A006

REGULATORY INFORMATION DISTRIBUTION SYSTEM

DOCKET NBR: 50-220 NINE MILE PT 1 DOC DATE: 781117

RECIPIENT: IPPOLITO, T.A. ACCESSION NBR: 7811290192

ORIGINATOR: DISE, D.P. COPIES RECEIVED:

COMPANY: NIAGARA MOHAWK LTR 1 ENCL 0

SUBJECT: SIZE: 41

Forwards requested info: Fire Pump Test Curves, Fire Main Connections, Floor Drain Sys Drawings (27), Test Plan & Specs for Pipe & Cable Penetration Fire Stop Qual Tests. Oversized drawings available in Central Files.

V FOR DRAWINGS SEE SHELF

Docket FILES RECD 26 xerox sheets of oversized.

DISTRIBUTION CODE: A006

DISTRIBUTION TITLE: FIRE PROTECTION INFORMATION (AFTER ISSUANCE OF OL).

NOTARIZED

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FOR ACTION

- ORB#3 BC

TOTAL NUMBER OF COPIES REQUIRED: LTR 39 ENCL 38

5 DRWGS

REG FILE
I & E (1)
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NOV 30 1978

TIA 4 CCP

NOTES:

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MEMORANDUM FOR: TERA Corp.

FROM: US NRC/TIDC/Distribution Services Branch

SUBJECT: Special Document Handling Requirements

☑ 1. Please use the following special distribution list for the attached document.

LTR
A096

5 DRWGS
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1 & E (1)
PLANT SYS BR (3)

☑ 2. The attached document requires the following special considerations:

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☐ Only one oversize enclosure was received - please return for Regulatory File storage.

☐ Proprietary information - send affidavit only to the NRC PDR

☐ Other: (specify)

REGULATORY DOCKET FILE COPY

Michael Collins

cc: DSB Files

TIDC/DSB Authorized Signature

NIAGARA MOHAWK POWER CORPORATION

NIAGARA MOHAWK

300 ERIE BOULEVARD, WEST
SYRACUSE, N. Y. 13202

November 17, 1978

Director of Nuclear Reactor Regulation
Attn: Mr. Thomas Ippolito, Chief
Operating Reactors/Branch #3
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Ippolito:

Enclosed is additional information requested during the Nine Mile Point Unit 1 Fire Protection site visit during the week of October 16, 1978. Five copies of the following are provided:

1. Fire Pump Test Curves
2. Fire Main Connections between Unit 1 and Unit 2
3. Drawings of the Floor Drain System
4. Test Plan and Specification for Pipe and Cable Penetration Fire Stop Qualification Tests

This completes our response to requests received to date.

Very truly yours,

NIAGARA MOHAWK POWER CORPORATION

7811290192

Donald P. Dise
Vice President-Engineering

A006(LTR) 5/30 5 DRWGS TO LIST

NLR/szd

Enclosures 22cf

00172 111

ANNUAL FIRE PUMP TEST SHEET

FILE NO. N-133A RISK Niagara Mohawk Nine Mile One DATE ____ 19 ____

MAKE Fairbanks Morse Model or type 6HC6922F Serial No. K2820186.97
Rated Capacity 2500 gpm. at rated head 125 psi., ft. at rated speed 1750 rpm.
Net pressure at shutoff 161 psi. Net pressure at 150% rated capacity 94 psi.
Brake horsepower at rated conditions 274 Max. brake H.P. at rated speed at any capacity 291
Horizontal, vertical, turbine 3 stages impeller dia. 11 13/16 inches.

PUMP OPERATES: Manual, Automatic Cut in 100 psi Cut out Manual psi.
JRC wants both cut-ins the same

DRIVEN BY: Electric motor, steam, turbine, gasoline, diesel, engine, water wheel, no clutch.

SUCTION FROM: Screen Well Capacity Unlimited Gals.

Lift 3½ ft. Vertical Turbine Discharge Head to Water Level 11 Ft.
Head ____ ft., psi. Vertical Turbine Lowest Impeller to Water Level ____ Ft.

JOCKEY OR MAKE-UP PUMP: Make Ing Rand Type CMRVN Rated Capacity 30 gpm.
Rated Head 123 psi., ft. Cut-in ____ psi., Cut-out ____ psi.
Centrifugal or Positive Displacement Type. Relief Valve Setting ____ psi.

SPECIAL COMMENTS Make sure relief valve isn't discharging during test

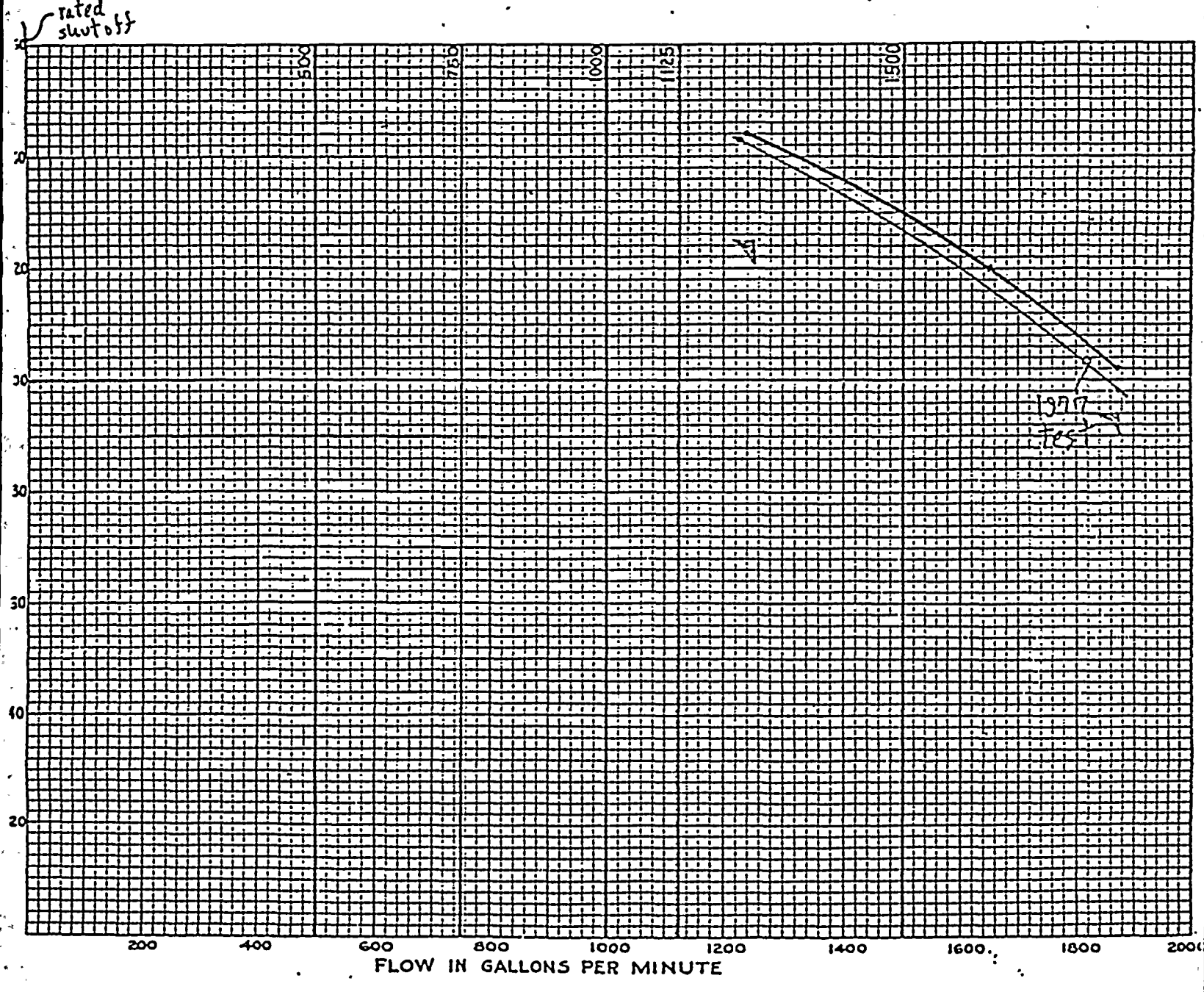
Date	Number and Size of Streams Ft. of Hose	Location	Pitot	G. P. M.	Pump Pressures Vertical Turbine Discharge Gage to Water Level or Suction: Discharge PSI, Ft.	PSI, Ft.	Net PSI, Ft.	R.P.M.	Steam at Inlet Stroke	Steam at Inlet Volts	Jets slip at 100 AMPS	In:
5/27/74	Test Line	Screen Hse	—	3750	102	—	102	1750	102	95		
"	"	"	—	3300	120	—	120	"	120	114		
"	"	"	—	2475	144	—	144	"	144	142		
5/11/77	Test Line	screen Hse	—	3750	98	—	98	1750	—	—		JF
"	"	"	—	2450	143	—	143	"	—	—		

Check engine tachometer against Insp. Speed Counter. Plot test points on N-15-H Sheet 2

Electric

Spot Annual Discharge Test Points Against Manufacturer's Characteristic Curve:

For Booster Pump, Spot Suction Readings.



0 0 1 7 2 1 1 1 0

Rev. 11-66 N-15-H Sheet 1

ANNUAL FIRE PUMP TEST SHEET

FILE NO. N-133A RISK Niagara Mohawk DATE ____ 19____

MAKE Worthington Model or type 15HH410WF Serial No. VTP15214
Rated Capacity 2500 gpm. at rated head 125 psi., ft. at rated speed 1770 rpm.
Net pressure at shutoff 181 psi. Net pressure at 150% rated capacity 98 psi.
Brake horsepower at rated conditions 260 Max. brake H.P. at rated speed at any capacity 270
Horizontal, vertical, turbine 4 stages impeller dia. 9 3/16 inches.

PUMP OPERATES: Manual, Automatic Cut in 90 100 psi Cut out Manual psi.
JRC wants both cut-ins the same

DRIVEN BY: Electric motor, steam, turbine, gasoline, diesel, engine, water wheel, no clutch.

SUCTION FROM: Screen Well Capacity Unlimited Gals.

Lift 14 ft. Vertical Turbine Discharge Head to Water Level 11 Ft.
Head ____ ft., psi. Vertical Turbine Lowest Impeller to Water Level ____ Ft.

JOCKEY OR MAKE-UP PUMP: Same as electric fire pump Make ____ Type ____ Rated Capacity ____ gpm.
Rated Head ____ psi., ft. Cut-in ____ psi., Cut-out ____ psi.
Centrifugal or Positive Displacement Type. Relief Valve Setting ____ psi.

SPECIAL COMMENTS Make sure relief valve isn't discharging during test

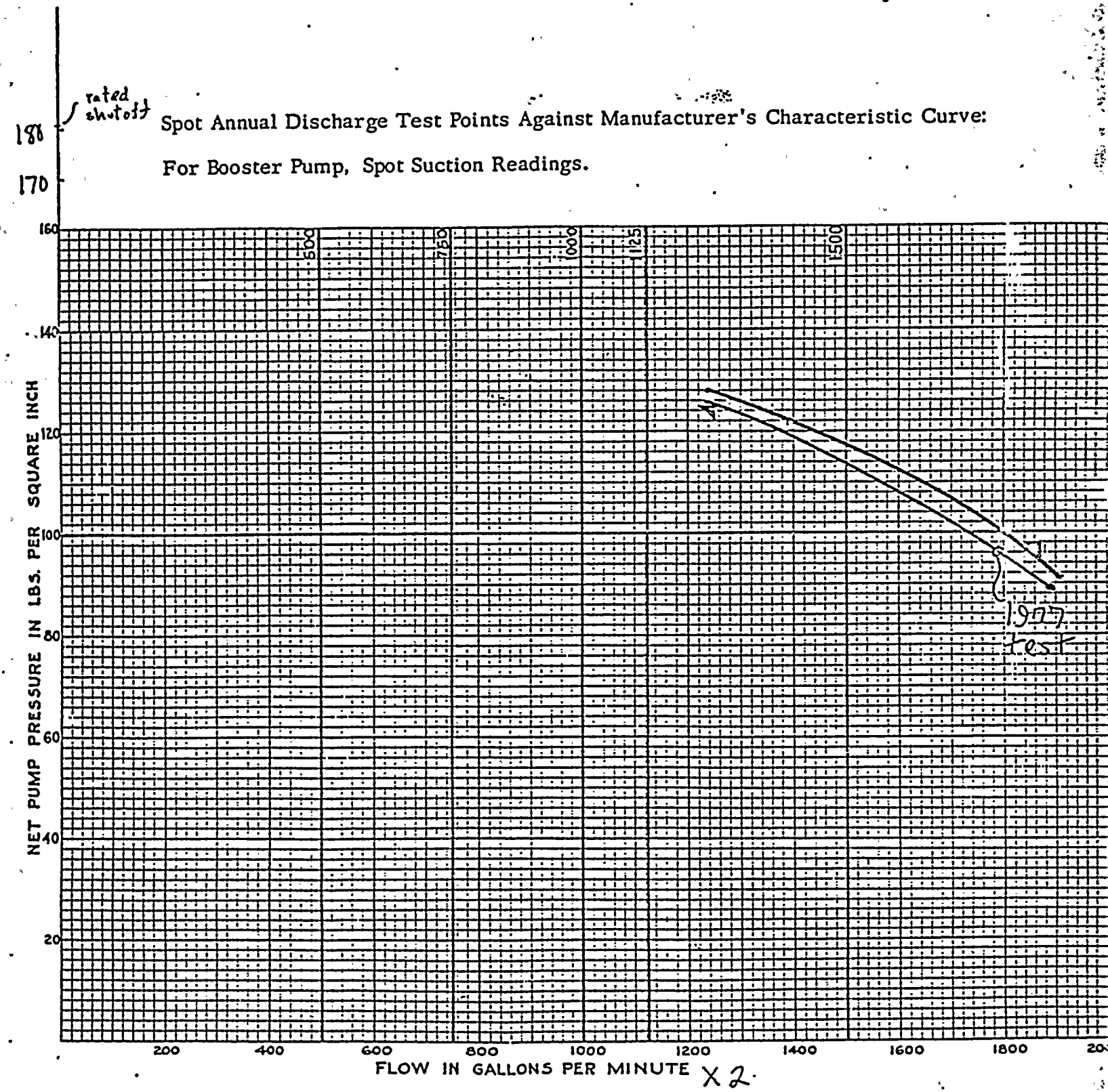
Date	Number and Size of Streams Ft. of Hose	Location	Pitot	G.P.M.	Pump Pressures Vertical Turbine Discharge Gage to Water Level or Suction: Discharge PSI, Ft.	PSI, Ft.	Net PSI, Ft.	R.P.M.	Steam at Inlet Jets: Stroke / Volts	slip at 100 / AMPS	Insp.
5/27/77	Test Line	Screen Hse		3825	91	—	91	1810			JFF
↓	↓	↓		3350	108	—	108	1800			↓
↓	↓	↓		2475	128	—	128	1825			↓
2/12/77	Test Line	Screen Hse.	—	2500	125	—	125	1825	—	—	JFB/F
	"	↓	—	3775	89	—	89	1800	—	—	↓
	Relief on	↓	—	Unk.	139	—	139	1825	—	—	↓

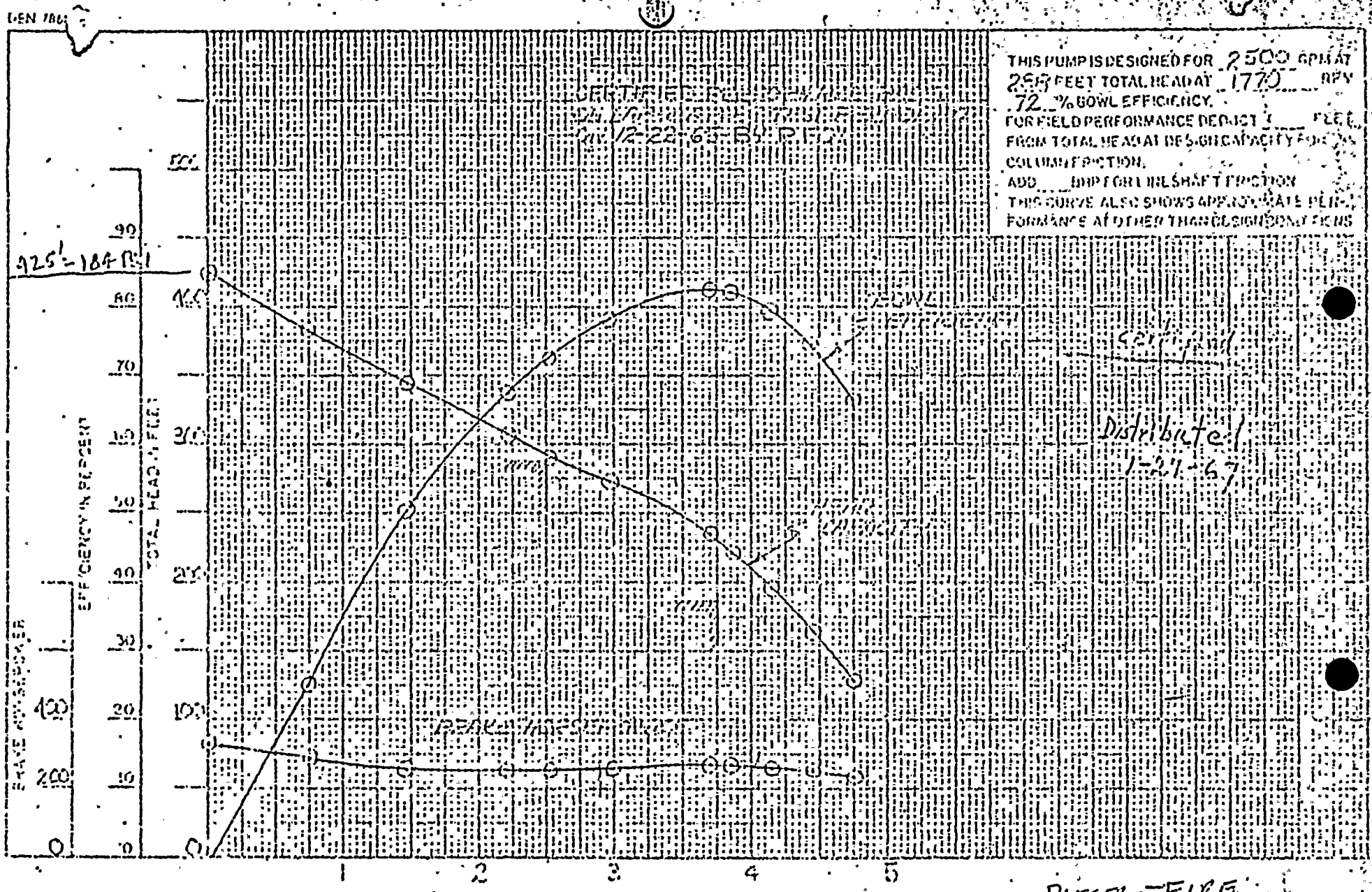
Check engine tachometer against Insp. Speed Counter. Plot test points on N-15-H Sheet 2.

Diesel

Spot Annual Discharge Test Points Against Manufacturer's Characteristic Curve:

For Booster Pump, Spot Suction Readings.





BROWN BUILLER	C.I. Flanged BOWL	15HMIXWE PUMP	WORTHINGTON CORPORATION	12-22-65 DATE	VTP-1521-H SERIAL NO.
9" DIA. LINE SHAFT GEARED	200 H.P. Elec. DRIVER	4 NO. OF STAGES	VERTICAL PUMP DIVISION	CUST. NO.	VTP-1521-H ORDER NO.
TEST NO.	1770 R.P.M.	RE DRAWN BY	DENVER, COLORADO, U.S.A. ALHAMBRA, CALIFORNIA U.S.A.	QUOTE NO.	CURVE NO.

