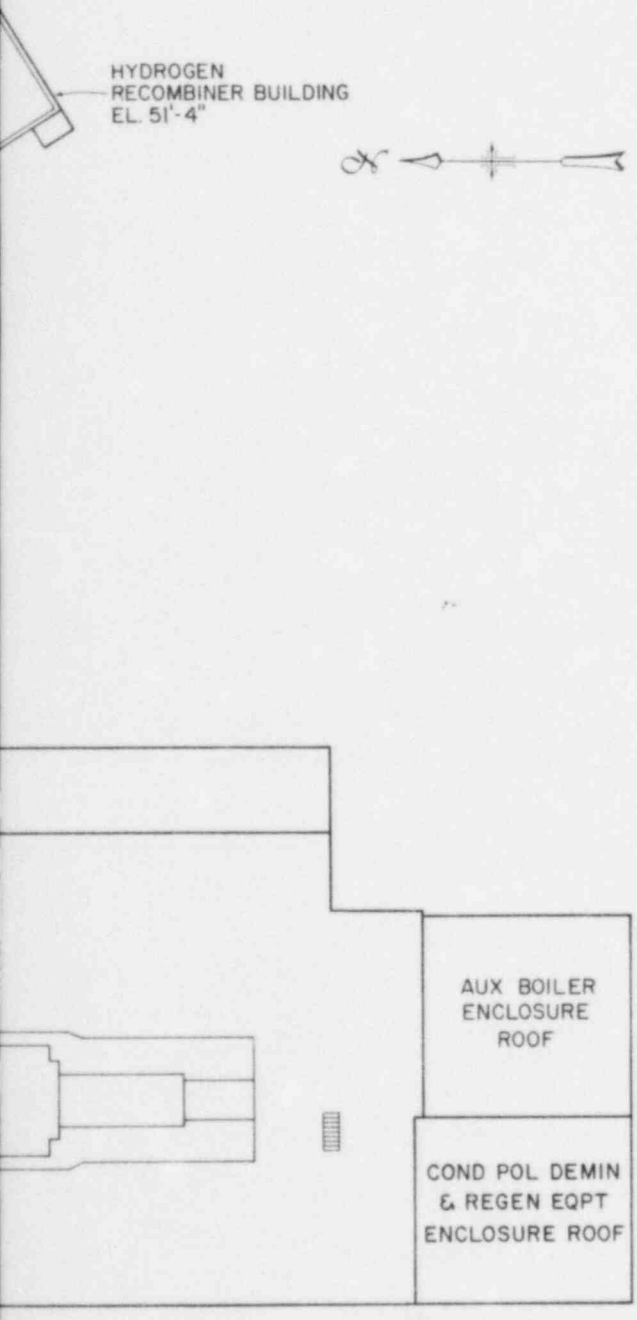
FIG. 12.3-3

DESIGN BASIS RADIATION ZONES FOR SHIELDING (NORMAL OPERATIONS)

