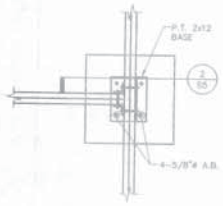
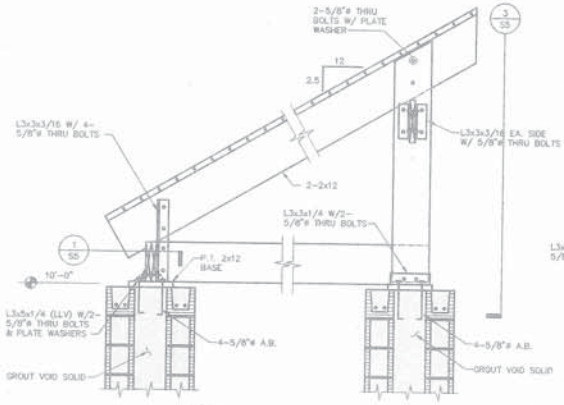


1/S5 SECTION
SCALE: 3/4" = 1'-0"



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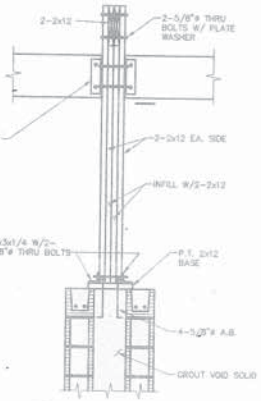
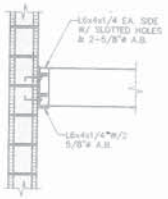
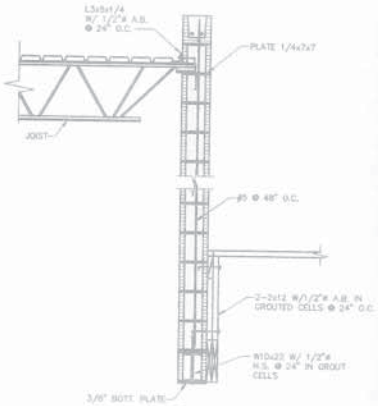
SCALE: 3/4" = 1'-0"



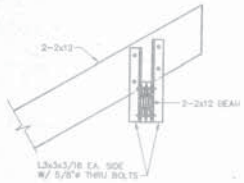
3/S5 SECTION
SCALE: 3/4" = 1'-0"



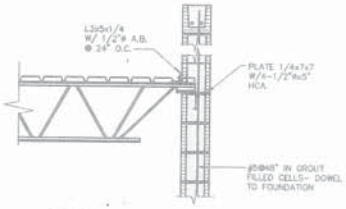
4/S5 SECTION
SCALE: 3/4" = 1'-0"



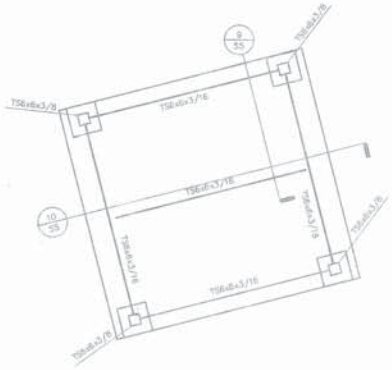
5/S5 SECTION
SCALE: 3/4" = 1'-0"



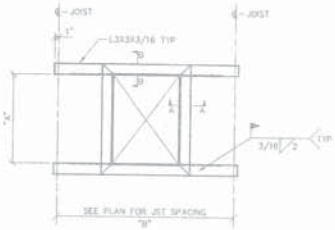
6/S5 SECTION
SCALE: 3/4" = 1'-0"



7/S5 SECTION
SCALE: 3/4" = 1'-0"



8/S5 PARTIAL ROOF PLAN
1/8"= 1'-0"

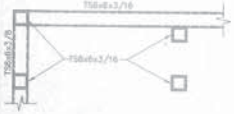


(WITH FRAME ABOVE DECK)

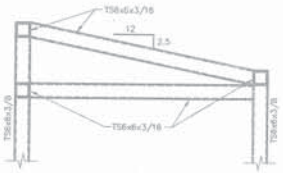
TYPICAL FRAMED ROOF OPENING
SCALE: 3/4" = 1'-0"

A-A/S5 SECTION
SCALE: 3/4" = 1'-0"

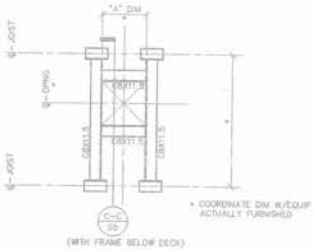
B-B/S5 SECTION
SCALE: 3/4" = 1'-0"



9/S5 SECTION
NO SCALE

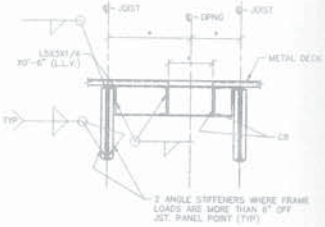


10/S5 SECTION
NO SCALE



(WITH FRAME BELOW DECK)

MECHANICAL ROOF SUPPORT
SCALE: 3/4" = 1'-0"



C-C/S5 SECTION
SCALE: 3/4" = 1'-0"

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NEW RECREATION CENTER AT JOHNSON PARK
ROCKDALE COUNTY, GEORGIA

DRAWN BY:
PRINTING

DATE	REMARKS
7/29/97	BID/ PERMIT

REVISION

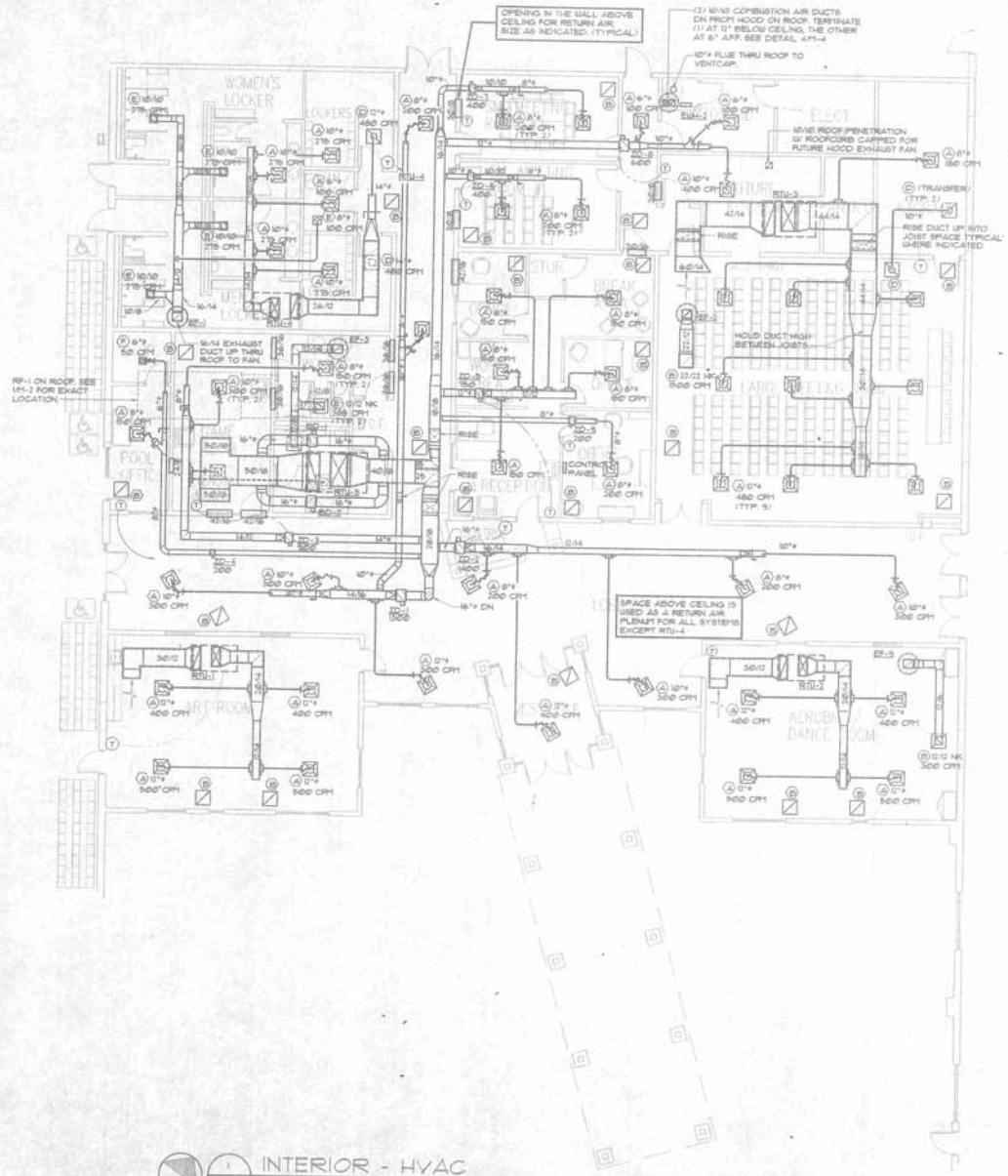
NO.	REMARKS

CONTENTS:
SECTIONS AND DETAILS

ISSUE DATE: 7/29/97

SHEET NUMBER: S5

WEEMS/DOAR ENGINEERS, INC.
1820 SILK CIRCLE
ATLANTA, GEORGIA 30329
SUITE 121
(404) 321-7944



INTERIOR - HVAC

SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. All HVAC work shall be in accordance with the Standard Mechanical Code, NFPA and ASHRAE. All ductwork shall be installed in strict accordance with SMACNA standards.
2. Spin-in fittings in sheet metal duct shall be equal to Philean S-4 with scoop 4 damper for supply, use TS-3 with scoop only no damper for return or exhaust air duct.
3. Insulated round flexible duct shall be equal to Thermaflex Thermaduct, type MKC, class 0. Maximum length for flexible duct shall be 6'-0" and be used for final connection to diffuser only.
4. Duct sizes shown are clear inside dimensions. Provide flexible connections where ducts connect to units.
5. Coordinate exact diffuser layout with reflected ceiling plan.
6. Coordinate all roof and wall penetrations with the structure.
7. Coordinate all electrical requirements for HVAC with the Electrical Contractor prior to ordering the equipment.
8. Coordinate exact thermostat locations with the Tenant and Interior finish. Regardless of interior finish, the thermostats shall not be located such that they are in the direct air stream from ceiling diffusers.
9. All RTUs shall be furnished with a firestat located in the return air stream prior to dilution by outside air. The firestat shall be set for 136 degrees F and shall shut down the fan on a detection of excessive heat.
10. RTU-3 and RTU-5 shall be furnished with a smoke detector located in the supply air duct prior to the first take-off. On a detection of smoke, the detector shall shut down the fan and send a signal to the building fire alarm panel. Mechanical Contractor shall install the smoke detectors, the Electrical Contractor shall furnish and wire all smoke detectors, and connect to the fire alarm panel.
11. All exhaust duct for toilet exhaust shall be uninsulated sheet metal.
12. Provide a deep seal trap at condensate drain from cooling coils. Condensate pipe shall be full size of unit connection. Condensate pipe shall be type "M" copper and shall spill on splashblock. Mount splashblocks on an additional thickness of roofing material.
14. Flue vent caps shall be U.L. and AGA approved. They shall terminate a minimum of 24" above the roof or 24" above any outside air intake within 10 feet horizontally.
15. Supply air 90 degrees elbows to have double thickness turning vanes. Return air 90 degree elbows have single thickness turning vanes.
16. Provide motor starters with thru the cover start/stop for all fan motors 1/4 hp and larger. For exhaust fans interlocked with motor operated louvers, provide all relays and wiring so that the intake louvers openscompletely before fan will start.
17. All duct work exterior to the building shall be externally insulated with 3" thick fiberglass duct wrap equal to Owens Corning type TS installed R=8.3. Cover insulation with galvanized sheet metal and cover entire surface of sheet metal with water proof mastic sealant so that the entire assembly is weather tight.
18. All exposed duct in the Natatorium shall be spiral sheet metal equal to United McGill. Duct shall be "Paint Grip" type sheet metal. See specifications for additional information. Architect's instructions. Exposed rectangular duct shall be paint grip sheetmetal and painted the same as spiral duct.

KEY PLAN

SCALE: NONE

AMC CONSULTING ENGINEERS, INC.
1827 POWERS FERRY ROAD
BUILDING #18 SUITE #900
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NEW RECREATION CENTER AT JOHNSON PARK

ROCKDALE COUNTY, GEORGIA

drawn by: LD

date: 10/01/01

revisions:

contents: INTERIOR - HVAC

job number:

sheet number: M-1

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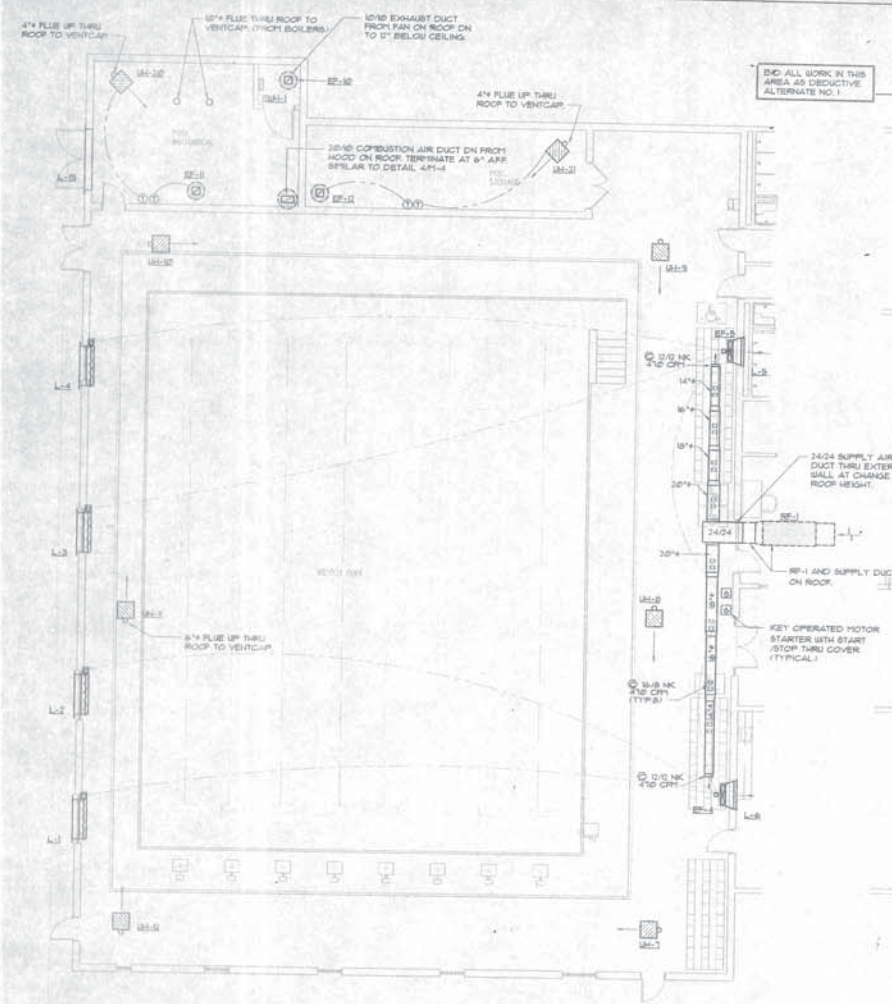
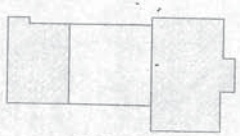
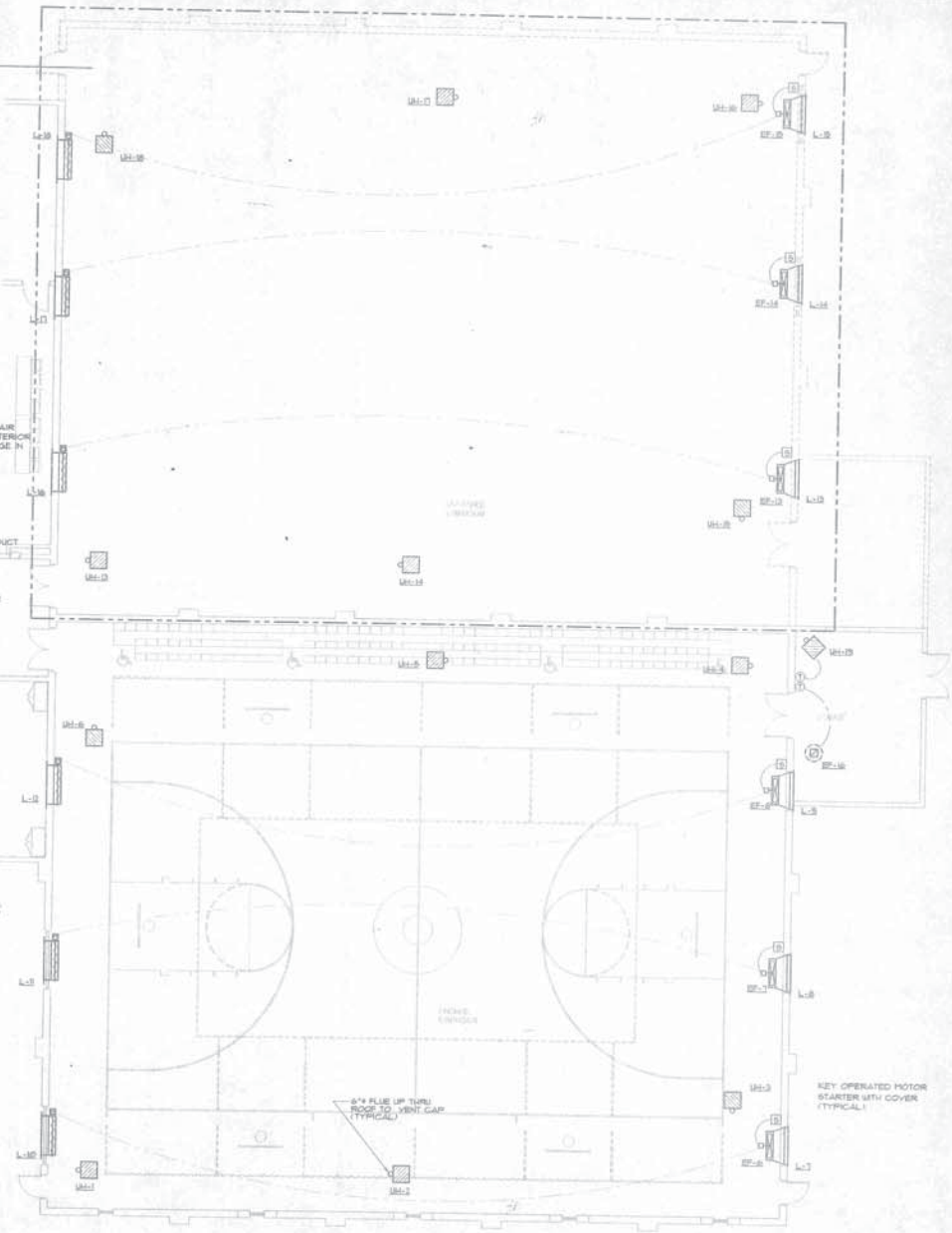


1 / M-2 NATATORIUM - HVAC
SCALE: 1/8" = 1'-0"



KEY PLAN



2 / M-2 GYM & FUTURE GYM - HVAC
SCALE: 1/8" = 1'-0"

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NEW RECREATION CENTER AT JOHNSON PARK

ROCKDALE COUNTY, GEORGIA

drawn by: LD
date: 1/28/97
revisions:

contents:
INTERIOR PLAN - HVAC

job number:

sheet number:
M-2

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LOUVERS

TAG	SIZE	CFM	MIN. NET FREE AREA	MAX. ΔP	BASIS OF DESIGN		NOTES
L-1-4	60/54	8800	5.48	.125"	RUSKIN	ELC6375D	① ②
L-5,6	60/54	7160	16.61	.10"		ET-125	
L-7,8,9	60/60	16100	18.51	.09"		ET-125	
L-10,11,12	60/60		10.48	.20"		ELC6375D	②
L-13,14,15	60/60		18.51	.09"		ET-125	
L-16,17,18	60/60		10.48	.20"		ELC6375D	②
L-5,6	60/54	7160	16.61	.10"		ET-125	
L-19	72/24	---	8.54	---		ET-125	③

① PROVIDE WITH BIRDSCREEN.
② COMBINATION LOUVER/DAMPER. PROVIDE W/120V/1# 24V TRANSFORMER DRIVEN OPEN & CLOSED.
③ LOUVER USED FOR COMBUSTION AIR.

AIR DISTRIBUTION SCHEDULE

TAG	TYPE	FACE SIZE	FINISH	O.B.D.	BASIS OF DESIGN		NOTES
Ⓐ	SUPPLY	24/24	WHITE	NO	TITUS	TDCA	① ②
Ⓑ	RETURN	24/24	WHITE	NO		CORE 50	
Ⓒ	SUPPLY	NECK ø	ALUMINUM	YES		300 PL	
Ⓓ	RETURN	24/24	WHITE	NO		CORE 50	②
Ⓔ	EXHAUST	NECK ø	ALUMINUM	YES		350 2RL	

① PROVIDE W/FRAME STYLE TO MATCH CEILING CONSTRUCTION.
② PROVIDE W/SQUARE TO ROUND ADAPTOR, COLLAR SIZE AS INDICATED.

ROOFTOP UNIT SCHEDULE

TAG	ARRGT	SUPPLY C.F.M.	O.A. CFM	EXT. S.P.	MIN HP	COOLING E.A.T.	COOLING TOT. MBH	COOLING SEN. MBH	GAS INPUT	GAS OUTPUT	BASIS OF DESIGN		E.E.R.	WEIGHT LBS	NOTES
RTU-1	DN.	1600	300	.7"	.60	80/67	62.9	42.7	90.0	72.0	TRANE	YCD060	SEER 9.85	838	①②
RTU-2		1600	250		.60		62.9	42.7	90.0	72.0		YCD060	SEER 9.85	838	②
RTU-3		4800	1500		3.0		151.0	116.0	250	175		YCD151	10.00	1838	②③
RTU-4		1200	240		.33		37.4	26.2	80.0	62.0		YCD036	SEER 10.00	776	②
RTU-5		7000	500		5.0		208.0	146.0	350	175		YCD210	8.3	2356	③④

① PROVIDE W/ROOFCURB, DISPOSABLE FILTERS.
② PROVIDE W/7 DAY PROGRAMMABLE T'STAT.
③ PROVIDE W/ENTHALPY ECONOMIZER W/BAROMETRIC RELIEF.
④ PROVIDE W/ "VARITRAC" CONTROL SYSTEM

SEQUENCE OF OPERATION

EQUIPMENT	OPERATION
EF-1,2,4,3	ON THRU COMFORT MAKER CONTROL PANEL ON DURING "OCCUPIED" MODE, OFF DURING SETBACK.
EF-4,5	ON/OFF THRU STARTER. EF-4 OPENS LOUVER L-1, AND L-2. EF-5 OPENS LOUVER L-3 AND L-4. LOUVERS CLOSED WHEN FANS ARE OFF.
EF-6,7,8	ON/OFF THRU STARTER. EF-6 OPENS L-10 EF-7 OPENS L-11, EF-8 OPENS L-12. LOUVERS CLOSE WHEN FANS ARE OFF.
EF-9	ON THRU AUX CONTACTS IN THERMOSTAT FOR RTU-2 W/120V RELAY ON DURING OCCUPIED MODE OFF DURING SETBACK.
EF-10	FAN TO RUN CONTINUOUSLY.
EF-13,14,15	FUTURE FANS TO OPERATE SIMILAR TO EF-6, 7, & 8.
EF-11,12,&16	WIRED TO COOLING ONLY THERMOSTAT SET AT 80° F.

MISCELLANEOUS

TAG	DESCRIPTION
EWH-1	ELECTRIC WALL HEATER EQUAL TO QMARK #QWH-3101 1.0KW @ 120V/1PHASE. PROVIDE W/SNAP ACTION THEROMSTAT AND SURFACE MOUNTING KIT.
EWH-2	ELECTRIC WALL HEATER EQUAL TO QMARK #QWH-2208, 2.0KW @ 208V/1PHASE. PROVIDE W/SNAP ACTION THEROMSTAT AND SURFACE MOUNTING KIT.