T0-001

S.O. 425' DRY

Diesel Fire Pump

PUMP NO KEJZ- [redacted] 697 , STAGES 3 , SIZE-FIGURE 16 HC 63255

TESTED [illegible] - [illegible] , REFERENCE [illegible] , IMPELLER 51264

PLOTTED LUH 2/66 , DRIVER Dyno. - 300 HP , IMP DIA 11 15/16"

TOTAL SUCTION FT. , MAXIMUM ON TEST , R P M 1750

CERTIFIED PUMP PERFORMANCE CURVE

EFFICIENCY

BRAKE HORSE POWER

TOTAL HEAD IN FEET

U S GALLONS PER MINUTE

Certified Correct by K Mac Cyrus 2/16/66 CHIEF ENGR.

District bulletin 11-14-68

S.P. No. 100-22

TEST PLAN AND SPECIFICATION FOR
PIPE AND CABLE PENETRATION FIRE STOP
QUALIFICATION TESTS
FOR
EXISTING OR PROPOSED PIPE AND CABLE PENETRATION FIRE STOPS

Prepared By	D. E. Sandwick D. E. Sandwick	10-16-78 Date
Reviewed By	J. P. Baleno A. P. Baleno	10/17/78 Date
Approved By	J. R. Corcoran J. R. Corcoran	10/20/78 Date
	C. V. Mangan C. V. Mangan	10/20/78 Date
Concurrence	P.N. Castonguay P.N. Castonguay-QC	10-17-78 Date

1.0 PURPOSE

The purpose of this test program is to establish the fire rating of various cable penetration fire stops and pipe penetrations in accordance with IEEE Standard 634-1978 "IEEE Standard Cable Penetration Fire Stop Qualification Test."

2.0 SCOPE

This test program involves a floor (horizontal) test and wall (vertical) test of various selected cable and pipe penetration fire stops that are either currently installed at Nine Mile Point Nuclear Station Unit 1 or under consideration for future installation.

3.0 CABLE PENETRATION FIRE STOPS TO BE TESTED

The cable penetration fire stops detailed on drawings LMP 101178A and LMP 101178B shall be tested. The specified test slab size or arrangement of the cable penetration fire stops on the wall or slab may be modified by the testing laboratory. Any proposed changed or modifications to the slab or cable penetration fire stop arrangement shall be delineated in a specific section of the bid proposal and identified as exceptions.

4.0 MATERIALS TO BE SUPPLIED

All cables, trays, fire stop materials and penetration internal or external sleeves, plates, or other materials to be tested will be furnished by Niagara Mohawk Power Corporation. All materials required for the construction of the wall and floor slab, instrumentation to monitor the test parameters, and materials required to perform the test shall be provided by the successful bidder.

5.0 PREPARATION OF TEST SLAB AND INSTALLATION OF PENETRATIONS AND CABLE

The construction and assembly of the test slabs shall be the responsibility of the testing laboratory. Installation of raceway, cables and fire stop material shall be the responsibility of either the testing laboratory or Niagara Mohawk Power Corporation. Bidders shall provide alternate proposals for the test program with and without penetration, cable and raceway installation.

All bidder's proposals shall detail the proposed size and construction of the wall and floor slab.

6.0 TEST INSTRUMENTATION

6.1 Exposed flame side instrumentation shall include a minimum of three thermocouples symmetrically distributed on each cable and pipe penetration fire stop. The thermocouples shall be enclosed in sealed porcelain tubes 3/4 inch (19 mm) in outside diameter and 1/8 inch (3 mm) in wall thickness or in sealed, standard weight, 1/2 inch (13 mm) black wrought steel or iron pipe for base metal thermocouples. The exposed length of the pyrometer tube and thermocouple in the flame area shall not be less than 12 inches.

The thermocouple junction shall be placed 12 inches away from the exposed face of the floor slab cable penetrations and 6 inches away from the exposed face of the wall. Thermocouples shall not touch the test penetrations during the test in the event of deflection.

Exposed side temperature measurements shall be recorded on continuous pen or multipoint recorder(s).

6.2 Unexposed (cold) side instrumentation for cable penetration fire stops shall include a minimum of three thermocouples for each fire stop. As a minimum, temperature shall be measured at the cable jacket, cable penetration fire stop interface; the interface between the fire stop, and through metallic components, other than the insulated cable conductor; and on the surface of the fire stop material.

6.3 Unexposed (cold) side instrumentation for pipe penetrations shall include one thermocouple on the face of each penetration at least 1/2 inch away from through metallic components. Pipe penetration unexposed side temperatures shall be recorded for information only.

6.4 Unexposed side temperatures for pipe and cable penetration fire stops shall be recorded on continuous pen or multipoint strip chart recorders.

7.0 PRE-TEST INSPECTION AND DOCUMENTATION

7.1 Upon complete assembly of the wall and floor slabs, installation of the pipe and cable penetration fire stops and placement of the thermocouples, the laboratory shall inspect the slabs, penetrations and thermocouple placement to determine compliance to this specification, drawings LMP101178 and LMP101178B and IEEE Standard 634-1978. Any deviations noted shall be corrected to comply with requirements or reported to the Niagara Mohawk Engineer for resolution.

7.2 Photographs shall be taken of boths sides of the slabs and each penetration prior to placement in the oven.

8.0 CONDUCTING THE TEST

8.1 Upon initiation of the test, the time temperature curve specified in Appendix I of the IEEE Standard 634-1978 shall be followed. Flame source temperature accuracy shall be monitored throughout the test.

The accuracy of flame source shall be calculated by averaging the results of the pyrometer readings such that the area under the time-temperature curve is within the following tolerance:

0-1 Hour	10 %
1-2 Hours	7.5%
2-3 Hours	5 %

Any variances exceeding the acceptable tolerance should be explained in the issued final test report.

8.2 The fire test shall be terminated at 3 hours. Any penetrations that burn through prior to three hours shall be photographed and suitably filled with ceramic fiber to continue the fire test. The elapsed test time shall be recorded for any penetrations that burn through prior to three hours.

8.3 Upon completion of the three hour test, each slab shall be photographed and immediately positioned for a hose stream test. A 1-1/2 inch hose discharging through a nozzle approved for use on fires in electrical equipment producing a long-range-narrow-angle (30-90 degrees set at 30 degrees included angle) high velocity spray only be used. The following criteria shall be applied for the hose stream test (both wall and floor slabs):

Hose Nozzle Placement	- 10 ft. from center of exposed surface
Calculated Water Pressure	- 75 lbs/sq. inch (at base of nozzle)
Water Flow	- 75 gallons/minute
Duration of Application	- 2-1/2 minutes/100 sq. ft. of test slab

8.4 Photographs shall be taken of both sides of each test slab after completion of the hose stream test.

9.0 ACCEPTANCE CRITERIA

9.1 Cable penetration fire stops that have endured the three house test shall be considered qualified for three hour fire rated use if the following conditions are met.

A. The cable penetration fire stop has withstood the fire endurance test without the passage of flame or gases hot enough to ignite the cable or other fire stop materials on the unexposed side.

B. Transmission of heat through the cable penetration fire stop does not cause the unexposed side temperature to exceed 700 degrees F as measured by the unexposed side thermocouples.

C. The fire stop withstands the hose stream test without the hose stream causing an opening through the test specimen.

9.2 Pipe penetration that have endured the three hour test shall be considered qualified for three hour rated use if the pipe penetration fire stop has:

A. Withstood the fire endurance test without the passage of flame.

B. Withstood the hose stream test without the hose stream causing an opening through the test specimen.

9.3 In the event that the Niagara Mohawk Power Corporation Engineer elects to terminate either test prior to three hours, in accordance with Section 10.1 of this specification, the remaining cable penetrations shall be considered qualified for the test period time duration providing that the criteria delineated in Section 9.1 A, B, & C are satisfied. Pipe penetration can be considered qualified for the elapsed test time period until termination if the criteria delineated in Section 9.2 A, B are satisfied.

10.0 CHANGES IN TEST PLAN

10.1 The Niagara Mohawk Power Corporation Engineer may elect to terminate the test prior to three hours. In this event, the time of termination shall be recorded, the oven burners turned off, photographs of the entire slab and each penetration taken and a hose stream test applied in accordance with Section 8.3 of this specification. See Section 9.3 for acceptance criteria.

10.2 Penetrations that burn through prior to the termination of the test shall be handled as described in Section 8.2

11.0 REQUIRED DOCUMENTATION

11.1 A test report shall be completed by the test laboratory upon completion of the test program. The test report shall describe the test set-up, measurement instruments, the test procedure, any irregularities, and the results of the tests. The test report shall contain a forward, summary of conclusions and a discussion section. The text of the test report shall be supplemented with applicable photographs.

11.2 Documentation to be supplied by Niagara Mohawk Power Corporation for inclusion in the test report:

A. Description of cable materials and construction.
B. Description of cable penetration fire stop design.
C. Description of fire stop materials.
D. Test program requirements (this specification).

11.3 Documentation to be supplied by the test laboratory for inclusion in the test report.

A. Description of slab construction.
B. Description of test furnace.
C. Description and calibration records of measurement records.
D. Any applicable personnel qualification records.
E. Description of fire test performance and hose stream test.

11.4 The following records or copies of records shall be transmitted to Niagara Mohawk following the test program.

A. Test data sheets.
B. All test photographs and negatives.
C. Measurement instrument calibration records.
D. Temperature strip chart recordings.

11.5 All test reports, records, data and photographs shall be the sole property of Niagara Mohawk Power Corporation at the termination of the test program. None of this material shall be released to anyone without prior written approval of an authorized Niagara Mohawk Power Corporation Officer.

12.0 QUALITY ASSURANCE

12.1. Measures shall be implemented to assure that test tools, gauges, instruments and other measuring and testing devices which may affect the test program are properly calibrated and adjusted at specified periods to maintain accuracy within necessary limits. All calibration shall be traceable to the National Bureau of Standards.

12.2 A suitable procedure or test plan and checklist shall be developed by the testing laboratory to assure compliance to this specification and applicable sections of IEEE Standard 634-1978 "IEEE Standard Cable Penetration Fire Stop Qualification Test".

12.3 Niagara Mohawk Power Corporation reserves the right to audit the calibration program for measuring and test equipment applicable to this test program and the procedures, test plans and checklist developed to assure compliance to this specification. Audits may be performed to verify the acceptability of these quality assurance documents or to verify the implementation of the established requirements. The testing laboratories shall grant Niagara Mohawk Power Corporation representatives free access to all documents and work areas deemed necessary to perform through and meaningful audits, limited to areas and documents appropriate to this project. Furthermore, the test laboratory shall act promptly to obtain Niagara Mohawk Power Corporation acceptance or remedial or corrective action by non-conformances and shall implement the same promptly after receipt of Niagara Mohawk Power Corporation acceptance.

12.4 Niagara Mohawk Power Corporation Engineers or Inspectors shall have the right at any time to witness tests and inspect test equipment used or to be used in connection with the test program.

12.5 Documentation shall be provided by the testing laboratory which verifies that the fire test room or area meets the minimum requirements defined in American National Standard A2.1-1972, Section 10.1.

7811790192 -01

D

WASTE STORAGE
FLOOR EL. 251'-0"

WASTE STORAGE
FLOOR EL. 251'-0"

NEW DRUM STORAGE + DISP. RAC.
X-3406

LOW LEVEL
STORAGE

OPEN HATCH
10'X10"
(ABOVE)

EL. 247'-0"

PIPE TUNNEL

PROCESS AIR BLOWER

EQUIPT. REMOVAL

RWR-1 X-3208
DECON TANK

RWR-2 X-3209
DECON TANK

CONC. WASTE TANK #12

V-0801

NEW HPD

CUT OPENING IN EXIST. WALL FOR PIPE RUNS

CHARCOAL COLUMN

EXISTING BUILDING

LIQUID WASTE BUILDING

EXISTING BUILDING

EXISTING BUILDING

STACK

SCREEN & PUMP HOUSE

REFERENCE DRAWINGS

TITLE	DWG. NO.
EQUIPMENT ARRANGEMENT RAD. ZONE - PLAN EL. 261'-0"	C-31781-C
RAD. ZONE - PLAN EL. 271'-0" & 283'-0"	C-31787-C C-31788-C

KEY

RADIATION-ZONES.

- ZONE 1 > 100 MREM/HR.
- ZONE 2 < 100 MREM/HR.
- ZONE 3 < 20 MREM/HR.
- ZONE 4 < 5 MREM/HR.
- ZONE 5 < 1.5 MREM/HR.
- ZONE 6 < 0.2 MREM/HR.
- RADIATION AREA MONITORS.

KEY PLAN
PLAN EL. 244'-0"

GENERAL NOTES

1. ACCESS TO RADIATION AREAS OR AREAS CONTAMINATED WITH RADIOACTIVE MATERIALS WILL BE CONTROLLED ADMINISTRATIVELY BY RADIATION PROTECTION PERSONNEL AND PHYSICAL BARRIERS WITH A LOCKING CAPABILITY WILL BE PROVIDED.
2. ACCESS TO HIGH RADIATION AREAS WILL BE POSTED WITH WARNINGS AND PROVIDED WITH PHYSICAL BARRIERS, LOCKS OR ALARMS. BARRIERS AND LOCKS ARE DESIGNED SO THAT NO INDIVIDUAL WILL BE PREVENTED FROM LEAVING A HIGH RADIATION AREA.

THIS DOCUMENT CONTAINS NO SAFETY RELATED MATERIAL

FOR APPROVAL

MK	DATE	BY	DESCRIPTION OF REVISION	APP	APP
A	2-5-79	LK	FOR APPROVAL		
	11-27-78	LK	PRELIMINARY		

PREPARED BY
CATALYTIC, INC.
ENGINEERING DEPARTMENT, PHILADELPHIA, PENNSYLVANIA 19102

CATALYTIC CONTRACT NO 36700 | CATALYTIC JOB NO 36704

N.M.P. CORP. M.O. NO. 4013

NIAGARA MOHAWK

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION NO. 1

RADWASTE SOLIDIFICATION AND STORAGE BLDG.

RADIATION-ZONES.

PLAN-ELEVATION 244'-0"

DES	DR	CH	DATE	SCALE
LK	LC 4-2-79	NC	1-9-79	1/8" = 1'-0"

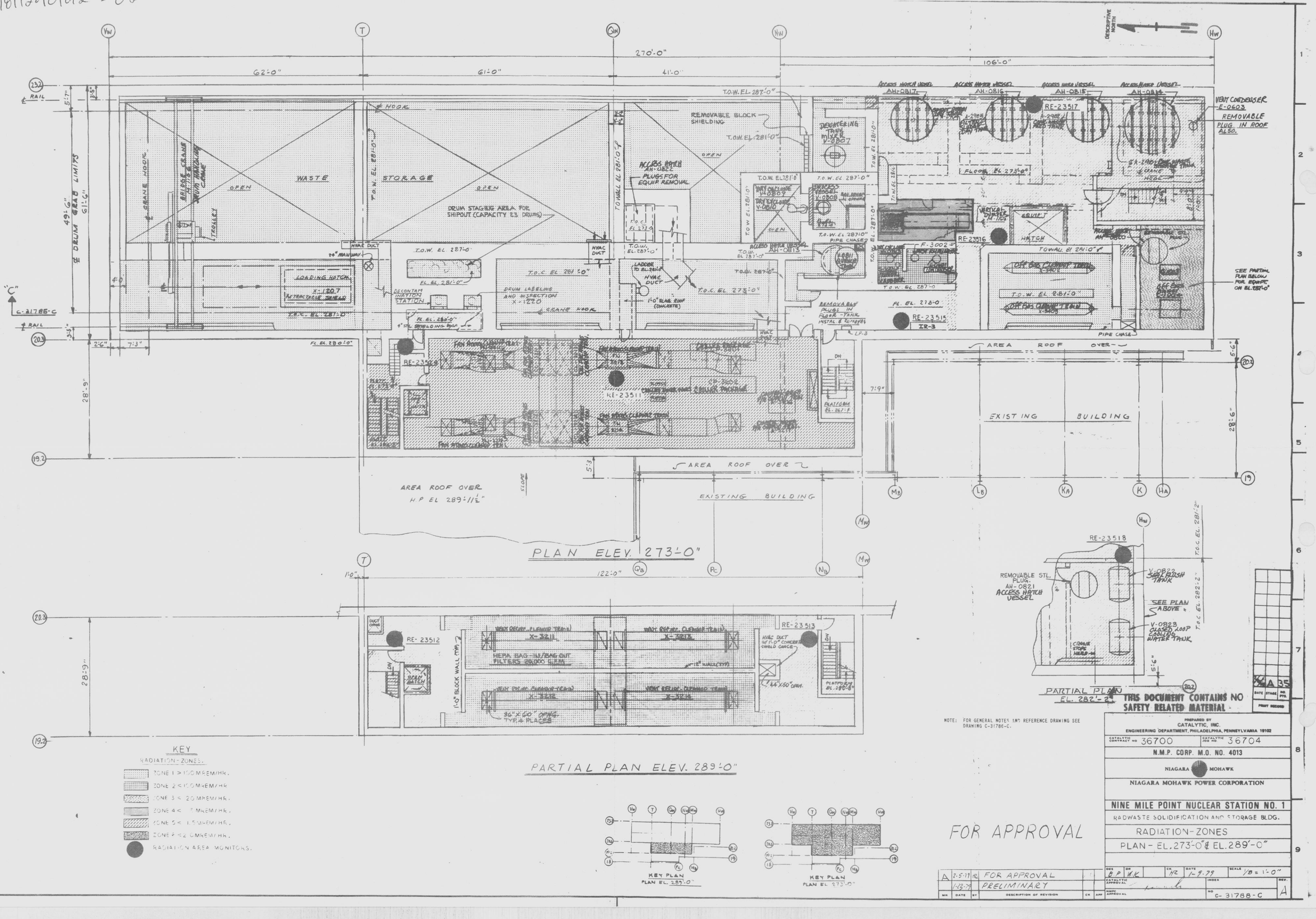
CATALYTIC APPROVAL | INDEX | REV.

NMPC APPROVAL | NO C-31786-C | A

3/6/79 | A | 35
DATE | STAGE | NO. PTS.
PRINT RECORD

7811290192 - 07

D



THIS DOCUMENT CONTAINS NO SAFETY RELATED MATERIAL

NOTE: FOR GENERAL NOTES AND REFERENCE DRAWING SEE DRAWING C-31786-C.

PREPARED BY
CATALYTIC, INC.
ENGINEERING DEPARTMENT, PHILADELPHIA, PENNSYLVANIA 19102

CATALYTIC CONTRACT NO	CATALYTIC JOB NO
36700	36704

N.M.P. CORP. M.O. NO. 4013

NIAGARA MOHAWK

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION NO. 1

RADWASTE SOLIDIFICATION AND STORAGE BLDG.

RADIATION-ZONES

PLAN - EL. 273'-0" & EL. 289'-0"

FOR APPROVAL

NR	DATE	BY	DESCRIPTION OF REVISION	CK	APP
A	2-5-79	NR	FOR APPROVAL		
	1-23-79		PRELIMINARY		

DES B.P. DR W.K. CK NR DATE 1-9-79 SCALE 1/8 = 1'-0"

CATALYTIC APPROVAL

NMPC APPROVAL

INDEX NO C-31788-C REV. A

A35 DATE STAGE NO. PTS. PRINT RECORD

D

4811290197
-03

PROPOSED PROPERTY LINE

ADMINISTRATIVE BLDG

℄ ROAD

67'-9"

24'-6"

28'-9"

61'-6"

28'-9"

270'-0"

41'-0"

106'-0"

TOT. EL. 259'-0"

96'-0"

59'-0"

4'-0"

34'-0"

WASTE STORAGE

OPEN

OPEN

RADIATION LOADING BARRIER (WHEN LOADING & UNLOADING RAD DRUMS)

FENCE

DRUM HATCH OPENING FLUSH WITH FLOOR

ROLL-UP DOOR

TRUCK

LOADING & TRUCK UNLOADING AREA

RE-23506

RE-23507

M-1108 10 TON BRIDGE CRANE

ROLL-UP DOOR

AREA FOR HVAC

RE-23508

SECO MIST

1H23 (16,950 LBS.)