MILLSTONE NUCLEAR POWER STATION UNIT 3

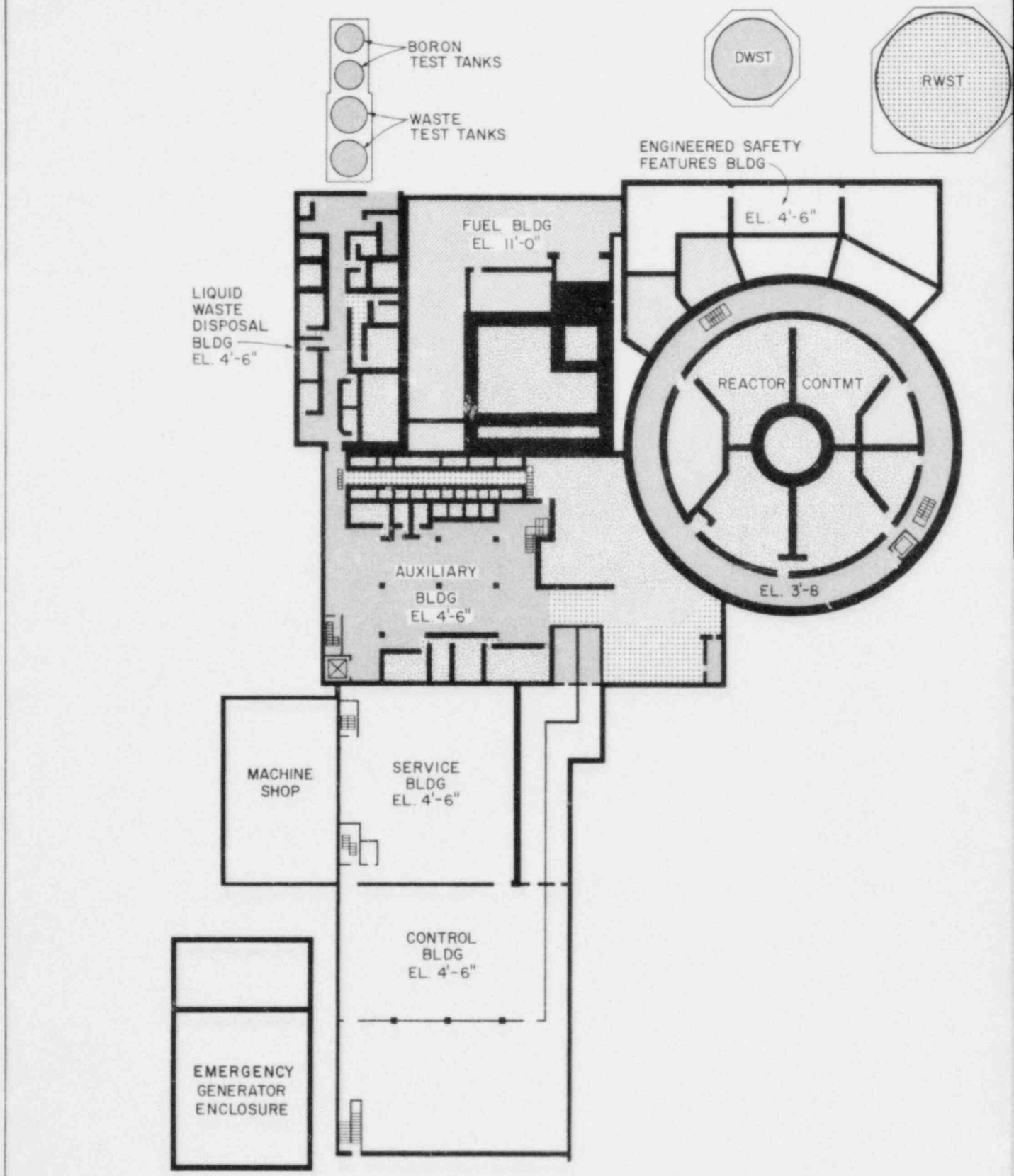
RADIATION SHIELDING DESIGN AND ANALYSIS REPORT

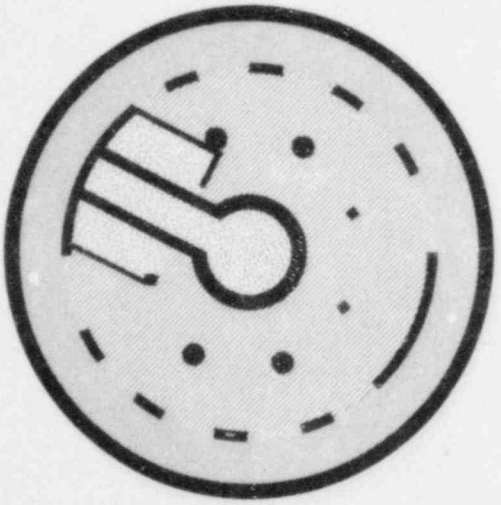

BORON TEST TANKS
WASTE TEST TANKS
DWST
RWST
RAILROAD CANOPY
ENGINEERED SAFETY FEATURES BLDG ROOF EL. 56' - 9"
FUEL BLDG EL. 52'-4"
SOLID WASTE DISPOSAL BLDG (SEE 12.3-2)
LIQUID WASTE DISPOSAL BLDG ROOF
REACTOR CONTAINMENT
EL 51' - 4"
AUXILIARY BLDG EL. 66'-6"
>100 MREM/HR FOLLOWING FUTURE INSTALLATION OF FILTER
MAIN STEAM VALVE BLDG EL. 58'-0"
MACHINE SHOP ROOF
SERVICE BLDG EL. 52'-6"
AUXILIARY BAY ROOF
TURBINE BLDG EL. 64'-6"
CONTROL BLDG EL. 64'-6"