FAN SCHEDULE

TAG	CFM	EXT. S.P.	DRIVE	HP	TYPE	BASIS OF DESIGN		SERVES	RPM	MAX. SONES	NOTES
EF-1	1200	.25"	BELT	¼	ROOF CENT.	GREENHECK	GB-120	POOL TOILET	1180	8.4	①
EF-2	1800	.25"		¼	ROOF CENT.		GB-160	LG. MTG. RM	850	8.5	
EF-3	770	.5"		¼	ROOF CENT.		GB-120	OFFICE TOILET	1045	8.8	
EF-4,5	7160	.20"		3.0	SIDEWALL PROP.		SB3L42-30	NATATORIUM	530	18.3	②
EF-6,7,8	16100	.30"		3.0	SIDEWALL PROP.		SB3L42-30	GYM	530	18.3	②
EF-9	300	.25"		¼	ROOF CENT.		GB-80	AEROBICS RM.	1170	5.7	①
EF-10	300	.25"		¼	ROOF CENT.		GB-70	CHLORINE RM.	1410	7.1	③
EF-11	500	.25"		¼	ROOF CENT.		GB-80	POOL EQUIP.	1410	8.1	
EF-12	500	.25"		¼	ROOF CENT.		GB-80	POOL STOR.	1410	8.1	
EF-13,14,15	16100	.30"		3.0	SIDEWALL PROP.		SB3L42-30	FUTURE GYM	530	18.3	②
EF-16	500	.25"		¼	ROOF CENT.		GB-80	POOL STOR.	1410	8.1	①

① PROVIDE W/ROOFCURB, DISCONNECT, BIRDSCREEN, AND BACKDRAFT DAMPER.
② PROVIDE W/MOTOR SIDE GUARD AND GRAVITY DISCHARGE SHUTTER.
③ PROVIDE W/ T.E.F.C MOTOR

ZONE DAMPER SCHEDULE

TAG	SIZE	CFM	BASIS OF DESIGN		NOTES
ZD-1	16"ø	1300	TRANE	VADA-16	①
ZD-2	16"ø	1400		VADA-16	
ZD-3	14"ø	900		VADA-14	
ZD-4	8"ø	300		VADA-8	
ZD-5	12"ø	750		VADA-12	
ZD-6	10"ø	400		VADA-10	
ZD-7	10"ø	400		VADA-10	
ZD-8	12"ø	600		VADA-12	
ZD-9	8"ø	200		VADA-8	
BD-1,2	16"ø	2500		VADA-16	

① PROVIDE W/120V/24V TRANSFORMER.

GAS FIRED HEATER SCHEDULE

TAG	CFM	EXT. S.P.	HP	MBH INPUT	MBH OUTPUT	BASIS OF DESIGN		NOTES
UH-1-12	2200	-	⅛	165.0	132.0	REZNOR	FE-165	①④
UH-13-18	2200	-	⅛	165.0	132.0	REZNOR	FE-165	③④
UH-19,20,21	650	-	1/15	50.0	40.0	REZNOR	FE-50	④
RF-1	4718	.7"	2	400	300	REZNOR	RPB-350	②③

① PROVIDE W/UNIT HANGING KIT, REMOTE MOUNTED T'STAT, AND SPARK IGNITION.
② PROVIDE W/FACTORY ROOF CURB, AND INTAKE HOOD, MODULATING GAS VALVE REMOTE T'STAT AND CONTROL PANEL.
③ BID EQUIPMENT AND ALL ASSOCIATED DUCT, GRILLES, CONTROLS ETC., AS ALTERNATE #5
④ HANG FROM ROOF STRUCTURE W/ TOP @ 24" BELOW STEEL.

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NEW RECREATION CENTER AT JOHNSON PARK

ROCKDALE COUNTY, GEORGIA

drawn by: LD
date: 10/8/91
revisions:

contents: SCHEDULES - HVAC

job number:

sheet number: M-3

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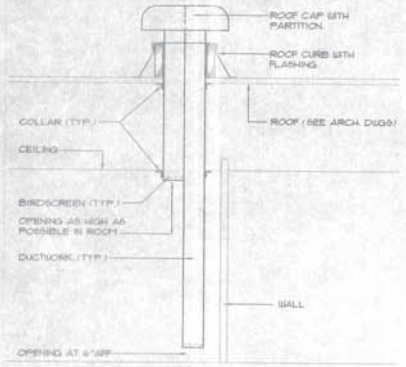
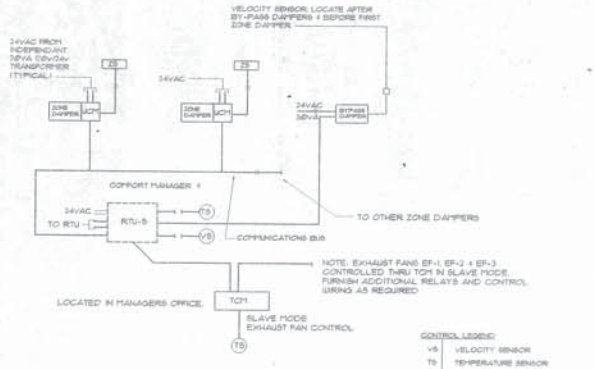


1 / M-4 COMBUSTION AIR
SCALE: NONE

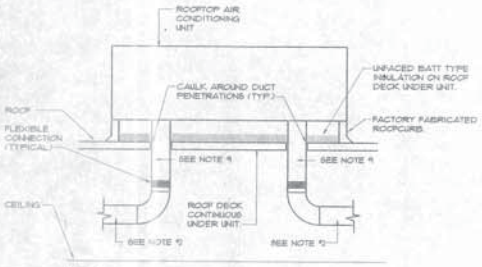


CONTROL LEGEND:

VS	VELOCITY SENSOR
TS	TEMPERATURE SENSOR
UMC	ZONE DAMPER CONTROL
ZS	ZONE SENSOR
TCM	THERMOSTAT CONTROL MODULE

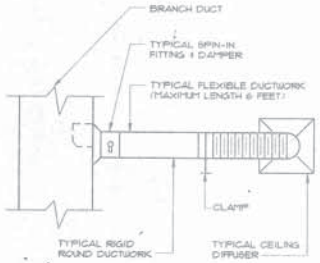
NOTE: ALL CONTROLS BY TRANE

2 / M-4 HVAC CONTROL SCHEMATIC
SCALE: NONE

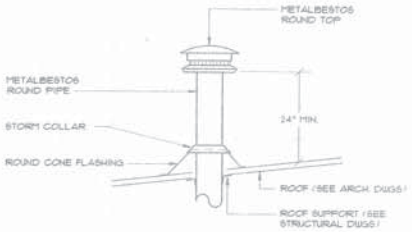


NOTES:
1. DUCTWORK SAME SIZE AS UNIT OPENING. DROP DOWN AS FAR AS POSSIBLE BEFORE ELBOW
2. SEE PLANS FOR ACTUAL DUCT SIZES

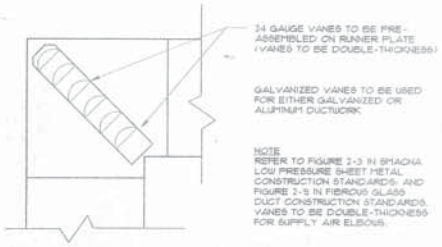
3 / M-4 ROOFTOP A/C UNIT – DETAIL
SCALE : NONE



4 / M-4 TYPICAL RIGID ROUND DUCT TAKE – OFF
SCALE : NONE



5 / M-4 FLUE THRU THE ROOF
SCALE: NONE



NOTE
REFER TO FIGURE 2-3 IN SMACNA LOW PRESSURE SHEET METAL CONSTRUCTION STANDARDS AND FIGURE 2-5 IN FIBROUS GLASS DUCT CONSTRUCTION STANDARDS. VANES TO BE DOUBLE-THICKNESS FOR SUPPLY AIR ELBOWS.

6 / M-4 SQUARE ELBOW – DETAIL
SCALE : NONE

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NEW RECREATION CENTER AT JOHNSON PARK
ROCKDALE COUNTY, GEORGIA

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sheet number: M-4

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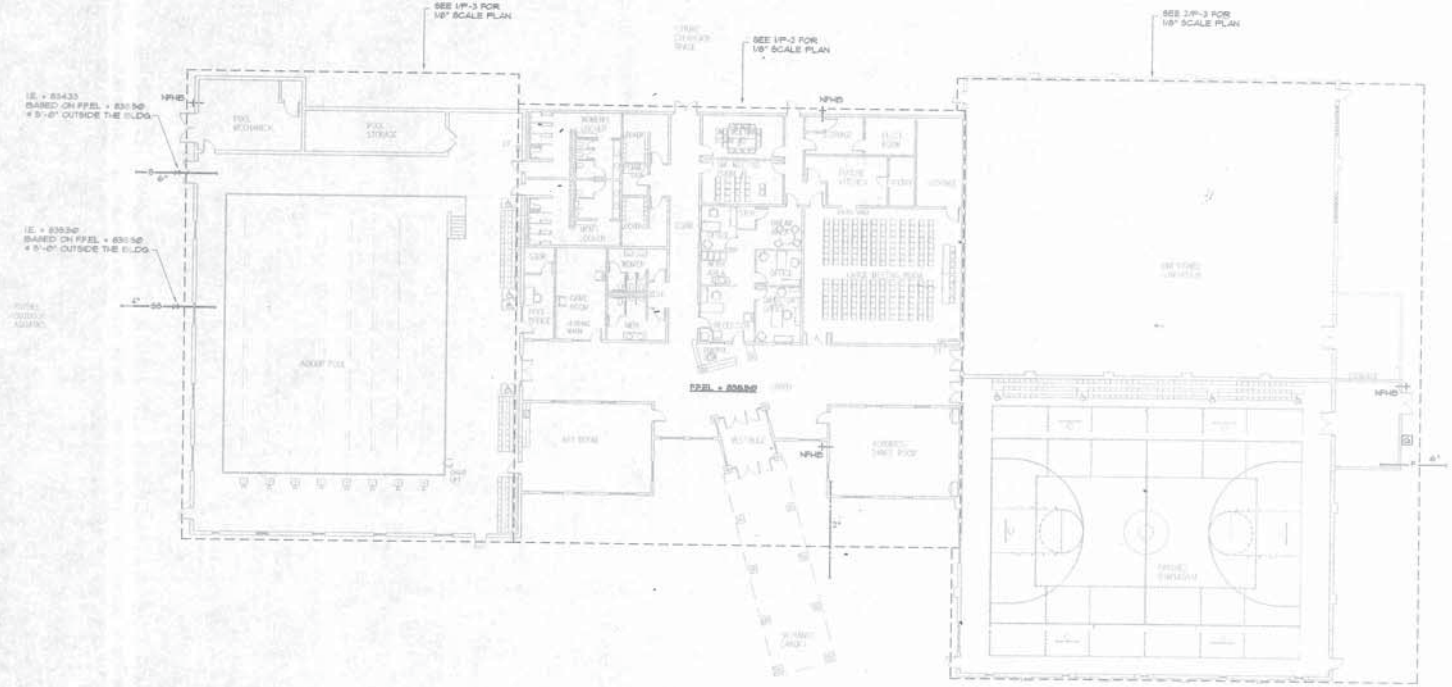
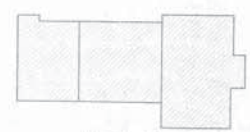


1 / P-1 OVERALL FLOOR PLAN - PLUMBING

SCALE: 1/16" = 1'-0"



KEY PLAN

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NEW RECREATION CENTER AT JOHNSON PARK

ROCKDALE COUNTY, GEORGIA

drawn by:
date: 1/20/01
revisions:

contents:
OVERALL FLOOR PLAN-PLUMBING

job number:

sheet number:
P-1

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1827 POWERS FERRY ROAD
BUILDING #18 SUITE #100
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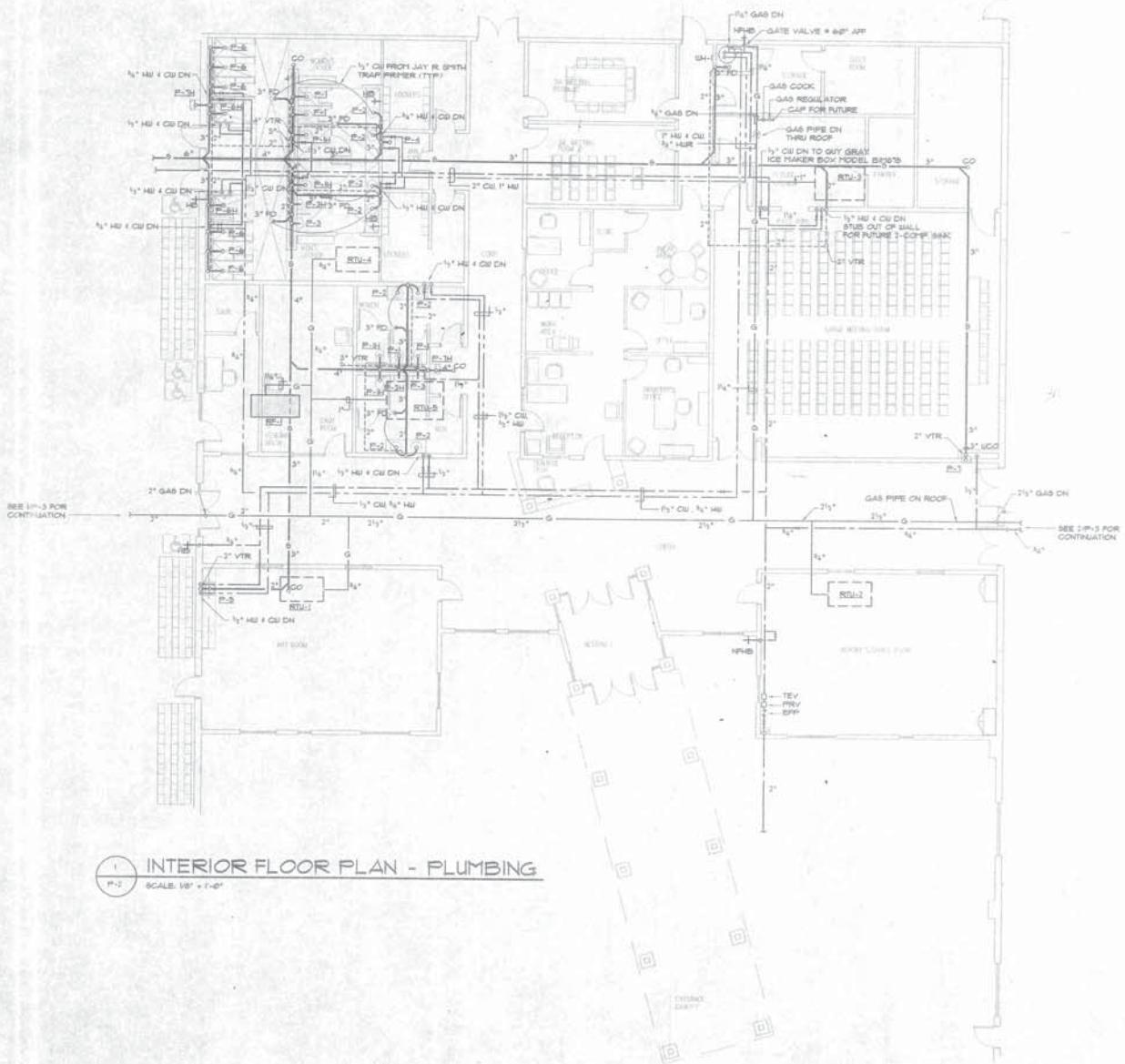
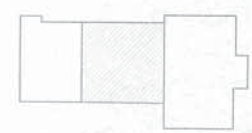


1 / P-2 INTERIOR FLOOR PLAN - PLUMBING

SCALE: 1/8" = 1'-0"



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ROCKDALE COUNTY, GEORGIA

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contents: INTERIOR PLUMBING

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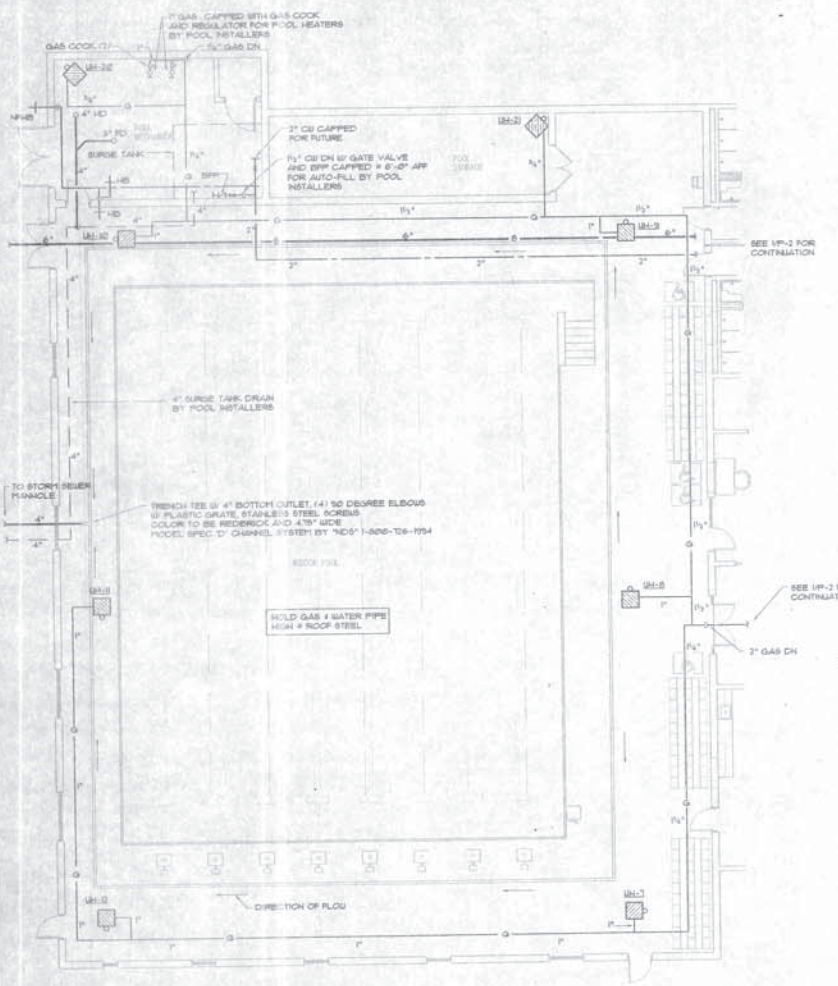
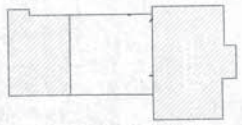


1 P-3 NATATORIUM - PLUMBING

SCALE: 1/8" = 1'-0"



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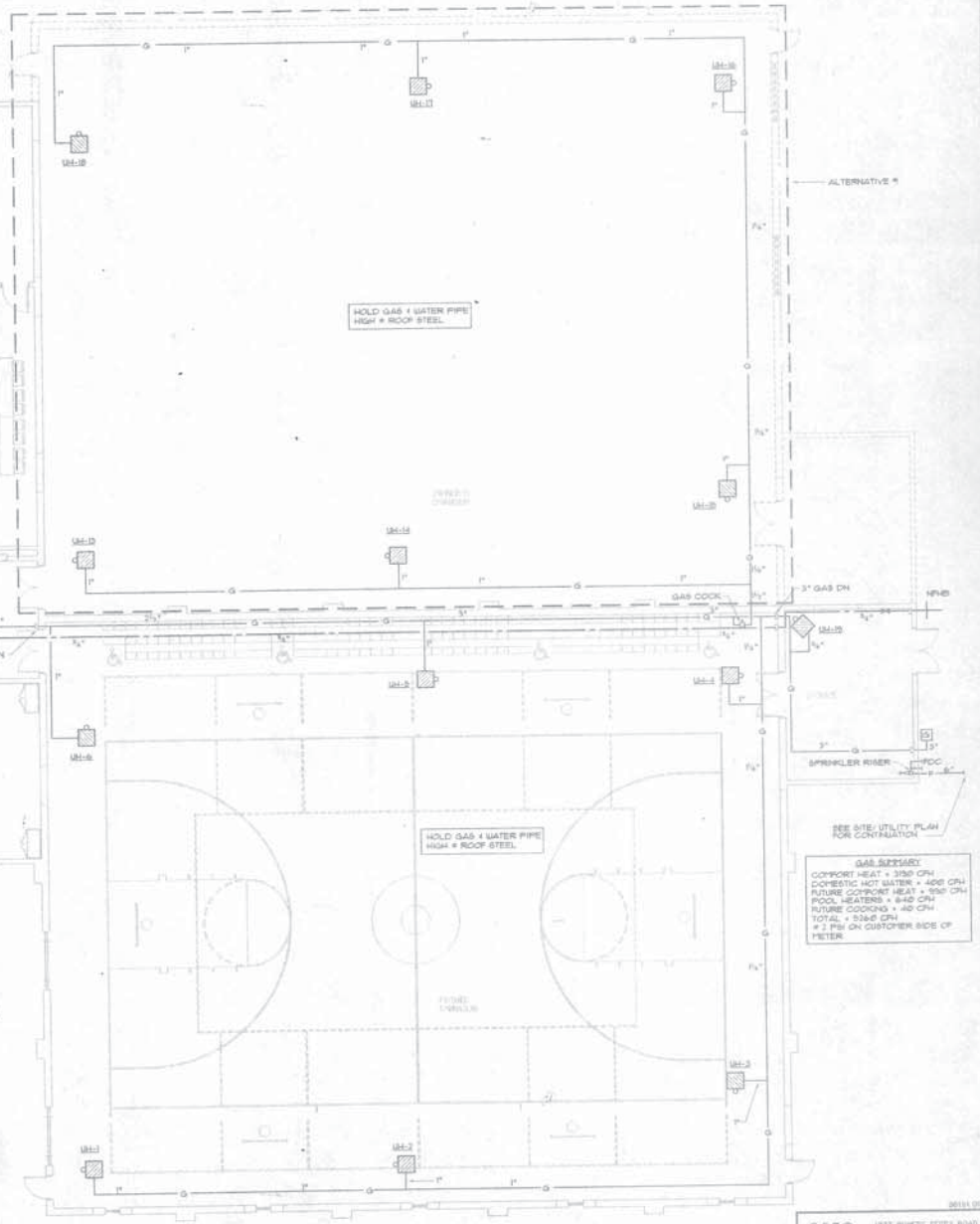

GAS SUMMARY

COMFORT HEAT = 3750 CFH
DOMESTIC HOT WATER = 4000 CFH
FUTURE COMFORT HEAT = 9750 CFH
POOL HEATERS = 8-40 CFH
FUTURE COOKING = 40 CFH
TOTAL = 5360 CFH
@ 2 PSI ON CUSTOMER SIDE OF METER

1 P-3 GYM AND FUTURE GYM - PLUMBING

SCALE: 1/8" = 1'-0"

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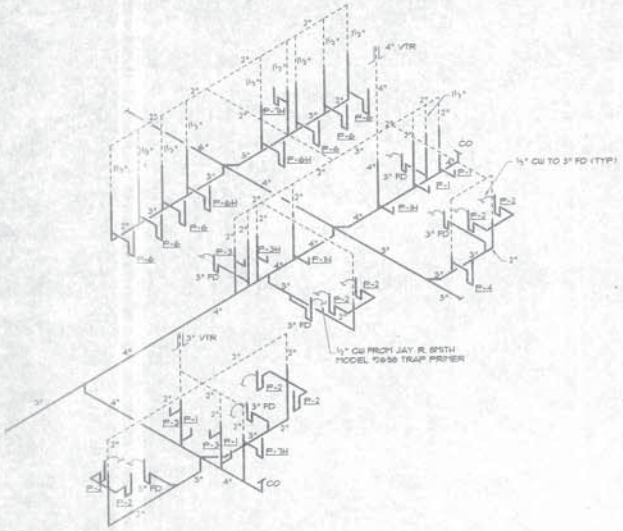
contents:
NATATORIUM & GYM FLOOR PLAN-PLUMBING

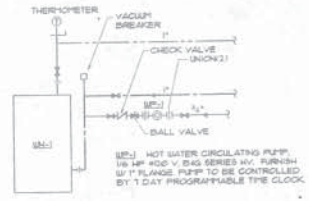
job number:

sheet number:
P-3



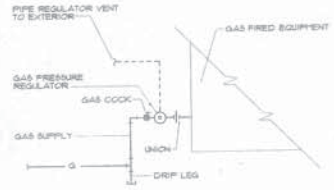
1 / P-4 SANITARY RISER

SCALE: NOT TO SCALE



3 / P-4 WATER HEATER PIPING SCHEMATIC

SCALE: NOT TO SCALE

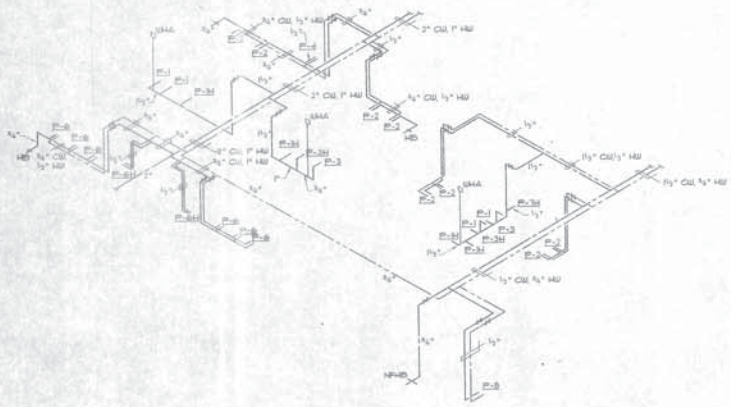


4 / P-4 GAS PIPE CONN. DETAIL

SCALE: NOT TO SCALE

PLUMBING LEGEND

	COLD WATER
	HOT WATER
G	GAS METER
W	WATER METER
C.O.	CLEAN OUT
	GATE VALVE
VTR	VENT THROUGH ROOF
S	SANITARY PIPE
G	NATURAL GAS
	PIPE UNION
	GAS COCK
NFHB	NON-FREEZE HOSE BIBB
	VENT PIPE
PRV	PRESSURE REDUCING VALVE
A.C.	ABOVE CEILING
F	SPRINKLER PIPE
TEV	THERMAL EXPANSION VALVE
	HOT WATER RETURN



2 / P-4 WATER RISER

SCALE: NOT TO SCALE

Plumbing Fixtures

P-1 Water Closet - Flush Valve Floor Mounted.

American Standard 2234.016 water saver Madera toilet, siphon jet action, elongated bowl, vitreous china, 1-1/2" top spud, 1.5 gallons/flush with Sloan III flush valve, Olsonite 95 seat open front, less cover.