FRONT

1B (16,620 LBS.)

18' (4800 LBS.)

NNI (18S) (3000 LBS.)

NNI (18S) (3000 LBS.)

CEMENT SILO X-1125

"FLAT" EL. 267'-4"

EQUIP. HATCH

DRUM PICK-UP STATION

X-3423 DECANT STATION

X-1219 DRUMMING STATION

X-1124 CEMENT FILLING STATION

SHIELDING

DECANT WATER RETURN PUMP

DECANT RESIN FILTER SLURRY P-2803/PMP

DRY CYCLONE V-0810

M-1101 PRODUCT HOPPER AH-0812

RED REMOVAL OPENING SHIELDED PIPE CAVE

SAFETY SHOWER AND EYE WASH

V-0817

CARB. STL. LINER

FILTER SLUDGE DAY TANK V-0811C

FL. EL. 254'-0" DIAM. 3'-2" LINER

CONC. WASTE FEED TANK V-0811B

FL. EL. 256'-10" CAST. LINER

CONC. WASTE STORAGE TANK NO. 13 V-0811A

FL. EL. 255'-0" DIAM.

FUEL OIL SHED

RE-23510

LAUN. OPEN-TOP TYPE DRUM SHIELD W/ COMPACTOR

SHOES & COVERALLS DISPENSER

EQUIP.

LAUN.

DRY

DRY

WASTE PACKAGING

PRECOVER

6" BLOCK WALL

BED MAT'LS. STOR. AND INJECTION ROOM

RE-23509

EXISTING BUILDING

EXIST. CRANE

CLOSE-OFF EXIST. DOOR

RELOCATE DOOR

EXISTING BUILDING

HATCH TO BE COVERED W/ REMOVABLE PLATE FOR FORK LIFT PASSAGE

21'-0"

21'-0"

18'-0"

28'-6"

EXISTING BUILDING

EXIST. BLDG 7

FIRE PUMP ROOM

BURIED TANK

24'-3"

24'-3"

20'-0"

26'-6"

17'-6"

STACK

26'-0"

26'-0"

15'-6"

18'-3"

23'-0"

23'-0"

23'-0"

23'-0"

KEY PLAN PLAN EL. 261'-0"

NOTE: FOR GENERAL NOTES AND REFERENCE DRAWING SEE DRAWING C-31786-C.

KEY

RADIATION-ZONES

ZONE 1 > 100 MREM/HR.

ZONE 2 < 100 MREM/HR.

ZONE 3 < 20 MREM/HR.

ZONE 4 < 5 MREM/HR.

ZONE 5 < 1.5 MREM/HR.

ZONE 6 < 0.2 MREM/HR

RADIATION AREA MONITORS.

FOR APPROVAL

MK.	DATE	BY	DESCRIPTION OF REVISION	APP.
A	2-5-79	MK	FOR APPROVAL	
	1/23/79	MK	PRELIMINARY	

THIS DOCUMENT CONTAINS NO SAFETY RELATED MATERIAL

DATE	STAGE	NO. PTS.
1/24/79	A	35

PRINT RECORD

PREPARED BY
CATALYTIC, INC.
ENGINEERING DEPARTMENT, PHILADELPHIA, PENNSYLVANIA 19102

CATALYTIC CONTRACT NO.	CATALYTIC JOB NO.
36700	36704

N.M.P. CORP. M.O. NO. 4013

NIAGARA MOHAWK

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION NO. 1

RADWASTE SOLIDIFICATION AND STORAGE BLDG.

RADIATION - ZONES

PLAN - ELEVATION 261'-0"

DES.	DR.	CH.	DATE	SCALE
CP	CF	MK	1-9-79	1/8" = 1'-0"

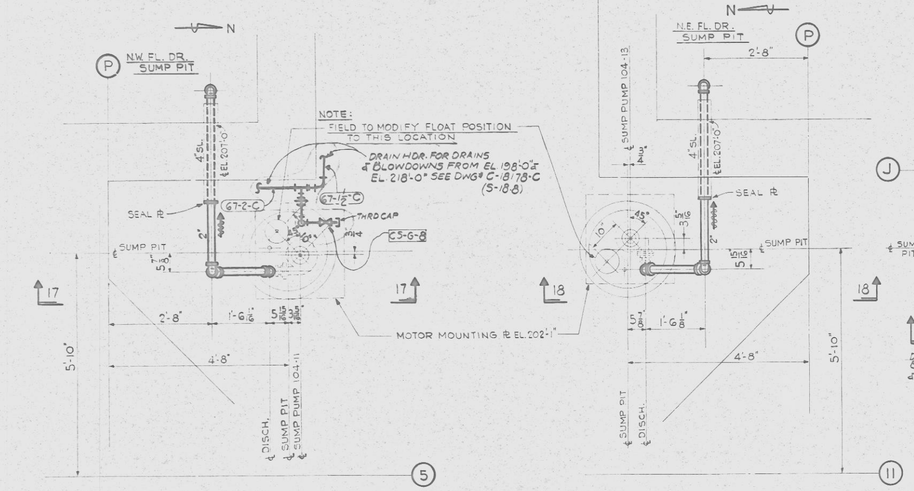
CATALYTIC APPROVAL

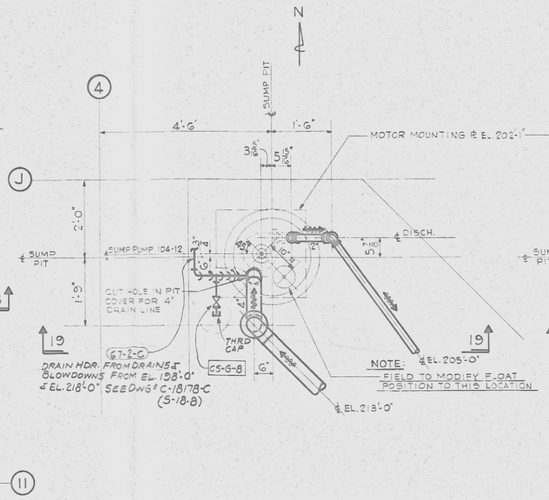
NMPC APPROVAL

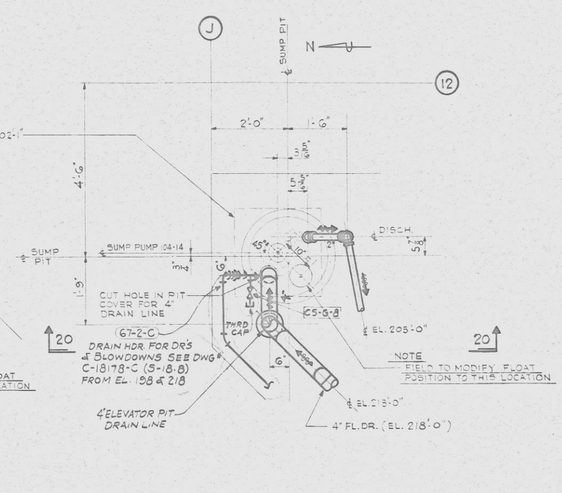
INDEX NO. C-31787-C

REV. A

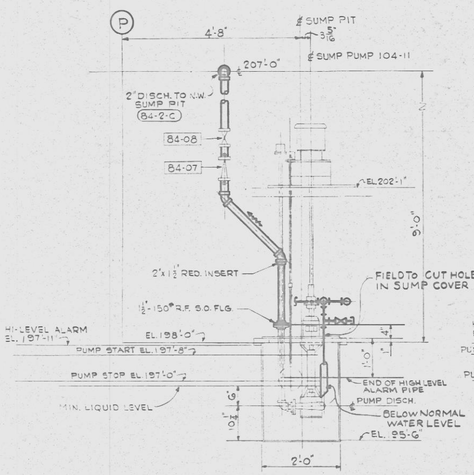
C-18506-C



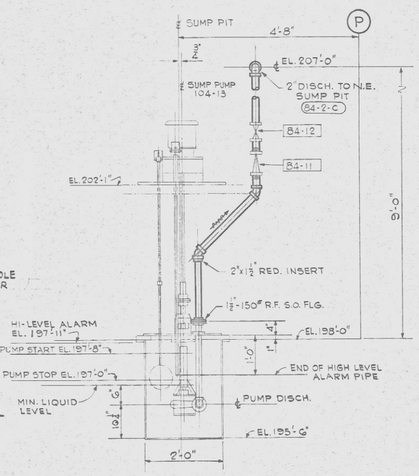




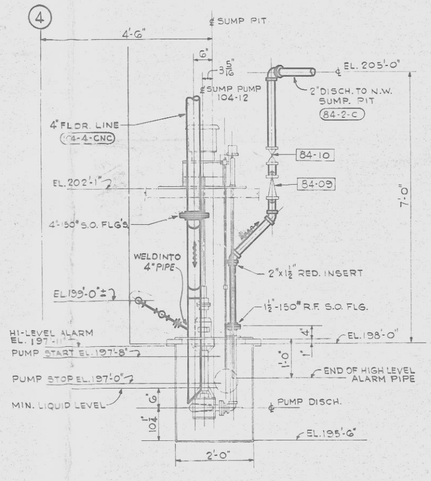
SUMP PUMP 104-11 N.W. CORNER
PLAN ABOVE EL. 198'-0"



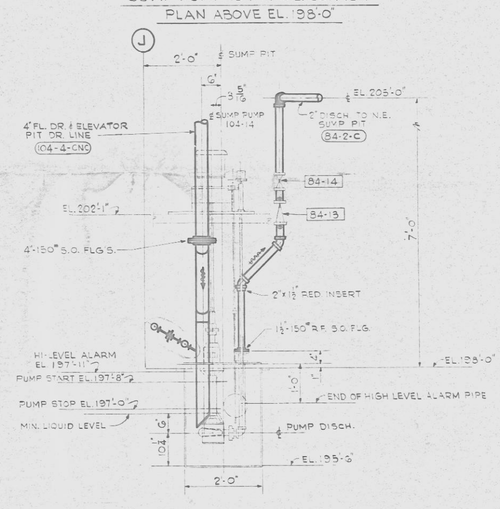
SUMP PUMP 104-13 N.E. CORNER
PLAN ABOVE EL. 198'-0"



SUMP PUMP 104-12 S.W. CORNER
PLAN ABOVE EL. 198'-0"



SUMP PUMP 104-14 S.E. CORNER
PLAN ABOVE EL. 198'-0"



SECTION "17-17"

SECTION "18-18"

SECTION "19-19"

SECTION "20-20"

FOR MAIN BLDG. SUMP PUMPS SEE DWG # C-18503-C & C-18504-C (S-15)
FOR GENERAL NOTES & REFERENCE DWG'S. SEE DWG. # C-18505-C

SYSTEM # 84, 104

NIAGARA MOHAWK RECORDS					
NIAGARA MOHAWK POWER CORPORATION					
NINE MILE POINT NUCLEAR STATION					
REACTOR BLDG.					
FLOOR DRAINAGE PIPING					
SUMP PUMP DETAILS					
LOWER CORNERSOF BLDG.					
DES.	DR. EAH	DR. 6/0	DATE 7-11-67	SCALE 3/4" = 1'-0"	
APP.	Kes	APP.		DWG # 3-N2-S15	
APP.		APP.		DWG # C-18506-C	

NO.	NO.	DATE	BY	DESCRIPTION OF REVISION	CK.	APP.
00	1	9/06	NS	ADDED DRAIN HEADER TO SUMPS	LL	JDH

LTR 11-17-78
#7811290192
50-220
D

RETURN TO REACTOR DOCKET FILES

MICRO 77 30 X

D

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

REACTOR BUILDING

FLOOR DRAINAGE PIPING

SECTION I-I LOOKING EAST

SYSTEM NO. 104, 103, 85, 84, 83, 80

ALL WORK SYSTEMS - 1941 105 BY S&W Co

FOR PIPING SPEC'S, SEE DWG..... C-18509-C
FOR GEN NOTES SEE DWG..... C-18500-C
FOR REFERENCE DWG'S, SEE DWG..... C-18505-C

CHANGED PIPING BETWEEN L & K AS PER FIELD INST.

ADDED PAD. PIPE MK3-31-83

ADDED PAD. PIPE MK3-

CORRECTED UPPER EL. 216'-0"

CHANGE LINE FROM 1" TO 1 1/2"

ADDED SLOPE ARROW

CHANGED TO 2" DRAIN

ADDED PIPING & EQUIP.

C-18502-C

SECTION I-I LOOKING EAST

SECTION 12-12

SECTION 11-11

PLAN AT PIPE CHASE BELOW EL. 261'-0"

FOR ENLARGED SECTION OF PIPING IN THIS AREA SEE SECT 14-14 ON DWG C-18504-C

PIPE CHASE

EQUIPMENT DRAIN TANK

4" EQUIP DRAIN

4" FLOOR DRAIN

4" TRACK DRAIN

4" CASK WASH DR.

4" LAUNDRY DR. TK.

4" EMERG. COND DR. & OVERFLOW

4" EMERG COND DR & OVERFLOW # CONT SPRAY SYSTEM TO WASTE DISPOSAL BLDG. FOR CONT SEE DWG'S. C-18379-C & C-18385-C (SH)

SUMP

EL. 198'-0"

EL. 218'-0"

EL. 237'-0"

EL. 261'-0"

EL. 340'-0"

EL. 554'-0"

EL. 333'-0"

EL. 298'-0"

EL. 278'-0"

EL. 253'-0"

EL. 231'-0"

EL. 213'-0"

EL. 189'-0"

EL. 257'-0"

EL. 232'-0"

EL. 275'-6"

EL. 295'-0"

EL. 308'-0"

EL. 328'-9"

EL. 313'-6"

EL. 284'-3"

EL. 253'-6"

EL. 261'-0"

EL. 237'-0"

EL. 257'-0"

EL. 232'-0"

EL. 231'-0"

EL. 213'-0"

EL. 189'-0"

C-18502-C

C-18496-C

HATCH

STORAGE PIT

SPENT FUEL STORAGE POOL

℄ REACTOR

TOP OF DRAIN EL 340'-0"

REFUELING PLATFORM TRACK DRAIN (TOP OF DRAIN EL 339'-10")

AIR LOCK

ELEVATOR

AIR VENT

6" RISER TO SUMP PIT

SPENT FUEL CASK WASH DOWN TRAY DRAINS, SEE DETAIL AT RIGHT

4" R SER. CASK WASH OR TO LAUNDRY DR. TANK

6" RISER TO SUMP PIT (CAP EL 333'-0")

REFUELING PLATFORM TRACK DRAIN (TOP OF DRAIN EL 339'-10")

FOR DETAILS AT TRACK SEE DWG. # C-15132-C SHT 5 (SG)

80-1C C-8177-C (S-18)

10S2-C C-8355-C (S-14) RISER TO RBEDT TERM. ECAP

CS-G-8

104-4-CNC

CONSTR JT.

PITCH

EL 332'-9"

EL 333'-3"

EL 333'-9"

EL 334'-3"

EL 334'-6"

EL 335'-0"

EL 335'-5"

EL 335'-3"

EL 340'-1"

EL 341'-6"

EL 334'-0"

EL 332'-0"

85-4-C

20'-0"

PLAN

REMOVEABLE COVER 3/8" THK. CHK'D. PL

ROUGH POUR

8" SCH 40

3"x4" RED.

4" SCH 40

DETAIL OF SPENT FUEL CASK WASH DOWN TRAY DRAINS

SCALE 3"=1'-0"

GENERAL NOTES

TOP OF FLOOR DRAINS TO BE SET AT EL. 339'-11" (EXCEPTIONS NOTED)

① ZURN # 509 FL DR SCREWED OUTLET OR EQUAL

② ZURN # 516 FL DR SCREWED OUTLET OR EQUAL FOR PIPE SPEC'S SEE DWG # C-18603-C

FOR FLOOR DRAIN SETTING DETAIL SEE DWG # C-

ALL FLOOR DRAIN PIPING TO BE 4" (EXCEPT WHERE NOTED) WITH BENDS OR BUTT WELD FITTINGS TO BE USED AT DISCRETION OF FIELD

ALL FLOOR DRAINS TO BE PITCHED APPROX. TO ELEV'S SHOWN WITH A CONTINUOUS PITCH AND NO POCKETS IN RUNS

④ ZURN # 507 FL DR SCREWED OUTLET OR EQUAL (2 REQ'D. FOR REFUELING PLATFORM TRACK DRAINS ONLY)

FOR REFERENCE DWG'S SEE DWG. C-18505-C SHT 5

ALL SYSTEM # 104 WORK & MATERIAL BY S&W. CO.

SYSTEM # 85-89-104-105

NO.	DATE	BY	DESCRIPTION OF REVISION	CK.	APP.
C	3 8/27/69	TPJ	CHANGED PIPING BETWEEN L & K RON 9612 AS PER FIELD INST.	CRF	
B	2 3/14/68	WS	ADDED EQUIP DRAINS	ALC-CW	
A	1 7/28/67	EA	REVISED ELEV. OF (2) FL. DRAINS (1) AT COL. L & 5	ALC-CW	

NIAGARA MOHAWK

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

REACTOR BUILDING

FLOOR DRAINAGE PIPING

PLAN AT ELEV. 340'-0"

DES. GJO	CH. NS	DR. TB	DATE 6/01 6/23/67
TR. K-A	APP.	APP.	APP.
SCALE 3/16"=1'-0"	INDEX 3-N2-S15	NO. C-18496-C	

RETURN TO REACTOR DOCKET FILES

ltr dtd 11-17-78 7811290192

50-220

D

MICRO AD 30 X

C-18509-C

FOR DRAINS IN TURBINE MAT

SEE DWG# C-19120-C & C-19121-C

TRACK DRAINS

6" RISER TERMINATE @EL. 244'-0"

FOR CONT. SEE DWG# C-18510-C

FL. DR SUMP# SU-1 BOT. EL. 235'-0"

FL. DR SUMP# SU-2 BOT. EL. 235'-6"

FL. DR SUMP# SU-3 INV. EL. 239'-10"

6" RISER TERMINATE @EL. 244'-0"

INV. EL. 240'-0"

MAIN STEAM DRAIN LINE @EL. 240'-3" FOR CONT. SEE DWG# C-18054-C (S11)

EQUIP. DRS

FL. EL. 243'-0"

TERMINATE @EL. 244'-0"

DIESEL GEN. COOL WTR. SUPPLY LINES, FOR CONT. SEE C-18510-C, SH. 1 & 2

TERMINATE @EL. 251'-0"

COOL WTR. SUPPLY TO DIESEL GEN #102, FOR CONT. SEE C-18306-C (S15)

79-4-C COOL WATER SUPPLY TO DIESEL GEN #103 SEE C-18306-C (S15)

6" RISER TERMINATE @EL. 251'-0"

TERMINATE @EL. 244'-6"

6" RISER TERMINATE @EL. 251'-0"

TERMINATE @EL. 251'-0"

TERMINATE @EL. 251'-0"

6" RISER TERMINATE @EL. 251'-0"

TERMINATE @EL. 251'-0"

TERM. @ EL. 251'-0"

FLR. DRAIN SUMP #SU-1 BOT. EL. 243'-6"

HIGH POINT @EL. 248'-6"

HIGH POINT @EL. 248'-6"

4" ZURN #Z-509 FL. DRAIN (OR EQUAL) SET F. DR @EL. 256'-0"

REFERENCE DWGS
C-18510-C (S15) PLAN-TURB. & IX. AREA
C-19120-C (S12) TURB. FOUND. MAT
C-19121-C (S12) " " "
C-19185-C (S11) BLDG. OUTLINE
C-18510-C (S11) " " "
C-18000-C (S11) PIPING & INSTR. SYMBOLS
FLOOR DRAINS SYSTEM #104
EQUIP. DRAINS SYSTEM #105

ALL WORK & MATERIAL BY S&W Co. ALL TRAPS TO BE MADE UP WITH BUTT WELD FITTINGS

4" FLOOR DRAIN-ZURN #Z-509 (OR EQUAL)

EL 243'-1½" EL 250'-0"

4"-45° ELBOW

THREADED CONN.