ZONE	DOSE RATE (MREM/HR)	ZONE CODE
I	≤0.25	
II	≤2.5	
III	≤15	
IV	≤100	
V	>100	

FIG. 12.3-4
DESIGN BASIS RADIATION ZONES FOR SHIELDING (NORMAL OPERATIONS)
MILLSTONE NUCLEAR POWER STATION UNIT 3
RADIATION SHIELDING DESIGN AND ANALYSIS REPORT


BORON
TEST TANKS
WASTE
TEST TANKS
DWST
RWST
ENGINEERED SAFETY
FEATURES BLDG
EL. 4'-6"
FUEL BLDG
EL. 11'-0"
LIQUID
WASTE
DISPOSAL
BLDG
EL. 4'-6"
REACTOR CONTMT
AUXILIARY
BLDG
EL. 4'-6"
EL. 3'-8
MACHINE
SHOP
SERVICE
BLDG
EL. 4'-6"
CONTROL
BLDG
EL. 4'-6"
EMERGENCY
GENERATOR
ENCLOSURE



PLAN EL. (–) 24'-6"

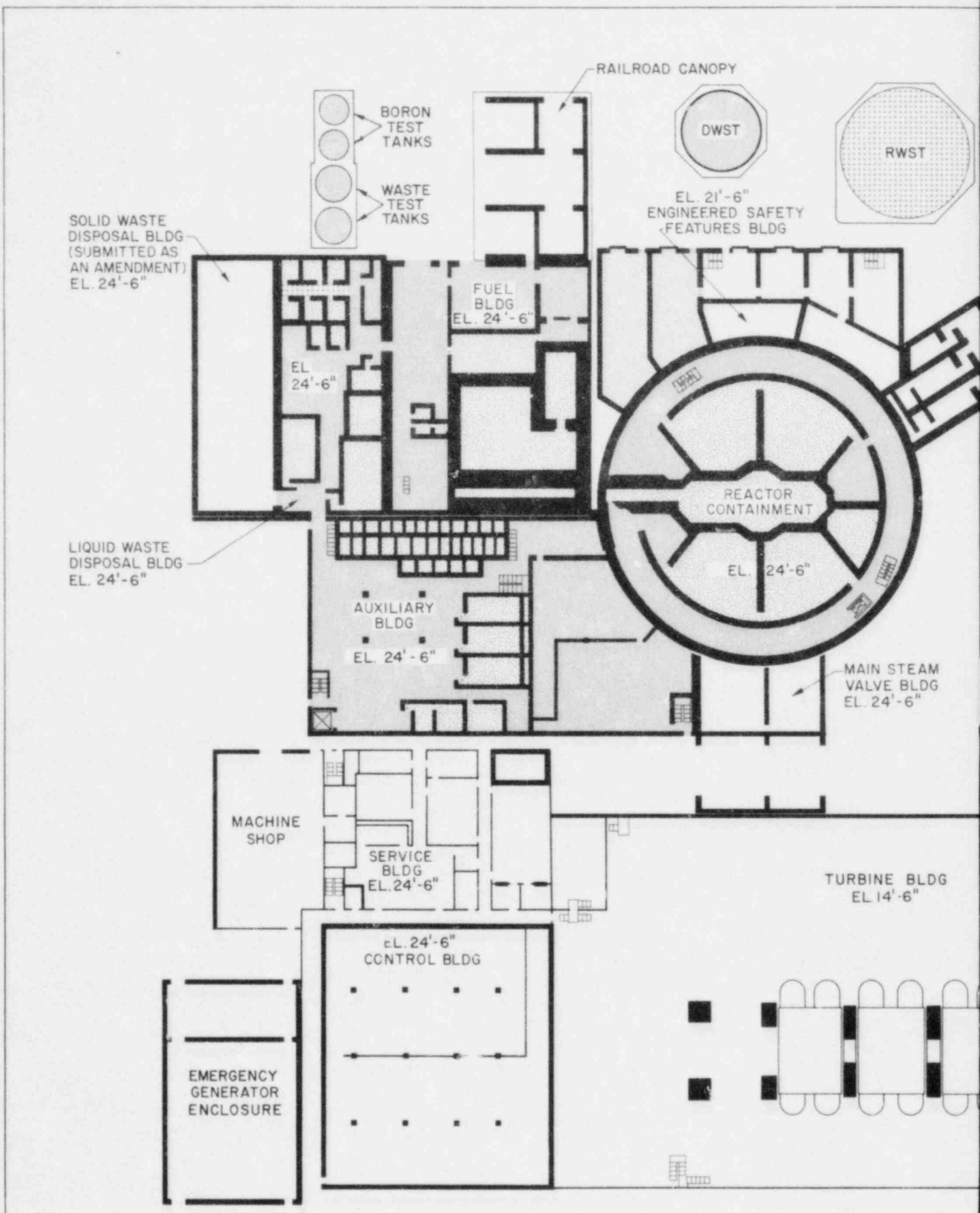
ZONE	DOSE RATE (MREM/HR)	ZONE CODE
I	≤0.25	
II	≤2.5	
III	≤15	
IV	≤100	
V	>100	