P-1H Water Closet - Flush Valve Floor Mounted Handicapped

American Standard 3043.102 elongated Cadet water saver toilet, vitreous china with siphon jet, 1-1/2" brass top spud, 18" high, 1.6 gallons per flush, Sloan III flush valve, Olsonite 95 seat open front, less cover.

P-2 Lavatory - Countertop Handicapped.

American Standard 0476.020 Aquatyn, 20"x17", oval vitreous china lav without overflow, American Standard 6601.3124 two-handle widespread lavatory faucet with pop-up drain, Insulate lavatory drain and trap with Handy Lav Guard by Truebro, McGuire 169 3/8" angle supply with stops, McGuire 8088 1-1/4" cast brass "P" trap, Furnish Jay R. Smith 2698 Prime-EZE 1-1/4" cast brass "P" trap with trap primer on lavatories indicated on drawings.

P-3, 3H Urinal Flush Valve - Handicapped.

American Standard Allbrook 6841.130 with carrier and Sloan Royal 186-1 flush valve, 1.0 gallons/flush. Provide with wall hung carrier. Mount at handicapped height.

P-4 Mop Sink

Mop sink shall be equal to Fiat 158-1060, 24"x24"x10" deep with stainless steel cap and Fiat model 1630-AA service faucet, 1989-CC mop hanger, 1831-AA hose and hose bracket.

P-5 Art Rinse Sink

Just SL-7915-B-GR stainless steel sink, 21"x15"x7", self rimming countertop sink, satin finish Just J-1714-K15 concealed string faucet with aerator and 4" oriel blade handles, Jay R. Smith 6750T plaster trap, McGuire 169 3/8" angle supply with stops.

P-6 Shower Trim

American Standard Reliant 0663.498 ultra-aix pressure balanced shower fitting cast brass body, seamless ceramic disc valve cartridge, 2.5 gpm flow restrictor, single lever handle. Shower drain shall be equal to Jay R. Smith 2005-A, 2" size.

P-6H Shower Trim Handicapped Accessible

American Standard 8662.801 shower kit with hand set, hose, wall supply, slide bar & 0810.121 pressure balance shower valve w/cast brass body, seamless ceramic disc valve cartridge, 2.5 gpm flow restrictor, single lever handle. Shower drain shall be equal to Jay R. Smith 2005-A, 2" size. Mount shower valve and hand set at handicapped accessible height, in accordance with ADA.

P-7,7H Electric Water Cooler-Barrier Free

Electric water cooler shall be equal to Oasis PPLF8WSLG. Furnish McGuire 8088 1-1/4" "P" trap and McGuire 165 angle shut-off valve. Mount P-7H @ handicapped height, provide with wall hung carrier.

PLUMBING NOTES

1. Plumbing shall be in accordance with 1994 Standard Plumbing Code.
2. The pressure reducing valve (PRV) shall be equal to Watts U5.
3. Furnish appropriate adapters for connection of dissimilar piping material.
4. Backflow preventers BPP-1 and BPP-2 shall be equal to Watts 009QT, pipe BPP-1 drain to exterior with 90 degree elbow down, pipe BPP-2 drain to adjacent floor drain with indirect connection.
5. Roof penetrations by gas & vent shall be thru Portals Plus Pipe Boot for rubber roofs and Portals Plus AlumiFlash for hot applied roofs. Pitch pockets are not acceptable.
6. Cleanouts shall be equal to Jay R. Smith 4020.
7. Thermal Expansion Valve (TEV) shall be equal to Watts 530 set @ 80 psi. Pipe drain to exterior.
8. Water heater (WH-1) shall be gas tank type, 100 gallon, 400,000 BTU's, 3.78 GPM @ 100 degree rise, 36-1/4" dia. equal to State 50PN100-400 NET. Pipe T&P relief down to adjacent floor drain with 90 degree elbow down @ 6" aff.
9. Hose bibs shall be equal to Woodford model 24 anti-siphon/lose coupled with vacuum breaker.
10. Non freeze hose bibs shall be equal to Woodford model B65 with vacuum breaker/backflow preventer.
11. Water hammer arrestor shall be equal to Jay R. Smith series 5000, size accordingly with manufacturers instructions.
12. Floor drains in Men's and Women's toilet shall be equal to Jay R. Smith 2005-A with trap primer tap.
13. Furnish gas regulators with 2 psi inlet and 1" w.c. outlet on all gas fired equipment, pipe vent to exterior (see 4/P-4).
14. Connections to all equipment in pool mechanical room shall be by the pool equipment suppliers.
15. Plumbing Contractor shall coordinate with the pool installers for exact location of surge tank drain, pool drain and pool under drain prior to installation of pool deck trench drains.

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NEW RECREATION CENTER AT JOHNSON PARK

ROCKDALE COUNTY, GEORGIA

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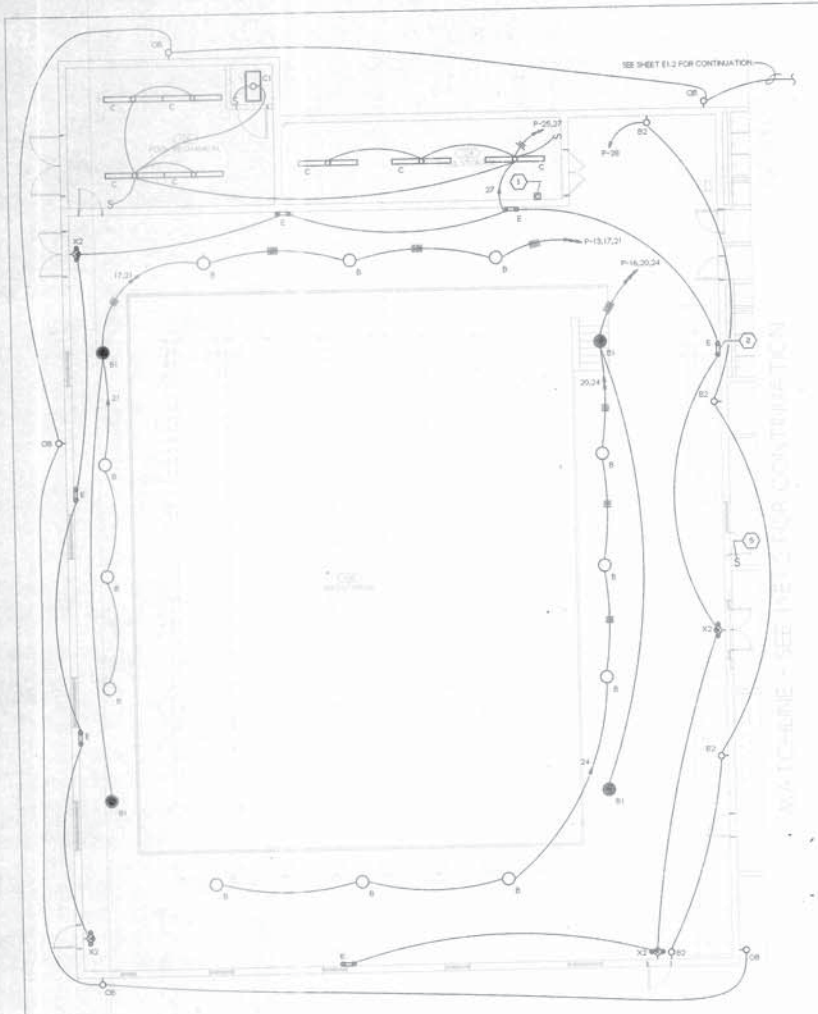
revisions:
contents: RISERS, DETAILS-PLUMBING
job number:
sheet number: P-4



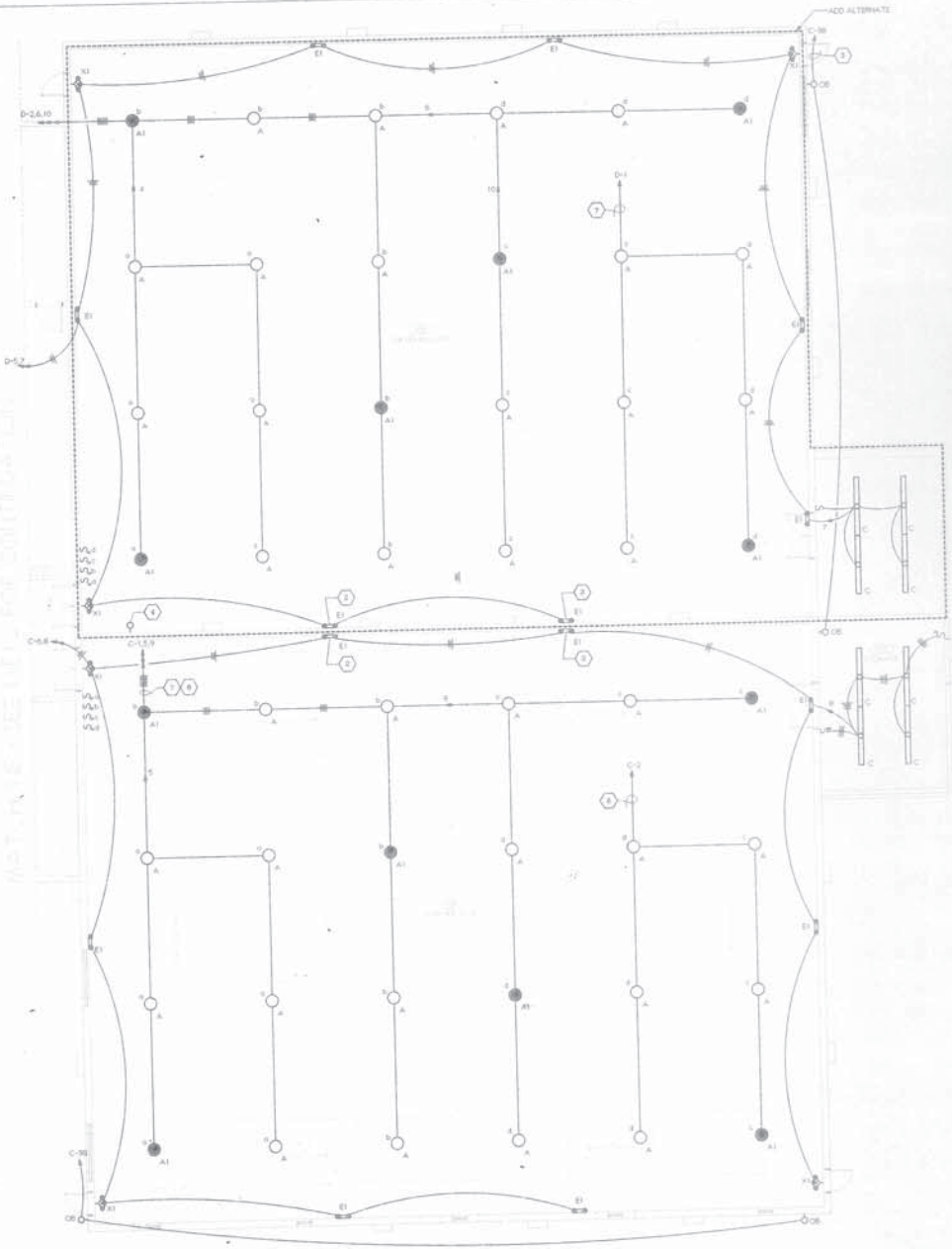
1 / E1.1 NATATORIUM FLOOR PLAN - LIGHTING
SCALE: 1/8" = 1'-0"

ELECTRICAL LEGEND NOTES (SHEET E1.1 ONLY):

1. PROVIDE 20A/208V/16P CONTACTOR 'C-1' (IN NEMA 1 ENCLOSURE) TO CONTROL POOL LIGHTS. CONTACTOR CONTROLLED BY SWITCH IN POOL OFFICE (SEE LEGEND NOTE #5)
2. INSTALL LIGHT FIXTURE AT 10'-0" ABOVE TOP OF PLATFORM.
3. SEE LEGEND NOTE #4 FOR LOCATION OF THIS FIXTURE IF ADD ALTERNATE IS NOT BUILT.
4. LOCATION OF TYPE 'OA' FIXTURE IF ADD ALTERNATE IS NOT BUILT.
5. PROVIDE SWITCH TO CONTROL CONTACTOR 'C-1'. MAKE ALL NECESSARY CONNECTIONS.
6. PROVIDE #8 CONDUCTORS (INCLUDING GROUND) THROUGHOUT CIRCUIT.
7. PROVIDE #10 CONDUCTORS (INCLUDING GROUND) THROUGHOUT CIRCUIT.
8. PROVIDE 3/4" C. FOR HOMERUN TO PANEL.

GENERAL NOTES (SHEET E1.1 ONLY):

1. SUBSCRIPT "A" ADJACENT TO LIGHT FIXTURE INDICATES WHICH SWITCH CONTROLS FIXTURE.
2. PROVIDE ADDITIONAL UNSWITCHED HOT WIRE TO EMERGENCY LIGHTING INDICATED TO BE SWITCHED.



2 / E1.1 GYMNASIUM FLOOR PLAN - LIGHTING
SCALE: 1/8" = 1'-0"

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NEW RECREATION CENTER
AT JOHNSON PARK
ROCKDALE COUNTY, GEORGIA

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CONTENTS:
GYMNASIUM AND NATATORIUM FLOOR PLAN - LIGHTING

ISSUE DATE:
1-20-97

SHEET NUMBER:
E1.1

ELECTRICAL LEGEND NOTES (SHEET E1.2 ONLY):

1. PROVIDE INBOARD/OUTBOARD SWITCHING IN THIS ROOM
2. PROVIDE #6 CONDUCTORS (INCLUDING GROUND) THROUGHOUT CIRCUIT.

GENERAL NOTES (SHEET E1.2 ONLY):

1. SUBSCRIPT "2" ADJACENT TO LIGHT FIXTURE INDICATES WHICH SWITCH CONTROLS CONTROLS FIXTURE.
2. PROVIDE ADDITIONAL UNSWITCHED HOT WIRE TO EMERGENCY LIGHTING INDICATED TO BE SWITCHED.

1 / E1.2 CENTER BLOCK FLOOR PLAN - LIGHTING
SCALE: 1/8" = 1'-0"

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CENTER BLOCK FLOOR PLAN - LIGHTING

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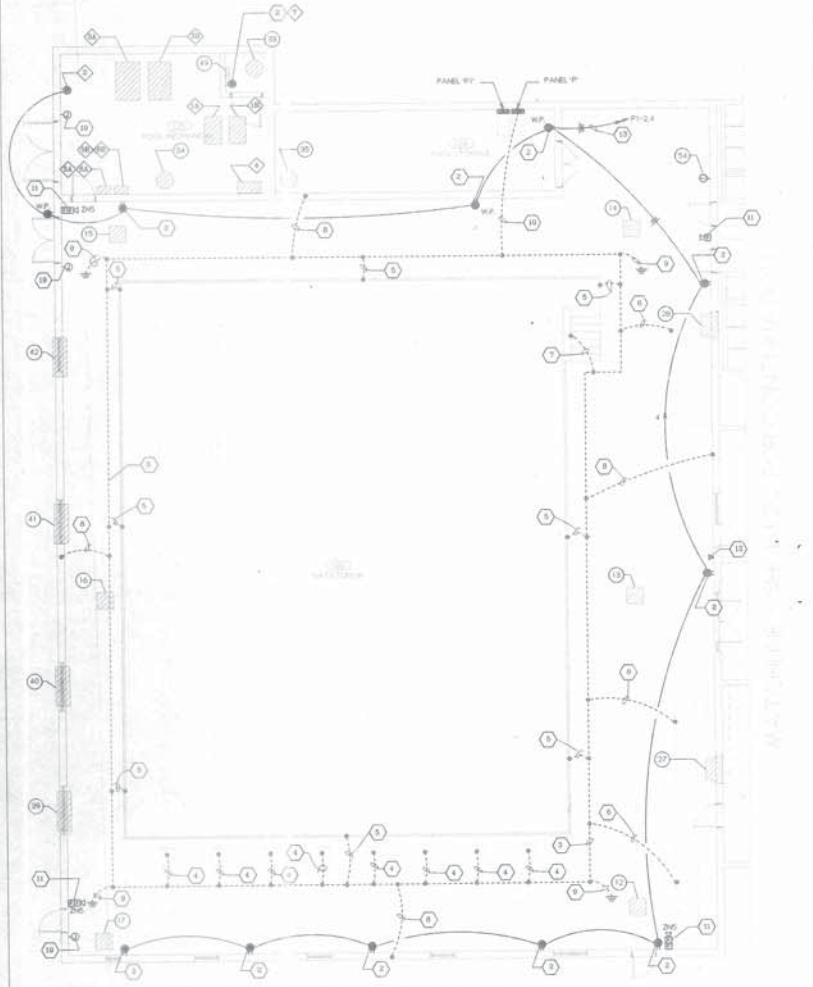
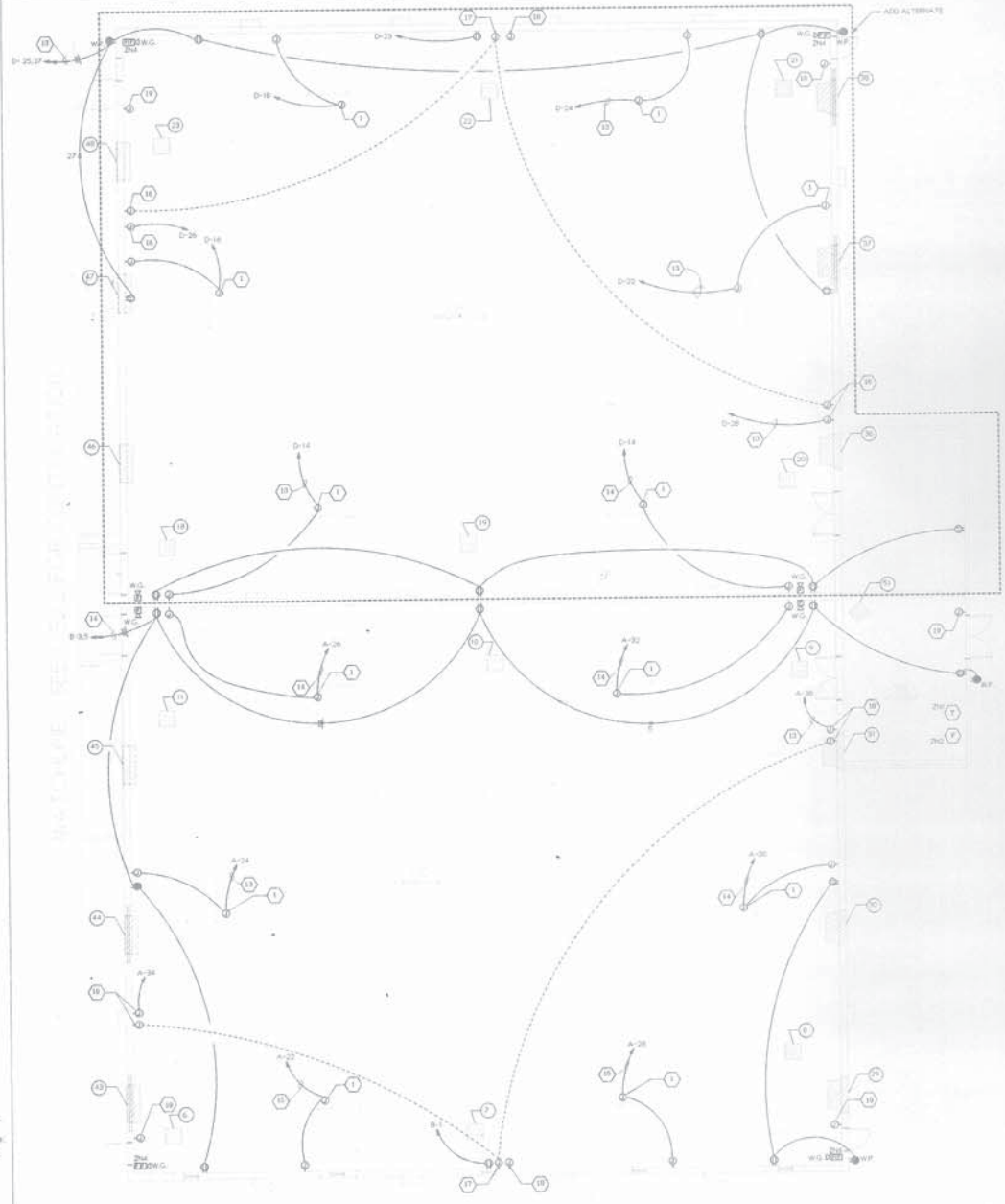


1 / E2.1 NATATORIUM FLOOR PLAN - POWER
SCALE: 1/8" = 1'-0"



2 / E2.1 GYMNASIUM FLOOR PLAN - POWER
SCALE: 1/8" = 1'-0"

ELECTRICAL LEGEND NOTES (SHEET E2.1 ONLY):

1. PROVIDE JUNCTION BOX FOR MOTORIZED GOAL (120V/1P, 3/4-1) MOTOR. PROVIDE JUNCTION BOX AT 48" A.F.F. FOR SWITCH TO CONTROL MOTOR. COORDINATE WITH EQUIPMENT INSTALLER AND MAKE ALL NECESSARY CONNECTIONS.
2. PROVIDE WEATHER PROOF G.F.C.I. DUPLEX RECEPTACLE WITH PLASTIC COVERPLATE AT 18" A.F.F.
3. PROVIDE #4 A.W.G. GROUND RING AROUND PERIMETER OF POOL.
4. BOND STARTING BLOCK TO GROUND RING WITH #8 A.W.G. WIRE.
5. BOND POOL STRUCTURAL STEEL TO GROUND RING WITH #8 A.W.G. WIRE.
6. BOND BLEACHER STEEL TO GROUND RING WITH #8 A.W.G. WIRE.
7. BOND POOL STAIR RAILING TO GROUND RING WITH #8 A.W.G. WIRE.
8. BOND BUILDING STEEL TO GROUND RING WITH #8 A.W.G. WIRE.
9. PROVIDE ONE 5/4" DIAMETER x 8'-0" LONG GROUND ROD. DRIVE ROD 10' INTO EARTH. BOND TO GROUND RING WITH #4 A.W.G. WIRE.
10. BOND GROUND BUS IN PANEL "P" TO GROUND RING WITH #4 A.W.G. WIRE.
11. PROVIDE WEATHER PROOF FIRE ALARM DEVICE WITH PLASTIC COVERPLATE

ELECTRICAL LEGEND NOTES (CONTINUED):

12. PROVIDE WEATHERPROOF TELEPHONE OUTLET WITH PLASTIC COVERPLATE AT 48" A.F.F. PROVIDE 1-3/4"C.I. WITH PULLWIRE TO ROOF DECK.
13. PROVIDE #10 A.W.G. WIRES (INCLUDING GROUND) THROUGHOUT CIRCUIT.
14. PROVIDE #8 A.W.G. WIRES (INCLUDING GROUND) THROUGHOUT CIRCUIT.
15. PROVIDE #6 A.W.G. WIRES (INCLUDING GROUND) IN 3/4"C. THROUGHOUT CIRCUIT.
16. PROVIDE JUNCTION BOX AT 18'-0" A.F.F. FOR SCOREBOARD.
17. PROVIDE JUNCTION BOX AT 18" A.F.F. FOR SCOREBOARD CONTROLS. PROVIDE 1-3/4"C. CONCEALED (WITH PULLWIRE) TO JUNCTION BOXES AT 18'-0" A.F.F.
18. PROVIDE JUNCTION BOX AT 18" A.F.F. PROVIDE 1-3/4"C.(WITH PULLWIRE) TO ROOF DECK.
19. PROVIDE FLUSH MOUNTEED JUNCTION BOX AT TOP OF DOOR JAM. PROVIDE 1-3/4"C. (WITH PULLWIRE) TO ROOF STRUCTURE.