WELDED JOINTS

4" PIPE

VARIES

FLOW

TYPICAL DETAIL AT FLOOR DRAINS (EXCEPT AT BEGINNING OF RUN)
CONC. SHOWN FOR EL 243'-0"

FOR FL EL 243'-0" SET @ EL 243'-1½"
" " " 243'-6" " @ EL 243'-4½"
" " " 250'-0" " @ EL 250'-0"

4" FLOOR DRAIN-ZURN #Z-509 (OR EQUAL)

4"-90° LR ELBOW

THREADED CONN.

4" PIPE

WELDED JOINTS

1'-2" MIN.

DETAIL AT BEGINNING OF DRAIN RUNS
CONC. SHOWN FOR EL 243'-0"

2" FLOOR

SEAL WELD METAL LINED

CONC. ENVELOPE

BOTTOM OF SUMP

COAT WITH KOPPERS BITUMASTIC, #50.

DETAIL OF FL. DR. SUMP
FOR DETAILS OF SUMPS SEE DWGS C-19269-C & C-19270-C (S11)

NOTE: FOR EQUIP DRS, EXTEND CONT PIPE INTO SUMP & SEAL OFF WITH STEEL PLATE, AFTER TEST, PROVIDE WEEP HOLE IN PLATE FOR DRAINAGE.

8" FLOOR

METAL LINED

BOT. O. SUMP

DETAIL OF EQUIP. DR. SUMP

GENERAL NOTES:
FLOOR DRAINS TO BE 4" ZURN #Z-509 WITH SCREWED OUTLET (OR EQUAL).
ALL PIPING TO BE 4" EXCEPT WHERE NOTED.
ALL PIPING TO BE CONTINUOUSLY PITCHED APPROX 1/16" PER FT. EXCEPT AS NOTED WITH NO POCKETS.
ALL ELEV'S. GIVEN ARE REFERRED TO USLS DATUM 1935.
ALL FLOOR DRAINAGE PIPING, FITTINGS & WELDING MATERIAL TO BE STD. WT. ALLOY STEEL ASTM A-55 WITH 2½% NICKEL & 1% COPPER
ALL ELEVATIONS GIVEN TO ℄ OF PIPE UNLESS NOTED OTHERWISE

NO.	DATE	BY	REVISION
9	2/16/79	RK	REVISED DIES GEN COOL WTR LINES PER AS BUILT DWGS & ADDED NOS.
8	8/27/76	RK	ADDED #1 DIESEL GEN COOLING WATER SUPPLY LINES
7	8/24/66	RK	ADDED FL DR'S EAST OF 17 ROW
6	12/12/75	RK	FIELD CHG 6" RISER @ COL B-16
5	11/23/65	RK	MOVED EQUIP DRAIN AT ⑰-Ⓑ
4	9/21/65	ACL	ADDED FL DR FOR ELEVATOR PIT AT ⑫-Ⓐ
3	8/26/65	RK	ENGINEERING CHG'S BLD. OUTLINE ADDED ROWS 1 & 2 AND ADDING DR COL A-16 & B-16
2	7/29/65	RK	CHGD ELEV'S AS INSTALLED IN FIELD
1	7/14/65	RK	CHGD DETAIL AT SUMP
0	6/1/65	RK	REVISED T-DEBT PIPING TO CLEAR WALLS

NIAGARA MOHAWK POWER CORPORATE

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

TURBINE BUILDING

FLOOR & EQUIP. DRAINAGE PIPING

PLAN AT EL. 243'-0" & 250'-0"

DES.	A.J.H.	DATE	JUNE 1965
DRN.	R.K.	APP.	
CHK.			C-18509-C

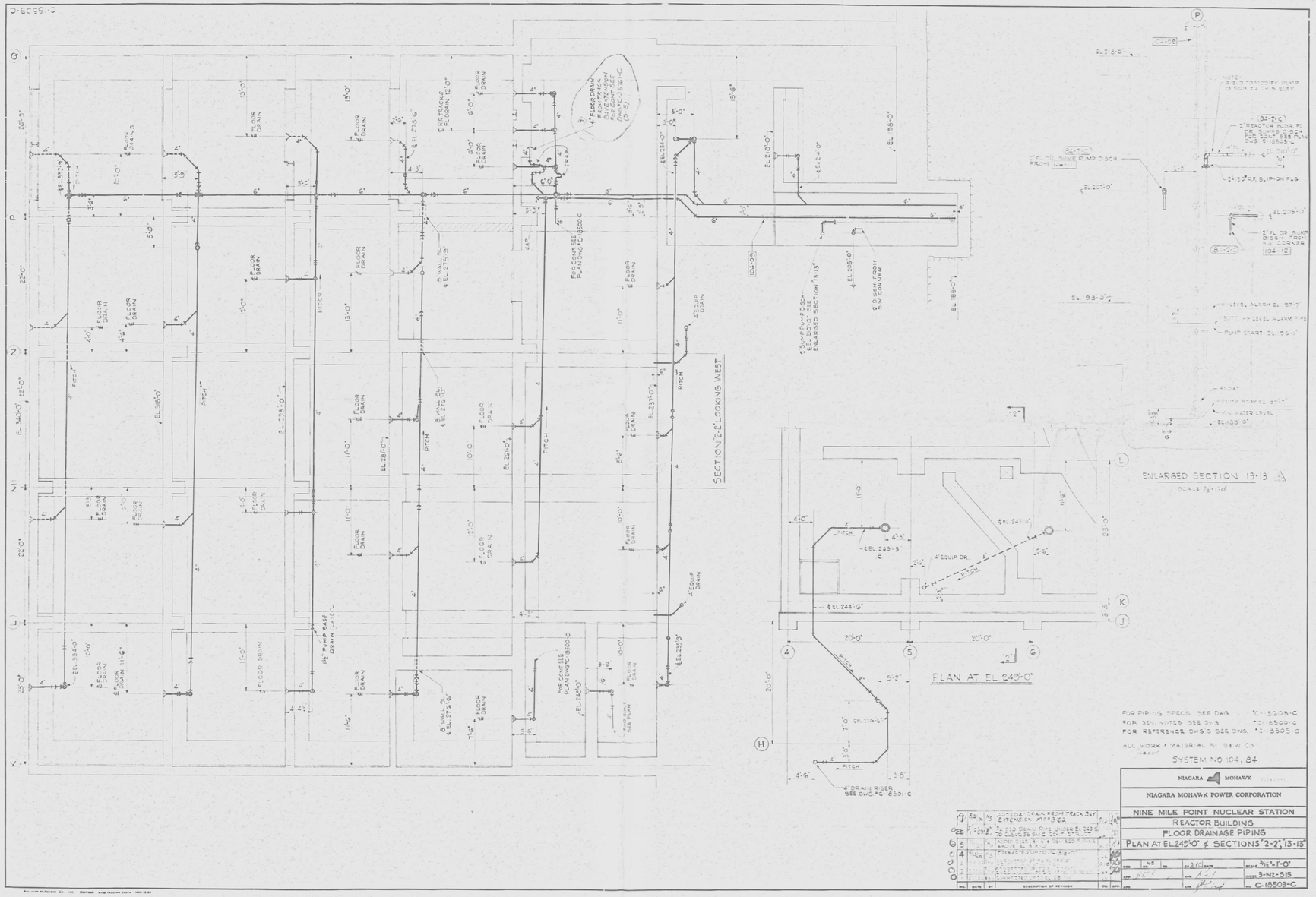
SCALE 1/8" = 1'-0"

9-10-915

1hr 11-17-78
#7811290192
50-220
D

RETURN TO REACTOR DOCKET FILES

MICRO AT 30 X



MICRO A1 30-X

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

REACTOR BLDG.

FLOOR DRAINAGE SYSTEM

PLAN AT ELEV 318'-0"

SYSTEM# (67.85.89-104/105)

ALL SYSTEM # 104 WORK & MATERIAL BY S&W CO.

FOR REFERENCE DWG'S. SEE DWG. C-13503-C

NO.	DATE	BY	DESCRIPTION OF REVISION	CK.	APP.
0	3/4/68	NS	ADDED EQUIP. DRN. NS		
1	7/11/67	RAJ	ADDED P.ENG. N PIPE CHASE, INCR. SECT. NS & C.		
2	7/6/67	NS	CHGD. DRAINAGE NORTH OF N. BLDG.		
3	3/4/68	NS	ADDED EQUIP. DRN. NS		

DES.	NS	DATE	11-14-66
DRN.	TS	SCALE	3/16"
CK.		DWG. NO.	3-N2-515
APP.			

SECT. 3 - 3 LOOKING NORTH
SCALE 3/16"=1'-0"

SECTION 1/4"

NOTES:
TOP OF FLOOR DRAINS TO BE SET AT EL. 318'-1½"
ALL FLOOR DRAINS ON THIS DWG. TO BE Z-502
FOR PIPE SPEC'S SEE DWG# C-16603-C
FOR FLOOR DRAIN SETTING DETAIL SEE DWG#C-
ALL FLOOR DRAIN P.ENG TO BE 4" (EXCEPT WHERE NOTED)
WITH 3ENDS OR BUTT WELD FITTINGS TO BE USED AT
DISCRETION OF FIELD
ALL FLOOR DRAINS TO BE PITCHED APPROX. TO EL'V'S
SHOWN WITH A CONTINUOUS PITCH AND NO POCKETS
IN RUNS

REACTOR STORAGE POOL
SPENT FUEL STORAGE POOL
REACTOR INTERNALS PIT
FRESH FUEL STORAGE
ELEVATOR
PIPE CHASE
HATCH
STORE TANKS
CRANE TRACK
CRANE RAIL
CRANE CL
CENTER LINE
PITCH
DOWN
UP
GRATING
CONCRETE SLAB
GRISER
SUMP
DRY
TRENCH
CURB
SECT. 1-1
SECT. 2-2
SECT. 3-3
SECT. 4-4
SECT. 5-5
SECT. 6-6
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SECT. 97-97
SECT. 98-98
SECT. 99-99
SECT. 100-100

C-16781-C

C-18498-C

OPEN HATCH
REMOVABLE RAILINGS

SPENT FUEL STORAGE POOL
FLOOR EL. 301'-2"

REACTOR

AIR DUCT

CLOSED LOOP COOL WATER PUMP

ELEC. TRAY EL. 293'-0"

PIPE CHASE

EL. SK.

TEST TANK

TANK

PUMP SUCT. & DISCH.

PUMP SUCT. & DISCH.

6" RISERS TO SUMP PIT SEE DWG.# C-18503-C

6" DRAIN RISER TO SUMP PIT SEE DWG.# C-18502-C

4" CASK WASH DRAIN (85-4-C)

6" OVERFLOW FROM SPENT FUEL POOL OVERFLOW SURGE TANKS, FOR CONT. SEE DWG.# C-18404-C (5-14) (85-6-C)

6" OVERFLOW FROM SPENT FUEL POOL OVERFLOW SURGE TANKS (85-6-C)

4" OVERFLOW & DRAINS FROM EMERG. CONDS. (85-4-C)

6" FL. DR. RISER

6" FD. RISER

6" CAP

EL. 312'-0"

EL. 312'-10"

SECTION 5-5

FL. PLUGS FOR FUEL POOL FILTERS

105-4-C RISER ABOVE EL. 300'-0" BELOW EL. 300'-0"

105-4-C RBEDT RISER SEE DWG.# C-18498-C

105-2-C C-18476-C (5-14A) C-18497-C

RISER TO REEDT (89-3-C) C-18402-C (5-14) C-18410-C (5-14)

89-2-C C-18404-C (5-14)

89-3-C C-18497-C C-18400-C (5-14)

89-2-C C-18400-C (5-14)

89-2-C 1½" PUMP BASE DR. SEE DWG.# C-18414-C (5-14)

105-4-C RBEDT. RISER SEE DWG.# C-18498-C

67-1-C C-18290-C (3-13A)

67-1-C C-18290-C (3-13A)

67-1-C C-18290-C (3-13A)

67-1-C PUMP DR

67-3/4-C DWG.# C-18290-C (3-13A)

67-3/4-C C-18252-C

BASE DRAIN C-18290-C (3-13A) 67-1-C

1½" PUMP BASE DR.

CLOSED LOOP COOL WATER HEAT EXCHANGER

SEE DWG.# C-18499-C

105-4-C RBEDT. RISER SEE DWG.# C-18497-C

CS-G-4

CS-G-6

CS-G-8

N

BLDG. NORTH

GENERAL NOTES:

FOR PIPE SPECIFICATIONS SEE DWG.# C-18603-C
ALL FLOOR DRAINS TO BE 4" SCR OUTLET ZURN #509 OR EQUAL.
ALL PIPE TO BE 4" (EXCEPT WHERE NOTED) WITH FITTINGS OR BENDS AT FIELD DISCRETION.
ALL DRAIN PIPING TO BE PITCHED APPROX. TO ELEVATIONS SHOWN WITH A CONTINUOUS PITCH AND NO POCKETS IN RUNS.
ALL PUMP BASE DRAINS (LATER)
ALL SYSTEM #104, WORK BY S & W Co.
1-5-65

FOR REFERENCE DWG'S. SEE DWG. C-18505-C

SYSTEM #67-69-85-89-104-105

NO.	DATE	BY	DESCRIPTION OF REVISION	CK.	APP.
3	2-28-68	NS	ADDED EQUIP. DRAINS	LLL	DW
2	7/15/67	RW	ADDED PIPING IN PIPE CHASE & SECT 5-5	6/12	DW
1	9/6/66	RW	MOVED DRAINS AT (3) AND DRAIN AT (8) (B) TO CLEAR SLEEVES	6/12	DW

NIAGARA MOHAWK (SYCONOLD)

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

REACTOR BUILDING
FLOOR DRAINAGE PIPING
PLAN AT EL. 298'-0"

DRN. G.M.R. | CK. LLL | DW | DATE 7/26/66 | SCALE 3/16"=1'-0"
DES. | APP. | APP. | APP. | DWG. NO. 3-N2-S15
APP. | APP. | APP. | APP. | DWG. NO. C-18498-C

RETURN TO REACTOR DOCKET FILES

ltr 11-17-78
7811290192
D

50-220

MICRO AT 130-X

C-18439-C

SECTION G-G
SCALE 3/8" = 1'-0"

SECTION 7-7
SCALE 3/8" = 1'-0"

TOP OF FLOOR DRAINS TO BE SET AT EL. 280'-11¼" FOR 281'-0" FLOOR
EL. 283'-11¼" FOR 284'-0" FLOOR

ALL FLOOR DRAINS ON THIS DWG TO BE ZURN Z-509 THREADED OUTLET (OR EQUAL)

FOR PIPING SPECS SEE DWG.....*C-18603-C
FOR GEN. NOTES SEE DWG.....*C-16500-C
FOR REFERENCE DWGS.....*C-18505-C

SYS 104 & 105

ALL WORK & MATERIAL BY S&W Co.

SYSTEM #'S 67-69-80-85-89-104-105

REV.	DATE	BY	DESCRIPTION OF REVISION	CH.	APP.
5	5-78	NS	ADDED EQUIP. DRAINS	LL	
4	11/17/78	NS	ADDED PIPING IN PIPE CHASE, CHGD. SECTN	LL	
3	11/6/78	NS	CHGS & REMOVED HOLD @	LL	
2	9/26/78	JO	MOVED DRAINS TO CLEAR FLOOR JOINTS	LL	
1	8/24/78	NS	CHGD. PIPING AT WELL SCREEN S.P.G. ADDED EQUIP. DRAINS	LL	

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

REACTOR BLDG.

FLOOR DRAINAGE PIPING

PLAN AT EL. 281'-0"

DES. | CK'D | DATE 4-28-78 | SCALE 3/16"=1'-0"
APP. | APP. | APP. | DRWG 3-NR-915
APP. | APP. | APP. | C-18499-C

RETURN TO REACTOR DOCKET FILES

IE 11-17-78
7811290192
D
50-220

MICRO AT 30-X

C-18500-C

SECTION 8-8

SECTION D-D

NOTES:
FOR PIPE SPECS SEE DWG# C-18603-C (5-11)
* ZURN #609 FL OR SCREWED OUTLET OR EQUAL
ZURN #619 FL DR
FOR FLOOR DRAIN SETTING DETAIL SEE DWG #C
ALL FLOOR DRAIN PIPING TO BE BUTT WELDED WHERE NOTED WITH BENDS OR BUTT WELD FITTINGS TO BE USED AT DISCRETION OF FIELD
ALL FLOOR DRAINS TO BE PITCHED AS SHOWN TO ELEV'S SHOWN WITH A CONTINUOUS PITCH AND NO POCKETS IN RUNS.

FOR REFERENCE DWGS SEE DWG # C-18505-C

ALL SYSTEM PIPING & PIPE WORK & MATERIAL BY S&W CO.

SYSTEM NO. 104, 105 & 152 67

NIAGARA MOHAWK	
NIAGARA MOHAWK POWER CORPORATION	
NINE MILE POINT NUCLEAR STATION	
REACTOR BUILDING	
FLOOR DRAINAGE PIPING	
PLAN AT EL. 261'-0"	
DES. JD / DRN. JD / CHK'D. / DATE 3-10-C	SCALE 3/8" = 1'-0"
APP'D. / APP'D.	DRAWING 3-N2-S15
APP'D. / APP'D.	No. C-18500-C

NO.	DATE	BY	DESCRIPTION OF REVISION	CK	APP'D
2	8-11-C		INSET SUMP & REST TRACK SAV EXTENSION, MOVED EQ		
1	3-6-C		DWG REORGANIZED ADDED EQUIP AND PIPE CHANGES NEW LOOK		

RETURN TO REACTOR DOCKET FILES

ltr 11-17-78
7811290192
50-220

D

C-18513-C

HATCH AREA

EXCITER BOARD

BRG. PUMP

"P" TRAP

4" FL. DR. ℄ EL. 279'-11" SEE DWG.# C-19114-C (SH2)

TURBINE GEN. & CONDENSER

STATOR LIQUID COOLING UNIT

3" PUMP BASE DRAIN

2" DRAIN FROM CNDSR PRIM. SUPPLY VOL. CHAMBER

CNDSR WATER BOX PRIM. PUMPS

SEE DWG.# C-16827-C SHT. 1 & 2 (S-SH)

6" RISER FROM EL. 262'-0" TERM. @ EL. 278'-0"

6" RISER FROM EL. 262'-0" TERM. @ EL. 278'-0"

4" RISER FROM EL. 262'-0" EL. 275'-4½"

4" RISER CAPPED AT EL. 278'-0"

4" RISER TERM. @ EL. 278'-0"

4" RISER EXTENDED FROM EL. 262'-0" TERM. @ EL. 278'-0"

6" RISERS FROM EL. 262'-0" EXTENDED TO EL. 278'-0"

ABANDON EXIST. FLOOR DRAIN.

FLOOR DRAIN IN SLAB. SEE DWG # C-19378-C (SH)

FOR CONT. SEE DWG # C-18514-C

POWER BOARD # 131

POWER BOARD # 13

POWER BOARD # 141

POWER BOARD # 112

RESERVE POWER BOARD # 101

4160 V. BUS DUCT

G.T. COMPARTMENTS

HOUSE SERVICE CUBICLES

BATTERY ROOM

BATTERY ROOM

ELEV.

RECEPTION ROOM

CORRIDOR

ROOF

RESULTS SHOP

INSTRUMENT SHOP

DIESEL GENERATOR AREA

TOILET ROOM

KITCHEN

ELECTRICAL BENCHBOARD

MECHANICAL BENCHBOARD

CONTROL CONSOLE

CONTROL ROOM

OFFICE

WOMENS RM.

FILE RM.