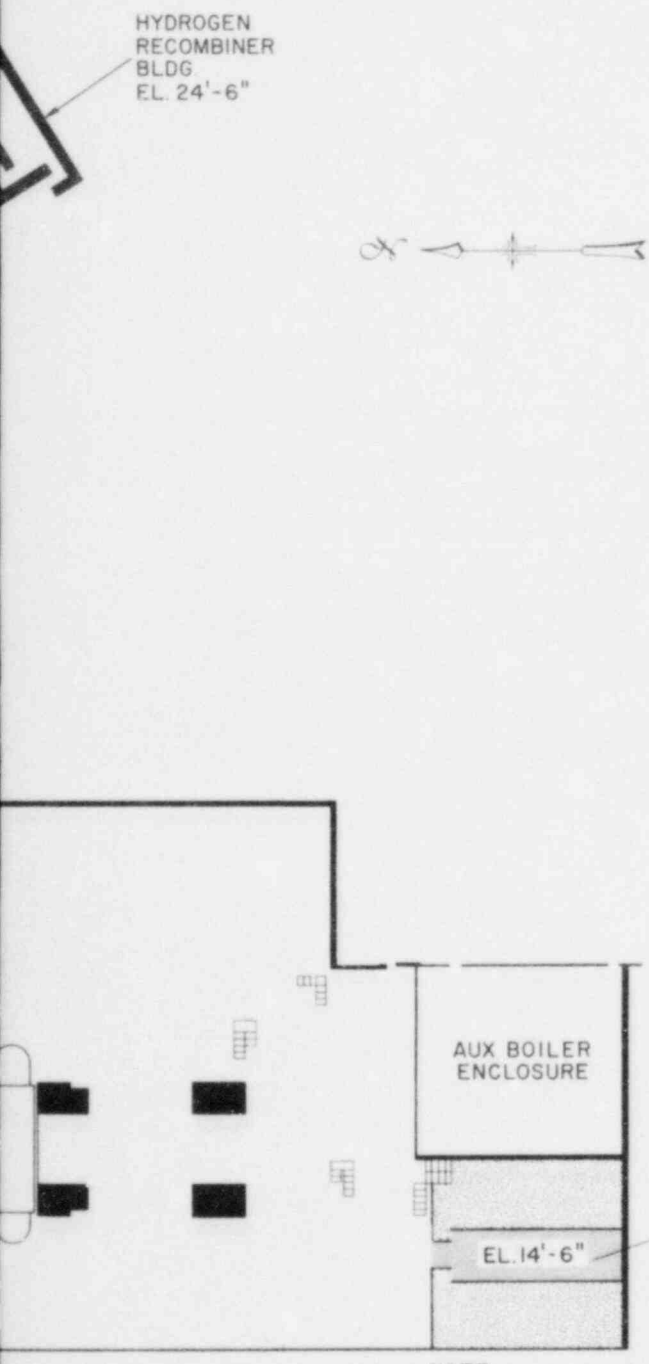
NOTE:
DURING INITIAL COLD SHUTDOWN, THE RHR SYSTEM(RHS) PIPING AND HEAT EXCHANGERS MAY EXCEED THE ZONE V RADIATION LEVEL CRITERION UNTIL THE REACTOR COOLANT IS DILUTED BY RWST WATER