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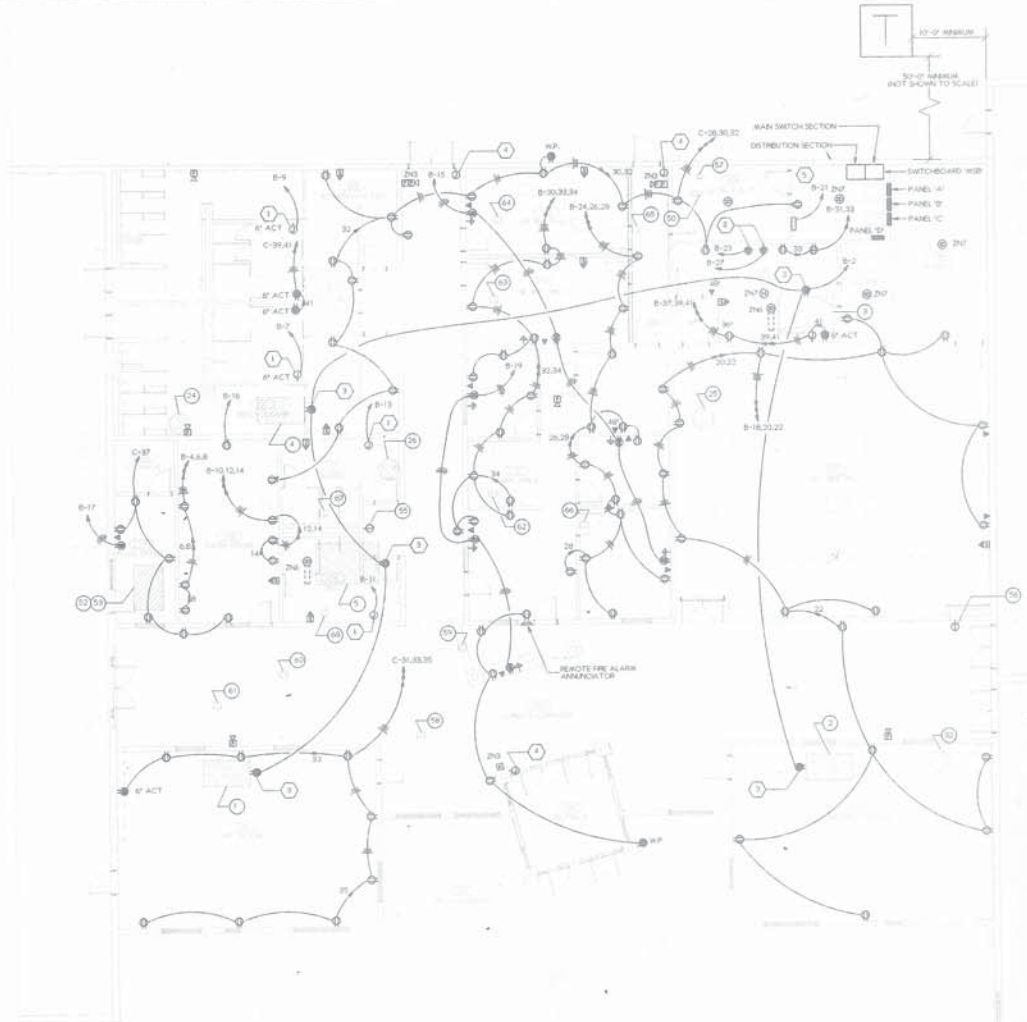
CONTENTS:
GYMNASIUM AND NATATORIUM FLOOR PLAN - POWER

ISSUE DATE:
1-20-97

SHEET NUMBER:
E2.1

ELECTRICAL LEGEND NOTES (SHEET E2.2 ONLY)

1. PROVIDE JUNCTION BOX FOR ELECTRIC DRYER (120V/1P/2.3KW). PROVIDE INTEGRAL DISCONNECT FOR DRYER. COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN. CIRCUIT TO PANEL WITH 2#10 & 1#10N & 1#10G - 1/2"C.
2. PROVIDE NEMA 10-30R RECEPTACLE FOR KITCHEN EQUIPMENT (20S/120V, 1.7KW). CIRCUIT TO PANEL WITH 2#12 & 1#12G - 1/2"C.
3. PROVIDE WEATHERPROOF G.F.C.I. RECEPTACLE AT ROOF TOP UNIT.
4. PROVIDE FLUSH MOUNTED JUNCTION BOX AT TOP OF DOOR JAM. PROVIDE 3/4" C. (WITH PULLWIRE) TO ABOVE SUSPENDED CEILING.
5. SUBMIT 1/2" = 1'-0" SCALE DRAWING OF ELECTRICAL ROOM (INCLUDING ALL EQUIPMENT AND WORKING CLEARANCES) WITH SHOP DRAWINGS.



1 / E2.2 CENTER BLOCK FLOOR PLAN - POWER
SCALE: 1/8" = 1'-0"

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CENTER BLOCK FLOOR PLAN - POWER

ISSUE DATE: 1-20-97

SHEET NUMBER: E2.2

SPEC FOR CONSTRUCTION

LIGHTING FIXTURE SCHEDULE

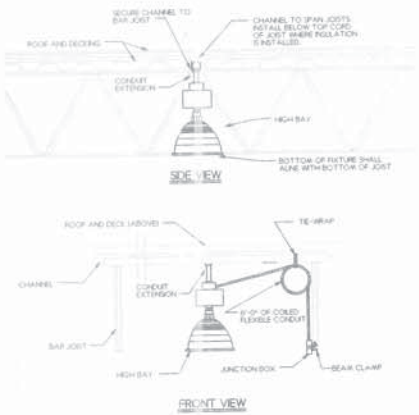
REFER TO ELECTRICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS WHICH MAY NOT NECESSARILY BE REFLECTED IN CATALOG NUMBER AND/OR DESCRIPTION IN THIS SCHEDULE

MARK	DESCRIPTION	MOUNTING	VOLT	LAMPS	REMARKS
A	LITHONIA #2THS-400W-A16-120-RG OR EQUAL BY WIDELITE	SEE DETAIL THIS SHEET	120	1-400W MH (RATED FOR OPEN FIXTURE)	PROVIDE WIREGUARD
A1	LITHONIA #2THS-400W-A16-120-QRS-WG OR EQUAL BY WIDELITE	SEE DETAIL THIS SHEET	120	1-400W MH ST-250RQ (RATED FOR OPEN FIXTURE)	PROVIDE WIREGUARD
B	PRK CRSW95236	SUSPENDED	208	2-400W MH	INSTALL EACH BALLAST IN PT BOX. WHITE ENCLOSURE DIRECTLY ABOVE FIXTURE ON STRUCTURE. SUSPEND FIXTURE TO 5' BELOW DECK. PROVIDE NATATORIUM FINISH FOR ENTIRE FIXTURE
B1	PRK CRSW95236/ QUARTZ RESTRIKE	SUSPENDED	208	2-400W MH & 2-250W Q	INSTALL EACH BALLAST IN PT BOX. WHITE ENCLOSURE DIRECTLY ABOVE FIXTURE ON STRUCTURE. SUSPEND FIXTURE TO 5' BELOW DECK. PROVIDE NATATORIUM FINISH FOR ENTIRE FIXTURE
B2	PRK CRR95237	SURFACE, WALL 16' A.F.F.	208	1-400W MH	INSTALL EACH BALLAST IN PT BOX. WHITE ENCLOSURE DIRECTLY ABOVE FIXTURE ON STRUCTURAL MEMBER. PROVIDE NATATORIUM FINISH FOR ENTIRE FIXTURE
C	LITHONIA #C2RN 120ES OR EQUAL BY LIGHTOLIER OR DAYBRITE	SURFACE, CEILING	120	2-F96T12 WM	
C1	LITHONIA #C240I120ES OR EQUAL BY LIGHTOLIER OR DAYBRITE	SURFACE, CEILING	120	2-F40T12WW - WM	
D	LITHONIA #AF 2/13DTT-6AR-120-TRW OR EQUAL BY LIGHTOLIER OR INDY	RECESS, CEILING	120	2-F13DTT	FIXTURE SHALL BE SUITABLE FOR CEILING IN WHICH IT IS INSTALLED
D1	PROGRESS #P5664 - 30 IP7 - TGI	RECESS, CEILING	120	1-100WA - 19	SUITABLE FOR SHOWER
E	LITHONIA #ELM2	SURFACE, WALL	120	INCLUDED WITH UNIT	10' - 0" A.F.F. UNLESS OTHERWISE NOTED
E1	LITHONIA #ELM2-BLANG2	SURFACE, WALL	120	INCLUDED WITH UNIT	10' - 0" A.F.F. UNLESS OTHERWISE NOTED
/EM	INDICATES FIXTURE WITH INTEGRAL BATTERY PACK TO CONTROL TWO LAMPS				
F	LITHONIA #2GT240A/2-125-120-ES OR EQUAL BY LIGHTOLIER OR DAYBRITE	RECESS, CEILING	120	2-F40TT2WW - WM	
F1	LITHONIA #2GT340A12125120ES OR EQUAL BY LIGHTOLIER OR DAYBRITE	RECESS, CEILING	120	3-F40TT2 WW - WM	PROVIDE TWO BALLASTS.
F2	LITHONIA #2GT440A12125120ES OR EQUAL BY LIGHTOLIER OR DAYBRITE	RECESS, CEILING	120	4-F40TT2WW - WM	PROVIDE TWO BALLASTS.
F3	LITHONIA #2GT3U340A12125120ES OR EQUAL BY LIGHTOLIER OR DAYBRITE	RECESS, CEILING	120	2-F40TT2/U/6-WW WM	
OA	HADCO #RB-36-A-LO-N-E 36' HIGH	GROUND MOUNTED	208	1-100 WMH	SEE INSTALLATION DETAIL, THIS SHEET
OB	LITHONIA #SF2-400W-R3-208-WBOY	WALL MOUNTED	208	1-100 WMH	INSTALL AT 15' A.F.F.
X	LITHONIA #LQMS-1-R-120-ELN	SURFACE, WALL OR CEILING	120	LED, INCLUDED WITH UNIT	
X1	LITHONIA #LHQM-S-W-1-R-120-N-WIRE GUARD	SURFACE, WALL	120	LED (EXIT) & INCANDESCENT (EMERGENCY LIGHT) INCLUDED WITH UNIT	INSTALL WITH BOTTOM OF EXIT SIGN 3' ABOVE TOP OF DOOR FRAME
X2	LITHONIA #LHQM-S-W-1-R-120-N	SURFACE, WALL	120	LED (EXIT) & INCANDESCENT (EMERGENCY LIGHT) INCLUDED WITH UNIT	INSTALL WITH BOTTOM OF EXIT SIGN 3' ABOVE TOP OF DOOR FRAME

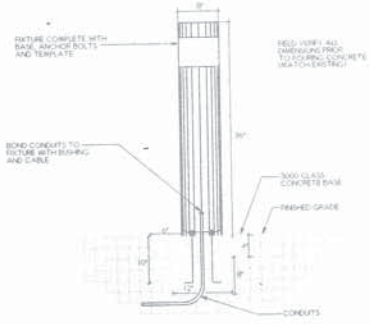
SYMBOL LEGEND

MOUNTING HEIGHT IS FROM FINISHED FLOOR TO CENTERLINE OF DEVICE OR OUTLET
HEIGHT MAY VARY TO CONFORM WITH BUILDING CONSTRUCTION

SYMBOL	DESCRIPTION	MOUNTING HEIGHT
	INCANDESCENT FLOURESCENT OR HID LIGHT FIXTURE - CEILING MOUNTED	
	INCANDESCENT OR FLOURESCENT LIGHT FIXTURE ON EMERGENCY 1/24 HOUR CIRCUIT	
	INCANDESCENT LIGHT FIXTURE - WALL MOUNTED	AS NOTED
	INCANDESCENT LIGHT FIXTURE - WALL MOUNTED ON EMERGENCY 1/24 HOUR CIRCUIT	AS NOTED
	2' X 4' FLUORESCENT LIGHT FIXTURE	
	2' X 4' FLUORESCENT LIGHT FIXTURE ON EMERGENCY 1/24 HOUR CIRCUIT	
	2' X 2' FLUORESCENT LIGHT FIXTURE	
	2' X 2' FLUORESCENT LIGHT FIXTURE ON EMERGENCY 1/24 HOUR CIRCUIT	
	4' FLUORESCENT LIGHT FIXTURE STRIP	
	EXIT SIGN - CEILING MOUNTED (DARKENED SECTIONS OF SYMBOLS INDICATE FACES OF FIXTURE	
	EXIT SIGN - WALL MOUNTED (DARKENED SECTIONS OF SYMBOLS INDICATE FACES OF FIXTURE	
	DOUBLE HEAD BATTERY POWERED EMERGENCY FIXTURE	
	HID LIGHT FIXTURE	
	4' FLOURESCENT LIGHT FIXTURE STRIP ON EMERGENCY 1/24 HOUR CIRCUIT	
	8' FLOURESCENT FIXTURE STRIP	
	8' FLOURESCENT LIGHT FIXTURE STRIP ON EMERGENCY 1/24 HOUR CIRCUIT	
S	S.P.S.T. LIGHT SWITCH	48"
S	D.P.S.T. LIGHT SWITCH	48"
S	THREE-WAY LIGHT SWITCH	48"
S	ASI OPERATED LIGHT SWITCH	48"
	DUPLEX RECEPTACLE OUTLET	18"
	DUPLEX RECEPTACLE OUTLET WITH ISOLATED GROUND	18"
	GROUND FAULT CURRENT INTERRUPTER TYPE RECEPTACLE	18"
	SPECIAL RECEPTACLE OUTLET AS NOTED	
	DUPLEX RECEPTACLE MOUNTED 6" ABOVE COUNTER TOP OR BACKSPLASH	
	SINGLE RECEPTACLE OUTLET	
	QUAD RECEPTACLE OUTLET	
	JUNCTION BOX W/COVERPLATE - WALL MOUNTED	
	JUNCTION BOX W/COVERPLATE - CEILING MOUNTED	18"
	COMPUTER OUTLET - WALL MOUNTED, PROVIDE 3/4"C. WITH PULLWIRE TO 12" ABOVE SUSPENDED CEILING	18"
	TELEPHONE OUTLET, PROVIDE 3/4"C. WITH PULLWIRE TO 12" ABOVE SUSPENDED CEILING	18"
	FIRE ALARM PULL STATION	48"
	FIRE ALARM AUDIO/VISUAL ANNUNCIATOR	80" A.F.F.
	FIRE ALARM STROBE ONLY UNIT	80" A.F.F.
	SMOKE DETECTOR - CEILING MOUNTED	
	HEAT DETECTOR	
	SMOKE DETECTOR - DUCT MOUNTED	48"
	FIRE ALARM CONTROL PANEL	48"
	SPRINKLER FLOW SWITCH, TERMINATE FIRE ALARM CONDUIT AT 6'-0" A.F.F.	
	SPRINKLER TAMPER SWITCH, TERMINATE FIRE ALARM CONDUIT AT 6'-0" A.F.F.	
	PANELBOARD 240V	
D	DISCONNECT SWITCH - HORSEPOWER RATED	
	CONDUIT CONCEALED IN WALL OR ABOVE CEILING	
	CONDUIT CONCEALED IN SLAB, IN GROUND, OR UNDER FLOOR	
	CONDUIT EXPOSED	
A.C.T.	ABOVE COUNTER OR BACKSPLASH	
W.P.	WEATHERPROOF	
G.F.I.	GROUND FAULT CIRCUIT INTERPRETER	



1 / E3.1 TYPE "A/A1" (HIGH BAY) INSTALLATION DETAIL
NOT TO SCALE



2 / E3.1 TYPE "OA" (BOLLARD) INSTALLATION DETAIL
NOT TO SCALE

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CONTENTS:
SCHEDULES AND DETAILS

ISSUE DATE:
1-20-97

SHEET NUMBER:
E3.1

NOT FOR CONSTRUCTION

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

ITEM NO.	DESCRIPTION	EQUIPMENT CHARACTERISTICS VOLTS	PH	KW	HP	FLA	CIRCUIT	FEEDER	DISCONNECT SWITCH SIZE	PL	FUSE	FEATURES	REMARKS
1	RTU-1	208	3			27.3	A-1	3#8 & 1#10G - 3/4" C	60	3	50	NEMA 3R	
2	RTU-2	208	3			27.3	A-7	3#8 & 1#10G - 3/4" C	60	3	50	NEMA 3R	
3	RTU-3	208	3			71.7	MDB-1	3#3 & 1#8G - 1-1/4" C	100	3	90	NEMA 3R	
4	RTU-4	208	3			17.0	A-13	3#10 & 1#10G - 1/2" C	30	3	30	NEMA 3R	
5	RTU-5	208	3			99.0	MDB-2	3#1 & 1#6G - 1-1/2" C	200	3	125	NEMA 3R	
6	UH-1	120	1			5.9	A-19	2#8 & 1#8G - 3/4" C	30	1	NF	MOTOR RATED SWITCH	
7	UH-2	120	1			5.9	A-19	2#8 & 1#8G - 3/4" C	30	1	NF	MOTOR RATED SWITCH	
8	UH-3	120	1			5.9	A-21	2#8 & 1#8G - 3/4" C	30	1	NF	MOTOR RATED SWITCH	
9	UH-4	120	1			5.9	A-21	2#8 & 1#8G - 3/4" C	30	1	NF	MOTOR RATED SWITCH	
10	UH-5	120	1			5.9	A-23	2#8 & 1#8G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
11	UH-6	120	1			5.9	A-23	2#8 & 1#8G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
12	UH-7	120	1			5.9	P-29	2#10 & 1#10G - 1/2" C	30	1	NF	NEMA 4X MOTOR RATED SWITCH	
13	UH-8	120	1			5.9	P-29	2#10 & 1#10G - 1/2" C	30	1	NF	NEMA 4X MOTOR RATED SWITCH	
14	UH-9	120	1			5.9	P-31	2#12 & 1#12G - 1/2" C	30	1	NF	NEMA 4X MOTOR RATED SWITCH	
15	UH-10	120	1			5.9	P-31	2#12 & 1#12G - 1/2" C	30	1	NF	NEMA 4X MOTOR RATED SWITCH	INSTALL SWITCH AT A MINIMUM HEIGHT OF 12'-0" A.F.F.
16	UH-11	120	1			5.9	P-33	2#10 & 1#10G - 1/2" C	30	1	NF	NEMA 4X MOTOR RATED SWITCH	INSTALL SWITCH AT A MINIMUM HEIGHT OF 12'-0" A.F.F.
17	UH-12	120	1			5.9	P-33	2#10 & 1#10G - 1/2" C	30	1	NF	NEMA 4X MOTOR RATED SWITCH	INSTALL SWITCH AT A MINIMUM HEIGHT OF 12'-0" A.F.F.
18	UH-13	120	1			5.9	D-9	2#8 & 1#8G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
19	UH-14	120	1			5.9	D-9	2#8 & 1#8G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
20	UH-15	120	1			5.9	D-11	2#8 & 1#8G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
21	UH-16	120	1			5.9	D-11	2#8 & 1#8G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
22	UH-17	120	1			5.9	D-13	2#10 & 1#10G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
23	UH-18	120	1			5.9	D-13	2#10 & 1#10G - 1/2" C	30	1	NF	NEMA 3R MOTOR RATED SWITCH	
24	EF-1	120	1		1/4		A-31	2#12 & 1#12G - 1/2" C	30	1	NF	NEMA 3R MOTOR RATED SWITCH	
25	EF-2	120	1		1/4		A-31	2#12 & 1#12G - 1/2" C	30	1	NF	NEMA 3R MOTOR RATED SWITCH	
26	EF-3	120	1		1/4		A-33	2#12 & 1#12G - 1/2" C	30	1	NF	NEMA 3R MOTOR RATED SWITCH	
27	EF-4	208	3		3.0		P1-1	3#10 & 1#10G - 1/2" C	30	3	NF	NEMA 4X	
28	EF-5	208	3		3.0		P1-7	3#12 & 1#10G - 1/2" C	30	3	NF	NEMA 4X	
29	EF-6	208	3		3.0		A-25	3#10 & 1#10G - 1/2"C	30	3	NF		
30	EF-7	208	3		3.0		A-36	3#10 & 1#10G - 1/2"C	30	3	NF		
31	EF-8	208	3		3.0		B-36	3#10 & 1#10G - 1/2"C	30	3	NF		
32	EF-9	120	1		1/4		A-33	2#12 & 1#12G - 1/2" C	30	1	NF	NEMA 3R MOTOR RATED SWITCH	
33	EF-10	120	1		1/4		P1-13	2#12 & 1#12G - 1/2" C	30	1	NF	NEMA 3R MOTOR RATED SWITCH	
34	EF-11	120	1		1/4		P1-13	2#12 & 1#12G - 1/2" C	30	1	NF	NEMA 3R MOTOR RATED SWITCH	
35	EF-12	120	1		1/4		P1-15	2#12 & 1#12G - 1/2" C	30	1	NF	NEMA 3R MOTOR RATED SWITCH	
36	EF-13	208	3		3.0		D-15	3#12 & 1#12G - 1/2"C	30	3	NF		
37	EF-14	208	3		3.0		D-29	3#12 & 1#12G - 1/2"C	30	3	NF		
38	EF-15	208	3		3.0		D-35	3#12 & 1#12G - 1/2"C	30	3	NF		

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE CONTINUED

ITEM NO.	DESCRIPTION	EQUIPMENT CHARACTERISTICS VOLTS	PH	KW	HP	FLA	CIRCUIT	FEEDER	DISCONNECT SWITCH SIZE	PL	FUSE	FEATURES	REMARKS
39	L-1	120	1	0.2			P1-17	2#12 & 1#12G - 1/2" C	30	1	NF	NEMA 4X MOTOR RATED SWITCH	COORDINATE LOUVER CONTROLS WITH DIVISION 15. INSTALL SWITCH AT 12'-0" A.F.F. MINIMUM
40	L-2	120	1	0.2			P1-17	2#12 & 1#12G - 1/2" C	30	1	NF	NEMA 4X MOTOR RATED SWITCH	COORDINATE LOUVER CONTROLS WITH DIVISION 15. INSTALL SWITCH AT 12'-0" A.F.F. MINIMUM
41	L-3	120	1	0.2			P1-17	2#12 & 1#12G - 1/2" C	30	1	NF	NEMA 4X MOTOR RATED SWITCH	COORDINATE LOUVER CONTROLS WITH DIVISION 15. INSTALL SWITCH AT 12'-0" A.F.F. MINIMUM
42	L-4	120	1	0.2			P1-17	2#12 & 1#12G - 1/2" C	30	1	NF	NEMA 4X MOTOR RATED SWITCH	COORDINATE LOUVER CONTROLS WITH DIVISION 15. INSTALL SWITCH AT 12'-0" A.F.F. MINIMUM
43	L-10	120	1	0.2			A-35	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	COORDINATE LOUVER CONTROLS WITH DIVISION 15
44	L-11	120	1	0.2			A-35	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	COORDINATE LOUVER CONTROLS WITH DIVISION 15
45	L-12	120	1	0.2			A-35	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	COORDINATE LOUVER CONTROLS WITH DIVISION 15
46	L-16	120	1	0.2			D-21	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	COORDINATE LOUVER CONTROLS WITH DIVISION 15
47	L-17	120	1	0.2			D-21	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	COORDINATE LOUVER CONTROLS WITH DIVISION 15
48	L-18	120	1	0.2			D-21	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	COORDINATE LOUVER CONTROLS WITH DIVISION 15
49	EWH-1	120	1	1.0			P1-19	2#12 & 1#12G - 1/2" C	30	1	NF	NEMA 4X	
50	EWH-2	208	1	2.0			A-27	2#12 & 1#12G - 1/2" C	30	2	NF		
51	UH-19	120	1			2.2	A-2	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
52	HR-1	120	1			1.8	A-2	2#12 & 1#12G - 1/2" C	30	1	NF		
53	HR-1 (MOTOR)	208	3		2.0		A-4	3#12 & 1#12G - 1/2" C	30	3	NF		
54	EWC-1	120	1		1/5		P1-20	2#12 & 1#12G - 1/2" C				NEMA 5-20R RECEPTACLE	CONCEAL RECEPTACLE BEHIND DRINKING FOUNTAIN
55	EWC-2	120	1		1/5		A-10	2#12 & 1#12G - 1/2" C				NEMA 5-20R RECEPTACLE	CONCEAL RECEPTACLE BEHIND DRINKING FOUNTAIN
56	EWC-3	120	1		1/5		A-12	2#12 & 1#12G - 1/2" C				NEMA 5-20R RECEPTACLE	CONCEAL RECEPTACLE BEHIND DRINKING FOUNTAIN
57	WF-1	120	1		1/6		A-14	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
58	ZD-1	120	1	0.2			A-16	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
59	ZD-2	120	1	0.2			A-16	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
60	ZD-3	120	1	0.2			A-16	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
61	ZD-4	120	1	0.2			A-16	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
62	ZD-5	120	1	0.2			A-18	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
63	ZD-6	120	1	0.2			A-18	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
64	ZD-7	120	1	0.2			A-18	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
65	ZD-8	120	1	0.2			A-18	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
66	ZD-9	120	1	0.2			A-20	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
67	SD-1	120	1	0.2			A-20	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	
68	SD-2	120	1	0.2			A-20	2#12 & 1#12G - 1/2" C	30	1	NF	MOTOR RATED SWITCH	

NOTE: COORDINATE EXACT LOCATIONS AND ELECTRICAL REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH MECHANICAL EQUIPMENT INSTALLER PRIOR TO ANY WORK.

POOL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

ITEM NO.	DESCRIPTION	EQUIPMENT CHARACTERISTICS VOLTS	PH	KW	HP	FLA	CIRCUIT	FEEDER	DISCONNECT SWITCH SIZE	PL	FUSE	FEATURES	REMARKS
[illegible]	FILTRATION PUMP	208	3		10.0		P-1	3#6 & 1#10G - 3/4"C	60	3	60	NEMA 4	
[illegible]	FILTRATION PUMP	208	3		10.0		P-7	3#6 & 1#10G - 3/4"C	60	3	60	NEMA 4	
[illegible]	POOL HEATER	120	1			12.0	P-2	2#12 & 1#12G - 1/2"C	30	1	NF	NEMA 4	
[illegible]	POOL HEATER	120	1			12.0	P-4	2#12 & 1#12G - 1/2"C	30	1	NF	NEMA 4	
[illegible]	CHEMICAL CONTROLLER	120	1			8.0	P-6	2#12 & 1#12G - 1/2"C	30	1	NF	NEMA 4	
[illegible]	CHLORINE FEEDER	120	1	0.2			P-8	2#12 & 1#12G - 1/2"C	30	1	NF	NEMA 4	
[illegible]	CHLORINE FEEDER	120	1	0.2			P-32	2#12 & 1#12G - 1/2"C	30	1	NF	NEMA 4	
[illegible]	CHEMICAL BOOSTER PUMP	208	1		3/4		P-10	2#12 & 1#12G - 1/2"C	30	2	20	NEMA 4	
[illegible]	CHEMICAL BOOSTER PUMP	208	1		3/4		P-34	2#12 & 1#12G - 1/2"C	30	2	20	NEMA 4	
7	CHEMICAL PH CIRCUIT	120	1	0.2			P-12	2#12 & 1#12G - 1/2"C				NEMA 4	PROVIDE MATCHING CORD AND PLUG

NOTE: COORDINATE EXACT LOCATIONS AND ELECTRICAL REQUIREMENTS OF ALL POOL EQUIPMENT WITH POOL EQUIPMENT INSTALLER PRIOR TO ANY WORK.