RESULTS ROOM

OIL TANKS

DN TO EL. 261'-0"

UP TO EL. 300'-0"

DN. TO EL. 261'-0"

SECTION "1-1"

SYSTEM # 104

FOR GENERAL NOTES SEE DWG. C-18511-C
FLOOR DRAINS ARE ZURN # 309 OR EQUAL
FOR TYPICAL FLOOR DRAIN DETAILS SEE C-16808-C (SG)
ALL FLOOR DRAINS & PIPING BY S.K.W. CO.
FOR FLOOR FINISH SEE DWG. # C-18738-C SHT. # (6-4)

NO.	DATE	BY	DESCRIPTION OF REVISION
6	5/15/72	NS	ADDED FLOOR DRAIN CNDSR PRIM. SUPPLY VOL. CHAMBER & ½" PUMP BASE DR. (M&C # 2473)
5	3/27/67	AG	REMOVED DR. FROM H.P.O. SEAL OIL UNIT & ENG. LIFT PUMP (P&I CHGD.)
4	3/9/67	AGH	CHGD. DR. BTWN. 142 FOR ELEC. CABLES, PIPES, CHGD. DIM. OF FLOOR BTWN. A & B AND 13 & 15, ABANDON FL. DR. BTW. C & A AT A5 AND G13.
3	2/22/66	AG	ADDED FL DR BETWEEN @ 13.
2	9/22/66	AG	CHGD DRAIN BETWN. COLS 13 & 14 @ 1ST FLOOR, CHGD. RISER AT A-13, ADDED RISERS AT B-11 & B-13 & FL DRS BETWN. A & B @ 14
1	4/28/66	JC	CHGD DRAINS @ COLS A & B 2 & A & B 9 DUE TO VENT. DUCTS, CHGD. HTD. BASE DRAIN TO 2"
0			

NIAGARA MOHAWK — RECORDS

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

TURBINE BUILDING

TURBINE GENERATOR AREA

FLOOR DRAINAGE PIPING

PLAN EL. 277'-0"

DES. MD	CHECKED S.A.	SCALE 3/32"=1'-0"
DRN. AWC	APPD.	DWG. 3-NP-S15
		C-18513-C

1h 11-17-78
#7811290192
50-220
D

RETURN TO REACTOR DOCKET FILES

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

TURBINE BUILDING

TURBINE AUX. AREA

FLOOR & EQUIP. DRAINAGE PIPING

PLAN AT EL. 261'0"

SCALE	1/8"=1'-0"	
DRAWN	[illegible]	
TRACED	[illegible]	
CHECKED	[illegible]	
APPROVED	[illegible]	

3-N2-SIB

C-18512-C

NO.	DATE	BY	DESCRIPTION OF REVISION	CK'D	APP'D
3	11/27	NS	ADDED HOUSE SERVICE AIR	DW	
2	8/27	NS	RELABELED FOR EL. 269'-6"	LB	
1	7/26	MH	CNG DIM & TYP BASE DRAIN ADDED FLANGE & GASK. ADDED T.S. IN ANGLE ROOM	DW	

SHEET 2 OF 2

FOR GENERAL NOTES & REFERENCE DWGS SEE C-NI8509-C & C-NI8510-C (SH #1)
TOP OF FL.DR. SET @ EL.260'-11¼" FOR EL.261'-0"
TOP OF FL.DR. SET @ EL.269'-11¼" FOR EL.289'-6"
EL.261'-0" FLOOR FINISH, DWG #C-18742-C(SH)
EL.289'-6" FLOOR FINISH, DWG #C-18790-C(SH)
* @ 2URN #509 SCREENED OUTLET OR EQUAL
@ 2URN #316 SCREENED OUTLET OR EQUAL
ALL WORK & MATERIAL BY S & W.

FLOOR DRAINS SYSTEM #04
EQUIP. DRAINS SYSTEM #05
HOUSE SERVICE AIR SYS # 55

PLAN AT EL 269'-6"

SECTION 1-1"
SCALE: 1/4" = 1'-0"

TYPICAL BASE DRAIN
COND. TRANS. PUMP (2-REQD)
WASTE SURGE PUMP (1-REQD)
SCALE: 1/2" = 1'-0"

CONDENSATE STORAGE & SURGE TANK

WASTE SURGE TANK

ELEVATOR

PIPE CHASE

N

C-18512-C (2OF 2)

NOTE
STAINLESS STEEL SURFACES TO BE EMBEDDED IN CONCRETE SHALL BEFORE INSTALLATION BE GIVEN 2 COATS OF KOPPERS BITUMASTIC 50 AND SHALL BE DRY BEFORE PLACING IN CONCRETE

N

EL 260'-11¼"
¼" S.S. @ SAME I.D. AS PIPE WITH ¼" DRILLED HOLES.
¼" S.S. RING WELDED TO O.D. OF PIPE
¼" THK. S.S. RING ½" WIDE, O.D. SAME AS I.D. OF PIPE, WELD TO PIPE.
4" SCH. 40 S.S. PIPE
WELD STRAP ANCHORS TO PIPE
4"x2" S.S. RED
S.S. 5-G-8
2" NIPPLE WITH THREADED END

DETAIL OF DRAIN IN ACID TANK AREA
2 REQD
SCALE: 1½"=1'-0"

FOR EQUIP'T PUMP BASE DRAINS IN THIS AREA, SEE DWG C-18233-C (SH 3), C-18234-C (SH 3), & C-18235-C (SH 3).

1½" BASE DRAINS

4" EQUIP DR. RISER TERM @ EL. 262'-0"

T. F. DR COLLECTOR TANK, SEE DWG C-

(67-1-C) RELIEF VALVE DISCHARGE FOR CONT SEE DWG "C-18434-C SHT 3 (5126)

DRAINS FROM AIR COMPR'S. LATER

HOUSE SER. AIR COMPR.

CONTROL AIR COMPR.

6" FL. DR. RISER TERM @ EL. 262'-0"

"P" TRAP

M.G. SET

1" BASE DRAIN

SEE DETAIL "A" BELOW

(69-1-C) BASE DRAIN SEE DWG C-18138-C (5-12)

¾" DRAIN FROM F.W. SYS. TIE LINS DWG #C-18557 C (SH)

4" EQUIP DR. RISER TERM @ EL. 262'-0"

4" FL. DR. RISER TERM @ EL. LATER

(67-3-C) DEMIN EQUIP. DRAINS, DWG #C-18629-C (SH)

RISERS FROM EL. 251'-0"

CONN. TO EX. ST. RISER BELOW

C-18511-C

ELEV. 265'-0"

ELEV. 259'-0"

ELEV. 254'-0"

ELEVATOR

TOP OF 4" SLEEVE EL 261'-3"
EL 261'-0"
WELD & GRIND SMOOTH
DRAIN PAN M.G. SET SEE G.E. DWG. #527.D.953
3 3/16" ±

DETAIL "A" AT M.G. SETS

PLAN AT ELEV. 261'-0"

FOR GEN. NOTES & REFERENCE DWGS. SEE DWG #C-18511-C
FLOOR DRAIN SYSTEM #104
EQUIP. " " #105

NO.	DATE	BY	DESCRIPTION OF REVISION	CH.	APP'D.
10	9/25/78	MW	REVISED ROUTING OF FLOOR DRAIN LINE TO AGREE WITH FIELD CONDITIONS	KID	
9	5/10/78	MW	ADDED ULTRASONIC RESIN CLEANER CONTROL PANEL RELIEF VALVE DISCH. M.S.K.D.720-1258-8-D.000	KID	
8	6/68	TJ	ADDED 1" TEST PUMP BASE DRAIN NEAR " " ROW G 11	KID	
7	5/11/67	KJ	ADDED " " AS PER E.I.O. CHG'D DIM 'B'	LL	
6	2/24/67	KJ	REMOVED G" RISER & F.D.R. CHG'D ELEV. & ADDED EQUIP. DR. PIPING	LL	
5	12/6/66	MG	CHG'D FLR. DRS. IN DECON. AREA	LL	
4	10/26/66	MW	CHG'D DIM. ON DRAIN DETAIL, ADDED NOTE & RELABELED SEC. H	LL	
3	10/7/66	MG	ADDED 1" DRS. IN MEZ. TO AREA & DETAIL REMOVED 2" LINE IN NEUTRALIZATION ROOM	LL	
2	7/27/66	MG	RELABELED ALL FL. DRAINS EXCEPT WHERE NOTED CHG'D DIM 'B' & NOTE CORRECTED 1-0" MTRS FOR CONST. PURPOSES	LL	
1	12/1/65	MG	ADDED FLOOR DRAINS CHG'D PIPING IN EQUIP. ROOM PER E.I.O. M.G. SETS, IN ROOM, SHOWER & DRAINS AT PANELS RELABELED	LL	
0			ISSUED FOR CONSTRUCTION		

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION
TURBINE BLDG.
TURBINE AUX. AREA
FLOOR DRAINAGE PIPING
PLAN-EL. 261'-0"

DES. A.H. DR. LL DATE 12/6/65 SCALE 3/32"=1'-0"
APP'D. DRN. 3-N12-S15
APP'D. C-18512-C 15

SHEET 1 OF 2

Williams-McKeehan Co., Inc. Buffalo

1R 11-17-78
#7811290192
50-220
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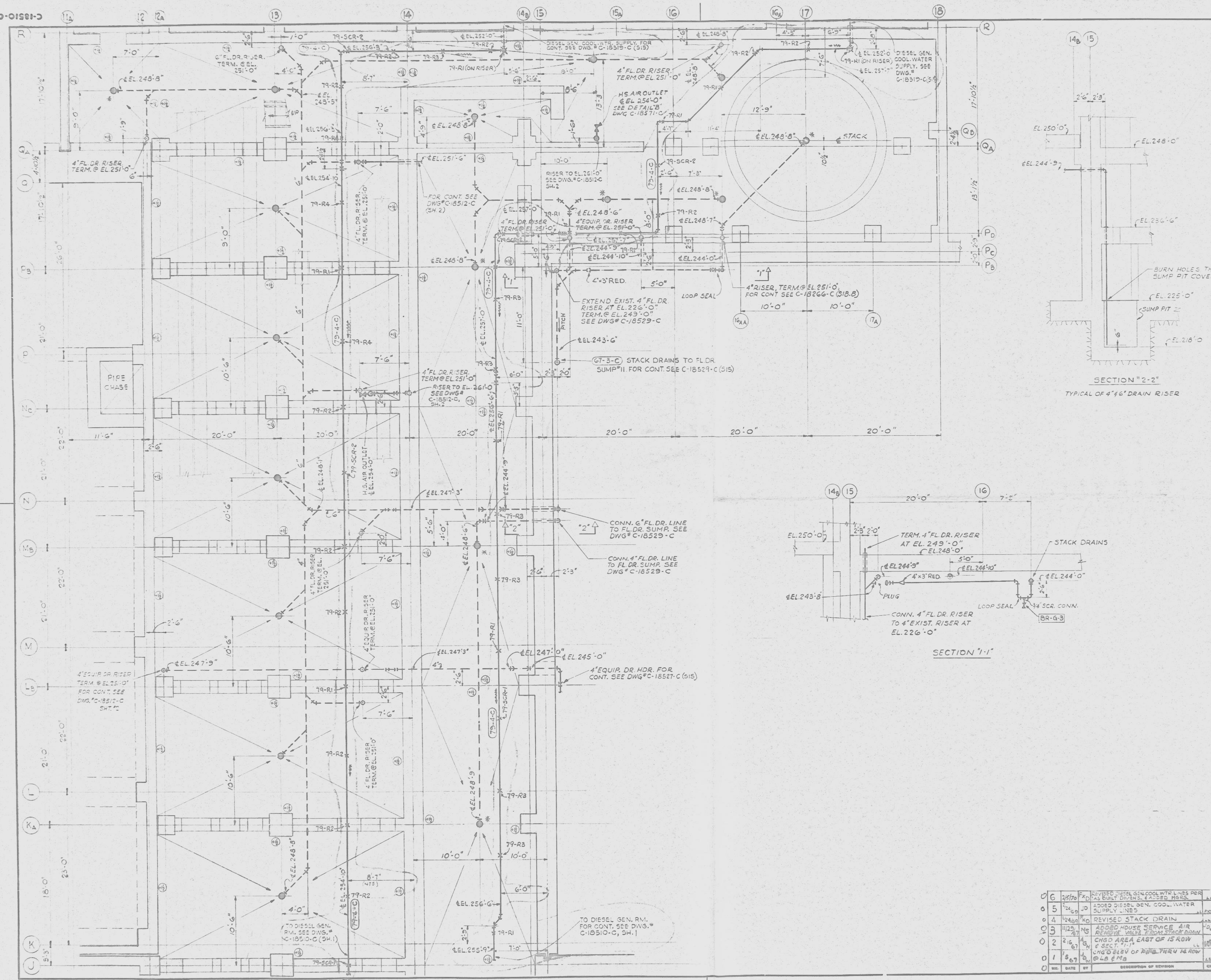
RETURN TO REACTOR DOCKET FILES

C-18510-C SH.2



NOTE: (±) INDICATES ELEV. OF RIDGE LINES WITH RELATION TO ELEV. 250'-0". FOR FL. ELEV. 250'-0", SET FL. DR. AT ELEV. 250'-0" (EXCEPT AS NOTED.)

FOR DETAIL OF SETTING FLOOR DRAIN SEE DWG# C-18509-C

* ZURN #509 WITH SCR. OUTLET OR EQUAL
ZURN #516 WITH SCR. OUTLET OR EQUAL

FOR CONC. ENVELOPE AT FLOOR DRAINS SEE DWG # C-18510-C

FOR EQUIP. DRAIN CONTAINMENT PIPE SEE DWG # C-13510-C

FOR GENERAL NOTES SEE DWG# C-18509-C

ALL WORK & MATERIAL BY S.&W. Co.
DIESEL GEN C.W. SYSTEM #79
FLOOR DRAINS SYSTEM #104
EQUIP. DRAINS SYSTEM #105
HOUSE SERVICE AIR SYS # 95

NO.	DATE	BY	DESCRIPTION OF REVISION	CK.	APP.
6	2/5/70	FXD	REVISED DIESEL GEN. COOL WTR. LINES PER AS BUILT DIMENS. & ADDED HGRS.		
5	7/24/69	JD	ADDED DIESEL GEN. COOL. WATER SUPPLY LINES	ESD	
4	1/24/69	FXD	REVISED STACK DRAIN		
3	11/29/67	NS	ADDED HOUSE SERVICE AIR REMOVE VALVE FROM STACK DRAIN	JDW	
2	2/16/67	AGH	CHGD AREA EAST OF 15 ROW & SECT. "1-1"	LL	
1	1/5/67	JDW	CHG'D ELEV OF PIPE THRU 14 ROW @ LB & MB	LL	

NIAGARA MOHAWK

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION
TURBINE BUILDING
TURBINE AUX. AREA
FLOOR & EQUIP. DRAINAGE PIPING
PLAN AT EL.250'-0"

DR. AGH | CH. JDW | DATE 8-11-66 | SCALE 3/16"=1'-0"
INDEX 3-N2-S15
NO. C-18510-C

SHEET 2 OF 2

RETURN TO REACTOR DOCKET FILES

11-17-78 lr
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50-220
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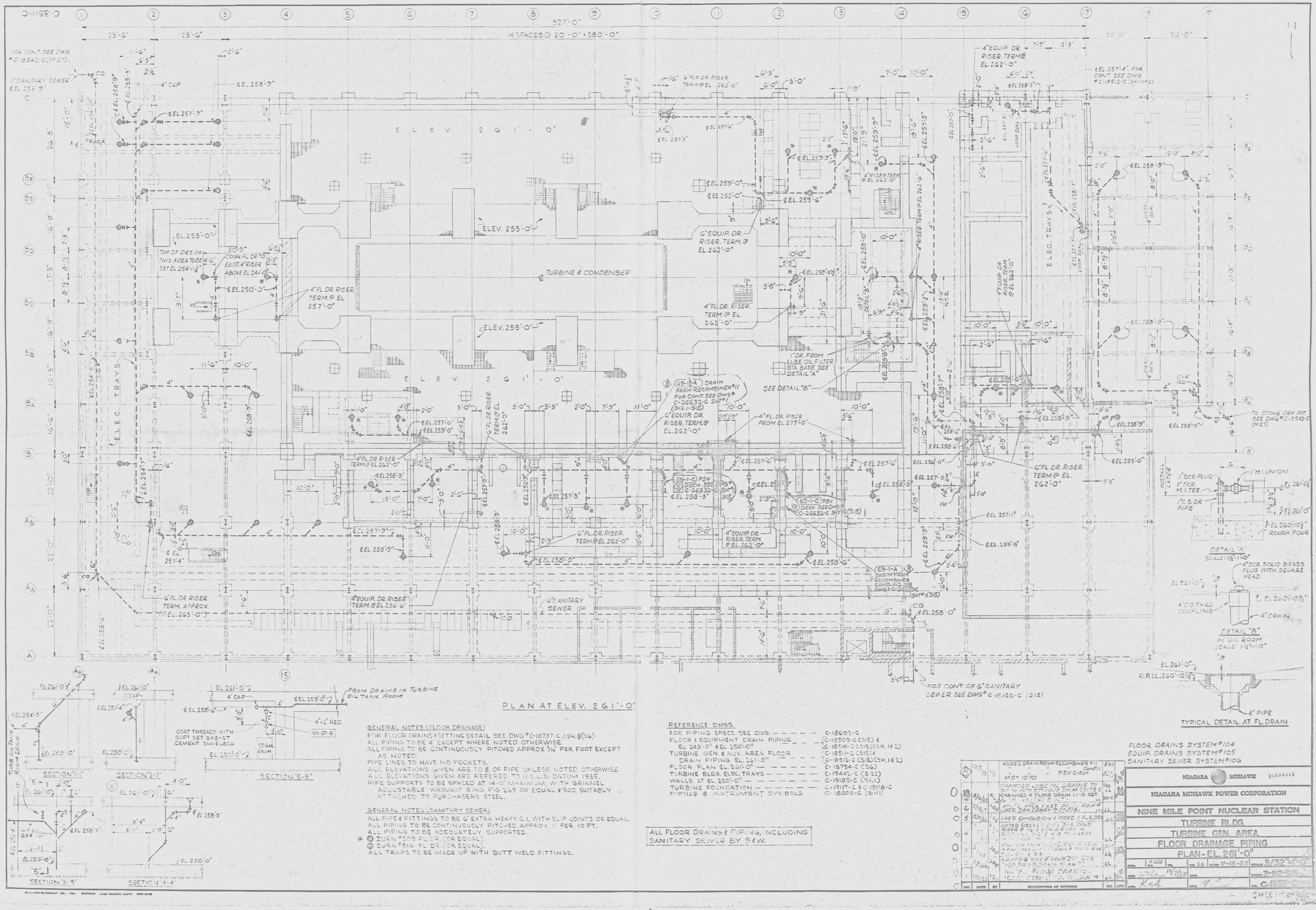
MICRO AT 30-X



PLAN AT ELEV. 261'-0"

GENERAL NOTES (FLOOR DRAINAGE)
FOR FLOOR DRAINS & SETTING DETAIL SEE DWG # C-18737-C (SH. 1) (SG)
ALL PIPING TO BE 4" EXCEPT WHERE NOTED OTHERWISE.
ALL PIPING TO BE CONTINUOUSLY PITCHED APPROX. 1/4" PER FOOT EXCEPT AS NOTED.
PIPE LINES TO HAVE NO POCKETS.
ALL ELEVATIONS GIVEN ARE TO ℄ OF PIPE UNLESS NOTED OTHERWISE.
ALL ELEVATIONS GIVEN ARE REFERED TO U.S.L.S. DATUM 1935.
PIPE SUPPORTS TO BE SPACED AT 14'-0" MAXIMUM, W TH GRINNEL ADJUSTABLE WROUGHT RING, FIG 269 OR EQUAL ROD SUITABLY ATTACHED TO PURCHASERS STEEL.