FIG. 12.3-6
DESIGN BASIS RADIATION ZONES FOR SHIELDING (SHUTDOWN/REFUELING)

MILLSTONE NUCLEAR POWER STATION UNIT 3

RADIATION SHIELDING DESIGN AND ANALYSIS REPORT


RAILROAD CANOPY
BORON TEST TANKS
WASTE TEST TANKS
DWST
RWST
EL. 21'-6" ENGINEERED SAFETY FEATURES BLDG
SOLID WASTE DISPOSAL BLDG (SUBMITTED AS AN AMENDMENT) EL. 24'-6"
FUEL BLDG EL. 24'-6"
EL 24'-6"
REACTOR CONTAINMENT
EL. 24'-6"
LIQUID WASTE DISPOSAL BLDG EL. 24'-6"
AUXILIARY BLDG
EL. 24'-6"
MAIN STEAM VALVE BLDG EL. 24'-6"
MACHINE SHOP
SERVICE BLDG EL. 24'-6"
TURBINE BLDG EL. 14'-6"
EL. 24'-6" CONTROL BLDG
EMERGENCY GENERATOR ENCLOSURE



ZONE	DOSE RATE (MREM/HR)	ZONE CODE
I	≤0.25	
II	≤2.5	
III	≤15	
IV	≤100	
V	>100	

NOTE:
DURING INITIAL COLD SHUTDOWN, THE RHR SYSTEM (RHS) PIPING AND HEAT EXCHANGERS MAY EXCEED THE ZONE V RADIATION LEVEL CRITERION UNTIL THE REACTOR COOLANT IS DILUTED BY RWST WATER

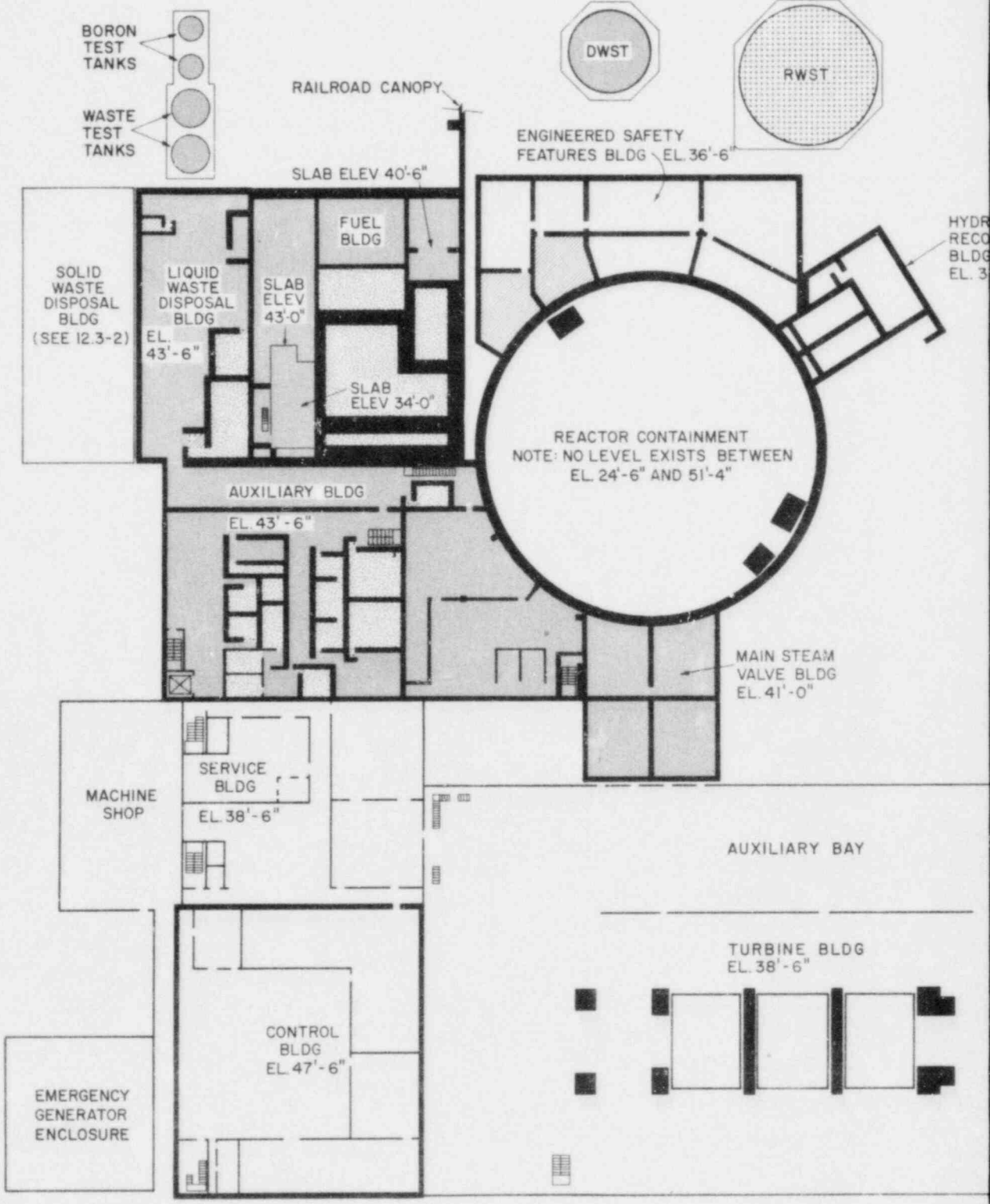
NOTE:
SUMP AT 4'-6" TO BOTTOM OF DEMIN. FLOOR > 100.