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CONTENTS: SCHEDULES

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ADD ALTERNATE

PANELBOARD A SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: M.L.O. | MOUNTING: SURFACE | REMARKS:

BUS SIZE: 225 A | TOTAL LOAD: 61.8 KVA | FAULT DUTY: 65,000 A.I.C.

NO	SERVES	LTG	RCPT	MTR	A/C	HTG	MSC	BREAKER TRIP	P	PHASE A B C	P	BREAKER TRIP	MSC	HTG	A/C	MTR	RCPT	LTG	SERVES	NO
1	RTU-1 (1)				7.6			50	3		1	20	0.2			0.3			UH-19, RF-1	2
3	---				---			---	-		3	20				2.7			RF-1 MOTOR	4
5	---				---			---	-		-	---				---			---	6
7	RTU-2 (1)				7.8			50	3		-	---				---			---	8
9	---				---			---	-		1	20			0.7				EWC-2	10
11	---				---			---	-		1	20			0.7				EWC-3	12
13	RTU-4 (1)				4.0			50	3		1	20				0.5			WP-1	14
15	---				---			---	-		1	20				0.8			ZD-1,2,3,4	16
17	---				---			---	-		1	20				0.8			ZD-5,6,7,8	18
19	UH-1,2			1.4				20	1		1	20				0.6			ZD-9/BD-1,2	20
21	UH-3,4			1.4				20	1		1	25				1.7			GOAL MOTOR	22
23	UH-5,6			1.4				20	1		1	25				1.7			GOAL MOTOR	24
25	EF-6			3.8				20	3		1	25				1.7			GOAL MOTOR	26
27	---			---				---	-		1	25				1.7			GOAL MOTOR	28
29	---			---				---	-		1	25				1.7			GOAL MOTOR	30
31	EF-1,2			1.4				20	1		1	25				1.7			GOAL MOTOR	32
33	EF-3,9			1.4				20	1		1	20	0.5						SCOREBOARD	34
35	L-10,11,12			0.6				20	1		1	20	0.5						SCOREBOARD	36
37	EWH-2					3.0		20	2		3	20				3.6			EF-7	38
39	---					---		---	-		-	---				---			---	40
41	SPARE							20	1		-	---				---			---	42

PANELBOARD B SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: M.L.O. | MOUNTING: SURFACE | REMARKS:

BUS SIZE: 225 A | TOTAL LOAD: 43.5 KVA | FAULT DUTY: 65,000 A.I.C.

NO	SERVES	LTG	RCPT	MTR	A/C	HTG	MSC	BREAKER TRIP	P	PHASE A B C	P	BREAKER TRIP	MSC	HTG	A/C	MTR	RCPT	LTG	SERVES	NO
1	RCPT.		0.2					20	1		1	20					1.0		RCPT./ATU	2
3	RCPT.		0.8					20	1		1	20	1.0						VIDEO GAMES	4
5	RCPT.		1.2					20	1		1	20	1.0						VIDEO GAMES	6
7	HAND DRYER					2.3		25	1		1	20	1.0						VIDEO GAMES	8
9	HAND DRYER					2.3		25	1		1	20	1.0						VIDEO GAMES	10
11	HAND DRYER					2.3		25	1		1	20	1.0						VIDEO GAMES	12
13	HAND DRYER					2.3		25	1		1	20	1.0						VIDEO GAMES	14
15	I.G. RCPT.		0.8					20	1		1	20	1.0						VIDEO GAMES	16
17	I.G. RCPT.		0.2					20	1		1	20					1.2		RCPT.	18
19	I.G. RCPT.		0.6					20	1		1	20					1.2		RCPT.	20
21	F.A.C.P.						0.5	20	1		1	20					1.2		RCPT.	22
23	KITCHEN EQUIPMENT						1.7	20	2		1	20					1.2		RCPT.	24
25	---						---	---	-		1	20					1.2		RCPT.	26
27	KITCHEN EQUIPMENT						1.7	20	2		1	20					1.2		RCPT.	28
29	---						---	---	-		1	20					1.2		RCPT.	30
31	MICROWAVE						1.0	20	1		1	20					1.2		RCPT.	32
33	GAS OVEN (4)						0.2	20	1		1	20	1.0						COPIER	34
35	SHUNT TRIP								1		3	20				3.8			EF-8	36
37	REFRIGERATOR				1.0			20	1		-	---				---			---	38
39	DISHWASHER					1.5		20	1		-	---				---			---	40
41	COFFEE MAKER						1.0	20	1		1	20							SPARE	42

PANELBOARD C SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: M.L.O. | MOUNTING: SURFACE | REMARKS:

BUS SIZE: 225 A | TOTAL LOAD: 51.8 KVA | FAULT DUTY: 65,000 A.I.C.

NO	SERVES	LTG	RCPT	MTR	A/C	HTG	MSC	BREAKER TRIP	P	PHASE A B C	P	BREAKER TRIP	MSC	HTG	A/C	MTR	RCPT	LTG	SERVES	NO
1	LTG., GYM	3.0						20	2		2	20						3.0	LTG., GYM	2
3	---	---						---	-		-	---						---	---	4
5	LTG., GYM	3.0						20	2		1	20						0.4	EMERGENCY LTG., GYM (2)	6
7	---	---						---	-		1	20						0.8	LTG., STORAGE	8
9	LTG., GYM	3.0						20	2		1	20						1.8	LTG., PANTRY/STOR./MEET.	10
11	---	---						---	-		1	20						1.8	LTG., LARGE MEETING	12
13	LTG., TOILETS	1.7						20	1		1	20						1.8	LTG., LARGE MEETING	14
15	LTG., LOBBY	1.7						20	1		1	20						1.5	LTG., MEN LOCKER ROOM	16
17	LTG., ART ROOM	1.8						20	1		1	20						1.5	LTG., WOMEN LOCKER ROOM	18
19	LTG., LOBBY	1.9						20	1		1	20						1.4	LTG. GAME RM./POOL OFFICE	20
21	LTG., AEROBICS	1.8						20	1		2	20						1.2	LTG. EXTERIOR (6)	22
23	LTG., TOILETS	1.9						20	1		-	---						---	---	24
25	EMERGENCY/NIGHT LTG. (2)	0.7						20	1		1	20						1.7	LTG., CORRIDOR	26
27	LTG., SMALL MEETING	1.3						20	1		1	20					0.8		RCPT.	28
29	LTG., ADMIN. AREA	1.6						20	1		1	20					1.0		RCPT.	30
31	RCPT.		0.8					20	1		1	20					1.2		RCPT.	32
33	RCPT.		0.6					20	1		2	20						3.0	LTG., EXTERIOR (6)	34
35	RCPT.		0.8					20	1		-	---						---	---	36
37	RCPT.		1.2					20	1		2	20						2.0	LTG., EXTERIOR (6)	38
39	RCPT.		0.2					20	1		-	---						---	---	40
41	RCPT.		0.2					20	1		1	20							SPARE	42

PANELBOARD D SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: M.L.O. | MOUNTING: SURFACE | REMARKS:

BUS SIZE: 225 A | TOTAL LOAD: 42.8 KVA | FAULT DUTY: 42,000 A.I.C.

NO	SERVES	LTG	RCPT	MTR	A/C	HTG	MSC	BREAKER TRIP	P	PHASE A B C	P	BREAKER TRIP	MSC	HTG	A/C	MTR	RCPT	LTG	SERVES	NO
1	LTG., GYM	3.0						20	2		2	20						3.0	LTG., GYM	2
3	---	---						---	-		-	---						---	---	4
5	EMERGENCY LTG., GYM (2)	0.4						20	1		2	20						3.0	LTG., GYM	6
7	LTG., STORAGE	0.8						20	1		-	---						---	---	8
9	UH-13,14			1.4				20	1		2	20						3.0	LTG., GYM	10
11	UH-15,16			1.4				20	1		-	---						---	---	12
13	UH-17,18			1.4				20	1		1	25				1.7			GOAL MOTOR	14
15	EF-13			3.8				20	3		1	25				1.7			GOAL MOTOR	16
17	---			---				---	-		1	25				1.7			GOAL MOTOR	18
19	---			---				---	-		1	25				1.7			GOAL MOTOR	20
21	L-16,17,18			0.6				20	1		1	25				1.7			GOAL MOTOR	22
23	RCPT		0.2					20	1		1	25				1.7			GOAL MOTOR	24
25	RCPT		1.0					20	1		1	20	0.5						SCOREBOARD	26
27	RCPT		1.0					20	1		1	20	0.5						SCOREBOARD	28
29	EF-14			3.8				20	3		1	20							SPARE	30
31	---			---				---	-		1	20							SPARE	32
33	---			---				---	-		1	20							SPARE	34
35	EF-15			3.8				20	3		1								SPACE	36
37	---			---				---	-		1								SPACE	38
39	---			---				---	-		1								SPACE	40
41	SPARE							20	1		1								SPACE	42

PANELBOARD P SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: 300 A M.C.B. | MOUNTING: SURFACE | REMARKS:

BUS SIZE: 400 A | TOTAL LOAD: 70.8 KVA | FAULT DUTY: 22,000 A.I.C.

NO	SERVES	LTG	RCPT	MTR	A/C	HTG	MSC	BREAKER TRIP	P	PHASE A B C	P	BREAKER TRIP	MSC	HTG	A/C	MTR	RCPT	LTG	SERVES	NO
1	FILTRATION PUMP			11.1				60	3		1	20	1.5						POOL HEATER	2
3	---			---				---	-		1	20	1.5						POOL HEATER	4
5	---			---				---	-		1	20	1.0						CHEMICAL CONTROLLER	6
7	FILTRATION PUMP			11.1				60	3		1	20	0.2						CHLORINE FEEDER	8
9	---			---				---	-		2	20				1.6			CHEMICAL BOOSTER PUMP	10
11	---			---				---	-		-	---				---			---	12
13	LTG., POOL (5)	3.0						20	2		1	20	0.2						CHEMICAL PH CIRCUIT	14
15	---	---						---	-		2	20						3.0	NIGHT LTG., POOL (2)	16
17	NIGHT LTG., POOL (2)	3.0						20	2		-	---						---	---	18
19	---	---						---	-		2	20						3.0	LTG., POOL (5)	20
21	LTG., POOL (5)	3.0						20	2		-	---						---	---	22
23	---	---						---	-		2	20						3.0	LTG., POOL (5)	24
25	EMERGENCY LTG., POOL (2)	0.4						20	1		-	---						---	---	26
27	LTG., STORAGE EQUIPMENT	1.6						20	1		2	20						2.0	LTG., POOL (5)	28
29	UH-7,8			1.4				20	1		-	---						---	---	30
31	UH-9,10			1.4				20	1		1	20	0.2						CHLORINE FEEDER	32
33	UH-11,12			1.4				20	1		2	20				1.6			CHEMICAL BOOSTER PUMP	34
35	SPARE							20	1		-	---				---			---	36
37	PANEL P1		2.4	10.5	0.7	3.0		100	3		1	20							SPARE	38
39	---		---	---	---	---		---	-		1	20							SPARE	40
41	---		---	---	---	---		---	-		1	20							SPARE	42

PANELBOARD P1 SCHEDULE

VOLTAGE: 208Y/120 V | MAINS: M.L.O. | MOUNTING: SURFACE | REMARKS:

BUS SIZE: 100 A | TOTAL LOAD: 14.8 KVA | FAULT DUTY: 22,000 A.I.C.

NO	SERVES	LTG	RCPT	MTR	A/C	HTG	MSC	BREAKER TRIP	P	PHASE A B C	P	BREAKER TRIP	MSC	HTG	A/C	MTR	RCPT	LTG	SERVES	NO
1	EF-4			3.8				20	3		1	20					1.2		RCPT	2
3	---			---				---	-		1	20					1.2		RCPT	4
5	---			---				---	-		1	20							SPARE	6
7	EF-5			3.8				20	3		1	20							SPARE	8
9	---			---				---	-		1	20							SPARE	10
11	---			---				---	-		1								SPACE	12
13	EF-10,11			1.4				20	1		1								SPACE	14
15	EF-12			0.7				20	1		1								SPACE	16
17	L-1,2,3,4			0.8				20	1		1								SPACE	18
19	EWH-1					1.5		20	1		1								SPACE	20
21	EWC-1 (3)				0.7			20	1		1								SPACE	22
23	SPARE							20	1		1								SPACE	24
25	SPARE							20	1		1								SPACE	26
27	SPARE							20	1		1								SPACE	28
29	SPACE								1		1								SPACE	30

ELECTRICAL NOTES (PANELBOARD SCHEDULES ONLY):

1. PROVIDE H.A.C.R. TYPE CIRCUIT BREAKER.
2. PROVIDE LOCK-ON DEVICE FOR CIRCUIT BREAKER.
3. PROVIDE G.F.C.I. TYPE CIRCUIT BREAKER.
4. PROVIDE SHUNT TRIP TYPE CIRCUIT BREAKER.
5. ROUTE THROUGH CONTACTOR 'C-1'. SEE LEGEND NOTE #1 (SHEET E1.1) FOR FURTHER INFORMATION.
6. ROUTE THROUGH CONTACTOR 'C-2' (20A/ 208V 6P, IN NEMA 1 ENCLOSURE, CONTROLLED ON/OFF BY PHOTOCELL). INSTALL CONTACTOR ADJACENT TO PANEL. INSTALL PHOTOCELL ON ROOF AND AIM NORTH.

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CONTENTS

SCHEDUALS

ISSUE DATE: 1-20-97

SHEET NUMBER: E3.3

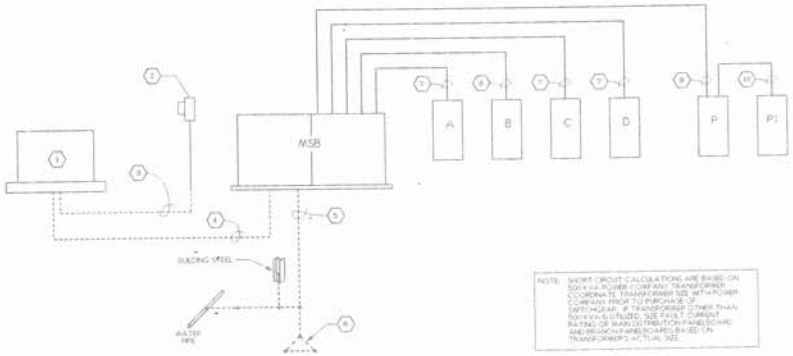
ISSUED FOR CONSTRUCTION

MAIN SWITCHBOARD MSB SCHEDULE

VOLTAGE: 208Y/120V, 3 PHASE, 4 WIRE — FAULT CUR'T: 100,000 A.I.C.

MAIN SWITCH: 1600 A — TOTAL LOAD: 331.3 KVA — BUS SIZE: 1600 A

SWITCH NUMBER	SERVES	BREAKER SIZE	BREAKER P	BREAKER TRIP	FEEDER	LOAD (KVA)	REMARKS
1	RTU-3	100	3	90	SEE MECHANICAL EQUIPMENT SCHEDULE	25.8	*
2	RTU-5	200	3	125	SEE MECHANICAL EQUIPMENT SCHEDULE	35.0	
3	PANEL 'A'	200	3	200	SEE ELECTRICAL RISER	61.9	
4	PANEL 'B'	200	3	150	SEE ELECTRICAL RISER	43.5	
5	PANEL 'C'	200	3	200	SEE ELECTRICAL RISER	51.0	
6	PANEL 'D'	200	3	200	SEE ELECTRICAL RISER	42.0	ADD ALTERNATE
7	PANEL 'P'/'P1'	400	3	300	SEE ELECTRICAL RISER	70.0	
8	SPACE	200	3				
9	SPACE	200	3				
10	SPACE	200	3				
11	SPACE	100	3				
12	SPACE	100	3				



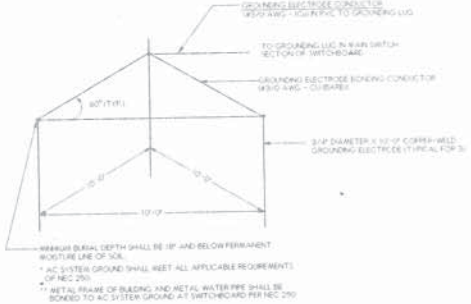
NOTE: SHORT CIRCUIT CALCULATIONS ARE BASED ON 500 KVA POWER COMPANY TRANSFORMER. COORDINATE TRANSFORMER SIZE WITH POWER COMPANY PRIOR TO PURCHASE OF SWITCHGEAR. IF TRANSFORMER OTHER THAN 500 KVA IS UTILIZED, SIZE FAULT CURRENT RATING OF MAIN DISTRIBUTION PANELBOARD AND BRANCH PANELBOARDS BASED ON TRANSFORMER'S ACTUAL SIZE.

1 / E3.4 ELECTRICAL RISER DIAGRAM

NOT TO SCALE

ELECTRICAL LEGEND NOTES (RISER DIAGRAM ONLY):

1. 208Y/120V POWER COMPANY PAD MOUNTED TRANSFORMER. 3-1/2" C.A.T. TRANSFORMER COORDINATE INSTALLATION REQUIREMENTS WITH LOCAL POWER COMPANY. COST FOR COMPLETE INSTALLATION OF PAD MOUNTED TRANSFORMER AND METERING SHALL BE BORNE BY THE CONTRACTOR.
2. POWER COMPANY METER. COORDINATE LOCATION AND INSTALLATION WITH LOCAL POWER COMPANY AND ARCHITECT PRIOR TO ANY WORK.
3. PROVIDE 1 - 1" C. WITH PULLSTRING.
4. PROVIDE 4 SETS 4#600MCM + 1#1/2" C.
5. PROVIDE 1#3/0G - 1" C.
6. SEE GROUNDING DETAIL, THIS SHEET.
7. PROVIDE 4#3/0 & 1#6G - 2" C.
8. PROVIDE 4#1/0 & 1#6G - 2" C.
9. PROVIDE 4#350MCM & 1#4G - 3" C.
10. PROVIDE 4#3 & 1#4G - 1-1/4" C.



2 / E3.4 GROUNDING DETAIL

NOT TO SCALE

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CONTENTS:

SCHEDULES AND ELECTRICAL RISER

ISSUE DATE: 1-20-97

SHEET NUMBER: E3.4

ISSUED FOR CONSTRUCTION

POOL SURFACE AREA:	4551 SQUARE FEET
VOLUME (INCLUDING SURGE):	160,150 GALLONS
TURNOVER RATE:	4 HOURS
FILTER FLOW RATE: (56.5 S.F. FILTER AREA)	11.8 GPM/SF FILTER
FILTRATION RATE:	667 GALLONS/MINUTE
SURGE VOLUME REQUIRED:	4551 GALLONS
SURGE TANK VOLUME PROVIDED: (11'-0"x14'-0"x4'-0") x 7.5 GAL/SF=	4620 GALLONS

LAP POOL CALCULATIONS

PL1.1-2

SCALE: NONE

NOTE: DEPTH MARKERS AT WALL PROVIDED BY GUTTER MANUFACTURER

NOTES:

1. DEPTH SHALL BE VERIFIED BY SECTION 13150 CONTRACTOR AND MARKERS SHALL BE INSTALLED TO INDICATE ACTUAL DEPTH OF WATER.
2. DEPTH MARKERS SHALL BE SPACED AT NOT MORE THAN 25'-0" INTERVALS MEASURED PERIPHERALLY. REFER TO PLAN FOR APPROXIMATE LOCATION.
3. TILES SHALL BE RECESSED SO THAT THE FACE OF THE TILE IS FLUSH WITH FINISHED SURFACE.
4. DEPTH AND NO DIVING MARKERS SHALL BE 8"x8", MINIS, NON-SLIP TILE W/ 6" HIGH BLACK NUMERALS OR RED INTERNATIONAL NO DIVING SYMBOL.

DEPTH MARKER - DECK

PL1.1-3

SCALE: NONE

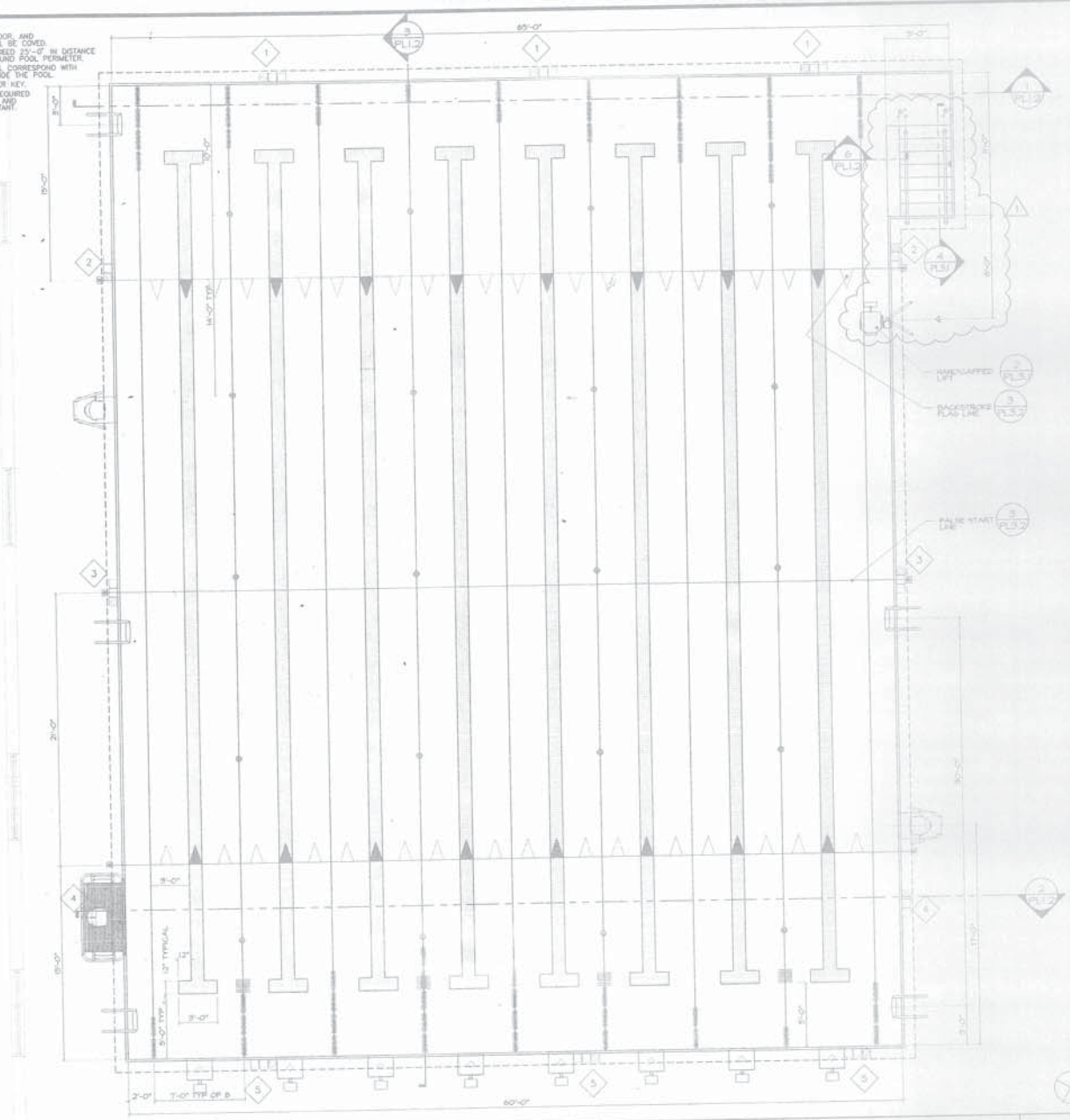
DEPTH MARKER KEY

PL1.1-4

SCALE: NONE

NOTES:

1. ALL WALL TO WALL, WALL TO FLOOR, AND FLOOR TO FLOOR JOINTS SHALL BE COVED.
2. DEPTH MARKERS SHALL NOT EXCEED 25'-0" IN DISTANCE FROM CENTER TO CENTER AROUND POOL PERIMETER.
3. DEPTH MARKERS ON DECK SHALL CORRESPOND WITH DEPTH MARKER LOCATIONS INSIDE THE POOL.
4. SEE PL1.1-4 FOR DEPTH MARKER KEY.
5. LOCATE LIFEGUARD CHAIRS AS REQUIRED PER STATE AND LOCAL CODES AND PER OWNER'S SAFETY CONSULTANT.