GENERAL NOTES (SANITARY SEWER)
ALL PIPE & FITTINGS TO BE @ EXTRA HEAVY C.I. WITH SLIP JOINTS OR EQUAL.
ALL PIPING TO BE CONTINUOUSLY PITCHED APPROX. 1" PER 10 FT.
ALL PIPING TO BE ADEQUATELY SUPPORTED.
* ① ZURN #609 FL DR. (OR EQUAL)
② ZURN #416 FL DR. (OR EQUAL)
ALL TRAPS TO BE MADE UP WITH BUTT WELD FITTINGS.

REFERENCE DWGS.

FOR PIPING SPECS SEE DWG	C-18603-C
FLOOR & EQUIPMENT DRAIN PIPING EL 243'-0" & EL 250'-0"	C-18503-C (S15) & C-18516-C (S15) (SH. 1 & 2)
TURBINE GEN & AUX. AREA FLOOR DRAIN PIPING EL 261'-0"	C-18511-C (S15) & C-18512-C (S15) (SH. 1 & 2)
FLOOR PLAN EL 261'-0"	C-18794-C (S6)
TURBINE BLDG. ELEC. TRAYS	C-19441-C (S22)
WALLS AT EL 250'-0"	C-19186-C (S1.1)
TURBINE FOUNDATION	C-19117-C & C-19118-C
PIPING & INSTRUMENT SYMBOLS	C-18000-C (S-11)

ALL FLOOR DRAINS & PIPING, INCLUDING SANITARY SEWER BY S&W.

FLOOR DRAINS SYSTEM # 104
EQUIP. DRAINS SYSTEM # 105
SANITARY SEWER SYSTEM # 106

NO.	DATE	BY	DESCRIPTION OF REVISION	CH.
0	4/16/65	RK	ADDED DRAIN FROM RECOMBINER #11 (cont'd) P.S.V. DISCH. MO # 1070	EAW
6	7/14/65	RK	CHANGED PIPE SIZE & ROUTING FROM EQUIP. DRAIN TANK (C-18512-C) CHANGED 4" FLOOR DRAIN LINE SET.	EAW
5	8/26/65	RK	CHG'D DIMENSION & ADDED 2 FL. DRS.	AL
4	10/1/65	RK	ADDED SLEEVE & PIPE, S.I.S. CHG'D RISER & ADD'D 6" CHG'D RISER IN EAST CORNER	AL
3	10/29/65	RK	ADDED 4" FROM EQUIP. DR. RISER TERM. @ EL 262'-0" & 4" FL DR. RISER TERM. @ EL 262'-0"	AL
2	11/3/65	RK	ADDED 4" FL DR. RISER TERM. @ EL 262'-0" & 4" FL DR. RISER TERM. @ EL 262'-0"	AL
1	11/12/65	RK	NOTE, FLOOR DRAINS	AL

NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT NUCLEAR STATION
TURBINE BLDG.
TURBINE GEN. AREA
FLOOR DRAINAGE PIPING
PLAN-EL. 261'-0"

DES.	AGW	CH.	APP.	11-16-65
DR.	RK	CH.	APP.	11-16-65
TR.		CH.	APP.	

SCALE 3/32" = 1'-0"
DRAWING NO. C-18511-C
SHEET 1 OF 1

RETURN TO REACTOR BLDG.

C 022-05
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11-17-78
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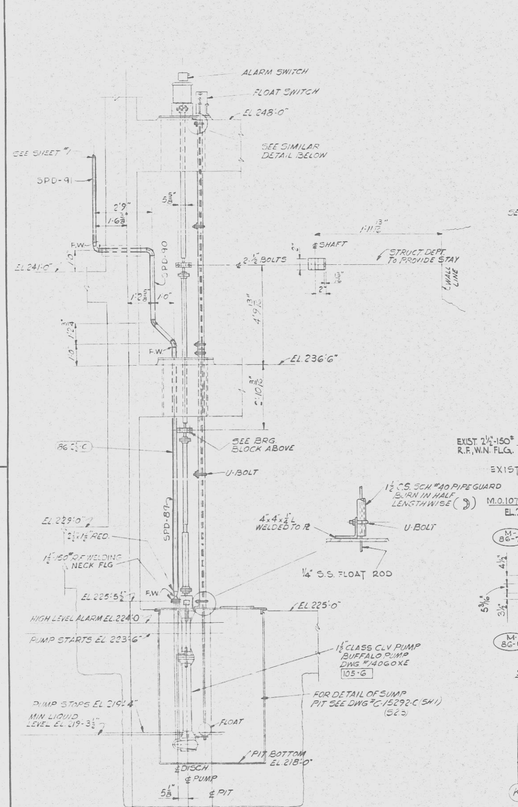
C-18530-C-SH2


ALARM SWITCH
FLOAT SWITCH
EL 248'-10"
SEE SIMILAR DETAIL BELOW
SEE SHEET #1
SPD-91
6"
5/8"
1'-6 3/8"
F.W.
EL 241'-0"
SPD-110
8 3/4" BOLTS
1'-11 3/8"
4" SHAFT
STRUCT. DEPT. TO PROVIDE STAY
4'-11 3/8"
EL 236'-6"
2'-0 1/2"
RG-21-C
SEE BRG. BLOCK ABOVE
U-BOLT
SPD-87
EL 229'-0"
2 1/2" RED.
1 1/2" 150# W.N. WELDING NECK FLG.
EL 225'-5"
F.W.
HIGH LEVEL ALARM EL 224'-0"
PUMP STARTS EL 223'-6"
EL 225'-0"
1 1/2" CLASS C.V. PUMP BUFFALO PUMPS DWG # 140GOXE
105-G
FOR DETAIL OF SUMP PIT SEE DWG #C-18292-C SH 1
(S-2)
PUMP STOPS EL 219'-6"
MIN. LIQUID LEVEL EL 219'-3"
FLOAT
PIT BOTTOM EL 218'-0"
℄ PUMP
℄ PIT
5/8"
2'-7 3/4"
1'-1 1/2"
M-B
SECTION 1-1
FL. DRAIN SUMP PUMP #1
℄ OF OPENING
4 1/2"
FLOAT SWITCH
℄ PUMP
ALARM SWITCH
EL 247'-0"
SEE DETAIL IN SECT 1-1
3'-0"
4'-11 5/8"
SEE SHEET #1
1'-5 3/8"
2"
EXISTING SHAFT BEARING STAYS TO BE REVISED TO SUPPORT EXISTING RELOCATED PUMP SHAFT
BRG.
U-BOLT
5'-10"
SPD-117
SEE SECT 1-1 AT LEFT
RELOCATED EXISTING SHAFT GUARD
RG-21-C
7'-2 15/16"
RELOCATED EXIST. FLOAT ROD GUARD PIPE
6 3/4"
EXIST. 2 1/2"-150# R.F., W.N. FLGS.
NEW 2 1/2"-150# R.F., W.N. FLGS.
EXISTING
1 1/2" GS. SCH #40 PIPEGUARD (RUN IN HALF LENGTH HOSE)
M.O. 1070 TO HERE
EL 229'-0"
SEE SECT 1-1
TOP OF FLANGE EL. 229'-2 1/2"
EL 229'-0"
HIGH LEVEL ALARM EL 227'-0"
PUMP START EL 226'-6"
M-86-6
1 1/2"-150# R.F. FLGS.
FLOAT
PUMP STOP EL 224'-5"
MIN. LIQUID LEVEL EL 224'-0 1/4"
℄ PUMP
DISCHARGE EL 223'-0 1/4"
PIT BOTTOM EL 222'-0"
2'-0"
11'-10 1/2"
2 1/2" x 1 1/2" RED.
SECTION 9-9
9
3 5/16"
15'-2"
℄ NEW SUMP PUMP 105-10A
℄ EXIST. SUMP PUMP SIL.
EXIST 1 1/2" CLASS C.V. 100G.P.M. BUFFALO PUMP REPLACED BY 1 1/2" CLASS VCRO 200 G.P.M. BUFFALO PUMP. SEE BUFFALO FORGE DWG. NO CD12169X
K2
SECTION 2-2
EQUIP. DRAIN SUMP PUMP #1
E.P. 105-10A
NOTE:
SUMP PUMP E.P. NO 105-10 HAS BEEN SCRAPPED AND THE MOTOR FROM SUMP PUMP E.P. NO 105-10 IS REUSED ON SUMP PUMP E.P. NO 104-20 IN THE OFF-GAS BUILDING.
ALARM SWITCH
FLOAT SWITCH
EL 247'-0"
TO R.D.C. TK
SEE SHT. #1 FOR CONT.
TO W.N.R.R. TK
SPD-114
4'-11 5/8"
6'-0"
9'-0"
U-BOLT
86-21-C
SEE SECT 1-1 AT LEFT
5'-10"
F.W.
4'-0"
9"
BRG.
86-30
6 1/8"
86-29 NORMALLY CLOSED
SPD-113
7'-2 15/16"
2 1/2" x 1 1/2" RED
1 1/2"-150# R.F. WELDING NECK FLG.
EL 229'-5"
EL 229'-0"
HIGH LEVEL ALARM EL 228'-6"
PUMP STARTS EL 227'-10"
1 1/2" CLASS C.V. PUMP BUFFALO PUMPS DWG # 140GOXC
104-19
FLOAT
PUMP STOPS EL 223'-5"
MIN. LEVEL EL 223'-3 1/2"
PIT BOTTOM EL 222'-0"
℄ PIT
℄ DISCH.
℄ PUMP
5 1/8"
1'-1 1/2"
2'-4 1/2"
K2
SECTION 3-3
FL DRAIN SUMP PUMP #3
GENERAL NOTES:
FOR PIPING SPECIFICATIONS, SEE DWG # C-18GO2-C (SH1)
FOR WELDING END DETAILS SEE DWG # B-18898 (C SH1)
BENDS TO BE USED WHERE INDICATED
SUPPORTS & HANGERS BY PIPING CONTRACTOR
REFERENCE DWGS.
GENERATING & TREATMENT PLANT P&I DIA. - SEE DWG # A&T 225 SH 1 & 2 & 226
FLOOR PLAN EL 225'-0" & EL 229'-0" - C-15275-C (S2.3)
EL 241'-0" & EL 249'-0" - C-15277-C (S2.3)
SUMP PIT LINERS - C-15293-C SH 1 & 2 (S2.3)
FL. DR. SUMP #2 - BUFFALO PUMP DWG # 140GXC (S/G P)
#1 - 140GXE
#3 - 140GXF
EQUIP. DRAIN SUMP #1 - CD/12169X
FLOAT SWITCH
ALARM SWITCH
SPD-193
86-21-C SEE SH #1
EL 225'-0"
2 1/2" x 1 1/2" RED
1 1/2"-150# R.F. WELDING NECK FLG.
HIGH LEVEL ALARM EL 223'-6"
PUMP STARTS EL 223'-0"
PUMP STOPS EL 219'-6"
MIN. LEVEL EL 219'-5"
1" CLV. SUMP PUMP BUFFALO PUMP DWG # 140GOXF
105-7
PIT BOTTOM EL 218'-0"
℄ PIT
℄ PUMP
℄ DISCH.
4'-6"
10 3/8"
5 1/8"
19
SECTION 4-4
FL DRAIN SUMP PUMP #2
SYSTEM #86
5 | 10/26/67 | M | M.O. 1070 AS BUILT INFO ADDED | 6 | 5/8/67 | 20
4 | 1/6/67 | M | ADDED VALVE & P.I. - 2 PL. SO | 6 | 5/8/67 | 20
3 | 5/8/67 | M | CHANGED E.P. NO. OF DRAIN SUMP PUMP NO. 1 FROM 105-10 TO 105-10A. ADDED NOTE 5. DELETED NOTE 4. RELOCATION OF THE MOTOR FROM SUMP PUMP E.P. NO. 105-10 | 6 | 5/8/67 | 20
2 | 11/1/66 | M | REVISED 1½ CLASS C.V. 100 G.P.M. BUFFALO PUMP TO 1½ CLASS C.V. 200 G.P.M. BUFFALO PUMP AS PER W.O. # 3/7 SO-1070-18-0000 E.P. 105-10 | 6 | 5/8/67 | 20
1 | 11/22/66 | | ADDED FAB. PIECE MKS FOR SYS. # 86 | 6 | 5/8/67 | 20
NO. | DATE | BY | DESCRIPTION OF REVISION | CK. | APP. | DATE
NIAGARA MOHAWK
NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT NUCLEAR STATION
WASTE DISPOSAL BUILDING
SUMP PUMP DISCHARGE PIPING
DETAILS
DES. | CAD | DR. | CK'D | DATE 5-8-67 | SCALE 1/2" = 1'-0"
APP. | DATE 11/7/66 | CONTRACT 3-N2-515
APP. | DWG. NO. C-18530-C
RETURN TO REACTOR DOCKET FILES
7811290192
1 hr 11-17-78
50-220
D
109

C-18530-C SH 1

PLAN BELOW EL 236'-6"

GENERAL PLAN

SECTION 5-5

SYSTEM # 84, 85, 86

FOR GENERAL NOTES & REF. DWG'S. SEE DWG. # C-18530-C SH # 2 OF 2

MK	DATE	BY	DESCRIPTION OF REVISION	CK	APP
10	12/74	TWK	ADDED LINE FROM FLR DR SUMP #3 DISCH TO WASTE TK. (M.O. 1070)		
9	8/11/75	TWK	ADDED ELEC. BLR. #12 PSV & B.D. LINE & DISCH. FROM FLR. DR. SUMP & 104-26 (M.O. 1070)		
8	12/74	MJW	CHANGED TEP NO'S OF EQUIP DRAIN SUMP PUMPS #1 FROM 105-10 TO 105-10A		
7	11/75	MJW	REMOVED (2) CLASS CLV, 100 G.P.M. BUFFALO PUMPS EQUIP. DRAIN SUMP PUMP #1 & REPLACED WITH (1) CLASS VCRO, 200 G.P.M. BUFFALO PUMP AS PER M.O. # 317.30-1070-16-0000	GD	
6	6/24/75	MJW	ADDED ULTRASONIC RESIN CLEANER RELIEF VALVE DISCHARGE M.O. # 317.30-1258-16-0000	GD	
5	10/31/76	KD	ADDED FAB. PIECE MK'S FOR P.S.V.'S AT WST. COLL. & FLR. DR. COLL. TANKS.	JH	
4	11/29/76	JR	ADDED FAB. PIECE MK'S FOR SYS. # 88.	JH	
3	2/28/77	JR	ADDED DRAIN FROM EL. 275'-0"	JH	
2	9/1/67	JR	ADDED FAB. PIECE MK'S FOR SYS. # 84.	JH	
1	6/20/67	TWK	REVISED EQ DR SUMP DISCH AT W.C. #	GD	
NO.	DATE	BY	DESCRIPTION OF REVISION	CK.	APP.

NIAGARA MOHAWK

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

WASTE DISPOSAL BUILDING

SUMP PUMP DISCHARGE PIPING

PLANS

DES.	CRG	TR.	
DRN.	KCS	CHK.	
APP'D.		APP'D.	
DATE	5-8-67	SCALE	1/4"=1'-0"
INDEX	3-N2-615	DWG. NO.	C-18530

RETURN TO REACTOR DOCKET FILES

1h 11-17-78 #7811290192 50-220 D

ROLL 41

NIAGARA MOHAWK

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

TURBINE GENERATOR FOUNDATION

OUTLINE

PLAN OF BASE SLAB

FRONT & CONDENSER BAYS

C-19121-C

SECTIONAL PLANS SHOWING HORIZONTAL KEYS IN MATS & TURBINE SUPPORTS

PLAN OF BASE SLAB

TYPICAL WATERPROOFING DETAILS

SEE PLANS & SECTIONS FOR LOCATION OF JOINTS

NO SCALE

SECTIONAL PLANS SHOWING VERTICAL KEYS IN TURBINE SUPPORTS AND MATS

NOTES:

WATERPROOF JOINTS INDICATED ON DRAWINGS TO CONSIST OF:

1. BRUSH COAT OF PRIMER #4
2. TWO COATS OF ASPHALT #4
3. ONE LAYER OF 15 LB. FELT
4. TWO COATS OF ASPHALT #4
5. ONE LAYER OF 15 LB. FELT
6. TWO COATS OF ASPHALT #4

WITH SEALING STRIP AS SHOWN

FOR TURBINE GENERATOR FOUNDATION BASE SLAB FROM CONDENSER AREA SEE DWG. C-19120

FOR TURBINE GENERAL NOTES & VERTICAL SECTIONS SEE DWG C-19140-C

FOR GENERAL NOTES SEE DWG C-19121-C

RETURN TO REACTOR DOCKET FILES

ltr 11-17-78
7811290192
50-220
D

C-18515-C

ELEV. 305'-6" & 300'-0"

ELEV. 300'-0"

FOR GENERAL NOTES & REFERENCE DWGS SEE DWG # C-18511-C.
* ○ ZURN #509 WITH SCRD OUTLET (OR EQUAL)
○ ZURN #5 & WITH SCRD OUTLET (OR EQUAL)

FOR TYPICAL FLOOR DRAIN DETAILS SEE DWG # C-18808-C (SG)
ALL FLOOR DRAINS & PIPING BY S.K.W. Co.
FOR FLOOR FINISH SEE DWGS # C-18740-C SHT # 2 (B-6)
TOP OF FLOOR DRAINS SET AT EL. 299'-11½" FOR EL. 300'-0".
TOP OF FLOOR DRAINS SET AT EL. 305'-5½" FOR EL. 305'-6".

SYSTEM # 104

NIAGARA MOHAWK

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

TURBINE BUILDING

FLOOR & EQUIP. DRAINAGE PIPING PLAN AT EL. 300'-0" & 305'-6"

NO.	DATE	BY	DESCRIPTION OF REVISION	CO.	APP.
7	7/9/68	RL	RELOCATED STAIRS IN T.-RS. LUBE OIL STORAGE AREA		
6	2/29/68	RL	ADDED DRAIN FOR INLET CHAMBER OF VENT SUPPLY FAN		
5	7/20/67	RL	CHGD DIM. TO CLEAR AIR TANK BASE		
4	5/11/67	RL	REMOVED 6" RISER & FL. DRS AT FAN BASES		
3	4/20/67	RL	REVISED & RELEASED DRAINS BETWN. ⑥-⑦ & Ⓐ-Ⓑ		
2	10/6/67	RL	RELOCATED 6" RISER @ COL. F1 ⑤		
1	9/15/67	RL	RELOCATED 6" RISER @ COL. Ⓐ ⑬		
0	ISS.				