FIG. 12.3-7

DESIGN BASIS RADIATION ZONES FOR SHIELDING (SHUTDOWN/REFUELING)

MILLSTONE NUCLEAR POWER STATION UNIT 3

RADIATION SHIELDING DESIGN AND ANALYSIS REPORT


BORON TEST TANKS
WASTE TEST TANKS
DWST
RWST
RAILROAD CANOPY
ENGINEERED SAFETY FEATURES BLDG EL. 36'-6"
SLAB ELEV 40'-6"
HYDR RECO BLDG EL. 3
SOLID WASTE DISPOSAL BLDG (SEE 12.3-2)
LIQUID WASTE DISPOSAL BLDG EL. 43'-6"
SLAB ELEV 43'-0"
FUEL BLDG
SLAB ELEV 34'-0"
REACTOR CONTAINMENT
NOTE: NO LEVEL EXISTS BETWEEN EL. 24'-6" AND 51'-4"
AUXILIARY BLDG
EL. 43'-6"
MAIN STEAM VALVE BLDG EL. 41'-0"
MACHINE SHOP
SERVICE BLDG
EL. 38'-6"
AUXILIARY BAY
TURBINE BLDG EL. 38'-6"
CONTROL BLDG EL. 47'-6"
EMERGENCY GENERATOR ENCLOSURE

ZONE	DOSE RATE (MREM/HR)	ZONE CODE
I	≤0.25	
II	≤2.5	
III	≤15	
IV	≤100	
V	>100	

NOTE:
DURING INITIAL COLD SHUTDOWN, THE RHR SYSTEM (RHS) PIPING AND HEAT EXCHANGERS MAY EXCEED THE ZONE V RADIATION LEVEL CRITERION UNTIL THE REACTOR COOLANT IS DILUTED BY RWST WATER

OGEN
MBINER
7'-6"

