

**Hilton
Garden Inn**
65 COMMERCIAL STREET
Portland, Maine

OLYMPIA
1000 WEST 12TH AVENUE
PORTLAND, ME 04104
PHONE 857-1111
FAX 857-1111

**ALLIED/COOK
CONSTRUCTION**
Planners • Managers • Design/Builders
Building Excellence Since 1958

B.H. MILLIKEN
ELECTRICAL CONTRACTORS
131 ANDERSON STREET
PORTLAND, MAINE 04101
PHONE 879-1177
FAX 774-1492

CONSTRUCTION DOCUMENT
REVIEW/ ISSUED FOR BID
5-29-02

REV.	DESCRIPTION	DATE

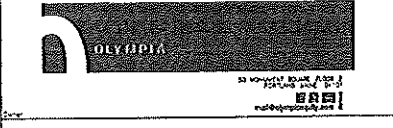
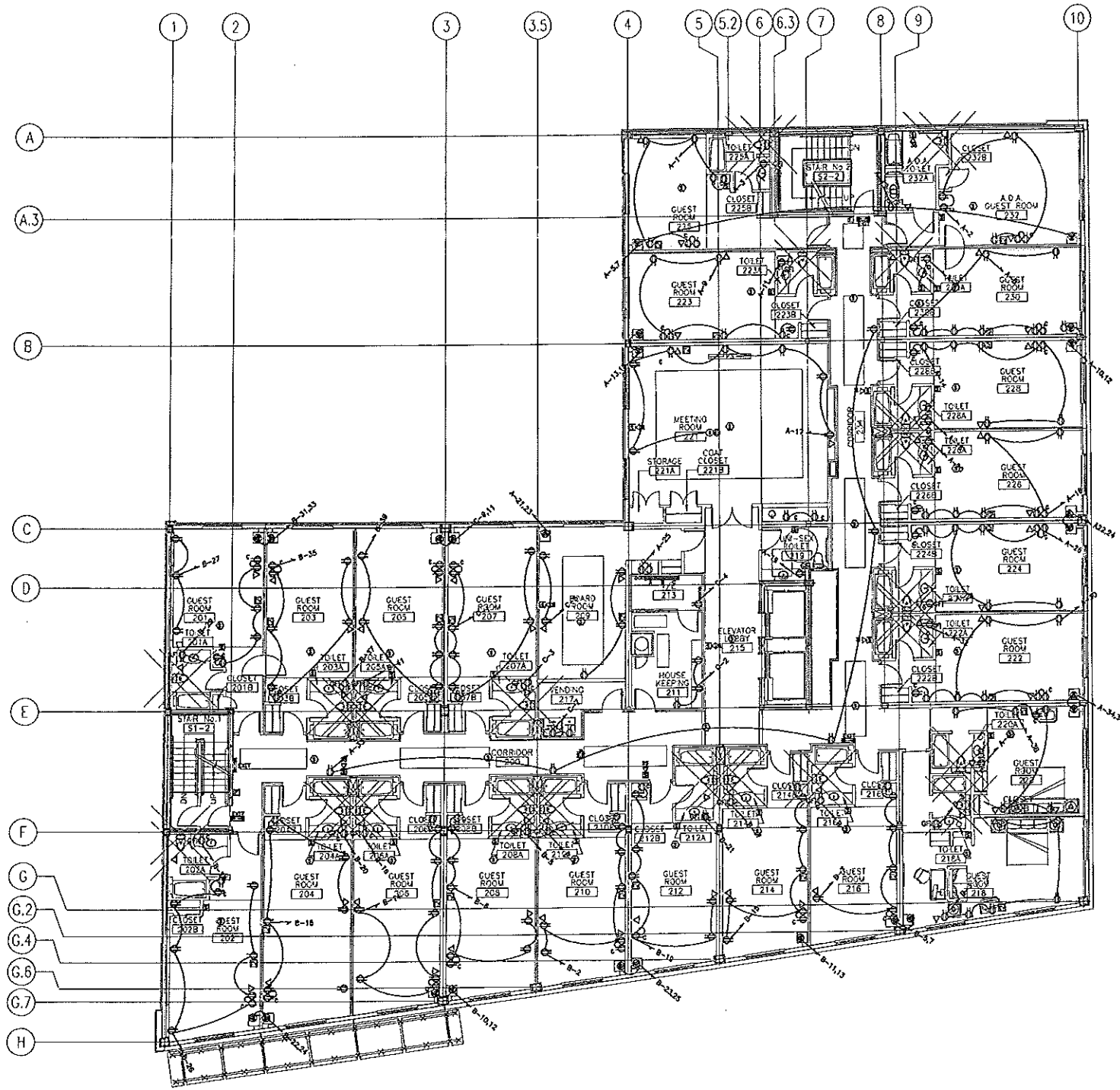
CURRENT ISSUE STATUS:

**SM
RT** ARCHITECTURE ENGINEERING PLANNING
SMBT
144 Fore Street/2d. Box 418
Portland, Maine 04104
tel. (207) 772-3546
fax. (207) 772-1070

HILTON GARDEN INN
65 COMMERCIAL STREET
PORTLAND, MAINE

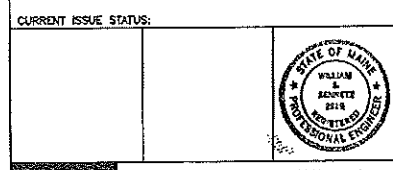
PROJECT:
POWER 1ST FLOOR

PROJECT MANAGER: RSG
PROJECT No. 02004
E 401



CONSTRUCTION DOCUMENT
 REVIEW/ ISSUED FOR BID
 5-29-02

REV.	DESCRIPTION	DATE

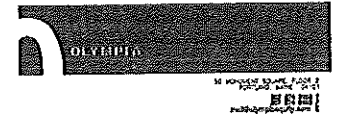


SMRT ARCHITECTURE ENGINEERING PLANNING
 5th Fl
 144 Fore Street/P.O. Box 618
 Portland, Maine 04104
 Tel. (207) 772-3546
 Fax. (207) 772-1070

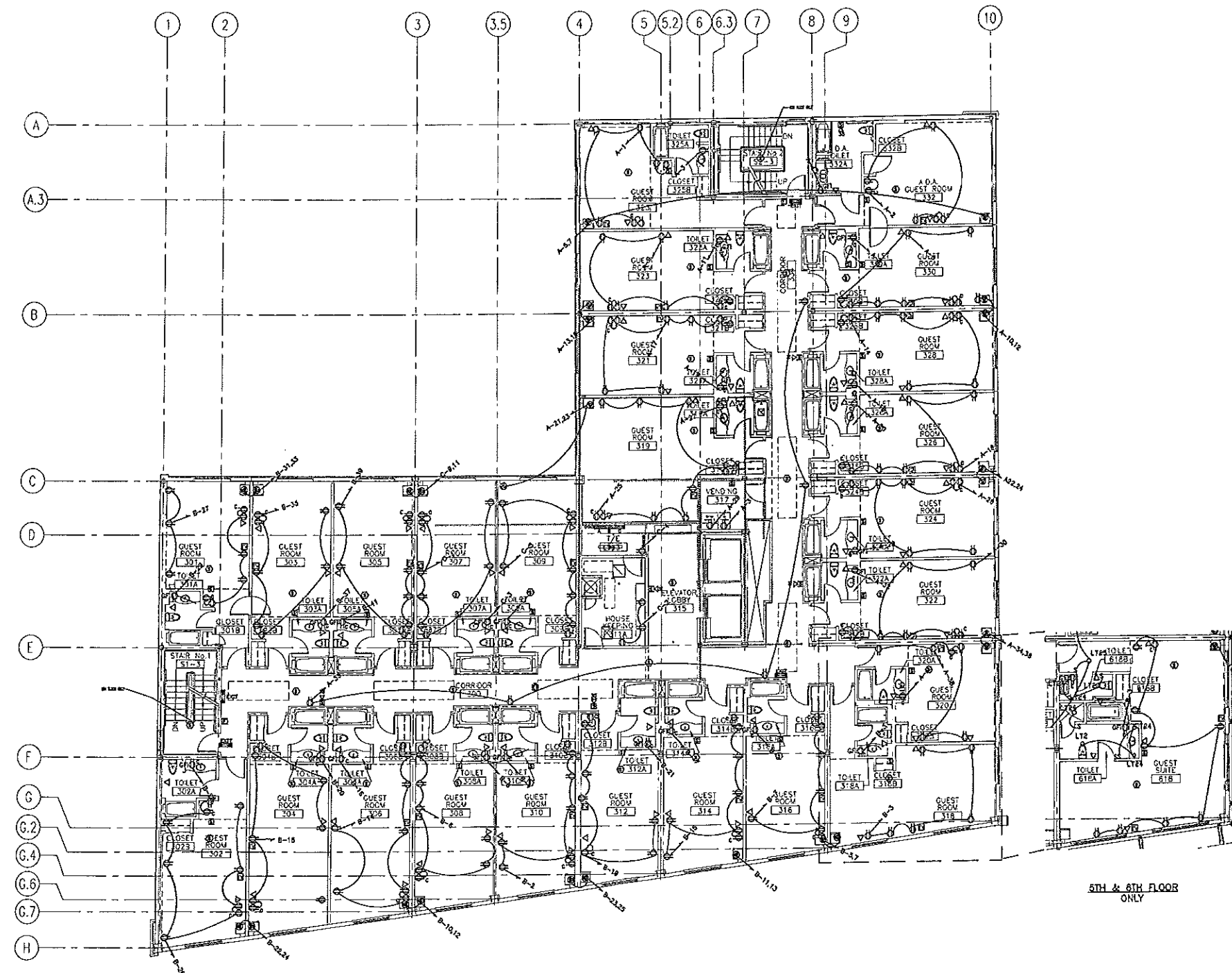
HILTON GARDEN INN
 65 COMMERCIAL STREET
 PORTLAND, MAINE

PROJECT: POWER 2ND FLOOR

PROJECT MANAGER: RIG
 PROJECT No. 02004
 E402



CONSTRUCTION DOCUMENT
REVIEW/ ISSUED FOR BID
5-29-02



LIGHTING TYP. 3RD-6TH FLOORS
SCALE: 1/8" = 1'

REV.	DESCRIPTION	DATE

CURRENT ISSUE STATUS:

SM RT ARCHITECTURE ENGINEERING PLANNING
SHWT
144 Fore Street, P.O. Box 618
Portland, Maine 04104
Tel. (207) 772-3848
Fax. (207) 772-1070

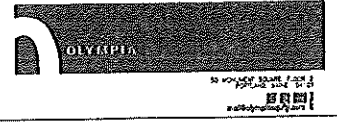
HILTON GARDEN INN
65 COMMERCIAL STREET
PORTLAND, MAINE

PROJECT: 3RD-6TH POWER (TYP)