LAP POOL PLAN

PL1.1-1

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

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NEW RECREATION CENTER AT JOHNSON PARK

ROCKDALE COUNTY, GEORGIA

DRAWN BY: S. FRANK

PRINTING:

DATE	REMARKS
1/20/97	BID/PERMIT
1/29/97	REVISION #1

REVISION:

NO.	REMARKS
1	POOL DRAWING REVISION

CONTENTS: POOL PLAN, CALCULATIONS, AND DETAILS

ISSUE DATE: 1/20/97

SHEET NUMBER: PL1.1

PL1.0 RECREATION CENTER SITE PLAN, NOTES AND DETAILS
PL1.1 POOL PLAN, CALCULATIONS, AND DETAILS
PL1.2 SECTIONS AND DETAILS

PL2.0 LAP POOL PIPING PLAN, NOTES, AND DETAILS

PL3.0 STRUCTURAL DETAILS
PL3.1 STRUCTURAL DETAILS
PL3.2 STRUCTURAL DETAILS

PL4.0 MECHANICAL EQUIPMENT PLAN AND LIST, AND DETAILS
PL4.1 MECHANICAL DETAILS
PL4.2 FILTRATION DETAILS
PL4.3 FILTRATION ISOMETRIC AND VALVE LEGEND

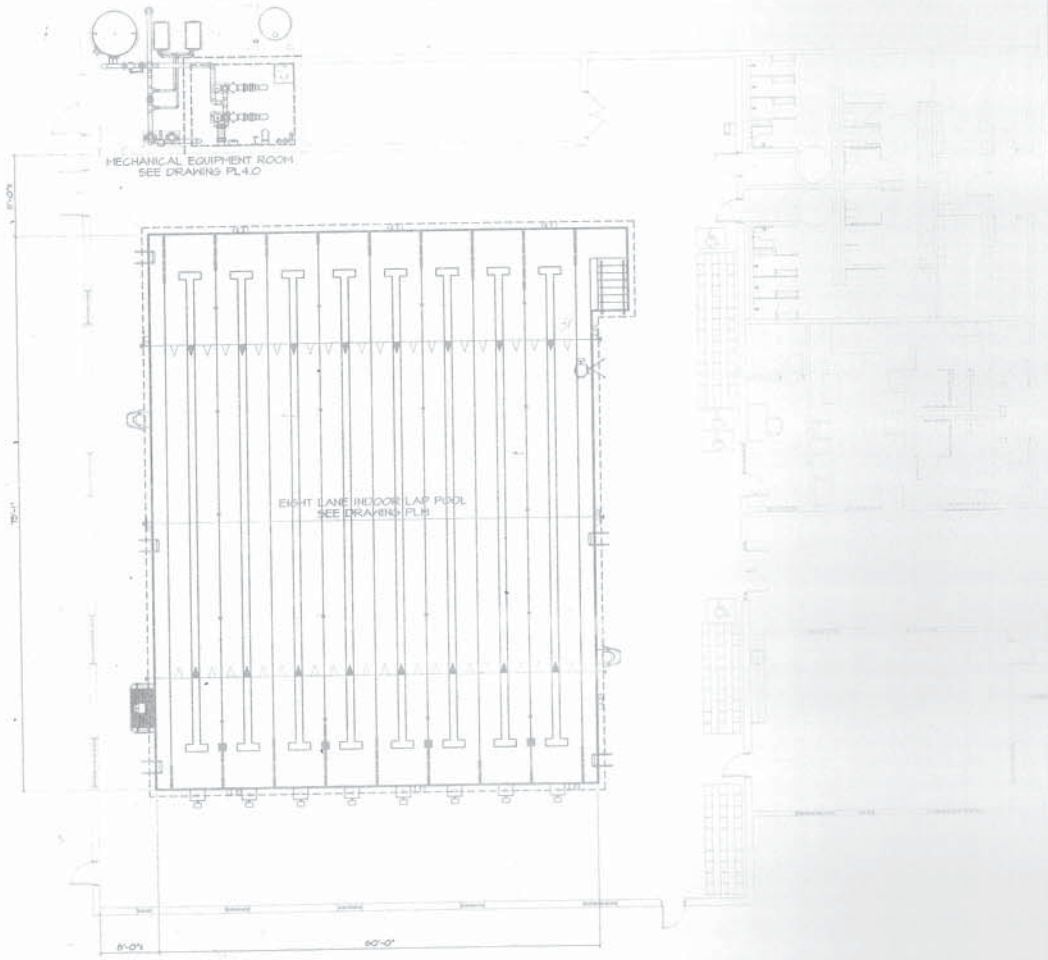
PLAN SET INDEX — PL1.0-3

SCALE: NONE

PLAN SET SYMBOL KEY — PL1.0-2

SCALE: NONE

NOTE:
SEE ARCHITECTURAL DRAWINGS FOR ACTUAL LOCATION OF POOL IN NATATORIUM



RECREATION CENTER SITE PLAN — PL1.0-1

SCALE: 1/8"=1'-0"

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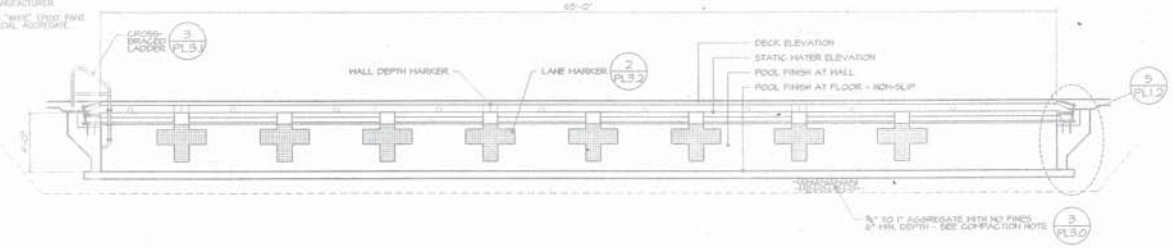
DRAWN BY: S. FRANK

7/20/97 BID/PERMIT
1/29/97 REVISION #1

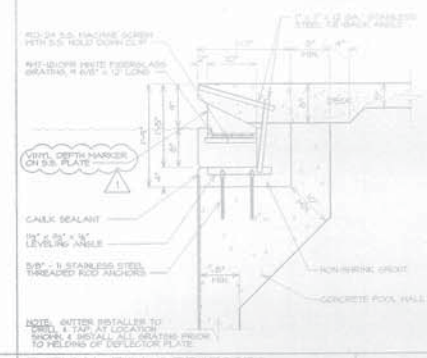
RECREATION CENTER SITE PLAN, NOTES AND DETAILS

SHEET NUMBER: PL1.0

NOTE:
1. ALL WALL TO WALL, WALL TO FLOOR, AND FLOOR TO FLOOR JOINTS SHALL BE COVED.
2. ROPE CUPS SHALL BE MANUFACTURED AS AN INTEGRAL COMPONENT OF THE GUTTER PROVIDED BY THE GUTTER MANUFACTURER.
3. BASE POOL FINISH TO BE 3 COATS "WHITE" EPOXY PAINT. ALTERNATE FINISH TO BE SPECIAL AGGREGATE.

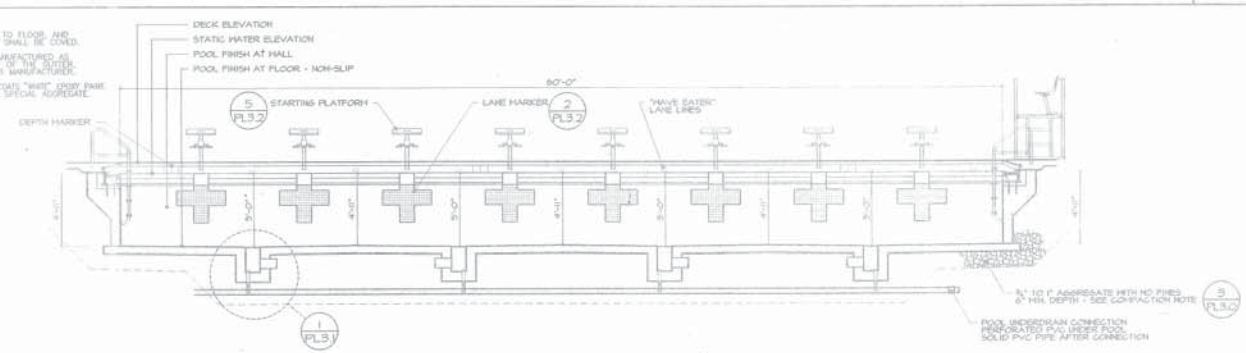


LAP POOL CROSS SECTION - SHALLOW END | PL1.2-1 | SCALE: 1/4"=1'-0"

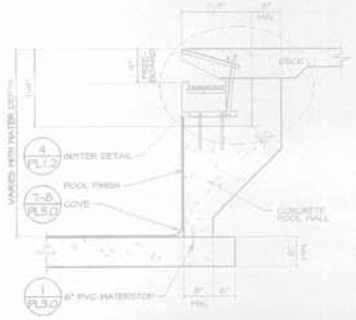


TYPICAL FULLY RECESSED STAINLESS STEEL GUTTER | PL1.2-4 | SCALE: 1"=1'-0"

NOTE:
1. ALL WALL TO WALL, WALL TO FLOOR, AND FLOOR TO FLOOR JOINTS SHALL BE COVED.
2. ROPE CUPS SHALL BE MANUFACTURED AS AN INTEGRAL COMPONENT OF THE GUTTER PROVIDED BY THE GUTTER MANUFACTURER.
3. BASE POOL FINISH TO BE 3 COATS "WHITE" EPOXY PAINT. ALTERNATE FINISH TO BE SPECIAL AGGREGATE.

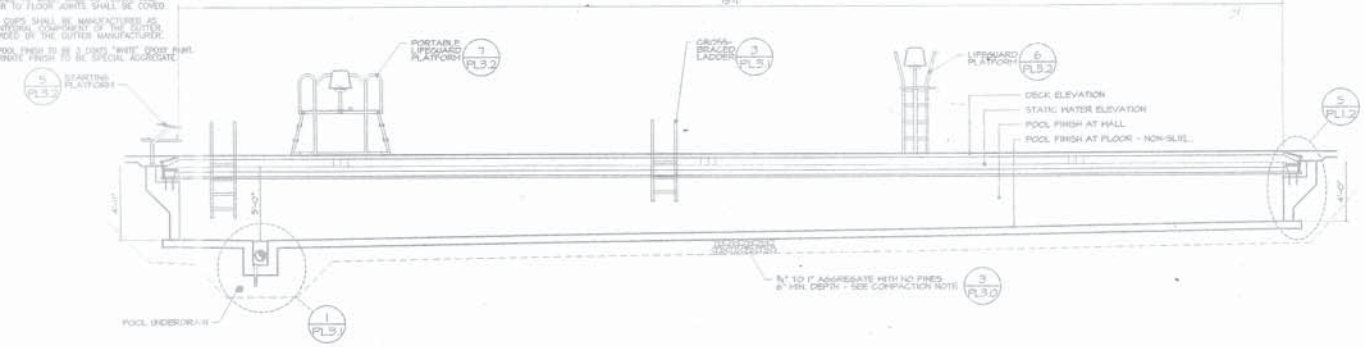


LAP POOL CROSS SECTION - DEEP END | PL1.2-2 | SCALE: 1/4"=1'-0"

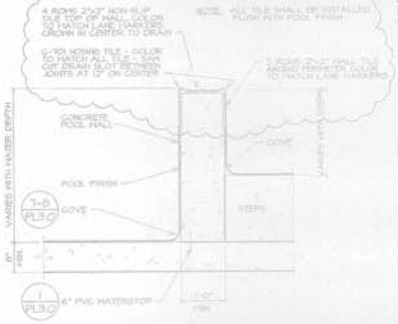


POOL WALL DETAIL | PL1.2-5 | SCALE: 1/4"=1'-0"

NOTE:
1. ALL WALL TO WALL, WALL TO FLOOR, AND FLOOR TO FLOOR JOINTS SHALL BE COVED.
2. ROPE CUPS SHALL BE MANUFACTURED AS AN INTEGRAL COMPONENT OF THE GUTTER PROVIDED BY THE GUTTER MANUFACTURER.
3. BASE POOL FINISH TO BE 3 COATS "WHITE" EPOXY PAINT. ALTERNATE FINISH TO BE SPECIAL AGGREGATE.



LAP POOL LONGITUDINAL SECTION - SHALLOW END | PL1.2-3 | SCALE: 1/4"=1'-0"



POOL WALL DETAIL | PL1.2-6 | SCALE: 1/4"=1'-0"

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NEW RECREATION CENTER AT JOHNSON PARK
ROCKDALE COUNTY, GEORGIA

DATE	REVISION
1/20/97	BID/PERMIT
1/29/97	REVISION #1

SECTIONS AND DETAILS

PL1.2

ARROWS DENOTE DIRECTION OF FLOW

INLET SUPPLY
ACTIVITY SUPPLY
ACTIVITY SUPPLY 2
GEYSER SUPPLY

SLIDE SUPPLY
FLUME SUPPLY

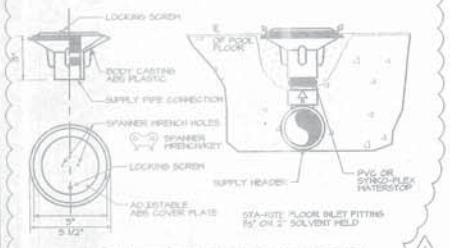
GUTTER DRAIN LINE
MAIN DRAIN LINE

POOL UNDERDRAIN
POOL DRAIN
SURGE TANK DRAIN/OVERFLOW

PIPING SCHEMATIC LINETYPE KEY — PL2.0-2

SCALE: NONE

NOTE: ALL BURIED RETURN PIPING SHALL BE ENCASED IN CONCRETE



NOTE: ADJUSTMENT BY CONTRACTOR SHALL BE NECESSARY ON SITE TO BALANCE FLOW!

ADJUSTABLE FLOOR INLET DETAIL — PL2.0-3

SCALE: 3"=1'-0"

PIPING NOTES — PL2.0-5

SCALE: NONE

PIPING NOTES
REFER TO SPECIFICATION SECTION 13150 FOR DETAILS

1. PIPING:

1a. ALL PIPING SHALL BE IN ACCORDANCE WITH THE GEORGIA STATE PLUMBING CODE, ROCKDALE COUNTY HEALTH CODE, GEORGIA DEPARTMENT OF PUBLIC HEALTH CODE, THE A.S.T.M. DESIGNATION NUMBER D-1785, AND THE NSF SEAL FOR POTABLE WATER.

1b. ALL PIPING DESIGNED FOR 5'/SECOND MAXIMUM SUCTION, 8'/SECOND MAXIMUM PRESSURE, AND 3'/SECOND MAXIMUM GRAVITY.

1c. MAIN DRAIN PIPING SHALL CARRY 100% OF RECIRCULATION RATE AT A VELOCITY NOT TO EXCEED 3'/SECOND.

1d. ALL GUTTER AND INLET RETURN PIPING MUST BE LAID ON A GRADE SO IT WILL DRAIN TO THE SURGE TANK COMPLETELY BY GRAVITY. MAIN DRAIN LINE PIPING MUST BE LAID ON A GRADE SO:
(A) ALL PIPING FROM BENEATH THE POOL TO THE ELEVATION CHANGE SHALL PITCH TO DRAIN TO THE POOL MAIN DRAIN SUMPS AND,
(B) ALL PIPING FROM THE ELEVATION CHANGE TO THE SURGE TANK SHALL PITCH TO DRAIN TO THE SURGE TANK.
IN ALL INSTANCES WHERE GRAVITY DRAINAGE IS NOT PROVIDED, THE CONTRACTOR SHALL INSTALL DRAIN VALVES SO THAT ALL LINES CAN BE DRAINED COMPLETELY TO SURGE TANK OR ANOTHER APPROVED LOCATION. DRAINAGE PLUGS SHALL BE PROVIDED IN THE PIPING SYSTEM TO ALLOW FOR DRAINING OF POOL PIPING. CONTRACTOR SHALL PROVIDE OPERATION AND DRAINING INSTRUCTIONS TO OWNER.

1e. ALL ELEVATIONS TO BE FIELD VERIFIED TO ALLOW FOR PROPER PITCH AND DRAINAGE. PITCH ~APPROX. 1"/ 10'-0". POOL CONTRACTOR SHALL MAKE EVERY EFFORT TO CURTAIL THE USE OF FITTINGS TO REDUCE HEAD.

1f. THIS DRAWING IS INTENDED FOR SCHEMATIC USE ONLY!! FINAL LOCATIONS SHALL BE FIELD VERIFIED WITH ALL OTHER TRADES, BY CONTRACTOR.

1g. CONTRACTOR SHALL COORDINATE ALL WORK WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL AND STRUCTURAL DRAWINGS.

2. DRAINS:

2a. ALL DRAIN FITTINGS TO CARRY 100% OF RECIRCULATION RATE AT A VELOCITY NOT TO EXCEED 1.5'/SECOND THROUGH THE CLEAR AREA OF THE GRATE.

2b. FILTER BACKWASH LINE,POOL DRAIN LINE, SURGE TANK DRAIN LINE, SURGE TANK OVERFLOW LINE & POOL UNDERDRAIN LINE TO DISCHARGE TO SEWER WITH MINIMUM 6" AIR GAP.

3. PRESSURE GAUGES:

3a. PRESSURE GAUGES TO BE INSTALLED ON ALL PUMP DISCHARGES.

4. VALVES:

4a. PROVIDE BACKWATER VALVES & GEAR OPERATED SUB-SURFACE BUTTERFLY VALVES WITH VALVE EXTENSION FOR ALL POOL & SURGE TANK DRAIN LINES.

4b. EACH VALVE SHALL HAVE A PERMANENT IDENTIFYING LABEL OR TAG ATTACHED TO IT. THE SEQUENCE OF OPERATION, BRIEFLY STATED, SHALL BE PROMINENTLY DISPLAYED.

5. FLOWMETERS:

5a. FLOWMETER SHALL BE PROVIDED IN THE RECIRCULATION PUMP DISCHARGE LINE AND EACH INLET RETURN LINE. INSTALL ON A STRAIGHT LENGTH OF PIPE AT A DISTANCE OF AT LEAST 10 PIPE DIAMETERS DOWNSTREAM AND 5 PIPE DIAMETERS UPSTREAM FROM ANY VALVE, ELBOW OR OTHER SOURCE OF TURBULENCE OR PER MANUFACTURER'S SPECIFICATIONS.

5b. MAIN FLOWMETER SHALL BE USED TO MONITOR BACKWASH RATE.

6. FILTERS:

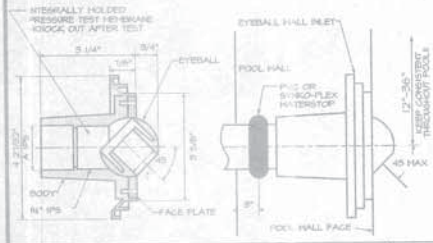
6a. FILTER SHALL BE PROVIDED WITH THE FOLLOWING APPROPRIATELY LOCATED ACCESSORIES: PRESSURE GAUGES, BACKWASH SIGHT GLASS ON WASTE DISCHARGE LINE, AN AIR RELIEF VALVE AT THE HIGH POINT OF THE FILTER & A VALVED TANK DRAIN.

7. HEATER EXCHANGERS:

7a. EQUIPPED WITH THERMOMETERS, 50-240 DEGREES F WITH 2 DEGREE GRADUATIONS; AUTOMATIC TEMPERATURE LIMITING DEVICE; FLOW SWITCH; HEATER BYPASS VALVES. ALL INFLUENT/EFFLUENT HEATER PIPING TO BE METALLIC. PRESSURE RELIEF VALVE TO BE PROVIDED AND PIPED TO WITHIN 6" OF FLOOR. THE AUTOMATIC TEMPERATURE SWITCH ON THE POOL HEATER SHALL BE SET FOR A MAXIMUM OF 100 DEGREES. FURNISH AND INSTALL THERMOMETERS IN INLET AND OUTLET PIPING TO HEATER AND DOWNSTREAM IN THE BLENDED WATER SYSTEM.

CATALOG NUMBER	A+
8418-000	1 1/4"
8419-000	1 1/2"

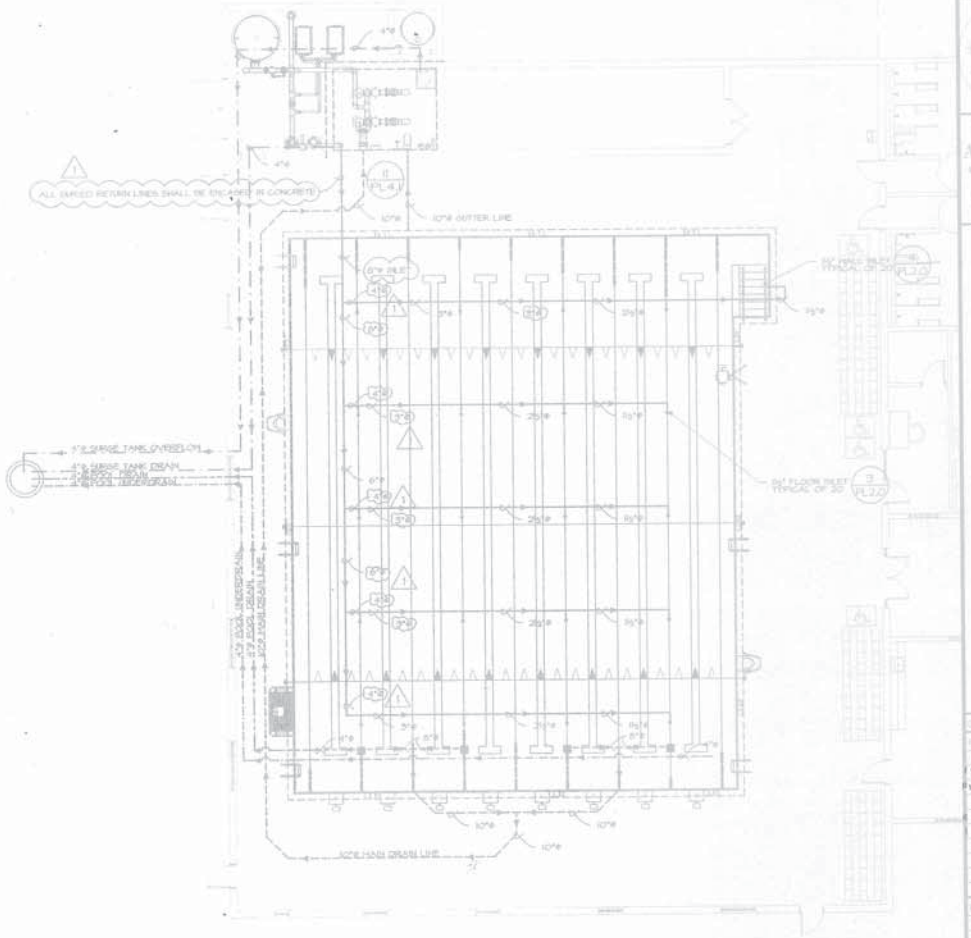
<SOLVENT WELD



WALL INLET DETAIL — PL2.0-4

SCALE: 6"=1'-0"

NOTE:
1. SEE CIVIL DRAWINGS FOR SITE PIPING.
2. ALL GRAVITY DRAIN LINE BENDS MUST BE MADE UP OF TWO (2) 45° FITTINGS INSTEAD OF ONE 90° FITTINGS.
3. REFER TO CIVIL DRAWINGS FOR LOCATION OF DRAINAGE SUMP.



RECREATION CENTER SITE PLAN — PL2.0-1

SCALE: 1/8"=1'-0"

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NEW RECREATION CENTER AT JOHNSON PARK
ROCKDALE COUNTY, GEORGIA

DRAWN BY: T. FRIEDE

REVISIONS

DATE	REMARKS
1/20/97	BID/PERMIT
1/29/97	REVISION #1

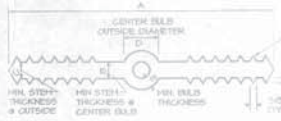
REVISION

NO.	REMARKS
1	PRE BIDDING TEXT

CONTENTS: LAP POOL PIPING PLAN AND DETAILS

DATE: 1/01/95

SHEET NUMBER: PL2.0

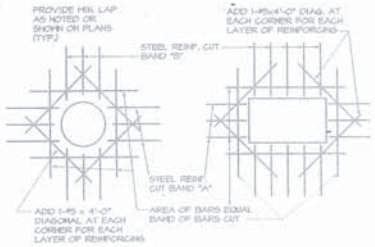


SIZE	A	B	C	D	E	F
WALL EXTERIOR	6"	3/8"	3/8"	7/8"	1/4"	6
FLOOR EXTERIOR	9"	3/8"	3/8"	1"	1/4"	8

NOTES:
1. MATERIAL QUALITY PER SPECIFICATIONS SECTION 03150
2. DIM. REQUIREMENTS INDICATED SHOULD BE GIVEN TO SUPPLIERS PRIOR TO PLACING ORDERS
3. NON-ROUND CENTER BULBS SHALL HAVE A MIN. OUTSIDE DIM. OF "D"

CONSULT WATERSTOP MANUFACTURER FOR SPLICING METHODS.

WATERSTOP DETAIL | PL3.0-1 | SCALE: NONE

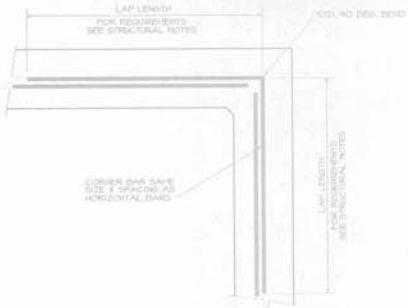


NOTES:
1. TYPICAL FOR ALL OPENINGS IN CONCRETE WALLS AND SLAB UNLESS INDICATED OTHERWISE ON PLANS.
2. DO NOT WELD REINFORCEMENT TO PIPE, SLEEVES AND INSERTS.
3. ALL OPENINGS THROUGH WATERTIGHT TANK REQUIRE WATERSTOPS.