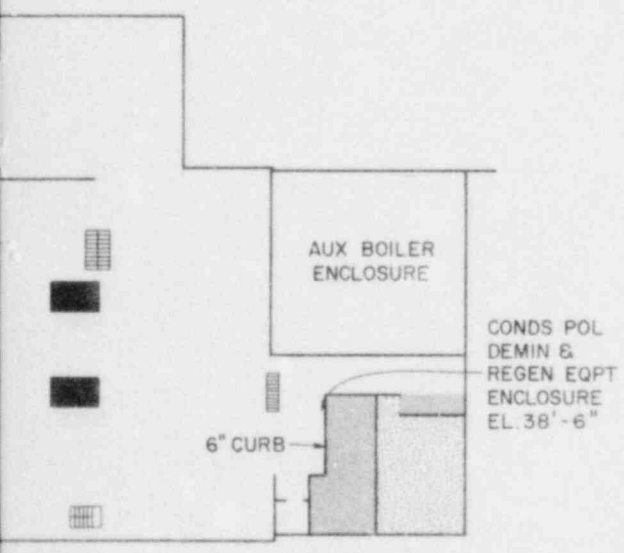
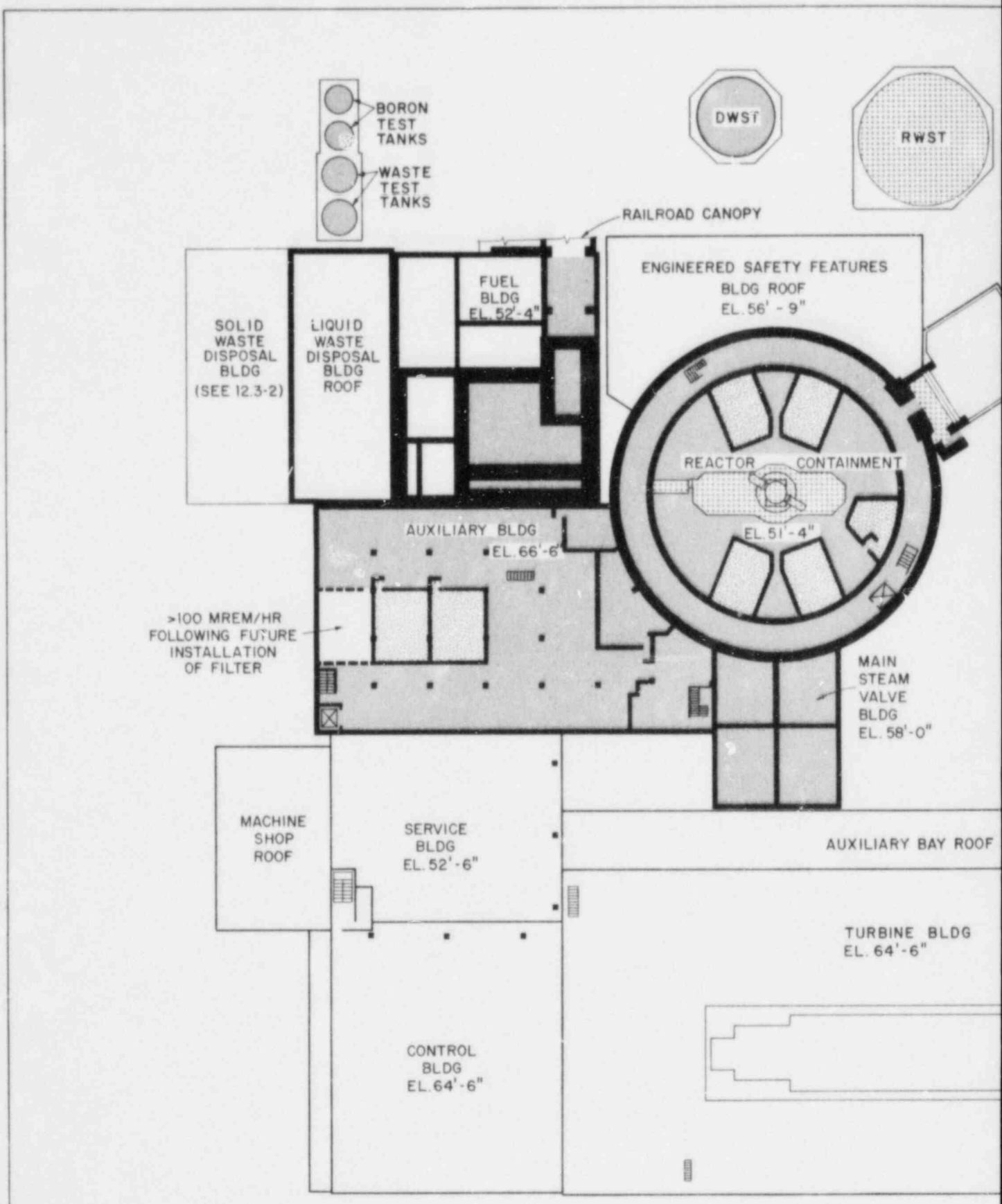
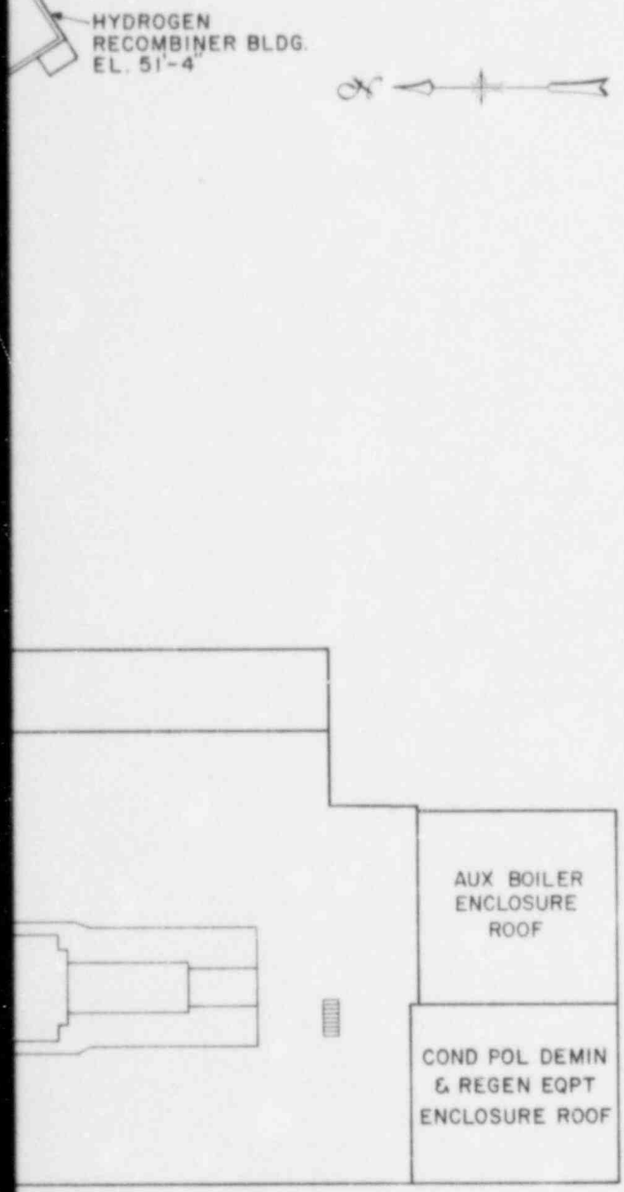