PROJECT NUMBER: 1/8" = 1'	
PROJECT No. 02004	E403



**Hilton
Garden Inn**
65 COMMERCIAL STREET
Portland, Maine

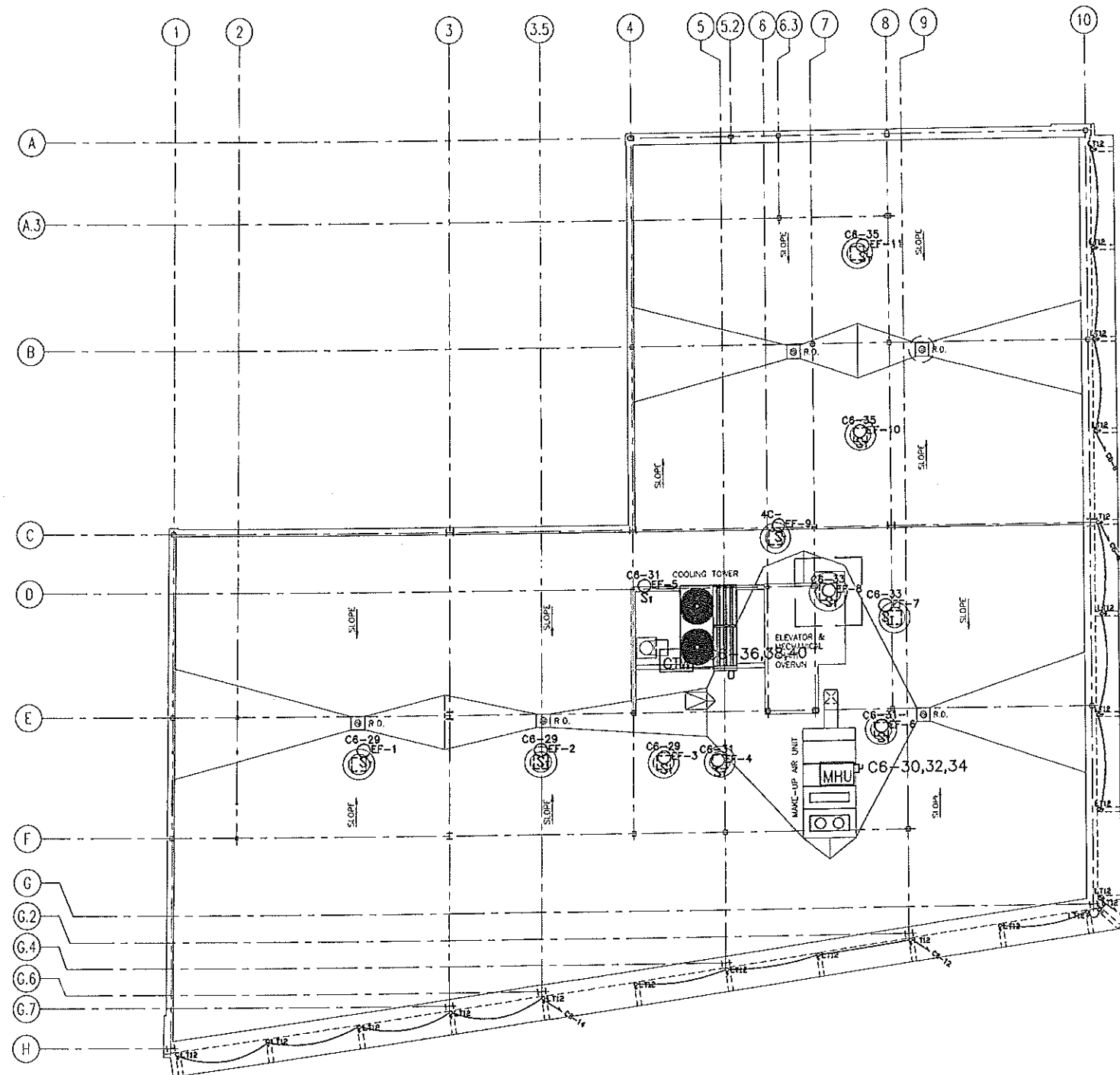


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173 ANDERSON STREET
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CONSTRUCTION DOCUMENT
REVIEW/ ISSUED FOR BID
5-29-02



TR 11

REV.	DESCRIPTION	DATE

CURRENT ISSUE STATUS:



**SM
RT** ARCHITECTURE ENGINEERING PLANNING
144 Fore Street, 2nd Floor
Portland, Maine 04104
Tel. (207) 772-1814
Fax. (207) 772-1079

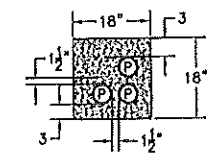
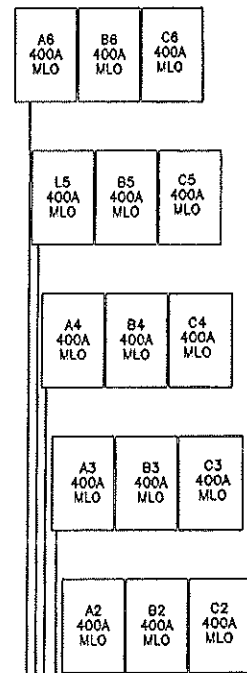
HILTON GARDEN INN
65 COMMERCIAL STREET
PORTLAND, MAINE

PROJECT: **ROOF POWER & LIGHTING**

PROJECT MANAGER: JJJ
SCALE: 1/8" = 1'

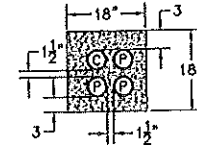
PROJECT No. 02034 **E406**

NOTES:
1) PANELS ON 2ND-6TH FLOORS TO BE FEED THRU



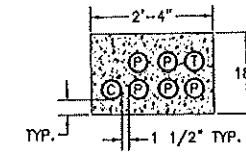
UTILITY DUCT BANK
DETAIL "A"

SCALE: 3/4"=1'



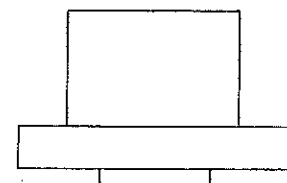
UTILITY DUCT BANK
DETAIL "B"

SCALE: 3/4"=1'

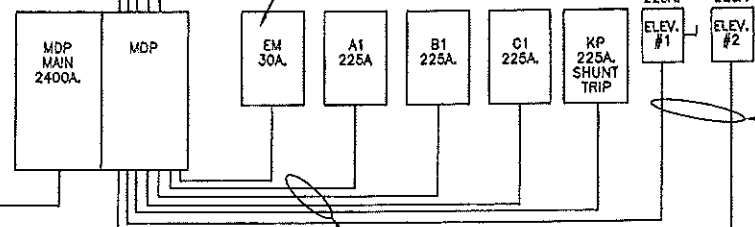


UTILITY DUCT BANK
DETAIL "B"

SCALE: 3/4"=1'



3-4' PVC ENCASED
IN CONCRETE



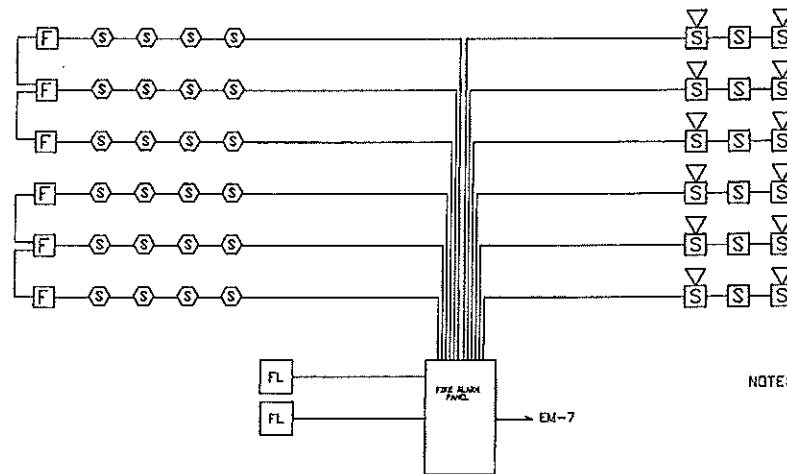
4-350 MCM CU, 3' EMT, EA.

INVERTER

3-4/0 CU, 2' C., EA.

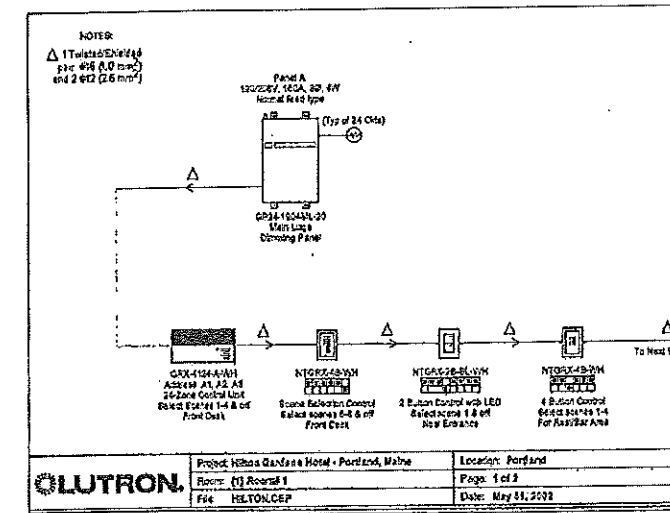
4-4/0 CU, 2' C., EA.