DES. [illegible] CHK'D JDW DATE 9-8-66 SCALE 3/16"=1'-0"
APP. [illegible] APP. [illegible] INDEX 3-N2S15
APP. [illegible] APP. J. Wilcox NO. C-18515-C

1h 11-17-78
#7811290192
50-220
D

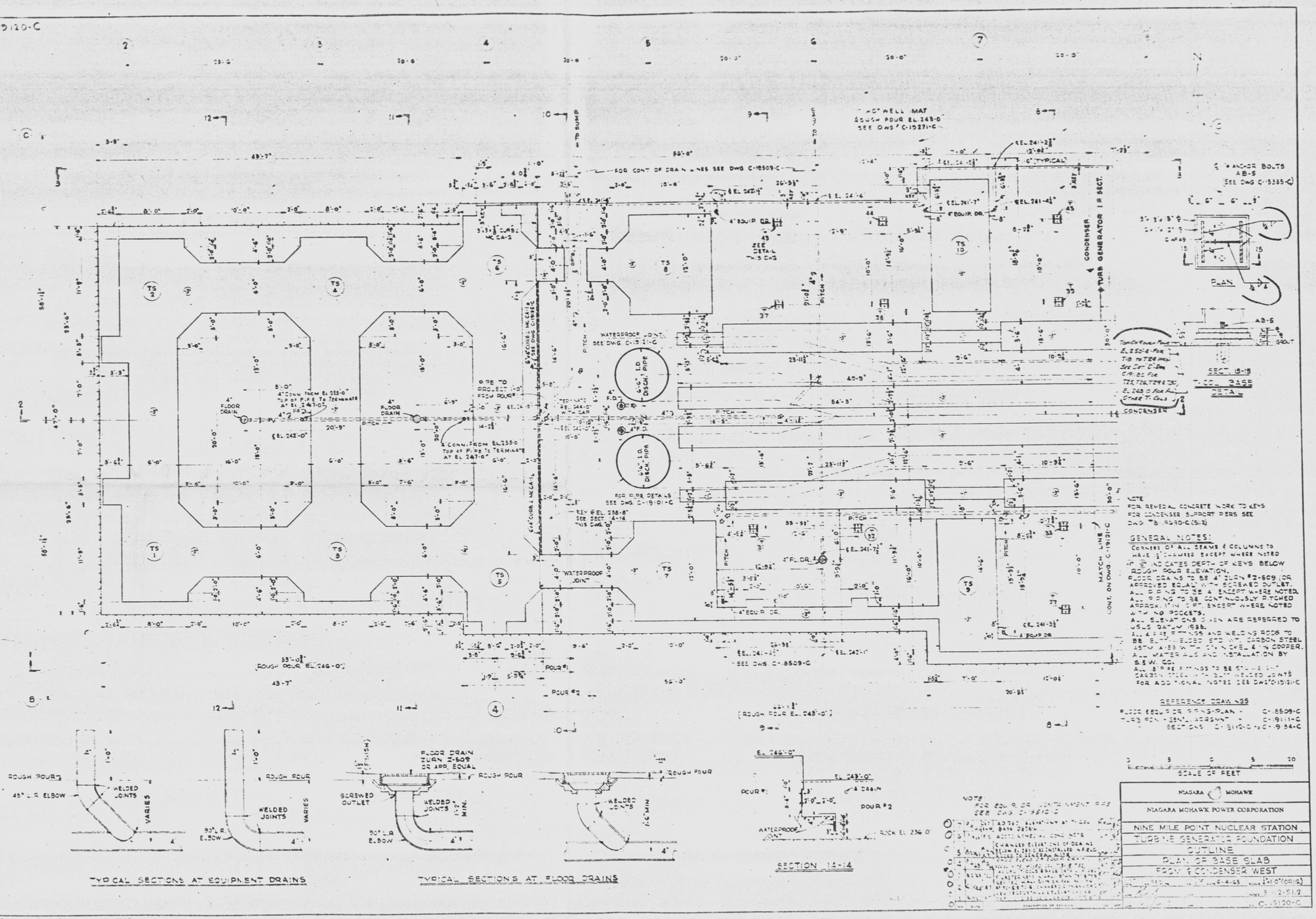
RETURN TO REACTOR DOCKET FILES

MICRO AT 30 X

C-19120-C

Q 022-05
2610621182 #
8-11-11 4/1
Q

RETURN TO REACTOR DOCKET FILES



TYPICAL SECTIONS AT EQUIPMENT DRAINS

TYPICAL SECTIONS AT FLOOR DRAINS

SHEET NO.1

C-1850-C

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

REACTOR BUILDING

FLOOR & EQUIP DRAIN PIPING

PLAN AT ELEV. 237'-0"

NIAGARA MOHAWK — RECORDED

DES. NS	DR. LL	DATE 9-4-65	SCALE 3/16"-1'-0"
CK. [illegible]	DATE		3-N2-S15
APP. [illegible]	DATE		C-1850-C

SHEET NO. 1

RETURN TO REACTOR DOCKET FILES

LH 11-17-78

7811290192

50-220

D

MICRO AT 30 X

C-18504-C

SECTION 21-21

SECTION "14-14"

PLAN AT EL. 198'-0"
(SHOWING EQUIP. DRAIN TANK)

PLAN ABOVE EL. 218'-0"

DETAIL OF COOLER SUPPORTS (2 REQ'D.)

BENDS TO BE USED IN PLACE OF FITTINGS WHERE POSSIBLE

SYSTEM #84
SYSTEM #104
SYSTEM #105
SYSTEM #202.1

FOR GENERAL NOTES SEE DWG #C-18505-C

NO.	DATE	BY	DESCRIPTION OF REVISION	CK.	APP.
5	5/15/68		CAPPED 6" E.D. RISER IN PIPE CHASE. EXTENDED 6" E.D. P. RISER NORTH & ADDED 3" E.D. DR. RISER REMOVED STR. DR. FROM ROOF		
4	4-4-68	E.H.	ADDED THERMOCOUPLE CONN. ON REACTOR BLDG. EQUIP. DRAIN TANK SUMP COVER		
3	7/17/67		ADDED SYSTEM "202.1		
2	7/11/67	A.H.	ADDED COOLER AT R.B.E.D.T. & SUMP PUMP 105-03. ADDED FL. DR. SUMP 104-10 & GENERAL PIPING REVISIONS		
1	3/31/67	K.D.	REVISED SUMP PUMP DISCH.		

NIAGARA MOHAWK RECORDED

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

REACTOR BUILDING

FLOOR & EQUIP DRAIN PIPING

ENLARG. PLAN & SECTION- N.E. CORNER

ELEV. 219'-0"

DES.	NS	DR.	LL
CH.	HWP	APP.	
DATE	9-4-67	SCALE	3/8"-1'-0"
DWG. NO.	C-18504-C		

50-220
11-17-78
7811290192
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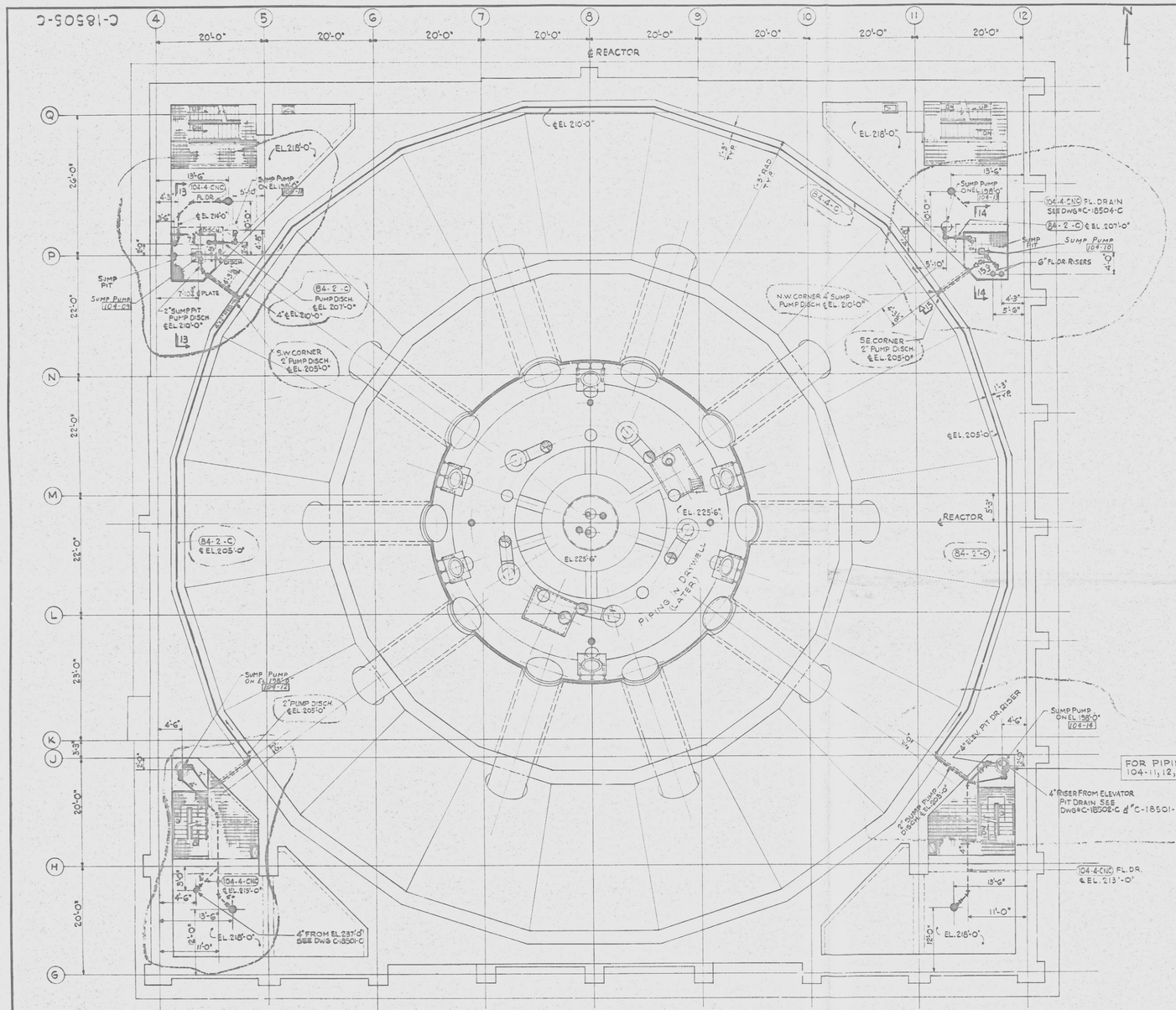
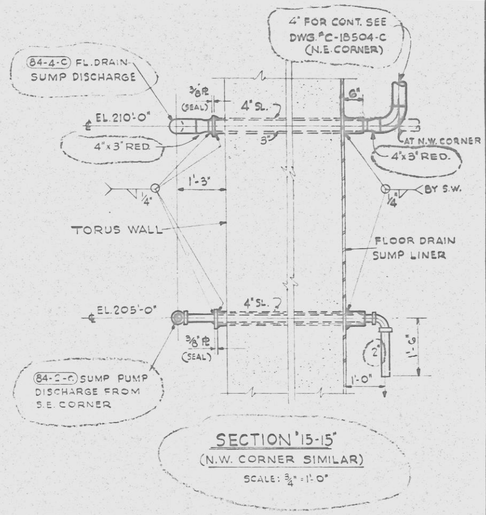
MICRO A1 3.0-X

C-18505-C



FOR PIPING DETAILS AT SUMP PUMPS 104-11, 12, 13, 14, SEE DWG. #C-18506-C



SECTION '15-15'
(N.W. CORNER SIMILAR)
SCALE: 3/4" = 1'-0"

GENERAL NOTES

ALL GRAVITY DRAINS BY DRAINAGE CONTRACTOR.
ALL PUMP DISCHARGE PIPING & SEAL PLATES BY M.W. KELLOGG.
ALL PUMP DISCH. PIPING TO BE SCH. #40 C.S. PIPE.
ALL PUMP DISCH. PIPING LARGER THAN 2" TO BE BUTT WELDED.
ALL PUMP DISCH. PIPING 1" OR SMALLER TO BE SOCKET WELDED.
BEND TO BE USED IN PLACE OF FITTINGS WHERE PRACTICAL.
ALL SLEEVES & DRAIN RECEIVERS BY S.E.W. AS PER DWG#
ALL DRAINS IN SUMPS TO TERMINATE BELOW ELEVATION OF BOTTOM OF SUMP SUCTION.
FOR ADDITIONAL NOTES SEE REFERENCE DWGS.
FOR GRAVITY DRAIN SPECIFICATIONS SEE DWG. #C-18599-C

REFERENCE DWG'S.

C-18496-C	FLOOR DRAINAGE PLAN AT EL.	340'-0"
C-18497-C	" " " "	318'-0"
C-18498-C	" " " "	298'-0"
C-18499-C	" " " "	281'-0"
C-18500-C	" " " "	261'-0"
C-18501-C	" " " "	237'-0"
C-18502-C	" " SECTION "H" LOOKING EAST	
C-18503-C	" " PLAN AT EL. 249'-0" & SECTION '2-2' LOOKING WEST	
C-18504-C	FLOOR & EQUIP. DR. PIPING ENLARGED PLAN & SECTIONS N.E. CORNER EL. 218'-0"	
C-18506-C	FLOOR DRAINAGE SUMP PUMP DETAILS	

SYSTEM #104
SYSTEM #84

2	7/11/67	FA	REVISED SUMP PUMP PIPING SIZES & ARRANGEMENT, CHG'D SECT Nº'S	GJ	DWN	
1	12/5/66	NS	CHG'D DRAINS IN SE & SW CORNERS	LL	C.	
NO.	DATE	BY	DESCRIPTION OF REVISION	CHK.	APP.	

NIAGARA MOHAWK RECORDS

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

REACTOR BLDG.
FLOOR DRAINAGE PIPING
GEN. PLAN EL. 225'-6" & EL. 218'-0"

DES. N.S. | DR. | CK. LL | DATE 12/6/65 | SCALE 1/8"-1'-0"
APP. Ken | APP. | SHEET 3-N2-S15
APP. [illegible] 12/7/65 | APP. | DWG. C-18505-C

MICRO AT 30 X

1/4 11-17-78 #7811290192 50-220 D

RETURN TO REACTOR DOCKET FILES

C-18510-C (Sh. 1)

NOTES FOR FLOOR DRAIN CONC. ENVELOPE & EQUIP. DRAIN CONTAINMENT PIPES

ALL BURIED FLOOR DRAIN PIPING & EQUIP. DRAINS (ONLY THOSE OF LOW TEMPERATURE, FLOW & RADIOACTIVITY) WHICH ARE CONNECTED TO THE FLOOR DRAIN SYSTEM, ARE TO BE ENCASED IN A MINIMUM OF SIX (6) INCHES OF CONC. ENVELOPE AS SHOWN ON DETAIL.

ALL EQUIP. DRAINS EXCEPT THOSE NOTED ABOVE ARE TO BE ENCLOSED IN A CONTAINMENT PIPE. SEE DETAIL.

CONTAINMENT PIPE SHALL BE SCH. #10.

ALL OUTSIDE SURFACES OF BURIED CONT. PIPES, EXCEPT WHEN ENCASED IN CONC., SHALL BE GIVEN TWO (2) HEAVY COATINGS OF KOPPER'S SUPER SERVICE BLACK OR EQUAL BITUMASTIC COATING.

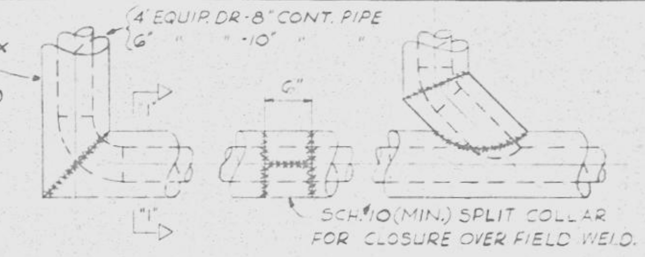
CONTAINMENT PIPE SHALL PROVIDE ADEQUATE INTERNAL CLEARANCES FOR THERMAL EXPANSION OF DRAIN PIPE AT 220 F MAX. TEMPERATURE.

BEFORE INSTALLING CONC. ENVELOPE OR CONT. PIPE CLOSURES, ALL DRAIN PIPES SHALL BE AIR TESTED AT 15 PSIG, ALL WELDS SHALL BE CHECKED WITH SOAP SUDS AND REPAIRED WHERE NECESSARY AND RETESTED.

CONTAINMENT PIPES SHALL ALSO BE AIR TESTED IN THE SAME MANNER DESCRIBED ABOVE.

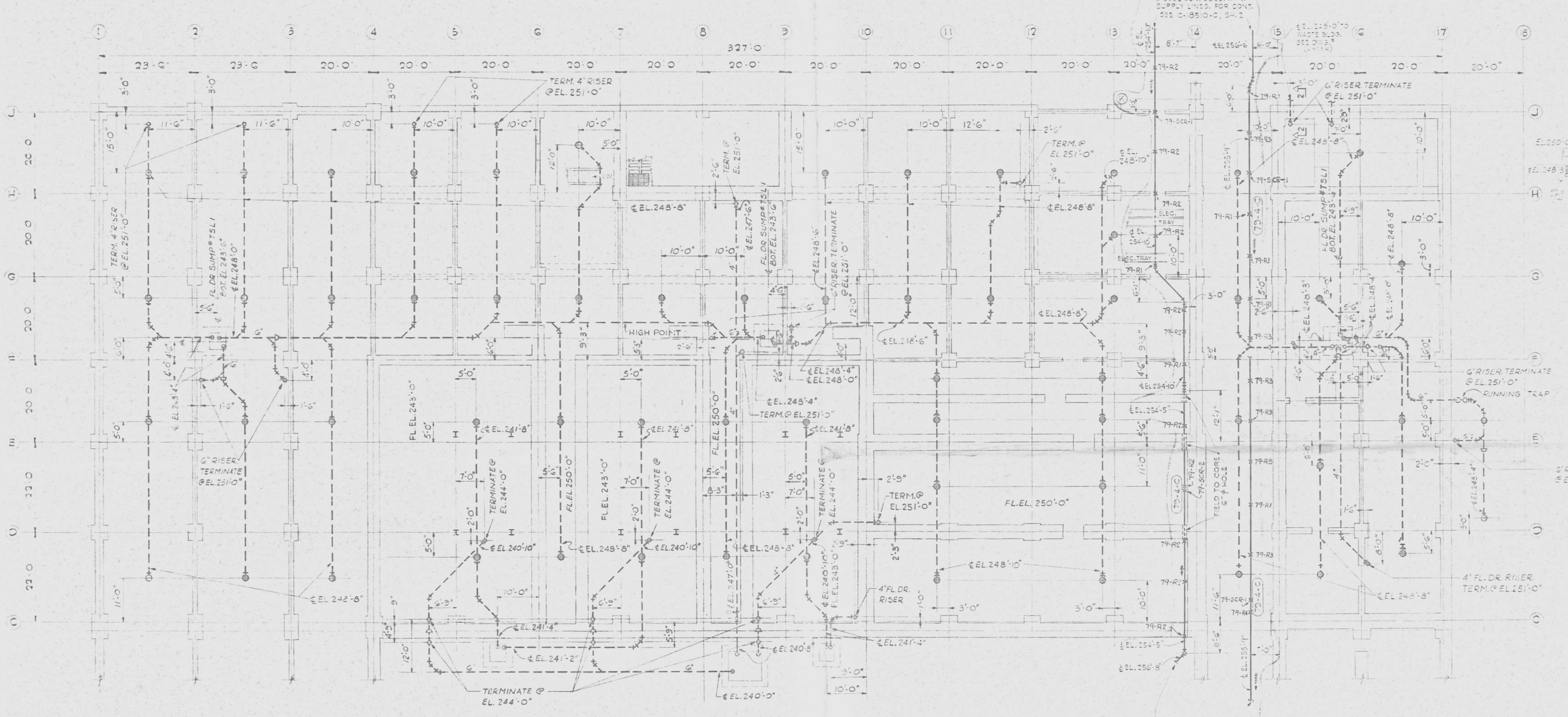
EACH SUMP SHALL BE CONNECTED TO A #9 STRANDED COPPER SINGLE CONDUCTOR TYPE T.W. RED TEST WIRE BY A THERMIT OR OTHER APPROVED WELDING PROCEDURE.

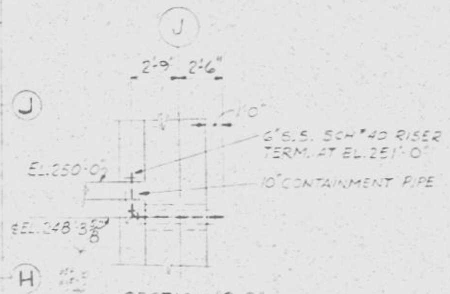
WIRE TO BE RUN TO JUNCTION BOX LOCATED 14" ABOVE FL. ELEV. AT COLUMNS A5-2, C-5, C-8, C-9, B-7, B-9, B-16, F-2, F-9 & F-16.