FIG. 12.3-8
DESIGN BASIS RADIATION ZONES FOR SHIELDING (SHUTDOWN/REFUELING)
MILLSTONE NUCLEAR POWER STATION UNIT 3
RADIATION SHIELDING DESIGN AND ANALYSIS REPORT


BORON TEST TANKS
WASTE TEST TANKS
DWST
RWST
RAILROAD CANOPY
ENGINEERED SAFETY FEATURES BLDG ROOF EL. 56' - 9"
SOLID WASTE DISPOSAL BLDG (SEE 12.3-2)
LIQUID WASTE DISPOSAL BLDG ROOF
FUEL BLDG EL. 52'-4"
REACTOR CONTAINMENT
EL. 51'-4"
AUXILIARY BLDG EL. 66'-6"
>100 MREM/HR FOLLOWING FUTURE INSTALLATION OF FILTER
MAIN STEAM VALVE BLDG EL. 58'-0"
MACHINE SHOP ROOF
SERVICE BLDG EL. 52'-6"
AUXILIARY BAY ROOF
TURBINE BLDG EL. 64'-6"
CONTROL BLDG EL. 64'-6"



ZONE	DOSE RATE (MREM/HR)	ZONE CODE
I	≤0.25	
II	≤2.5	
III	≤15	
IV	≤100	
V	>100	

NOTE:

DURING INITIAL COLD SHUTDOWN, THE RHR SYSTEM (RHS) PIPING AND HEAT EXCHANGERS MAY EXCEED THE ZONE V RADIATION LEVEL CRITERION UNTIL THE REACTOR COOLANT IS DILUTED BY RWST WATER.

FIG. 12.3-9
DESIGN BASIS RADIATION ZONES FOR SHIELDING (SHUTDOWN/REFUELING)

MILLSTONE NUCLEAR POWER STATION UNIT 3

RADIATION SHIELDING DESIGN AND ANALYSIS REPORT