DISTRIBUTION



FIRE ALARM SYSTEM

NOTES:
1) FIRE ALARM SYSTEM TO BE VOICE EVAC.
2) SYSTEM TO BE ADDRESSABLE
3) SEE FLOOR PLANS FOR LOCATIONS OF DEVICES



LUTRON

Project: Hilton Garden Inn Hotel - Portland, Maine
Room: 01 Rooms 1
F44: HELTON/CEP
Location: Portland
Page: 1 of 2
Date: May 21, 2002

Hilton Garden Inn
65 COMMERCIAL STREET
Portland, Maine

OLYMPIA
1000 COMMERCIAL STREET
PORTLAND, MAINE 04101
PHONE: 774-1492

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ELECTRICAL CONTRACTORS
175 ANDERSON STREET
PORTLAND, MAINE 04101
PHONE: 774-1877
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CONSTRUCTION DOCUMENT
REVIEW/ ISSUED FOR BID
5-29-02

REV.	DESCRIPTION	DATE

PROGRESS PRINT

CURRENT ISSUE STATUS:

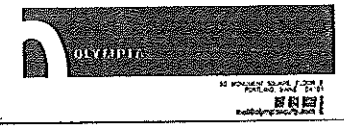
SMRT ARCHITECTURE ENGINEERING PLANNING
5147
144 Fore Street 2 Fl. Box 615
Portland, Maine 04104
Tel. (207) 777-3814
Fax. (207) 777-1020

HILTON GARDEN INN
65 COMMERCIAL STREET
PORTLAND, MAINE

DETAILS

PROJECT MANAGER: RHO	
PROJECT No. 02004	

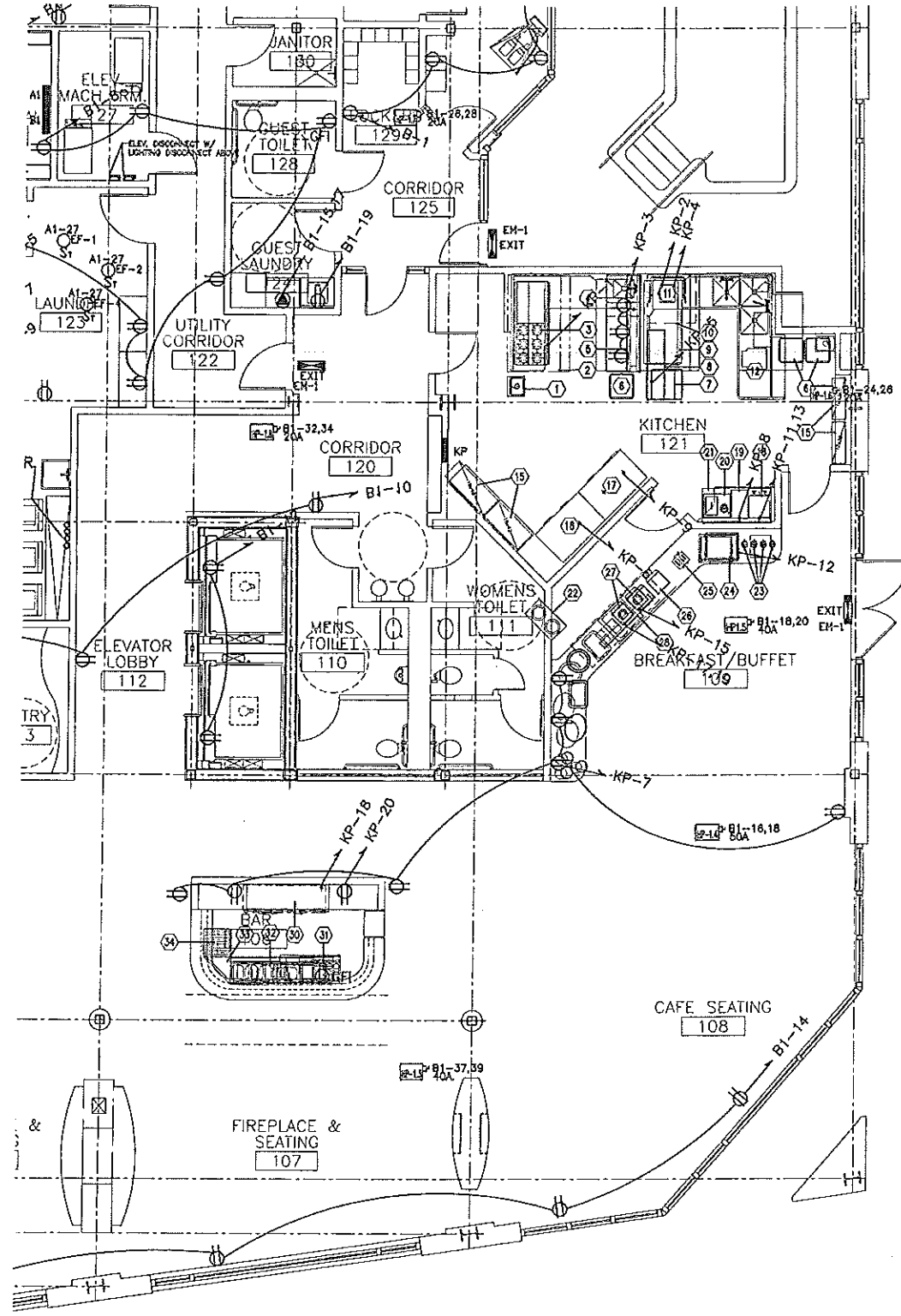
E500



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B.H. MILLIKEN
ELECTRICAL CONTRACTORS
171 ANDERSON STREET
PORTLAND, MAINE 04101
PHONE: 879-1177
FAX: 724-1472

CONSTRUCTION DOCUMENT
REVIEW/ ISSUED FOR BID
5-29-02



ITEM	QTY	DESCRIPTION
1	1	HAND SINK
2	1	EXHAUST HOOD W/FIRE SUPPRESSION SYSTEM
3	1	RANGE, MEDIUM DUTY GAS
4	1	CHEF'S COUNTER
5	2	WALL SHELF
6	3	TRASH CONTAINER
7	1	ICE MACHINE WITH BIN
8	2	WALL SHELF
9	1	CLEAN DISHTABLE
10	1	CONDENSATE HOOD
11	1	DISHWASHER W/BOOSTER
12	1	SOLEID DISHTABLE/POT SINK
13	-	- SPARE NUMBER-
14	-	- SPARE NUMBER-
15	4	SHELVING UNIT
16	1	REFRIGERATOR, 2-SECTION
17	1	DUAL-TEMP REFRIGERATOR/FREEZER
18	1	COFFEE BREWER
19	1	JUICE DISPENSER
20	1	WATER & ICE STATION
21	1	BEVERAGE COUNTER
22	1	DISPENSER, HEATED PLATE
23	4	AIRPOT
24	1	FROST TOP
25	1	TOASTER, POP-UP
26	1	UNDERCOUNTER REFRIGERATOR
27	2	INDUCTION COOKTOP
28	1	SNEEZE GUARD
29	-	- SPARE NUMBER-
30	1	BACK BAR REFRIGERATOR
31	1	UNDERBAR WORKSTATION
32	1	3-COMPARTMENT UNDERBAR SINK
33	1	FLAT TOP FILLER SECTION (90)
34	1	GLASS STORAGE BIN

NOTES:

- ELECTRICAL CONTRACTOR TO RUN CONTROL WIRING BETWEEN EVAPORATORS AND REVIDE CONDENSING UNITS FOR WALK-IN COOLER AND FREEZER. CO-ORDINATE WITH KITCHEN EQUIPMENT CONTRACTOR (K.E.C.)
- ELECTRICAL CONTRACTOR TO INSTALL SEAL-OFF FITTINGS ON ALL CONDENSING PIPING WALK-IN COOLER AND FREEZER.
- ELECTRICAL CONTRACTOR TO PROVIDE 115 VOLT W/P RECEPTACLE IN FREEZER FOR DRAIN LINE HEAT TAPE. HEAT TAPE FURNISHED AND INSTALLED BY K.E.C.
- PLUMBING CONTRACTOR TO INSTALL VACUUM BREAKER, SOLENOID VALVE, AND FLOW CONTROL VALVE (FURNISHED) IN COLD WATER LINE TO DISPOSER.
- KITCHEN EQUIPMENT CONTRACTOR TO PROVIDE GAS REGULATING VALVES FOR ALL GAS OPERATED KITCHEN EQUIPMENT.
- FLOOR DRAIN REQUIRES FLOW RATE OF 3 G.P.M.
- PLUMBING CONTRACTOR TO INSTALL ALL DRAINS AND FAUCETS SUPPLIED BY KITCHEN EQUIPMENT CONTRACTOR.
- PLUMBING CONTRACTOR TO FURNISH AND INSTALL ALL INPECT DRAIN PIPING TO FLOOR DRAINS.
- PLUMBING CONTRACTOR TO INSTALL GAS REGULATORS ON ALL GAS EQUIPMENT. REGULATORS BY K.E.C.
- PLUMBING CONTRACTOR TO MONTE ALL GAS PIPING AND ASSESS K.E.C. AND FACTORY REP'S IN START-UP AND DEMONSTRATION OF EQUIPMENT.
- ELECTRICAL CONTRACTOR TO INTERWIRE SOLENOID VALVE AND CONTROL PANEL TO DISPOSER.
- GENERAL CONTRACTOR TO PROVIDE ALL REQUIRED WALL BACKING AS DIRECTED BY K.E.C.
- GENERAL CONTRACTOR TO PROVIDE ALL REQUIRED SLEEVES THROUGH BUILDING FOR TENDITE REFRIGERATION LINES. REFRIGERATION LINES BY K.E.C.

FOODSERVICE EQUIPMENT FLOOR PLAN

1/4"=1'-0"
FS-1

REV.	DESCRIPTION	DATE

CURRENT ISSUE STATUS:

SM RT ARCHITECTURE ENGINEERING PLANNING
5087
144 Fore Street, P.O. Box 618
Portland, Maine 04104
tel. (207) 772-3846
fax. (207) 772-1270

HILTON GARDEN INN
65 COMMERCIAL STREET
PORTLAND, MAINE

KITCHEN POWER

PROJECT MANAGER	RG	0'	1'
PROJECT No.	02004	E501	



CONSTRUCTION DOCUMENT REVIEW/ISSUED FOR BID 5-29-02

PANEL:MDP VOLTAGE: 208/120V. Table with 4 columns: VA, AMPS, AMPS, VA. Rows 1-41.

PANEL:KP VOLTAGE: 208/120V. Table with 4 columns: VA, AMPS, AMPS, VA. Rows 1-41.

PANEL:EM VOLTAGE: 208/120V. Table with 4 columns: VA, AMPS, AMPS, VA. Rows 1-41.

PANEL:A4 VOLTAGE: 208/120V. Table with 4 columns: VA, AMPS, AMPS, VA. Rows 1-41.

PANEL:A1 VOLTAGE: 208/120V. Table with 4 columns: VA, AMPS, AMPS, VA. Rows 1-41.

PANEL:B1 VOLTAGE: 208/120V. Table with 4 columns: VA, AMPS, AMPS, VA. Rows 1-41.

PANEL:C1 VOLTAGE: 208/120V. Table with 4 columns: VA, AMPS, AMPS, VA. Rows 1-41.

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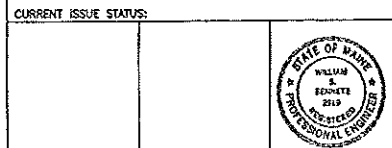
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Table with 3 columns: REV., DESCRIPTION, DATE.