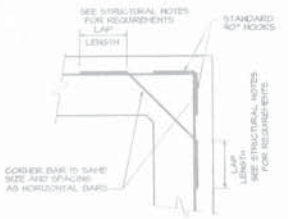
CONCRETE REINFORCEMENT AT OPENINGS DETAIL | PL3.0-2 | SCALE: NONE

COMPACTION NOTE:
3/4" – 1" CLEAR GRANULAR STONE WITH NO FINES SHALL BE PLACED IN MAXIMUM 6" LOOSE THICKNESS LIFTS. EACH LIFT SHALL BE COMPACTED WITH A COMPACTOR APPROVED BY THE SOILS ENGINEER. COMPACTION SHALL BE IN ACCORDANCE WITH ASTM D-1557. INSTALLATION AND TESTING SHALL CONFORM TO DIVISION 2.

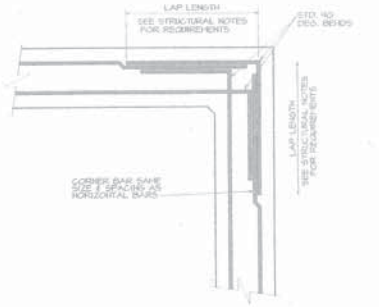
POOL UNDER DRAINAGE DETAIL | PL3.0-3 | SCALE: NONE



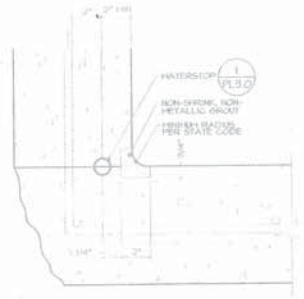
SINGLE MAT REINFORCING @ CORNER DETAIL | PL3.0-4 | SCALE: 1/2"=1'-0"



SINGLE MAT REINFORCING @ CORNER DETAIL | PL3.0-5 | SCALE: 1/2"=1'-0"



DOUBLE MAT REINFORCING @ CORNER DETAIL | PL3.0-6 | SCALE: 1/2"=1'-0"



NOTE:
PROVIDE COVE AT ALL WALL TO WALL AND WALL TO FLOOR INTERSECTIONS

FORMED & POURED WALLS COVE DETAIL | PL3.0-7 | SCALE: 3"=1'-0"
USE WITH BASE BID - PAINT FINISH

STRUCTURAL NOTES:

1. UNLESS OTHERWISE SHOWN, CONCRETE WALLS AND SLABS SHALL BE REINFORCED AS FOLLOWS: NO. 4'S @ 6" EACH WAY CENTER OF 8" SECTIONS; NO. 4'S @ 12" EACH FACE OF 12" SECTIONS. SINGLE MAT REINFORCEMENT SHALL BE AT CENTER OF SECTION, UNLESS SHOWN OTHERWISE.

2. MINIMUM CLEARANCE FOR REINFORCEMENT BARS, UNLESS SHOWN OTHERWISE, SHALL BE 3" WHEN PLACED ON GROUND, FOR SURFACES EXPOSED TO WATER, EARTH OR WEATHER – 2" CLEARANCE FOR NO. 4 BARS OR SMALLER AND 1" CLEARANCE FOR LARGER BARS; INTERIOR SLABS – 3/4" CLEARANCE, INTERIOR BEAMS 1 1/2" CLEARANCE.

3. REFER TO WALL CORNER AND WALL INTERSECTION REINFORCING DETAIL. IN GENERAL, THE WALL CORNER REINFORCING SIZES AND SPACINGS SHALL BE CALLED OUT ON THE PLANS AND REFERENCED TO THESE DETAILS AND THE TYPICAL HORIZONTAL WALL REINFORCING SHALL LAP WITH CORNER AND INTERSECTION REINFORCING.

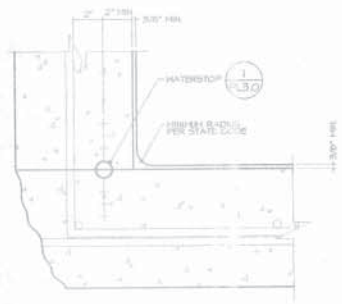
4. ALL BENDS, UNLESS OTHERWISE SHOWN, SHALL BE A 90 DEGREE STANDARD HOOK AS DEFINED IN LATEST EDITION OF ACI 318.

5. UNLESS OTHERWISE NOTED, ALL WALL REINFORCEMENT BARS SHALL BE CONTINUOUS AROUND CORNERS AND THROUGH COLUMNS OR PILASTERS. REINFORCEMENT SHALL BE EXTENDED INTO CONNECTING WALLS AND LAPPED ON THE OPPOSITE FACE OF THE CONNECTING WALLS, AS INDICATED ELSEWHERE ON THESE DRAWINGS. VERTICAL WALL BARS SHALL BE LAPPED WITH DOWELS FROM BASE SLABS AND EXTENDED INTO THE TOP FACE OF ROOF SLABS AND LAPPED WITH TOP SLAB REINFORCEMENT. UNLESS INDICATED OTHERWISE, CONTRACTOR MAY SPLICE CONTINUOUS SLAB OR LONGITUDINAL BEAM BARS AT LOCATIONS OF HIS CHOOSING, EXCEPT THAT TOP BAR SPLICES SHALL BE LOCATED AT MIDSPAN AND BOTTOM BAR SPLICES SHALL BE LOCATED AT SUPPORTS. ALL REINFORCEMENT BENDS AND LAPS, UNLESS OTHERWISE NOTED, SHALL SATISFY THE FOLLOWING MINIMUM REQUIREMENTS. (SHOWN BELOW)

DETAIL OF REINFORCEMENT – LAP LENGTHS – CONC. DESIGN STRENGTH 4000 PSI

BAR SIZE		#4	#5	#6	#7	#8	#9	#10	#11
TOP BAR		2'0"	2'6"	3'0"	3'9"	4'9"	6'0"	7'9"	9'6"
CG-BG OTHER BAR		1'6"	2'0"	2'4"	2'9"	3'6"	4'4"	5'0"	6'8"

STRUCTURAL REINFORCEMENT NOTES | PL3.0-11 | SCALE: NONE



NOTE:
PROVIDE COVE AT ALL WALL TO WALL AND WALL TO FLOOR INTERSECTIONS

FORMED & POURED WALLS COVE DETAIL | PL3.0-8
ALTERNATE BID - SPECIAL AGGREGATE FINISH | SCALE: 3"=1'-0"

PL3.0-9

PL3.0-10

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NEW RECREATION CENTER AT JOHNSON PARK
ROCKDALE COUNTY, GEORGIA

DRAWN BY: S. FLOWE

DATE	REVISION
1/24/97	BID/PERMIT
1/29/97	Revision #1

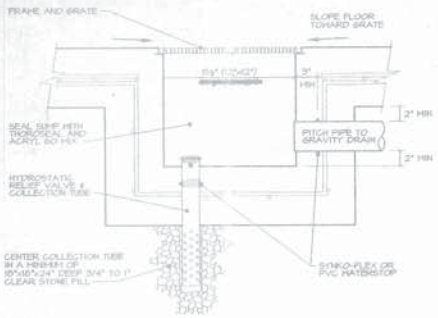
REVISION

NO.	DESCRIPTION
1	ISSUE DRAWING SERIES

CONTENT: STRUCTURAL DETAILS

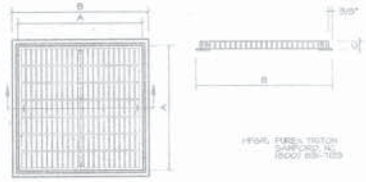
ISSUE DATE: 1/24/97

SHEET NUMBER: PL3.0



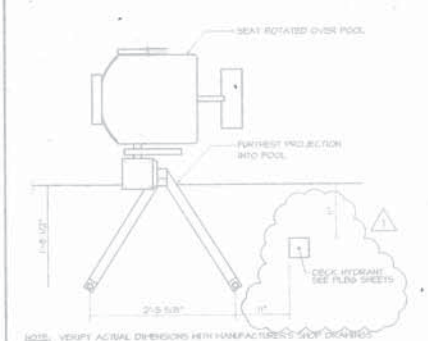
DIMENSIONS-MAIN DRAIN FRAME & GRATE							
ORDER NUMBER	SIZE	A	B	C	SECURING SCREWS	SQ. IN. OPEN AREA	MAX. GPM FLOW @ 1 1/2 FPS
54-2020	12"x12"	12"	13 13/16"	1"	4	85.88	401

FRAME AND GRATE SHALL BE HEAVY DUTY, NON-CORROSIVE, INJECTION MOLDED, WHITE CYCOLAC. GRATE SECURED TO FRAME WITH TAMPER PROOF STAINLESS STEEL SCREWS, MAXIMUM 3/8" WIDE OPENING IN GRATE.



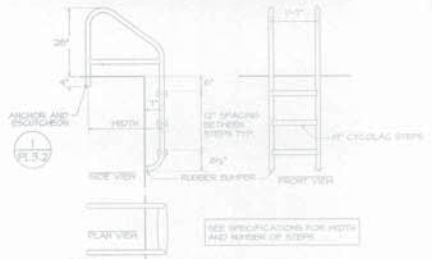
NOTES:
1. SUMP SHALL BE POURED MONOLITHIC WITH POOL FLOOR.
2. WALLS AND BOTTOM OF SUMP SHALL BE SAME THICKNESS AS POOL FLOOR.
3. REINFORCING STEEL SHALL BE SAME SIZE AND SPACING AS POOL FLOOR, CENTERED IN SLAB, AND CONTINUOUS.
4. VERIFY FRAME AND GRATE DIMENSIONS WITH MANUFACTURER.

MAIN DRAIN WITH HYDROSTATIC RELIEF VALVE DETAIL — PL3.1-1
SCALE: 3/4"=1'-0"



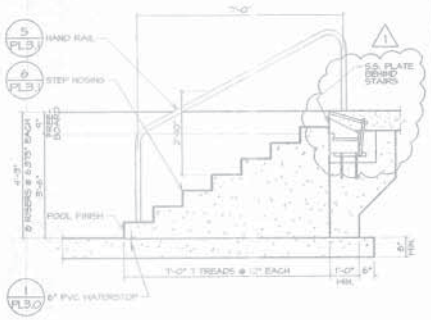
NOTE: VERIFY ACTUAL DIMENSIONS WITH MANUFACTURER'S SHOP DRAWINGS

PLAN VIEW OF SAIM-LIFT II — PL3.1-2
SCALE: 1"=1'-0"

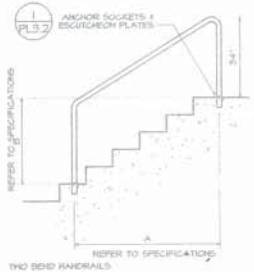


SPECIFICATIONS
Ladder Frames shall be fabricated with smooth, wrinkle-free bends. The pipe shall be 1.900" O.D. x.109 " wall thickness, Type 304, polished to 320 grit. Steps shall be of injection molded Cycolac, 1" wide with raised non-skid treads. The ends of all steps shall be curved to fit the O.D. of the ladder frames. The bolts for attaching the ladder steps shall have smooth, rounded heads and the underside of the head shall be curved to fit the O.D. of the tubing. All ladders shall have white non-marking rubber bumpers at their lower ends.
Cross braces shall be notched and welded to the ladder frames. Joints shall be cleaned and blended to match the finish of the pipe.

STAINLESS STEEL CROSS BRACED LADDER DETAIL — PL3.1-3
SCALE: 1/4"=1'-0"



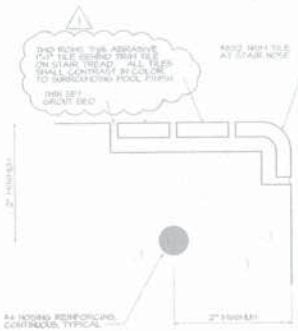
LAP POOL STAIR DETAIL — PL3.1-4
SCALE: 1/2"=1'-0"



TWO BEND HANDRAILS

SPECIFICATIONS
The railing shall be fabricated from one continuous piece of Stainless steel pipe. The pipe shall be 1.900" O.D. x .145" wall thickness, Type 304, polished to 320 grit.
Bends shall be smooth and wrinkle free.
Special order rails are available.
Anchor sockets and Escutcheon Plates are not included and should be ordered separately.

TWO BEND HANDRAIL DETAIL — PL3.1-5
SCALE: 1/2"=1'-0"



STAIR NOSING TILE DETAIL — PL3.1-6
SCALE: 12"=1'-0"

PL3.1-7

PL3.1-8

PL3.1-9

PL3.1-10

PL3.1-11

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NEW RECREATION CENTER AT JOHNSON PARK
ROCKDALE COUNTY, GEORGIA

DRAWN BY: E. FINN

PHASE: CONSTRUCTION DOCUMENTS

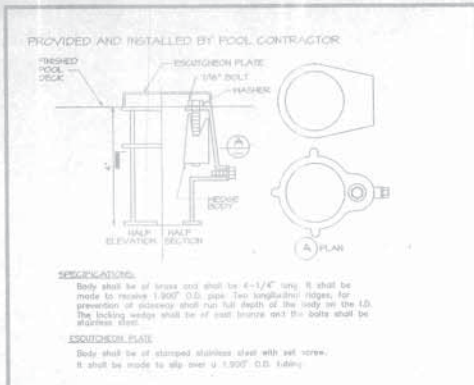
DATE	REVISION
1/20/97	BID/PERMIT
1/27/97	REVISION #1

REVISION

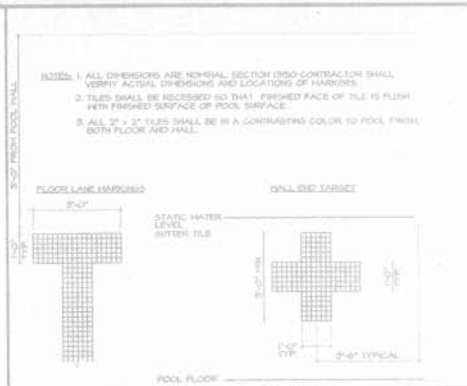
NO.	REVISION	DATE
1	[illegible]	[illegible]

CONTENTS: STRUCTURAL DETAILS

SHEET NUMBER: PL3.1

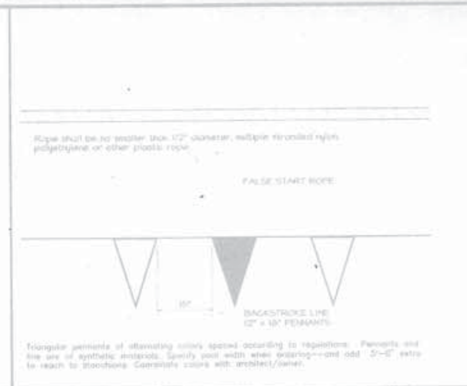


DECK ANCHOR SOCKET DETAIL — PL3.2-1 — SCALE: 1"=1'-0"

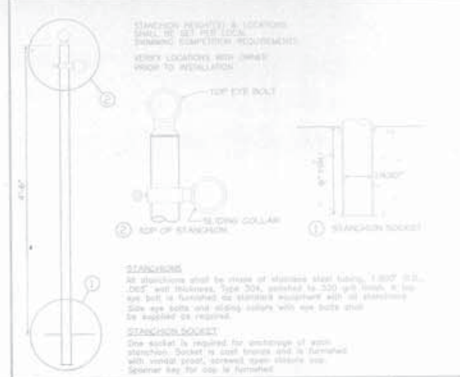


TILE LANE MARKERS & ENDWALL TARGETS DETAIL — PL3.2-2 — SCALE: 1"=1'-0"

BASE BID BLACK PAINT FINISH - ALTERNATE CERAMIC TILE

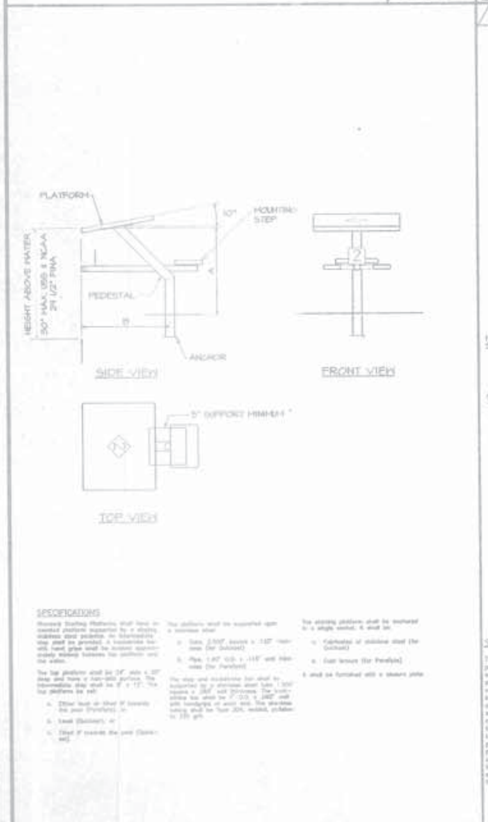


PENNANT LINES AND ROPE DETAIL — PL3.2-3 — SCALE: 1"=1'-0"

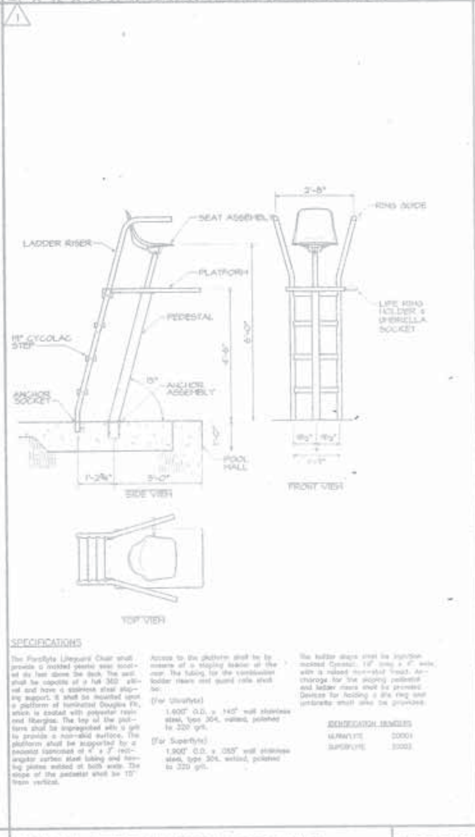


STANCHION DETAIL — PL3.2-4

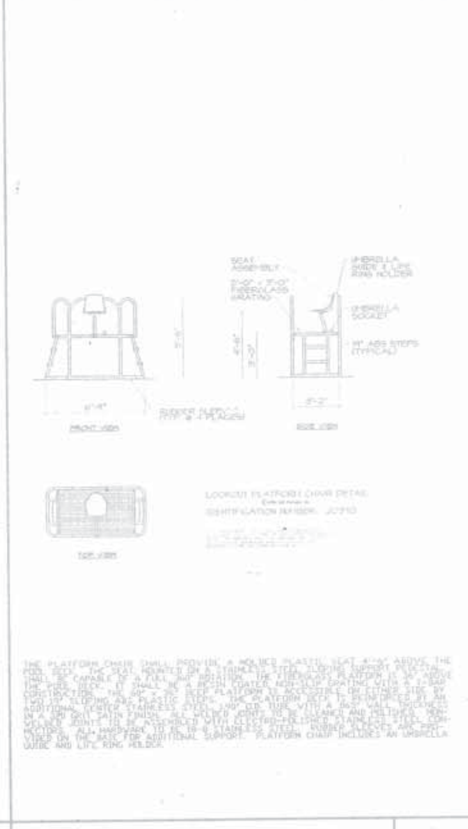
FALSE START LINE



KDI QUICKSET STARTING PLATFORM — PL3.2-5 — SCALE: 1"=1'-0"



REAR LADDER LIFEGUARD CHAIR — PL3.2-6 — SCALE: 1/4"=1'-0"



LOOKOUT PLATFORM CHAIR DETAIL — PL3.2-7 — SCALE: 1"=1'-0"

STANCHION DETAIL — PL3.2-8

BACKSTROKE FLAG LINE

Dowling Architects

NEW RECREATION CENTER AT JOHNSON PARK

ROCKDALE COUNTY, GEORGIA

DATE	REMARKS
1/20/97	BID/PERMIT
1/29/97	REVISION #1

STRUCTURAL DETAILS

PL3.2

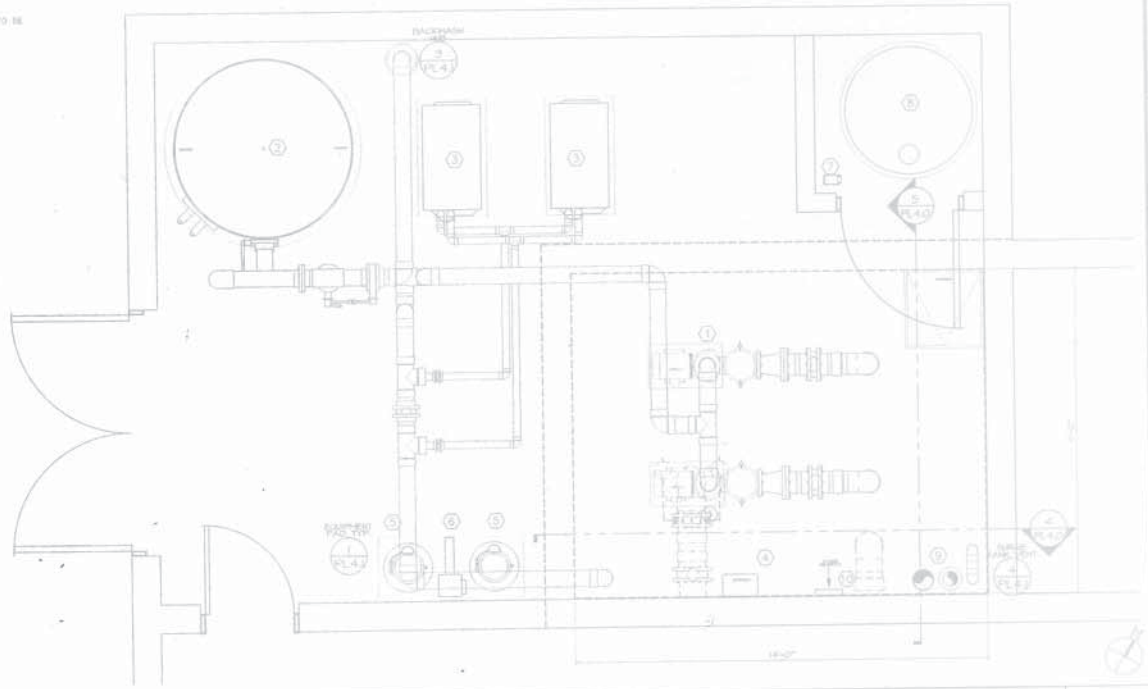
		QTY	DESCRIPTION
①	1/PL4.2 FILTRATION PUMPS	2	STAHL, BESSON L 10 H.P., 230/460 VOLT, 3 PH, 60 HZ, 3-00 U.P.M. 431 G.P.M. @ 70' TDH WITH COATED HAIR & LINT STRAINER, 8" SAC.
②	FILTER	1	NEPTUNE BENSON, MODEL CT3 300-48 ONE 72" DUAL CELL FILTER TANK, 48 SQ.FT. TOTAL FILTER AREA PROVIDED, 1118 G.P.M. PER 3.2 SF FILTER AREA, SINGLE LEVER LINKAGE, BACK-WASH ONE TANK AT A TIME.
③	HEATER	2	TELEDYNE LAARS, MODEL HB-E, 320,000 BTU INPUT, 1" GAS VALVE CONNECTION, 2" WATER CONNECTIONS, PROVIDE WITH 2.5 H.P. BARNE, FLOW SWITCH, INDOOR VENT KIT, PRESSURE RELIEF VALVE AND SAFETY CONTROLS PER STATE AND LOCAL BOILER CODES.
④	6/PL4.2 CHEMICAL CONTROLLER	1	STRANTROL MODEL SYSTEM 4, CONTINUOUS MONITORING AND CONTROL, pH RANGE = 0.0 TO 14.0, CHLORINE RANGE = 0.1 TO 20.0 PPM, ORP RANGE = 1-1000 mV W/WGRAB SAMPLE STREAM.
⑤	4/PL4.2 CHLORINE FEEDER	2	GUN POOL PRODUCTS PULSAR II CHLORINATOR, 2.8 TO 48.0 LBS PER DAY CAPACITY.
⑥	CHLORINE BOOSTER PUMP	1	GOULDS #NBF/2½" 3/4 H.P., 115/230 V., SINGLE PHASE, CODE GOULDS, STAINLESS STEEL CONSTRUCTION, 20 GPM @ 50' TDH.
	PULSAR SOLENOID	1	ASCO, 8210 SERIES, BRASS BODY, SEALS, AND DIAPHRAGM 1/4", NORMALLY CLOSED, ENCLOSURE WATERTIGHT, 115 VOLT.
	PULSAR VENTURI	1	MAZZEI, MODEL #178, 1", POLYPROPELENE CONSTRUCTION.
⑦	3/PL4.2 ACID FEED	1	LIQUID METRONIC, INC. #A151-625, 0.02 TO 2.0 GALLONS PER HOUR FEED RATE.
⑧	3/PL4.2 ACID STORAGE	1	CHEMTAINER, OC SERIES, DOUBLE WALL, 100 GALLON, 34" DIAMETER, 37" HIGH, WITH 8" MANWAY.
⑨	2/PL4.1 AUTO FILL	1	CLA-VAL CO. #11-01A, 1-1/4" CLA-VALVE W/ OFF FLOAT CONTROLLER. PROVIDE FLOAT ROD LENGTH AS REQUIRED.
⑩	10/PL4.2 FLOWMETER	1	DETERON STAHL-RD, EAGLE EYE SERIES, 0CR STAINLESS STEEL ANNUBAR, GASKET MOUNTED, WALL MOUNT FLOW METER DISPLAY. RANGE = 0-500 G.P.M.