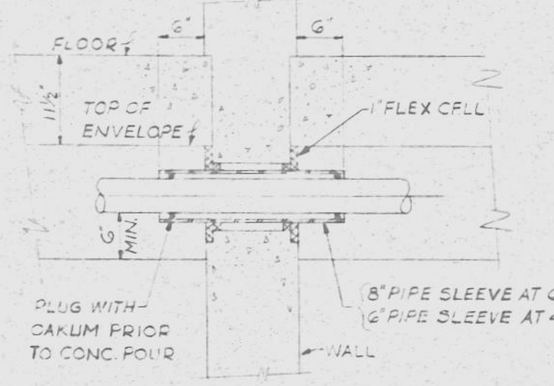
TYPICAL DETAILS FOR CONTAINMENT AT EQUIPMENT DRAINS

SECTION "1-1"

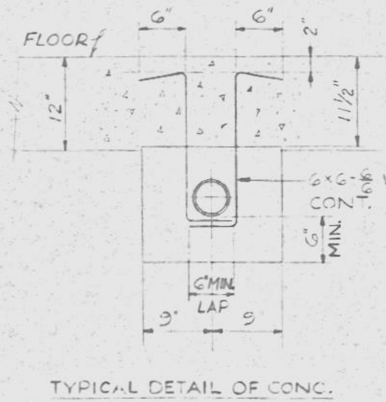




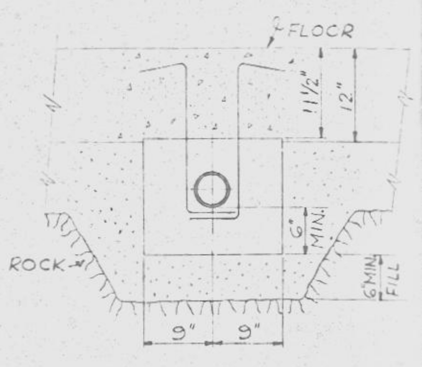
SECTION "2-2"
LOOKING WEST
TYPICAL OF 2



TYPICAL DETAIL AT WALLS FOR FLOOR DRAINS



TYPICAL DETAIL OF CONC. ENVELOPE FOR FLOOR DRAINS WHERE ROCK IS 6" OR MORE BELOW BOTTOM OF ENVELOPE



TYPICAL DETAIL OF CONC. ENVELOPE FOR FLOOR DRAINS WHERE ROCK IS NOT BELOW ENVELOPE

NOTE:
WHERE FLOOR SLAB REST ON ROCK, NO FILL IS REQ'D UNDER CONCRETE ENVELOPE.

ALL WORK & MATERIAL BY S & W CO.

FOR GENERAL NOTES & REFERENCE DWG'S SEE DWG # C-18509-C

SYSTEM # 104
SYSTEM # 105
SYSTEM # 79

NO.	DATE	BY	DESCRIPTION OF REVISION	CK.	APP.
12	2/5/73	Fx	REVISED DIES. GEN. COOL WTR. LINES PER "AS BUILT" DIMEN'S & ADDED HGRS.	LL	
11	2/26/69	JD	ADDED DIESEL GEN. COOL. WATER SUPPLY LINES		
10	9/25/66	AGH	ADDED FL. DRS EAST OF 17 ROW & 2 RISERS BETWEEN 15 & 16, AT J ROW	LL	
9	7/12/66	AGH	ADDED 6" DR. RISER AT (J) ROW NEAR (1) ROW. REV'D. PER FIELD CHANGE	LL	
8	5/16/66	AGH	ADDED DR. RISERS AT (J) ROW	LL	
7	2/22/66	AGH	CHG'D. PIPING ABOVE M.S. TUNNEL TO CLEAR REINF. BARS.	LL	
6	2/7/66	WH	CHG'D. RISER @ H 12 & LINE BET'N G 1-2 & H-J	LL	
5		AGH	[illegible]	LL	
4		AGH	[illegible]	LL	
3		AGH	REVISED NOTES ON DETAILS	LL	
2	8/1/65	AGH	REVISED NOTES & DETAILS FOR EQUIP. DRAIN CONT. PIPE		
1	7/14/65	AGH	REVISED & ADDED PIPING TO CLEAR WALLS		

NIAGARA MOHAWK

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

TURBINE BLDG

AUX. EQUIP AREA

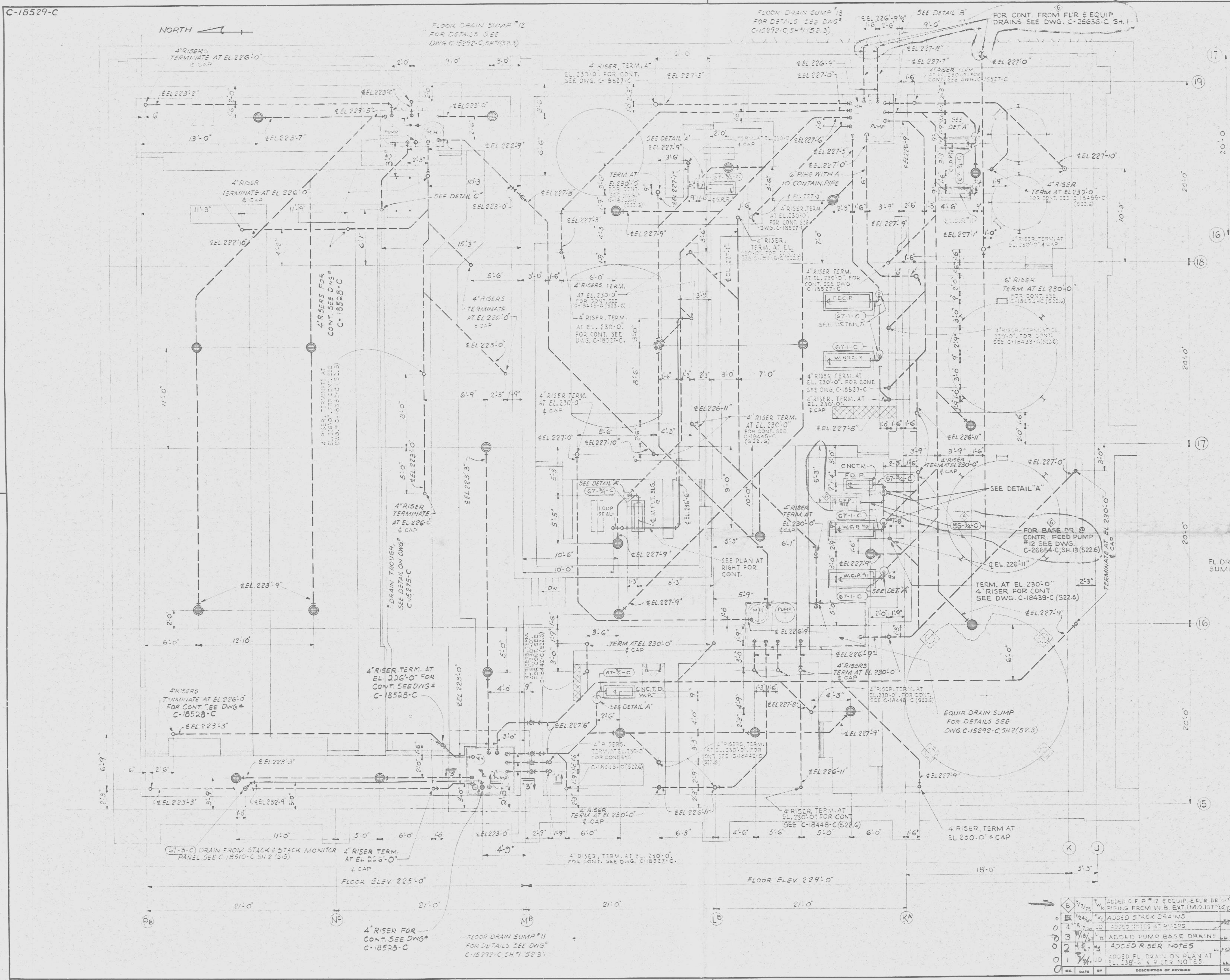
FLOOR & EQUIP. DRAIN PIPING

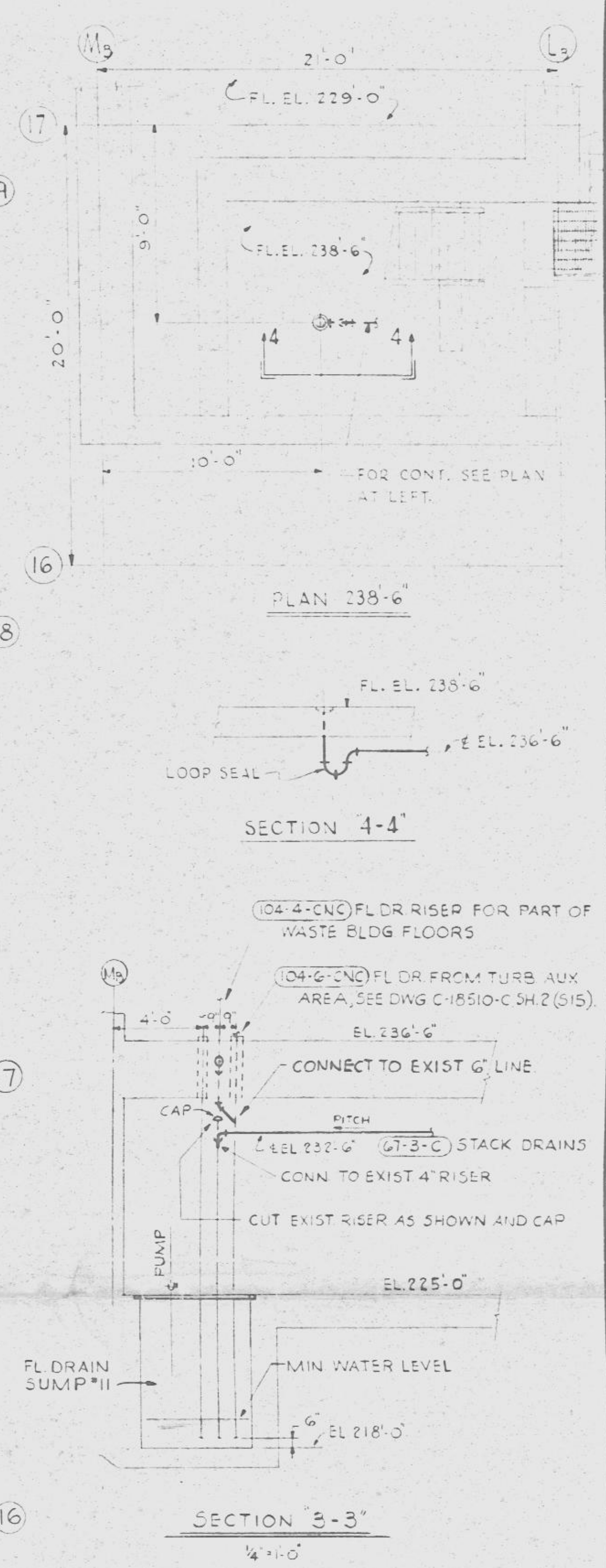
PLAN AT EL. 243'-0" & 250'-0"

DES.	DR. AGH	TR.	CK. LL	DATE 6-7-65	SCALE 3/32"=1'-0"
APP.			APP.		INDEX 3-N2-S15
APP.			APP.		NO. C-18510-C

SHEET 1 OF 2

C-18529-C





FOR PUMP BASE DRAIN DETAIL, SEE DETAIL 'A' ON DWG. C-18531-C

ALL WORK & MATERIAL BY S & W

SYSTEM NO. 67
SYSTEM NO. 104
SYSTEM NO. 105

FOR GENERAL NOTES & REFER DWG'S SEE DWG C-18531-C

NO.	DATE	BY	DESCRIPTION OF REVISION	CK.	APP.
6	8/7/75	TWK	ADDED C.F.P. #12 & EQUIP. & FL'R DR PIPING FROM W.B. EXT. (M.O. 107?)		
5	1/24/68	FXD	ADDED STACK DRAINS		
4	5/7/68	JD	ADDED NOTES AT RISERS		
3	11/18/67	JB	ADDED PUMP BASE DRAINS	LL	
2	4/8/67	NS	ADDED RISER NOTES	FXD	
1	3/9/67	JD	ADDED FL. DRAIN ON PLAN AT EL. 238'-6" & RISER NOTES	LL	

NIAGARA MOHAWK

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

WASTE DISPOSAL BUILDING
FLOOR & EQUIP. DRAINAGE PIPING
PLAN AT EL. 225'-0" & EL. 229'-0"

DES. FXD	CK. LL JDW	DATE 5-23-66	SCALE 1/4" = 1'-0"
APP.	APP.		INDEX 3N2-S15
APP.	APP.		NO. C-18529-C

SULLIVAN-McKEEGAN CO., INC. BUFFALO NO. 17 0192 PHOENIX TRACING CLOTH

Irr 11-17-78
7811290192
50-220
D

C-18526-C

N.

CONN TO EXISTING 4" RISER SEE DWG# C-18527-C

CONNECT TO EXIST 4" RISER SEE DWG# C-18527-C

4" DRAIN FOR CONT. SEE DWG# C-18527-C

4" DRAIN FROM EL. 275'-0" SEE DWG.# C-18525-C

4" DRAIN FROM EL. 275'-0" TO F.D.G.TK. SEE DWG.# C-5530-C (SH. 2)

CENTRIFUGE ROOM

FUTURE CENTRIFUGE ROOM

PUMP SUCT.

1" PRE-COAT PUMP BASE DRAIN

PRE-COAT PUMP

CONN TO EXIST 4" RISER SEE DWG# C-18527-C

THIS PORTION IN FLOOR SLAB

PITCH

SEE DETAIL "A"

ELEV.

CONTROL ROOM

CONN TO EXIST. RISER CONN'S. SEE DWG# C-18529-C

4" DRAIN FROM EL. 275'-0" SEE DWG.# C-18525-C.

CONN TO EXIST. RISER ON DWG# C-18527-C

GENERAL NOTES

FOR PIPE SPEC'S SEE DWG# C-18603-C

* = ZURN# 509 FLOOR DRAIN (OR EQUAL) SCRD. OUTLET

= ZURN# 516 FLOOR DRAIN (OR EQUAL) SCRD. OUTLET

ALL PIPE TO BE 4" (EXCEPT WHERE NOTED) WITH BENDS OR BUTT-WELD FITTINGS TO BE USED AT DISCRETION OF FIELD.

ALL DRAIN PIPING TO BE CONTINUOUSLY PITCHED APPROX. 1/16" PER FOOT, EXCEPT AS NOTED, WITH NO POCKETS

TOP OF DRAINS TO BE SET AT EL. 260-11½" FOR DETAIL "A" SEE DWG# C-15277-C (52-3)

REFERENCE DWG'S

C-18527-C - FLOOR DRAINAGE EL. 247'-0" & EL. 246'-0"
C-18528-C " " EL. 236'-6" & EL. 237'-0"
C-18529-C " " EL. 225'-0" & EL. 225'-0"
C-15278-C - FLOOR PLAN - EL. 261'-0"

ALL WORK & MATERIAL BY S&W CO.

SYSTEM NO 104

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

WASTE DISPOSAL BUILDING

FLOOR DRAINAGE PIPING

PLAN AT ELEVATION 261'-0"

NO.	DATE	BY	DESCRIPTION OF REVISION
2	9/22/67	JC	ADDED DRAINS FROM EL. 275'-0" AND EL. 277'-0"
1	6/20/67	9/19	REV. FL. DR. PIPING NEAR COLS K & M-8

DES. JHS | DR. FXO | DATE 4-10-67 | SCALE 1/4" = 1'-0"
CH. KJS | APP. | APP. | DRAWING S-N2-SB
APP. | APP. | APP. | DWG. C-18528-C

SYSTEM BOUNDARY DRAWING RETURN TO FILES

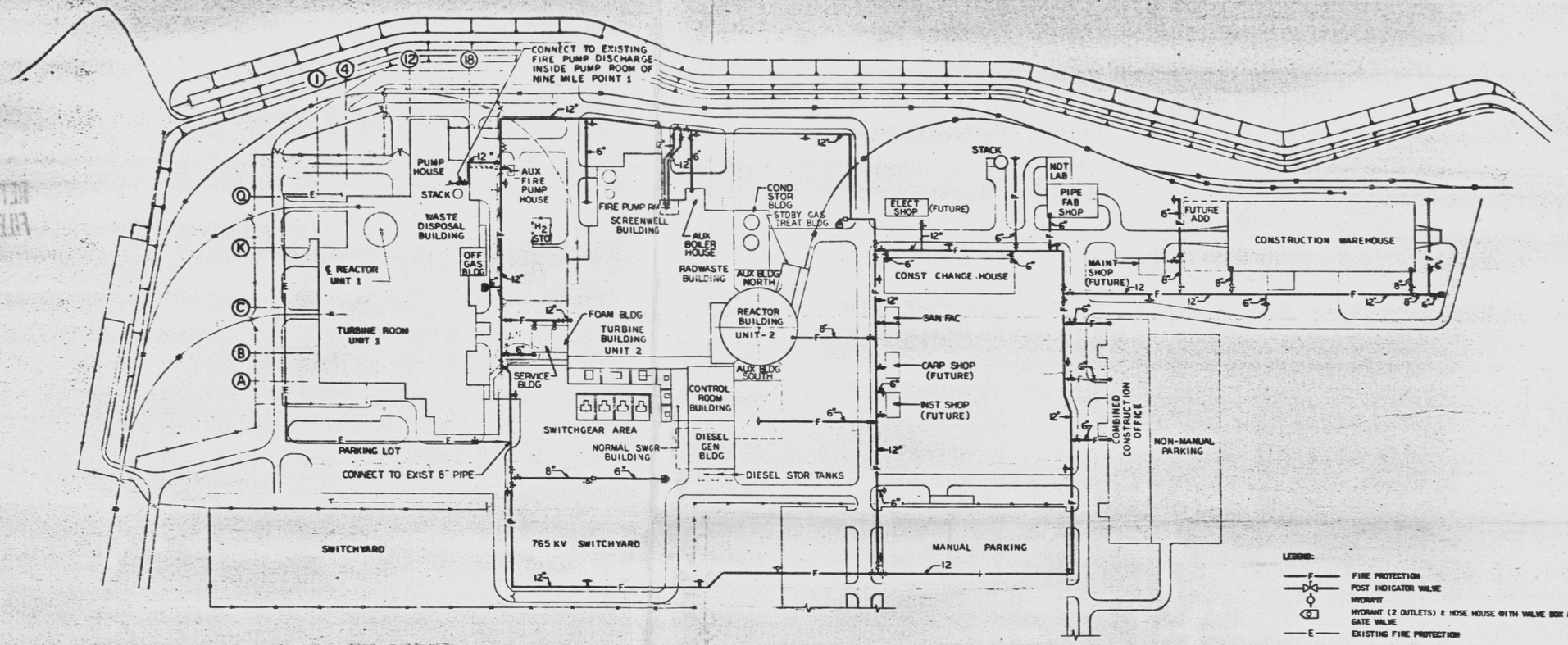
1w 11-17-78
#7811290192
50-220

D

MICRO A1-30-X

12177-EB-3AVD-2

LAKE ONTARIO



CALLED NORTH
14°-57-07"

LEGEND:

- F — FIRE PROTECTION
- POST INDICATOR VALVE
- HYDRANT
- HYDRANT (2 OUTLETS) & HOSE HOUSE WITH VALVE BOX & GATE VALVE
- E — EXISTING FIRE PROTECTION

NOTES:

1. NO SCALE

REFERENCES:

YARD WATER & FIRE PROTECTION PIPING EB-2

PLAN

RETURN TO REACTOR DOCKET FILES
Ltr dtd 11-17-78
7811290192
50-220

D

VOID-DO NOT USE

YARD - FIRE PROTECTION ARRANGEMENT

NINE MILE POINT NUCLEAR STATION — UNIT 2
NIAGARA MOHAWK POWER CORPORATION
STONE & WEBSTER ENGINEERING CORPORATION
BOSTON, MASS.

10-CH

DRAWING NUMBER 12177-EB-3AVD-2

SUPERSEDED BY DWG EB-3A-3

Designed by A V [illegible]
Des. Chkd by D PITETTI
Drawn by V SUZILLI
Chkd by A MOORE