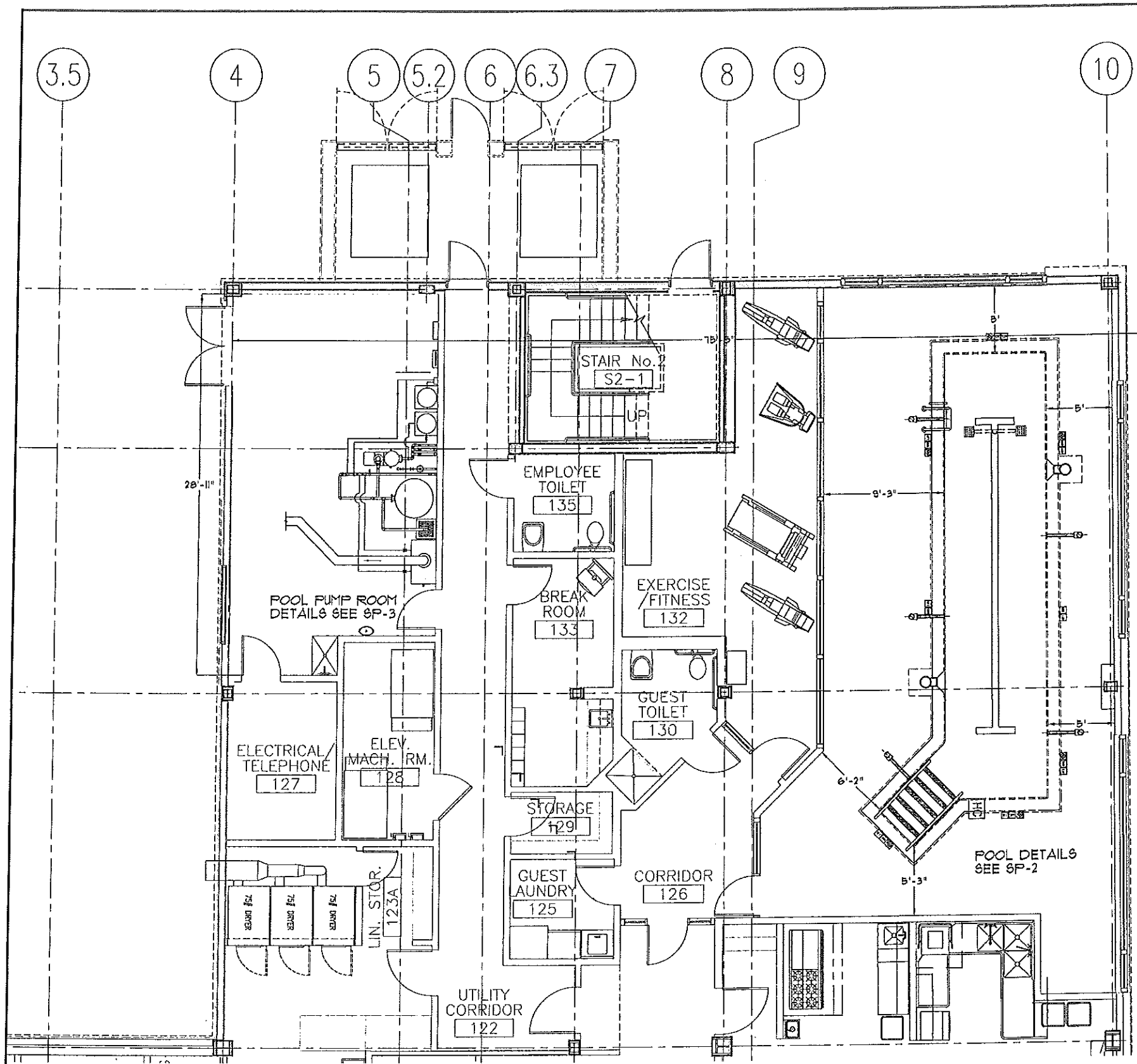


SMRT ARCHITECTURE ENGINEERING PLANNING 51PT 144 Fore Street, Box 814 Portland, Maine 04104

HILTON GARDEN INN 65 COMMERCIAL STREET PORTLAND, MAINE

PANEL SCHEDULES

PROJECT MANAGER: RG PROJECT No. 02004 E600



DESIGN DATA	
POOL	
FILTER MODEL	= TR-140C
FILTER AREA	= 7.06 SQ. FT.
TURN OVER	= 1.4 HRS.
POOL VOLUME	= 8,820 GALLONS
POOL FLOW RATE	= 105 GPM
APPLICATION RATE	= 14.81 GPM/SQFT.
PERIMETER	= 94'-5" LINEAR FT.
SURFACE AREA	= 294 SQFT

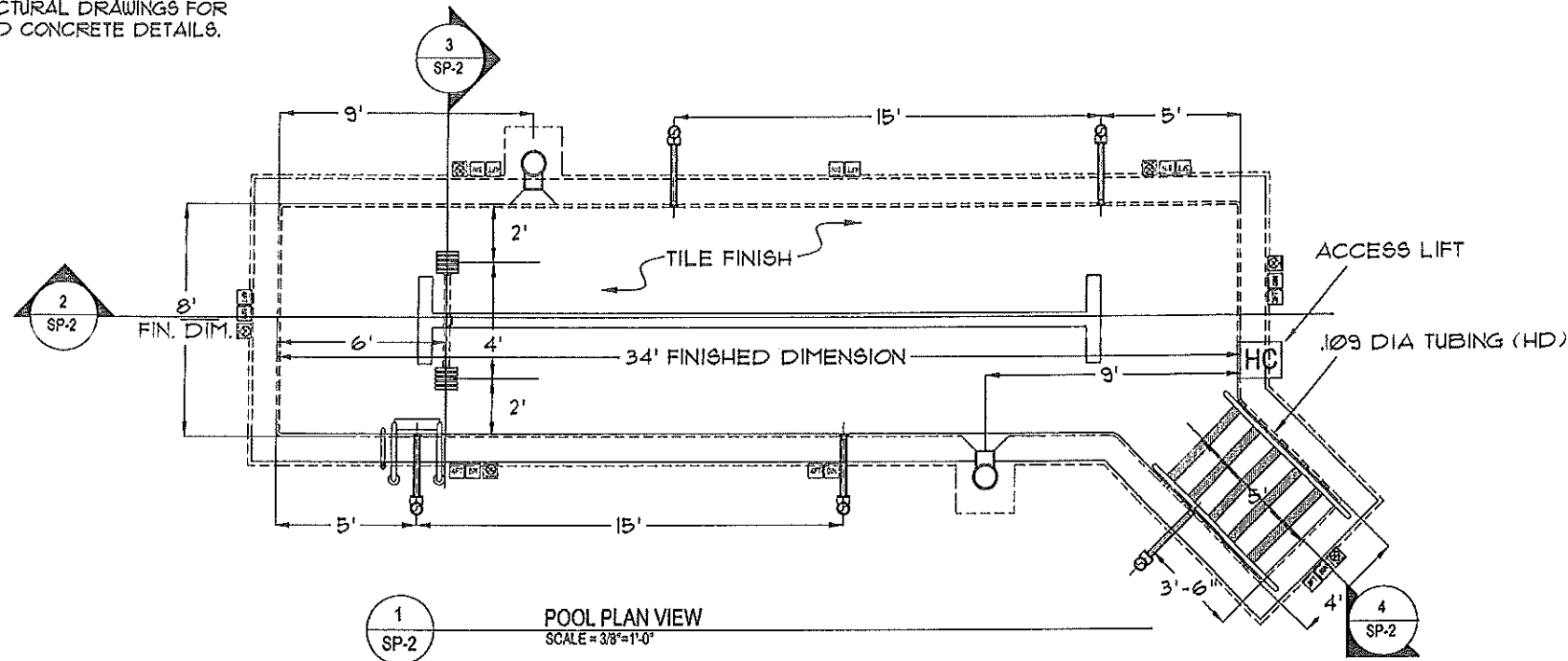
CONSTRUCTION NOTES

- ALL WORK SHALL COMPLY WITH NATIONAL ELECTRIC CODE SECTION 680 AND ANY LOCAL REQUIREMENTS WHICH APPLY TO POOL CONSTRUCTION. POOL DECKING SHALL SLOPE 1/4" PER FT. TO DECK DRAINS.
- PIPING IS SHOWN FOR CLARIFICATION AND MAY NOT SHOW EXACT ROUTING OR WIDTH, CONTRACTOR SHALL INSTALL PIPING WITH AS FEW CHANGES BASED UPON JOB SITE CONDITIONS.
- ALL PIPING SHALL BE PROPERLY SUPPORTED WHEN EXPOSED OR ENCASED IN CONCRETE FOR SUPPORT.
- ALL POOL DEPTH MARKERS SHALL BE FIELD VERIFIED AS TO PROPER LOCATION SHOWING WATER LEVEL. MARKINGS SHALL BE DARK LETTERS ON LIGHT BACKGROUND. DEPTH MARKERS SHALL BE CERAMIC TILE AND BE INSTALLED ON VERTICAL AND HORIZONTAL SURFACES AROUND POOL AREA.
- POOL CONTRACTOR SHALL ASSIST GENERAL CONTRACTOR TO ASSURE THAT OTHER TRADE PROVIDE HEALTH DEPARTMENT REQUIRED EQUIPMENT: SUCH AS, FILL WATER BACKFLOW PREVENTORS, DRINKING FOUNTAINS NOSE BIBS, MECHANICAL VENTILATION, FLOOR DRAINS, TELEPHONE CONNECTIONS, LIGHTING, OUTLETS FOR CHEMICAL FEEDERS, GFI, OUTLETS, HOLDING TANKS, OR BACKWASH FIT.
- ALL POOL WORK CONCRETE SHALL BE 4000 PSI DECK WORK 3500 PSI.
- ALL PIPES WILL BE AIR OR WATER TESTED TO 25 PSI AND TEST SHALL REMAIN ON PIPES UNTIL ALL CONCRETE OR BACK FILL HAS BEEN COMPLETED. PIPING SHALL BE PVC SCH. 80 BELOW GROUND AND SCH. 40 ABOVE GROUND HAVING NSF-FU SEAL OF APPROVAL.
- ALL REINFORCING WILL BE GRADE 40 #5 BARS (WALLS), GRADE 40 #4 BARS (FLOORS) 12" O.C.B.W. UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL COLOR CODE PIPING, PROVIDE VALVE CHART AND OPERATING INSTRUCTIONS TO OWNER'S PERSONNEL, IN ACCORDANCE WITH HEALTH DEPARTMENT REQUIREMENTS.
- CONTRACTOR TO SUPPLY OPERATING INSTRUCTIONS TO OWNER AND ARCHITECT.
- ALL CHEMICAL FEED PUMPS SHALL BE ELECTRICALLY INTERLOCKED WITH FILTER PUMPS TO PREVENT CHEMICAL PUMPS FROM RUNNING WHEN FILTER PUMPS ARE OFF.
- ALL PUMP FITS & EQUIPMENT ROOM CONCRETE FLOORS WILL SLOPE TO DRAINS, SUMPS, OR DOORS.
- CONTRACTOR TO PROVIDE BATHER LOADS AND SAFETY SIGNS (REQUIRED BY HEALTH DEPT. OR SAFETY CONSULTANT) FOR POOL AS REQUIRED.
- ALL SEATS, STEPS, AND PROTRUDING CONCRETE FIXTURES SHALL HAVE 1" DARK CONTRASTING TILE SAFETY STRIP.
- MAN DRAINS SHALL BE INSTALLED 60 THAT INSE FROTRUDE.
- ALL EXPOSED PVC PIPING AND FILTER TANKS WILL BE COLOR CODED.
- ALL GRATES WILL BE SECURED WITH NON CORROSIVE TAMPER PROOF SCREWS OR CEMENTED IN PLACE.
- POOL FLOORS ARE TO HAVE 6" NICHES 3/4" STAIN STONE BASE IF SOIL CONSISTS OF MATERIAL OR MATERIALS THAT DO NOT PROMOTE GOOD DRAINAGE.
- ALL POOLS, DECKS & SHALL BE PLACED ON BACKFILL, WHICH HAS BEEN COMPACTED TO 95%.
- MESH AND REBAR TO BE SUPPORTED BY BLOCKS OR CHAIRS.
- GROUNDING THE FOLLOWING EQUIPMENT SHALL BE GROUNDED: 1. ALL ELECTRIC EQUIPMENT LOCATED WITHIN 5 FEET OF THE INSIDE WALL OF POOL. 2. ALL EQUIPMENT ASSOCIATED WITH THE CIRCULATING SYSTEM OF THE POOL. 3. JUNCTION BOXES. 4. TRANSFORMER ENCLOSURES. 5. GROUND FAULT CIRCUIT INTERRUPTERS. 6. PANEL BOARDS THAT ARE NOT PART OF THE SERVICE EQUIPMENT AND THAT SUPPLY ANY ELECTRICAL EQUIPMENT ASSOCIATED WITH THE POOL.
- OWNER TO PROVIDE SIGNAGE, TELEPHONE WITH 911 SERVICE AND DRINKING FOUNTAIN IN POOL ROOM.