NOTE: ~CURRENT CHARACTERISTICS MAY VARY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY VOLTAGE PRIOR TO ORDERING PUMPS.

MECHANICAL EQUIPMENT LIST | PL4.0-2 | SCALE: NONE

SECTION 13150 CONTRACTOR SHALL:

1. VERIFY EQUIPMENT PAD HEIGHT REQUIREMENTS FROM MANUFACTURERS & PROVIDE SHOP DRAWINGS TO POOL ENGINEER.
2. VERIFY ALL OPENINGS, PENETRATIONS, AND ELEVATIONS AND PROVIDE SHOP DRAWINGS TO POOL ENGINEER.
3. COORDINATE ALL PIPING AND EMBEDMENTS WITH AFFECTED TRADES.
4. REFER TO ARCHITECTURAL PLANS FOR ACTUAL ROOM DIMENSIONS AND FINISHED FLOOR ELEVATIONS.
5. SEE PL3.0-2 FOR REINFORCEMENT AT PIPE PENETRATIONS.
6. SUPPORT PIPES PER PL4.0-3.
7. ALL CONNECTIONS AND HANGERS IN SURGE TANK TO BE MADE OF STAINLESS STEEL.



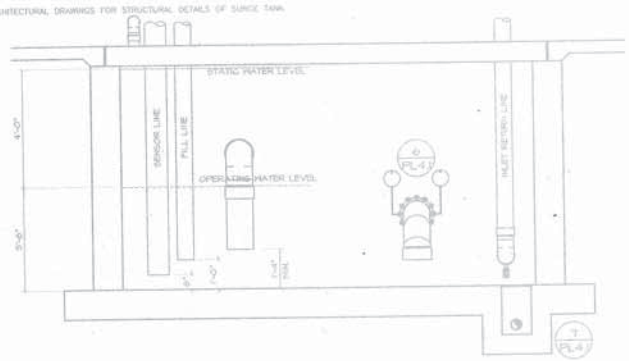
MECHANICAL EQUIPMENT ROOM PLAN | PL4.0-1 | SCALE: 3/4"=1'-0"

MINIMUM REQUIRED SUPPORT SPACING (IN FEET)

NOM. PIPE SIZE (in)	PVC PIPE									
	Schedule 40					Schedule 80				
	Temp °F					Temp °F				
	60	80	100	120	140	60	80	100	120	140
½	4-1/2	4-1/2	4	2-1/2	2-1/2	5	4-1/2	4-1/2	3	2-1/2
¾	5	4-1/2	4	2-1/2	2-1/2	5-1/2	5	4-1/2	3	2-1/2
1	5-1/2	5	4-1/2	3	2-1/2	6	5-1/2	5	3-1/2	3
1-¼	5-1/2	5-1/2	5	3	3	6	6	5-1/2	3-1/2	3
1-½	6	5-1/2	5	3-1/2	3	6-1/2	6	5-1/2	3-1/2	3-1/2
2	6	5-1/2	5	3-1/2	3	7	6-1/2	6	4	3-1/2
2-½	7	6-1/2	6	4	3-1/2	7-1/2	7-1/2	6-1/2	4-1/2	4
3	7	7	6	4	3-1/2	8	7-1/2	7	4-1/2	4
4	7-1/2	7	6-1/2	4-1/2	4	9	8-1/2	7-1/2	5	4-1/2
6	8-1/2	8	7-1/2	5	4-1/2	10	9-1/2	9	6	5
8	9	8-1/2	8	5	4-1/2	11	10-1/2	9-1/2	6-1/2	5-1/2
10	10	9	8-1/2	5-1/2	5	12	11	10	7	6
12	11-1/2	10-1/2	9-1/2	6-1/2	5-1/2	13	11	10	7	6

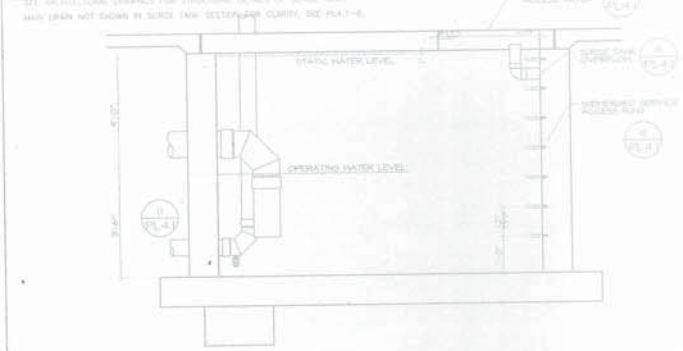
POOL PIPE SUPPORT NOTE | PL4.0-3 | SCALE: NONE

NOTE: SEE ARCHITECTURAL DRAWINGS FOR STRUCTURAL DETAILS OF SURGE TANK.



SURGE TANK SECTION | PL4.0-4 | SCALE: 3/4"=1'-0"

NOTE: SEE ARCHITECTURAL DRAWINGS FOR STRUCTURAL DETAILS OF SURGE TANK. MAN DRAIN NOT SHOWN IN SURGE TANK SECTION FOR CLARITY. SEE PL4.1-6.



SURGE TANK SECTION | PL4.0-5 | SCALE: 3/4"=1'-0"

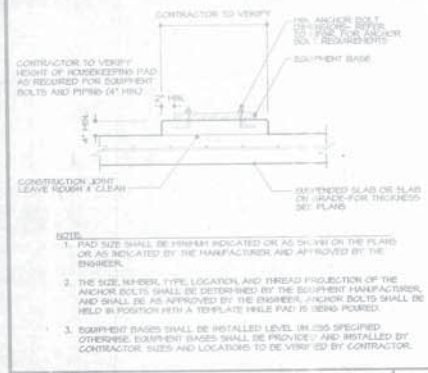
NEW RECREATION CENTER AT JOHNSON PARK
FAIRFAX COUNTY, VIRGINIA

Dowling Architects

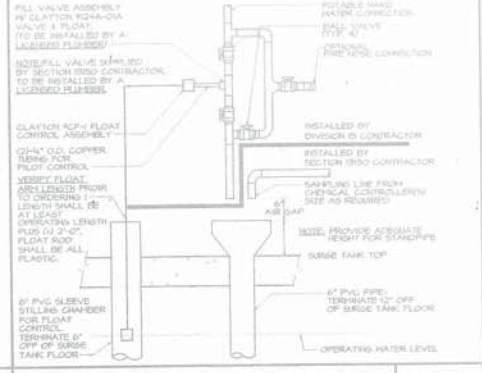
1/20/11 BID/PERMIT
1/28/11 REVISION #1

MECHANICAL EQUIPMENT PLAN & LIST AND DETAILS

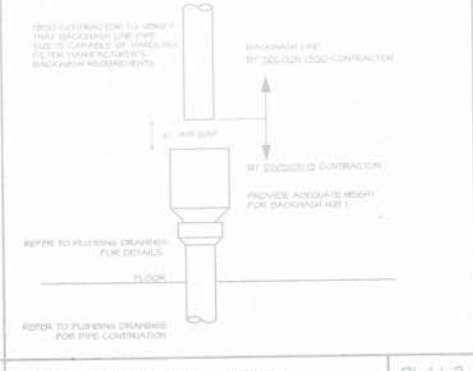
PL4.0



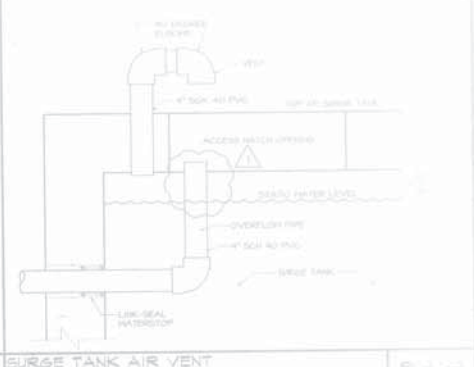
EQUIPMENT PAD DETAIL — PL4.1-1 — SCALE: NONE



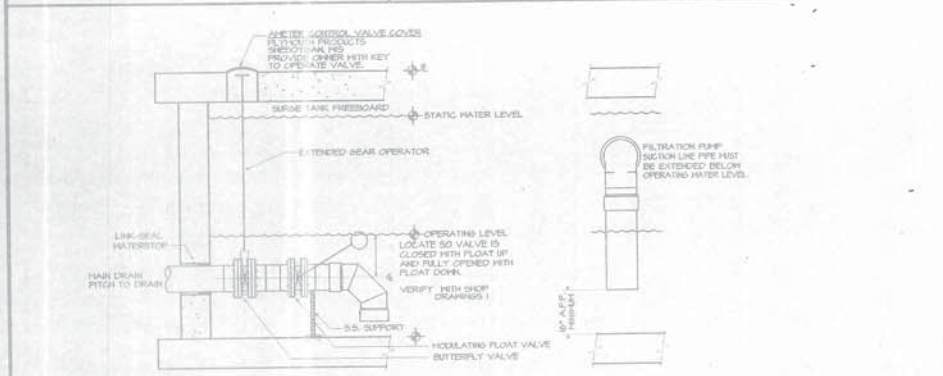
CLA-VALVE AUTO-FILL DETAIL — PL4.1-2 — SCALE: 3/4"=1'-0"



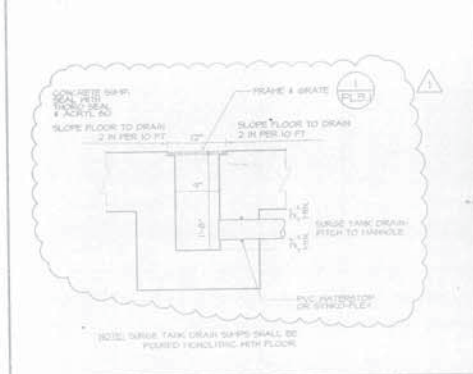
BACKWASH AIR GAP DETAIL — PL4.1-3 — SCALE: NONE



SURGE TANK AIR VENT AND OVERFLOW DETAIL — PL4.1-4 — SCALE: NONE

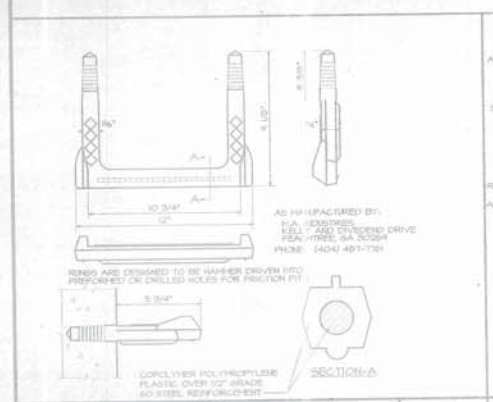


MAIN DRAIN PENETRATION / FILTER SUCTION PIPE DETAIL — PL4.1-6 — SCALE: 3/4"=1'-0"



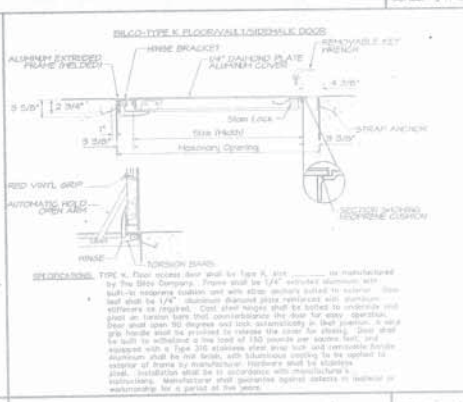
SURGE TANK DRAIN DETAIL — PL4.1-7 — SCALE: 1"=1'-0"

PL4.1-8 — SCALE: NONE



SUBMERGED SERVICE ACCESS RUNG DETAIL — PL4.1-9 — SCALE: 3"=1'-0"

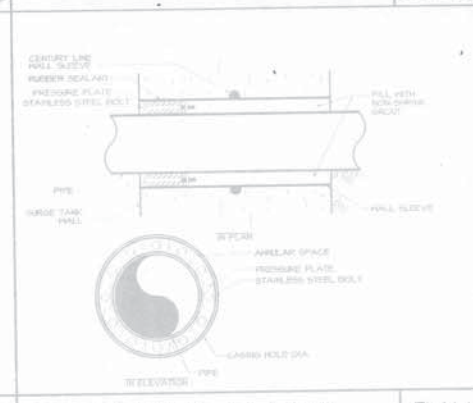
PROVIDED & INSTALLED BY SECTION 15100 CONTRACTOR



SPECIFICATIONS: TYPE K, Floor access door shall be Type K, size _____ as manufactured by The Bilco Company. Frame shall be 1/4" extruded aluminum with built-in neoprene isolation and with strap anchors bolted to exterior leg shall be 1/4" aluminum diamond plate reinforced with aluminum stiffeners as required. Cast steel hinges shall be bolted to underside and shall on torsion bars that counterbalance the door for easy operation. Door shall open 90 degrees and lock automatically in that position. A vinyl grip handle shall be provided to release the door for closing. Door shall be built to withstand a live load of 150 pounds per square foot, and equipped with a Type 316 stainless steel drop lock and removable handle. Aluminum shall be mill finish, with bituminous coating to be applied to exterior of frame by manufacturer. Hardware shall be stainless steel. Installation shall be in accordance with manufacturer's instructions. Manufacturer shall guarantee against defects in material or workmanship for a period of five years.

ACCESS HATCH DETAIL — PL4.1-10 — SCALE: 1"=1'-0"

PROVIDED & INSTALLED BY SECTION 15100 CONTRACTOR

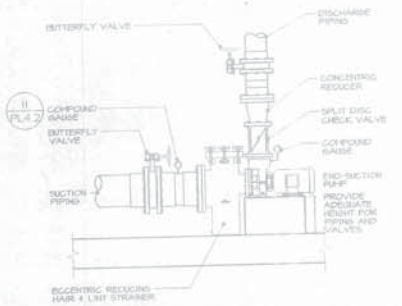


WALL SLEEVE / LINK SEAL DETAIL — PL4.1-11 — SCALE: NONE

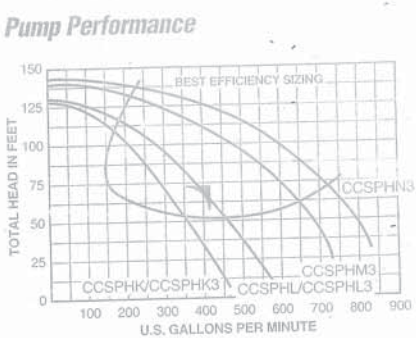
PL4.1-12

NEW RECREATION CENTER AT JOHNSON PARK
DEKALB COUNTY, GEORGIA

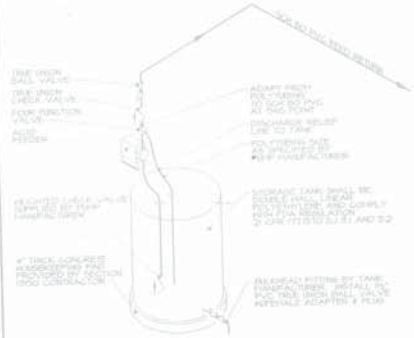
PL4.1



FILTRATION PUMP INSTALLATION DETAIL | PL4.2-1 | SCALE: 1/4"=1'-0"

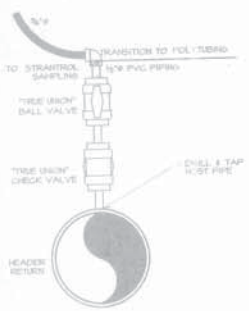


FILTRATION PUMP CURVE | PL4.2-2 | SCALE: NONE

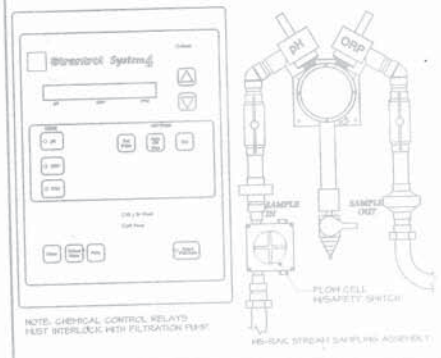


ACID SYSTEM ISOMETRIC DETAIL | PL4.2-3 | SCALE: NONE

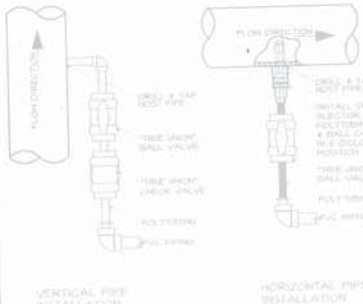
PULSAR ISOMETRIC DETAIL | PL4.2-4



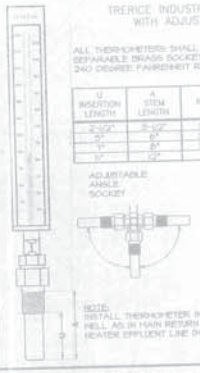
SAMPLE STREAM DETAIL | PL4.2-5 | SCALE: NONE



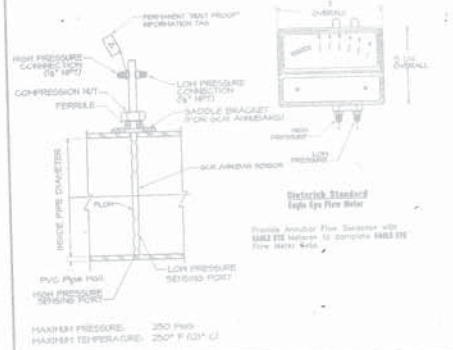
SYSTEM 4 CONTROLLER DETAIL | PL4.2-6 | SCALE: NONE



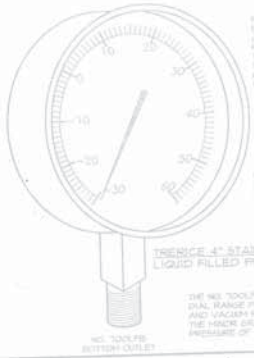
CHEMICAL INJECTOR DETAIL | PL4.2-7 | SCALE: NONE



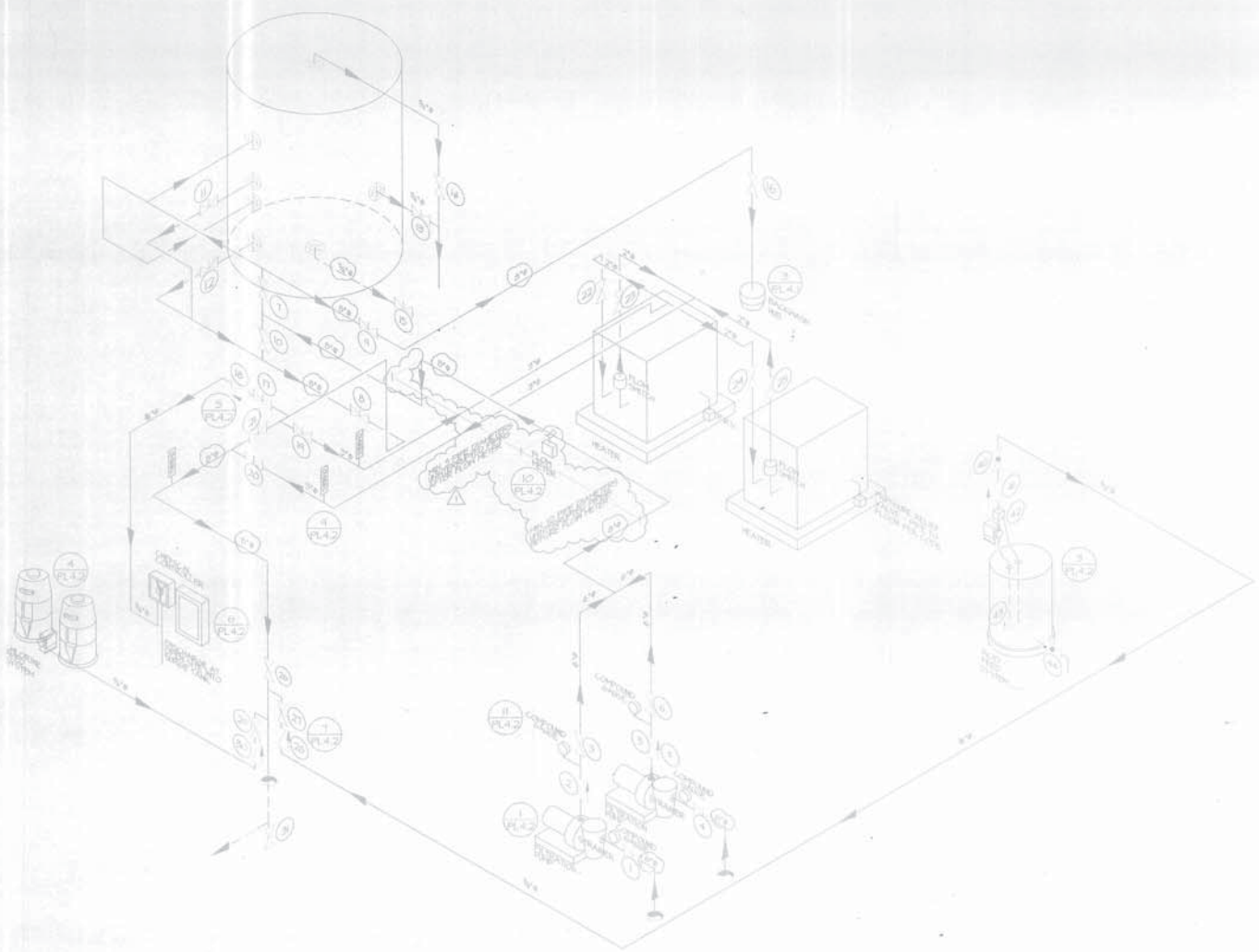
THERMOMETER DETAIL | PL4.2-9 | SCALE: NONE



ANNUBAR FLOWMETER DETAIL | PL4.2-10 | SCALE: NONE



COMPOUND GAUGE DETAIL | PL4.2-11 | SCALE: NONE



NO.	TYPE	OPERATOR	USE DESCRIPTION
1	BUTTERFLY	LEVER	FILTRATION PUMP SUCTION
2	CHECK	------	FILTRATION PUMP DISCHARGE
3	BUTTERFLY	GEAR	FILTRATION PUMP DISCHARGE
4	BUTTERFLY	LEVER	FILTRATION PUMP SUCTION
5	CHECK	------	FILTRATION PUMP DISCHARGE
6	BUTTERFLY	GEAR	FILTRATION PUMP DISCHARGE
* 7	BUTTERFLY	------	FILTER INFLUENT
* 8	BUTTERFLY	------	FILTER EFFLUENT
* 9	BUTTERFLY	------	FILTER BACKWASH
* 10	BUTTERFLY	------	FILTER BACKWASH
* 11	BUTTERFLY	------	FILTER CELL ISOLATION
* 12	BUTTERFLY	------	FILTER CELL ISOLATION
13	TUBE	------	FILTER AIR RELEASE
14	TUBE	------	FILTER AIR RELEASE
15	TUBE	------	FILTER DRAIN
16	BUTTERFLY	GEAR	FILTER BACKWASH INDICATOR
17	TUBE	------	CHEMICAL SAMPLING
18	TUBE	------	CHEMICAL SAMPLING
19	BUTTERFLY	LEVER	HEATER INFLUENT
20	BUTTERFLY	LEVER	HEATER EFFLUENT
21	BUTTERFLY	LEVER	HEATER BY-PASS
22	BUTTERFLY	LEVER	HEATER DRAIN
23	BUTTERFLY	LEVER	HEATER DRAIN
24	BUTTERFLY	LEVER	HEATER DRAIN
25	BUTTERFLY	LEVER	HEATER DRAIN
26	BUTTERFLY	GEAR	INLET SUCTION TANKS
27	TUBE	------	CHEMICAL INJECTION
28	TUBE	------	CHEMICAL INJECTION
29	TUBE	------	CHEMICAL INJECTION
30	TUBE	------	CHEMICAL INJECTION
31	TUBE	------	INLET SUCTION TANK DRAIN
32	BUTTERFLY	S.S.E.A.	POOL DRAIN
33	SKIMMER	------	POOL SKIMMERS
34	BUTTERFLY	S.S.E.A.	SURGE TANK DRAIN
35	SKIMMER	------	SURGE TANK SKIMMER
36			
37			
38			
39			
40	TUBE	------	ACID PUMP DISCHARGE
41	TUBE	------	ACID PUMP DISCHARGE
42	F.V.	------	ACID PUMP DISCHARGE
43	W.C.V.	------	ACID PUMP SUCTION
44	TUBE	------	ACID TANK DRAIN
45			
46			
47			
48			
49			

* = FURNISHED WITH PUMP
F.V. = FOOT VALVE (S.S.)
TUBE = PVC UNION BALL VALVE
S.S.E.A. = SUBMERGED SERVICE ELECTRIC ACTUATOR
F.V. = FOOT VALVE
W.C.V. = WEIGHTED CHECK VALVE

THE INTENT OF THIS VALVE LEGEND IS NOT [illegible] OF ALL VALVES REQUIRED FOR THIS [illegible] RESPONSIBILITY OF THE CONTRACTOR TO [illegible] VALVES REQUIRED.

FILTRATION ISOMETRIC	PL43-1	VALVE LEGEND
FOR SCHEMATIC USE ONLY!!	SCALE: NONE	