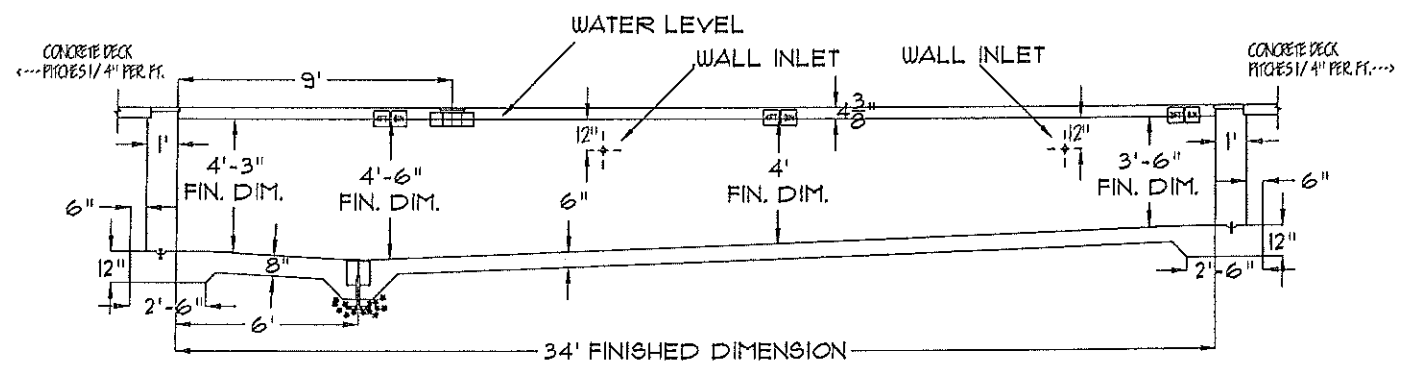
NOTE: POOL FINISH TO BE ALL TILE.

1
SP-1
SITE POOL PLAN
SCALE = 1/4" = 1'-0"

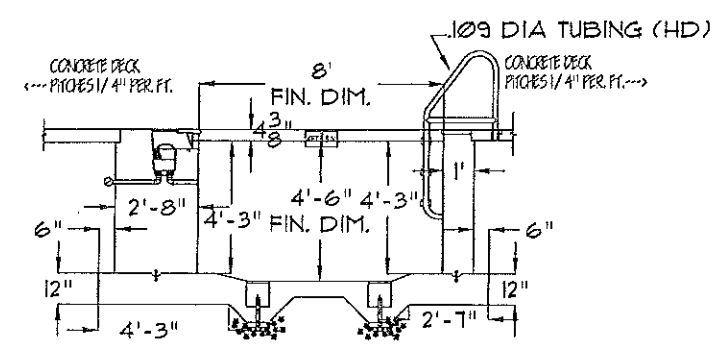
NOTE:
SEE STRUCTURAL DRAWINGS FOR
STEEL AND CONCRETE DETAILS.



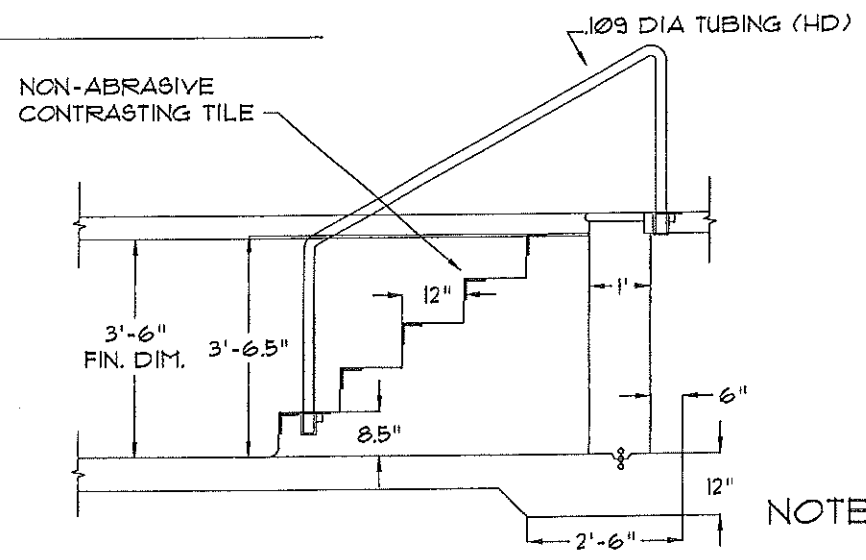
1 POOL PLAN VIEW
SCALE = 3/8"=1'-0"



2 LONGITUDINAL SECTION
SCALE = 3/8"=1'-0"



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



4 SECTION THROUGH STAIRS
SCALE = 3/4"=1'-0"

DESIGN DATA	
POOL	
FILTER MODEL	= TR-140C
FILTER AREA	= 1.06 SQ. FT.
TURN OVER	= 1.4 HRS.
POOL VOLUME	= 8,820 GALLONS
POOL FLOW RATE	= 105 GPM
APPLICATION RATE	= 14.81 GPM/SQFT.
PERIMETER	= 94'-5" LINEAR FT.
SURFACE AREA	= 294 SQFT

PERIMETER OVERFLOW AND RECIRCULATION SYSTEM		
NO.	QTY.	DESCRIPTION
1	2	SP1082 RECIRCULATING SYSTEM-SKIMMERS
2	5	8434-0060 DWELLS STA-RITE
3	2	SP1033 9" X 9" MAIN DRAIN BOX ASA 1/2 HAYWARD GRATE
4	2	HYDROSTATIC RELIEF VALVE & TEE

FILTRATION EQUIPMENT		
NO.	QTY.	DESCRIPTION
5	1	TR-140C VERTICAL PRESSURE SAND FILTER 30" DIA. 1/2 CONTROL VALVE, PAC-FAB 766 SQFT FILTER AREA
6	1	CHK-53 PACFAB 5 HP, RATED FOR A TOTAL FLOW 103 GPM @ 65' TDH. 1 PHASE, 60 CYCLE, 208V, 3450 RPM
7		
8		
9	1	850,000 BTU GAS HEATER

CHEMICAL SANITATION SYSTEM		
NO.	QTY.	DESCRIPTION
9	1	BIOGUARD EROSION FEEDER
10	1	STEDER ACID FEED SYSTEM
11	1	50 GAL ESOCK
12		

MAINTENANCE EQUIPMENT		
NO.	QTY.	DESCRIPTION
13		
14		
15		
16		
17		

DECK EQUIPMENT		
NO.	QTY.	DESCRIPTION
18		
19		
20	6	28202 ST.ST. ESCUTCHEONS-KOI
21	6	28102 1-1/2" ESPANZE WEDGE DECK ANCHERS KOI
22	1	KOI LAUNDRY-POOL ACCESS 109 DIA
23	2	KOI STAIR HAND RAILS 109 DIA. KOI
24	1	EC-100 POOL ACCESS LIFT

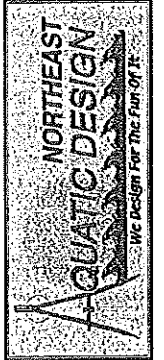
SAFETY EQUIPMENT		
NO.	QTY.	DESCRIPTION
25		
26		
27		
28		
29		
30		
31		
32		

RACING EQUIPMENT		
NO.	QTY.	DESCRIPTION
33		
34		
35		
36		
37		
38		

MISCELLANEOUS EQUIPMENT		
NO.	QTY.	DESCRIPTION
39	1	EYEWASH STATION-FILTER ROOM
40	1	FILL LINE
41	1	2" ANALOG FLOWMETER SIGNET
42	1	VACUUM GAUGE
43	1	PRESSURE GAUGE
44	1	VACUUM FITTING
45	1	ORNS SYSTEM DEL INDUSTRIES
46	1	ELECTRICAL CONTROL PANEL-BY OTHERS
47	6	NO DIVING
48	32	DEPTH MARKERS (SECK AND DOB WALL)
49		
50		

NOTE: POOL FINISH TO BE ALL TILE

CONSTRUCTION DOCUMENTS
5-29-02



Hilton Garden
Portland, ME

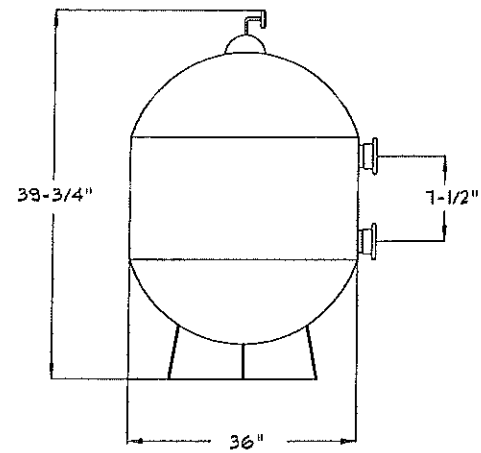
DATE: 05/10/02
REVISED: 05/23/02
DRAWN BY: UGU
JOB NO.: 224

NorthEast Aquatic Design and Supply, Inc.
We Design for the Fun of it

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Tel. 978-535-7900
Fax 978-535-3968

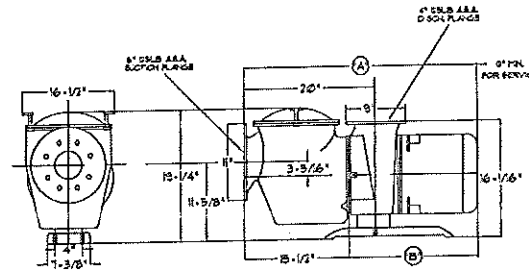
POOL SECTIONS
SP-2



TR-140C 1.06 SQ.FT.

1
SP-4

1 FILTER DETAIL
SCALE = NTS

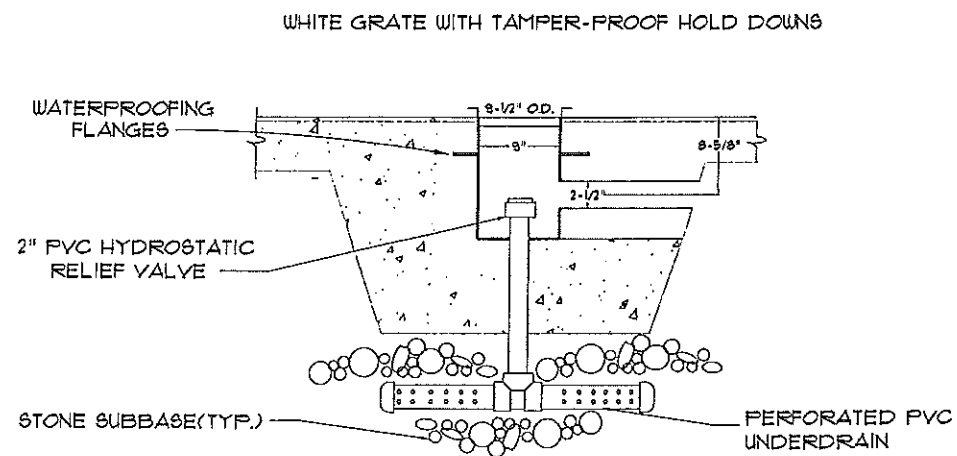


PACFAB "C" SERIES HD COMMERCIAL

3 PHASE AMPS @220V	(A)	(B)
5 HP, 14 AMPS	34-3/4"	19-3/8"
15 HP, 20 AMPS	35-3/4"	20-3/8"
10 HP, 36 AMPS	37-1/4"	21-1/8"

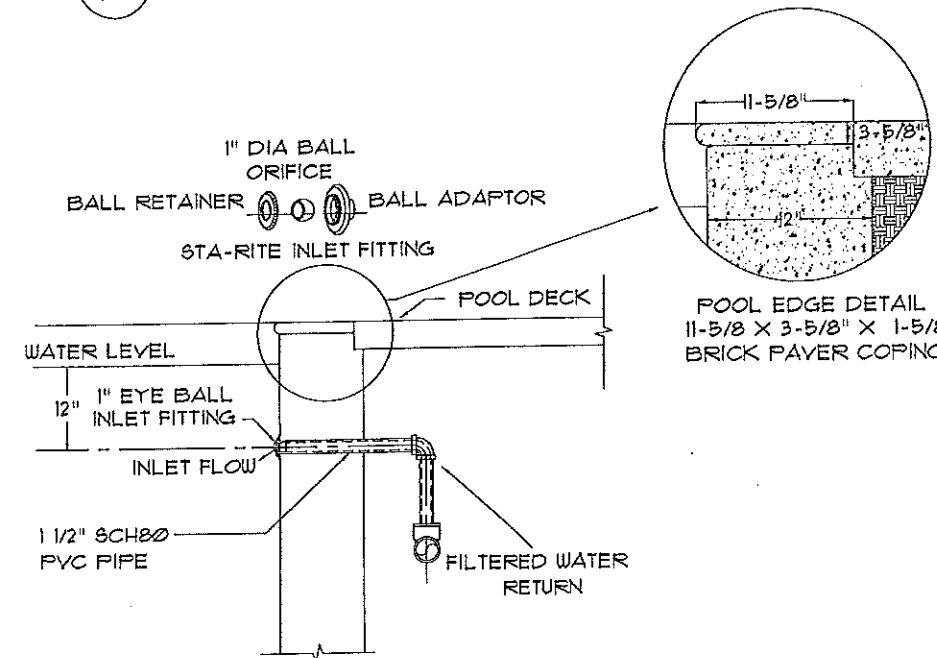
2
SP-4

2 PUMP DETAIL
SCALE = NTS



3
SP-4

3 MAIN DRAIN DETAIL
SCALE = NTS



4
SP-4

4 WALL INLET AND POOL EDGE DETAIL
SCALE = NTS

CONSTRUCTION DOCUMENTS
5-29-02



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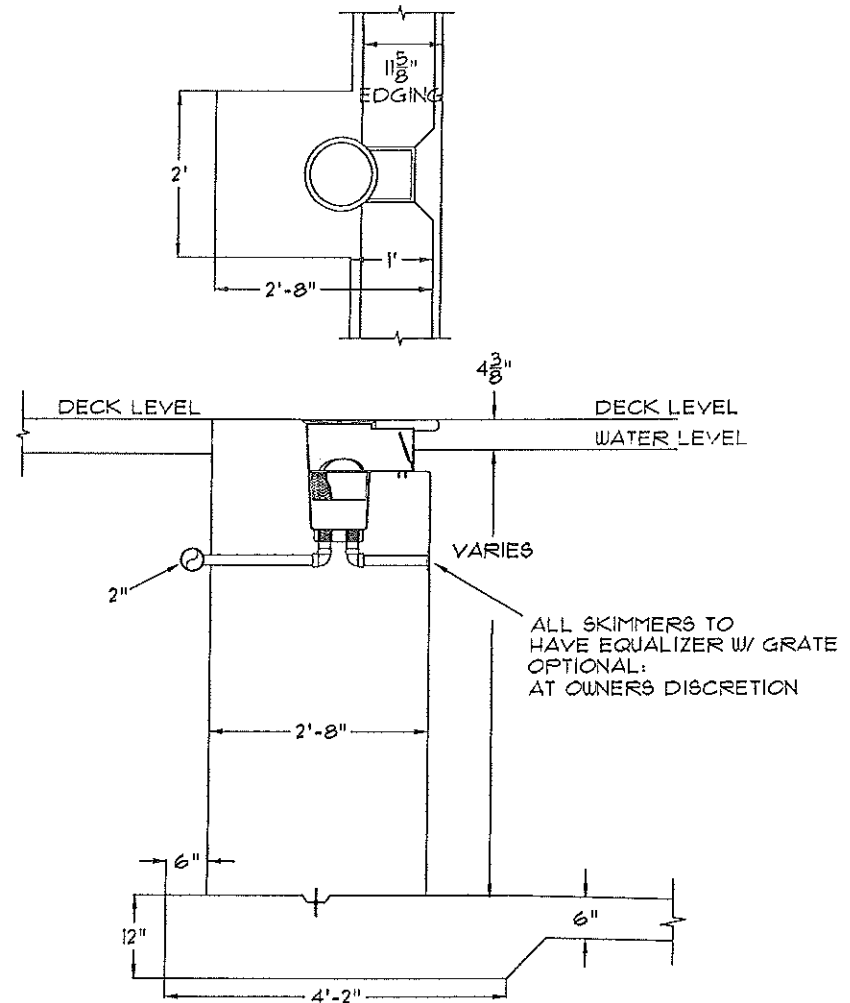
DATE: 05/10/02
REVISED: 05/28/02
DRAWN BY: JKW
JOB NO: 24

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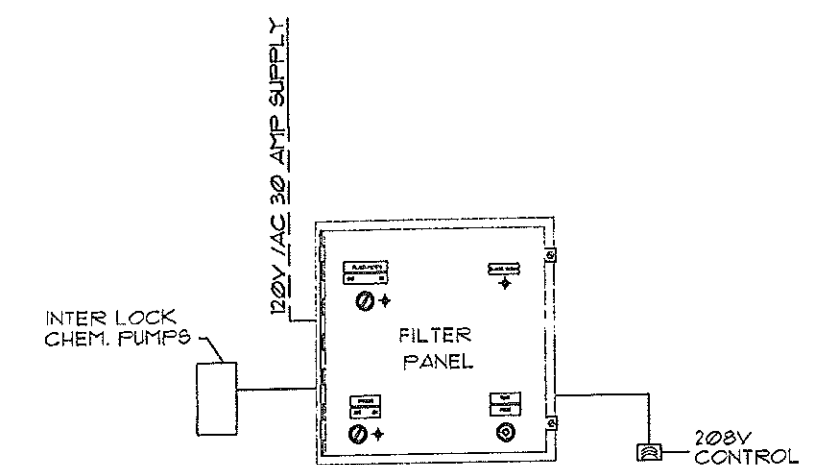
Business: sales@neaquatic.com
Drawings: drawings@neaquatic.com
3 Bourbon St.
Peabody, MA 01960
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Fax 978-535-3968

PUMP EQUIP.

SP-4



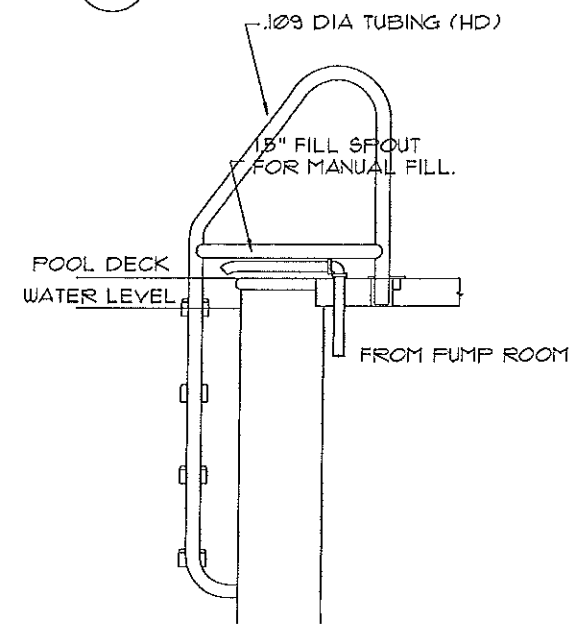
1 SKIMMER/WALL DETAIL
SP-2 SCALE = 1"=1'-0"



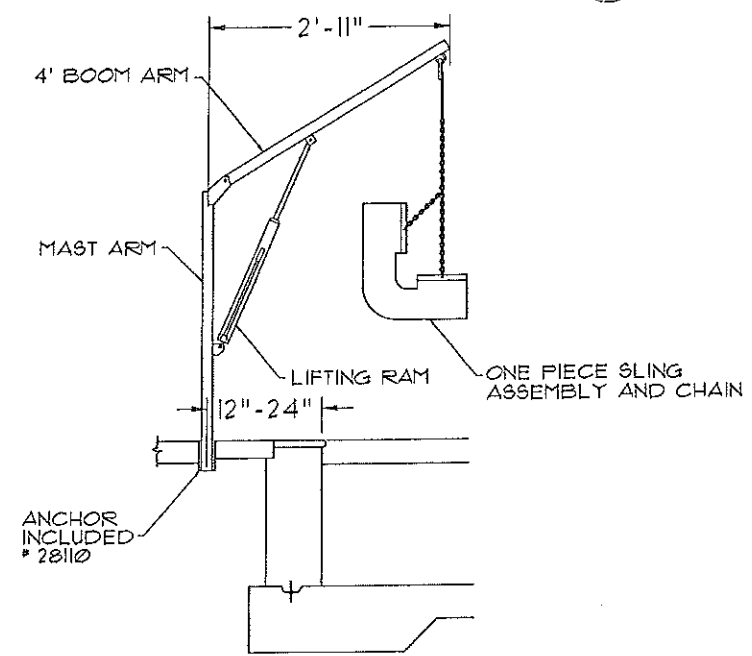
MOTOR STARTER
 -ONE N.O. AUX CONTACTS ON CONTACTOR
 -COIL VOLTAGE NOT TO EXCEED 208 VAC, 3 AMP
 (NOTE: IF HIGHER VOLTAGE USE STEP DOWN CONTROL TRANSFORMER.)
 -RUN SIGNAL FROM FILTER PANEL IS DRY CONTACT TYPE.

- NOTES:
 1. ALL CONDUITS, CONDUCTORS, AND INSTALLATION BY POOL CONTRACTOR.
 2. ALL WIRING OF 110V, 120VAC, AND 24VAC CIRCUITS TO BE 14 AWG.
 3. CONFORM TO ALL LOCAL, STATE, AND NATIONAL ELECTRICAL CODES.
 4. PLACE PANEL ON UPPER LEVEL ABOVE MAX. WATER LEVEL, OUT OF PUMP FIT.

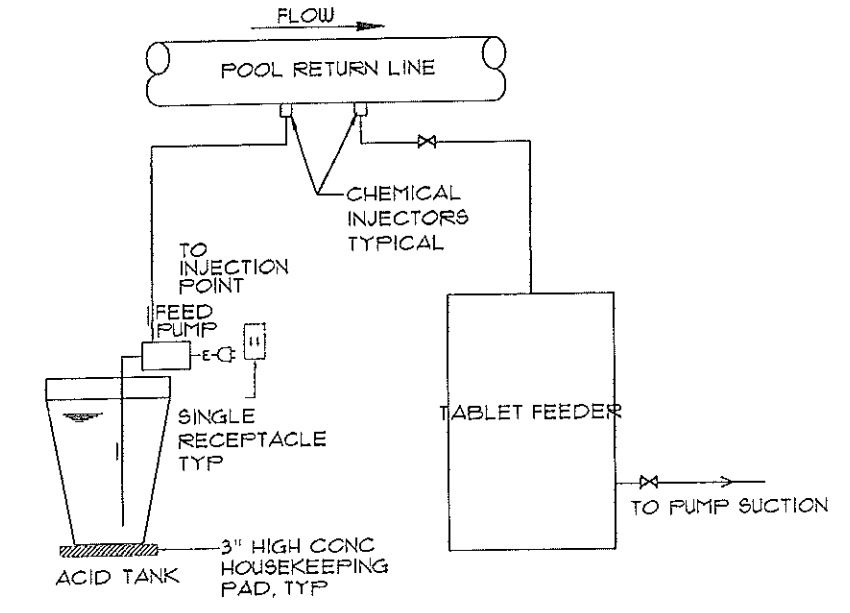
2 CONTROL PANEL SUPPLIED AND DESIGNED -BY PROJECT ELECTRICIAN OR ENGINEER
SP-5 SCALE = NTS



3 LADDER AND FILL FUNNEL DETAIL
SP-5 SCALE = 1"=1'-0"



4 TYPICAL POOL ACCESS HOIST
SP-5 SCALE = NTS



5 TYPICAL DETAIL EROSION/ACID FEED CHEMICAL SYSTEM
SP-5 SCALE = NTS

CONSTRUCTION DOCUMENTS
5-29-02

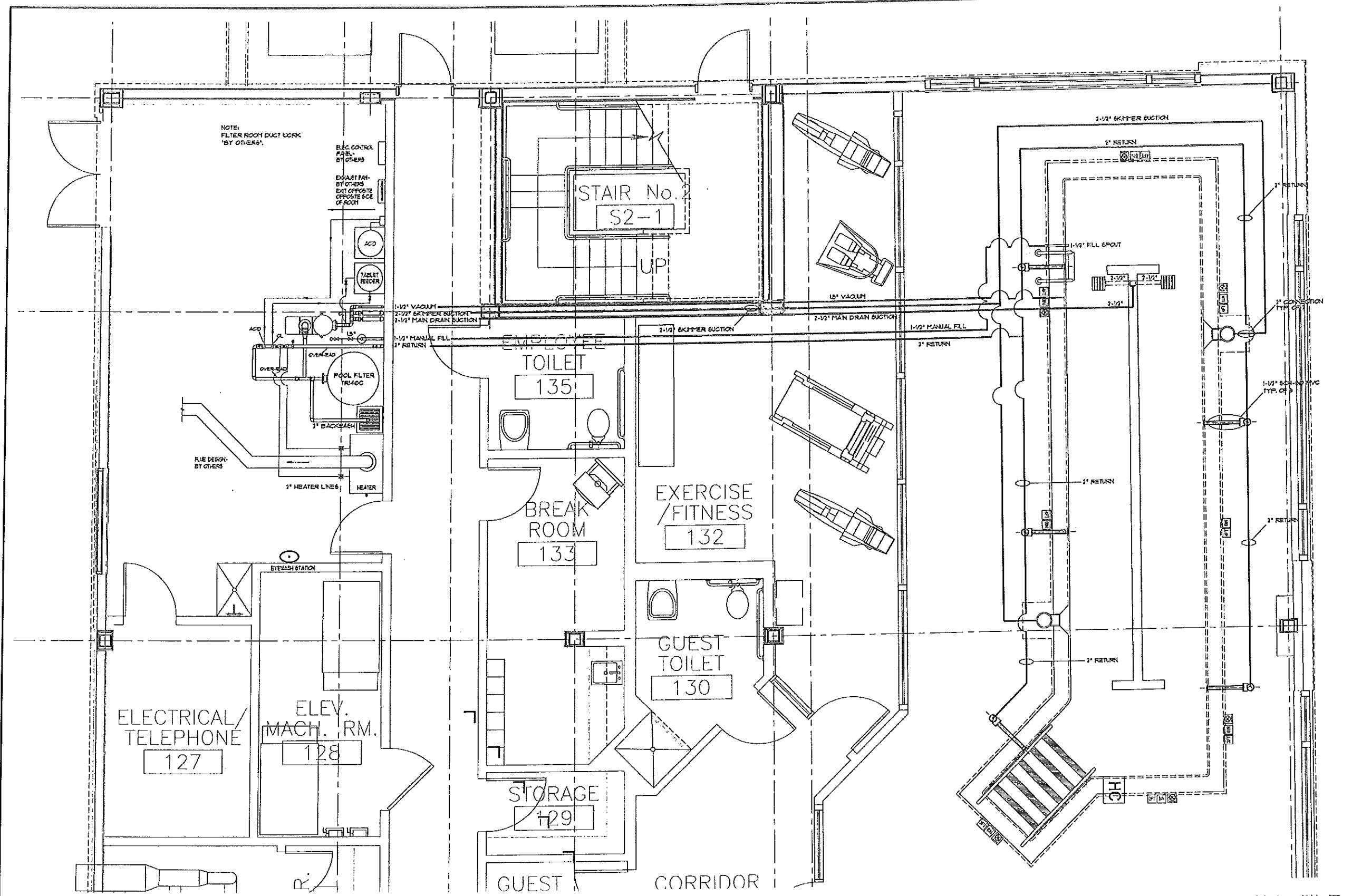
NORTHEAST AQUATIC DESIGN
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Portland, ME

DATE: 05/10/02
REVISED: 05/28/02
DRAWN BY: JGW
JOB NO.: 224

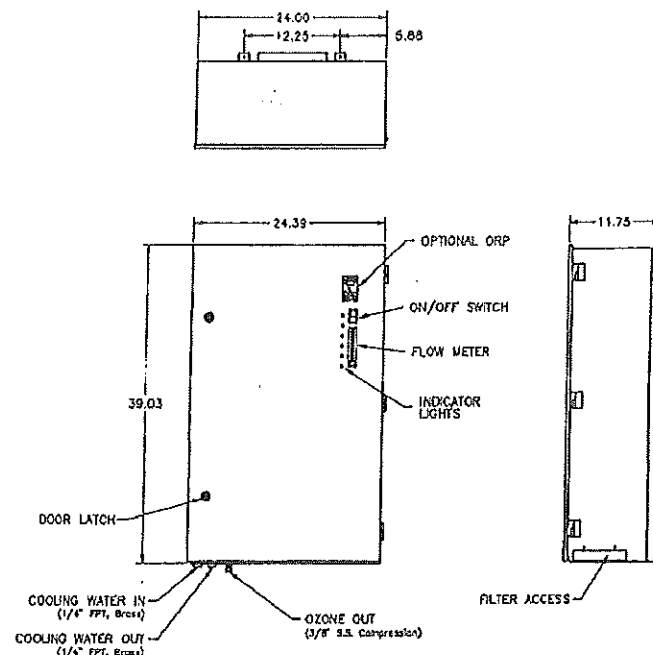
NorthEast Aquatic Design and Supply, Inc.
3 Bourbon St.
Peabody, MA 01960
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POOL EQUIP.
SP-5



1
SP-6
POOL PLUMBING PLAN
SCALE = NTS

NOTE: POOL FINISH TO BE ALL TILE.
CONSTRUCTION DOCUMENTS
5-29-02



CD-7 SPECIFICATIONS

OZONE OUTPUT (±10%) 7 g/hr
 FLOW RATE (max) 7 scfh (3.5 lpm)
 % WEIGHT 2.5 - 3.0%

POWER REQUIREMENTS:
 DOMESTIC MODEL 120 VAC, 50/60 Hz, 19, 5.5 Amp
 COOLING WATER 0.1 gpm (0.4 lpm)
 INLET TEMPERATURE 50F - 80F (10C - 32C)
 INLET PRESSURE 15.0 - 40 psf (100 - 270 kPa)
 WEIGHT 150 lb (70 kg)

LOCATION REQUIREMENTS:**
 MOUNTING Floor or wall mount in a clean, protected area using supplied brackets.
 AMBIENT TEMP 40F - 100F (5C - 40C)
 VENTILATION 6 Air changes per hour, (min)

* Typical pool water may be used for cooling. Generator efficiency and life will be improved at inlet temps of 80F or less.
 ** Protection from weather elements must be provided for outdoor installations. Operating outside of the recommended temp. ranges may result in damage not covered under the manufacturer's warranty.

FEATURES:

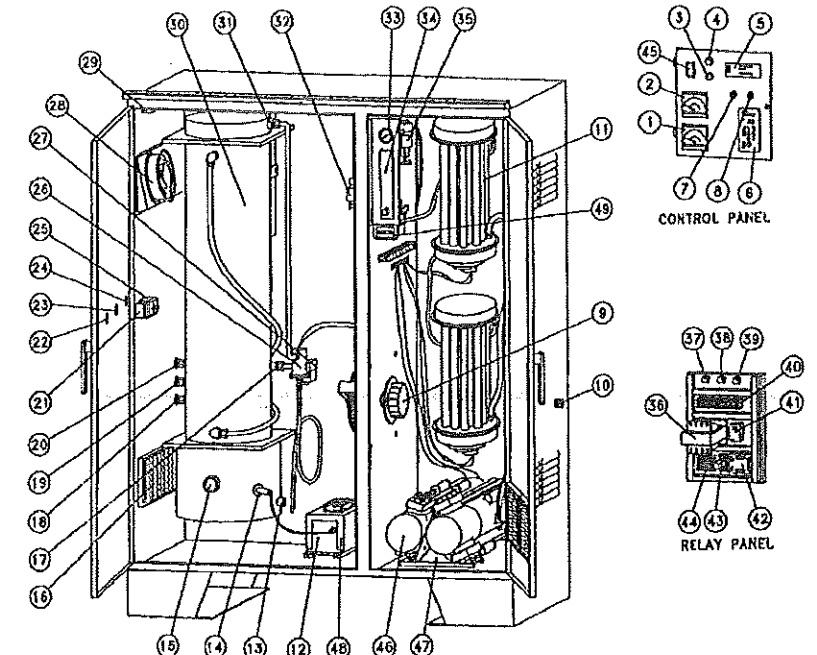
Protection from - Loss of Vacuum
 - Overheating of Water Jacket & Transformers
 - Water Backflow

All Circuits Fuse Protected
 Stainless Steel, Water Cooled Generator Module
 Variable Output (0 to 100%) (Optional)
 Electrodes - Cold Plasma
 - Low Frequency
 - Vertical Tube and Shell with Glass Tube Dielectric

ORP Monitor/Controller: (Optional)
 • Soft Touch Membrane Keypad
 • 4 Digit LCD Plus Symbols
 • -10C to 50C Operating Temperature

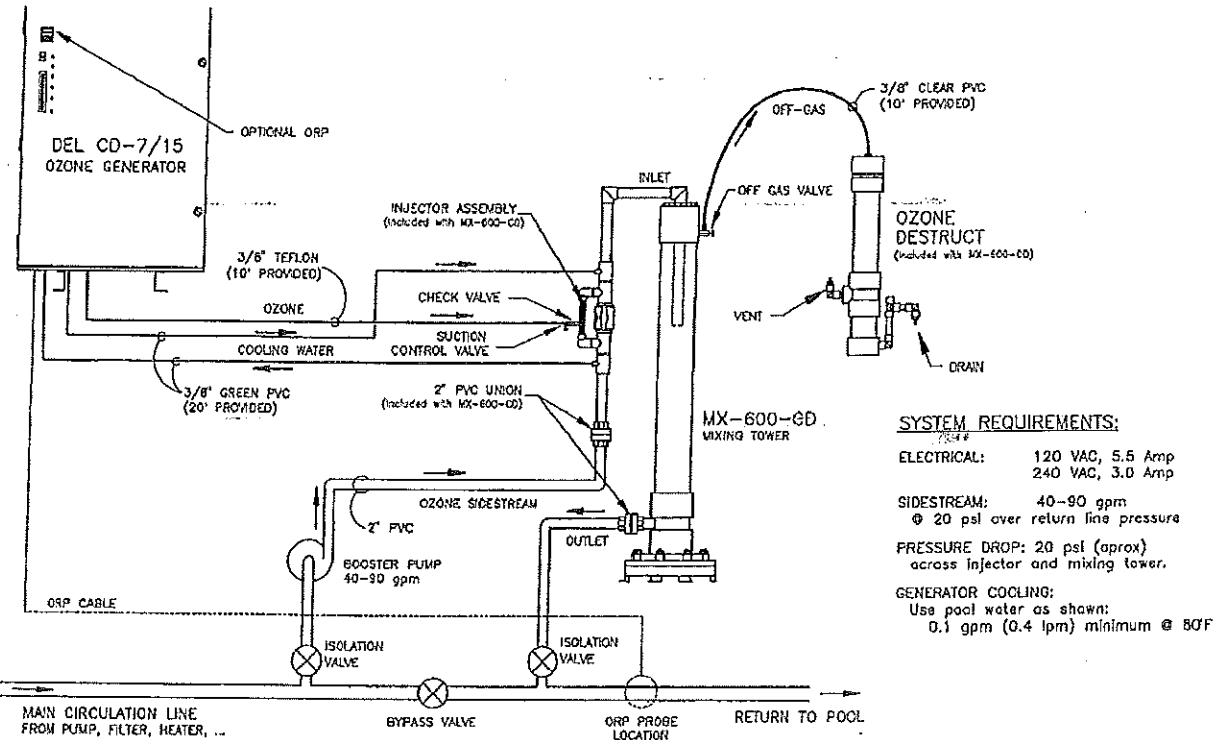
Oxygen Concentrator: (1 per Unit)
 • Oxygen Output - 7 scfh @ 8 psig (max)
 • Dewpoint - -73C
 • Oxygen Purity - 90% +/- 5%
 • Sound Levels - 55 db @ 1 Meter, Open Field
 • Response Time - 2 min. from Initial Startup or Extended Shutdown to Attain Maximum Purity

• Compressor - 1/3 Hp Thomas Glass Diaphragm
 Powdercoated Steel Enclosure



1. Primary Ammeter
2. Primary Voltmeter
3. PLC output fuse (1 Amp)
4. PLC input fuse (1 Amp)
5. ORP monitor/controller
6. Operator reset
7. Master reset
8. Variable transformer
9. Oxygen feed fitting (CO-150 and larger)
10. Oxygen concentrator
11. High voltage transformer
12. Generator feed gas fitting
13. High voltage feed-through
14. Sight glass
15. Air filter
16. Air filter
17. Stainless steel check valve
18. Cooling water in fitting
19. Cooling water out fitting
20. Ozone out fitting
21. Power connection terminal block (DIN rail)
22. Ozone power indicator light
23. System ON/OFF switch
24. Emergency stop switch
25. Main circuit breaker (DIN rail)
26. Water back-flow detection unit
27. Output solenoid valve
28. Cooling fan(s)
29. Door safety switch
30. Ozone generator module
31. Generator ozone outlet
32. Relay panel (see separate detail)
33. Vacuum gage
34. Feedgas flow meter
35. Vacuum regulator
36. Step-down transformer
37. Lo-limit vacuum switch
38. Hi-limit pressure switch
39. Hi-limit vacuum switch
40. Electrical terminal blocks
41. Ground fault interrupter
42. Generator module power relay
43. Air prep. power relay
44. Fuse blocks
45. Standby mode control switch
46. Air compressor
47. Compressor mounting bracket
48. H.V. transformer shroud assembly
49. Hourmeter

1 OZONE SYSTEM UNIT DETAIL
 SCALE = NTS



SYSTEM REQUIREMENTS:

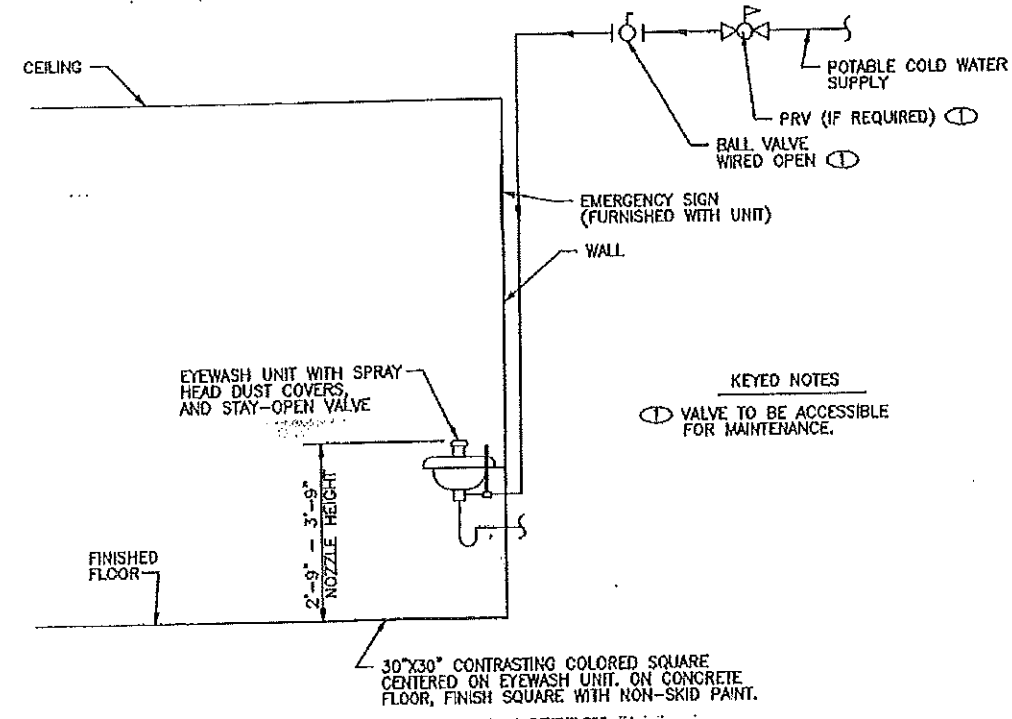
ELECTRICAL: 120 VAC, 5.5 Amp
 240 VAC, 3.0 Amp

SIDESTREAM: 40-90 gpm
 @ 20 psi over return line pressure

PRESSURE DROP: 20 psi (approx)
 across injector and mixing tower.

GENERATOR COOLING:
 Use pool water as shown:
 0.1 gpm (0.4 lpm) minimum @ 80F

2 OZONE SYSTEM INSTALLATION DETAIL
 SCALE = NTS



KEYED NOTES
 (1) VALVE TO BE ACCESSIBLE FOR MAINTENANCE.

3 TYPICAL FIXED EYEWASH STATION DETAIL
 SCALE = NTS

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OZONE SYS.

SP-7