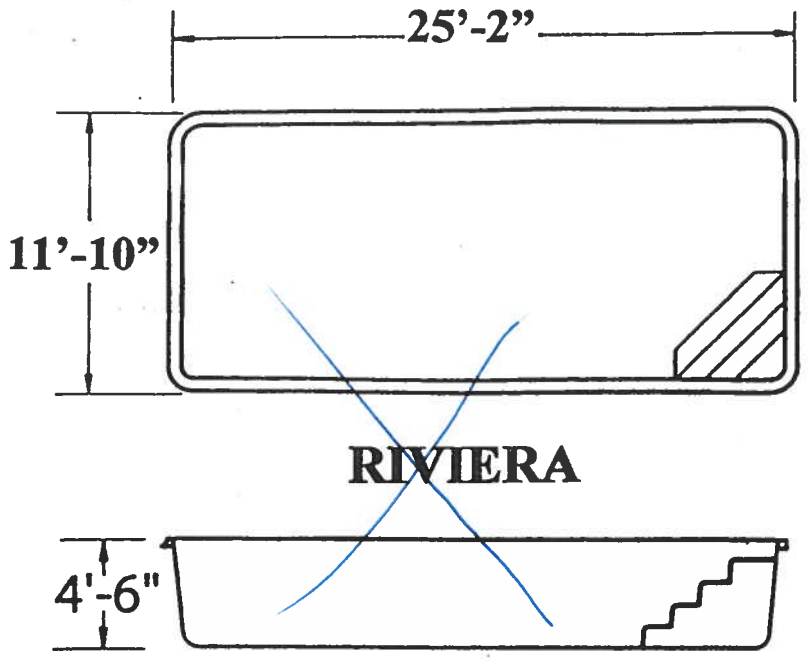
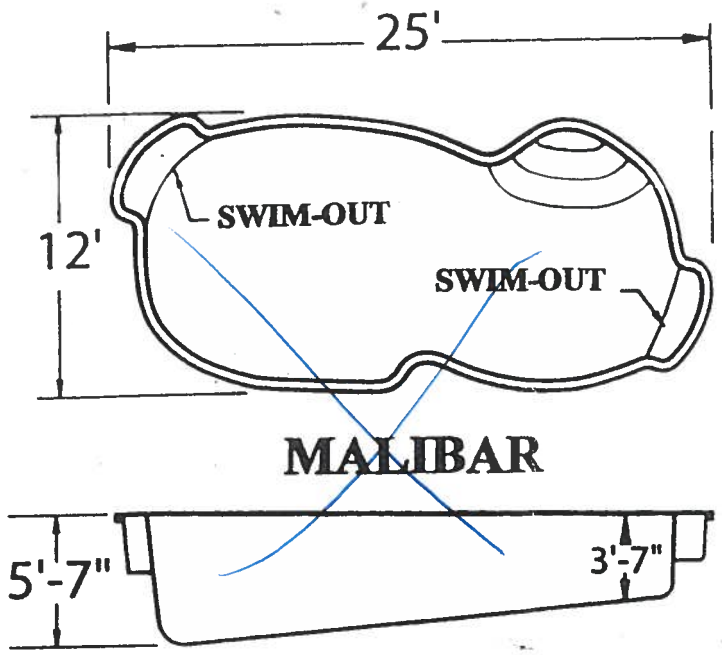
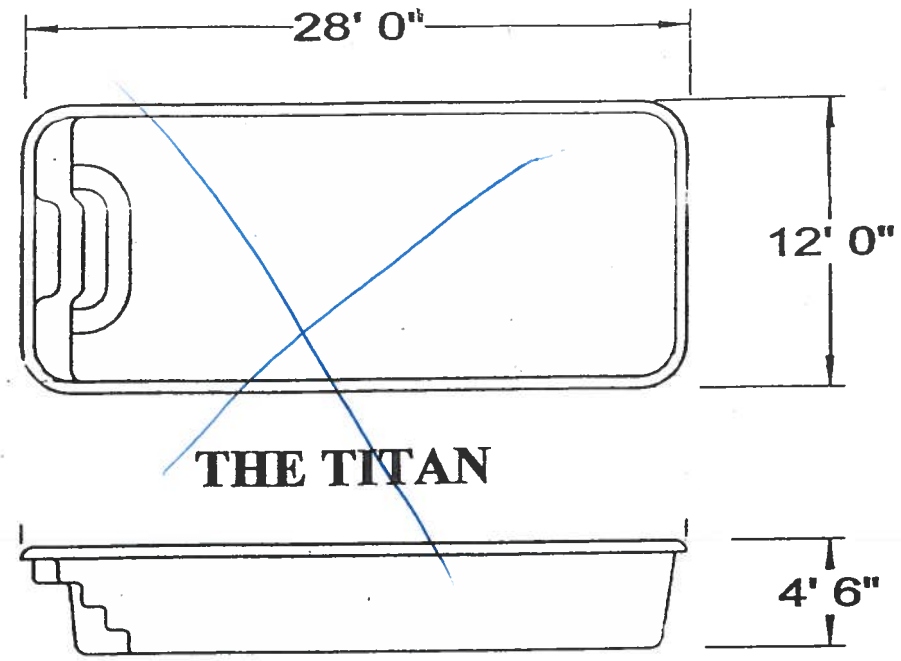


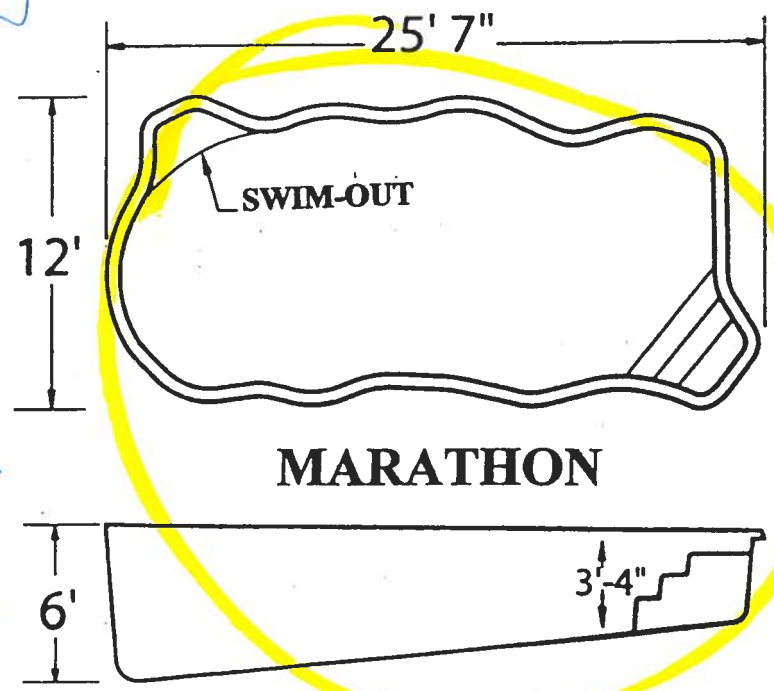
RIVIERA



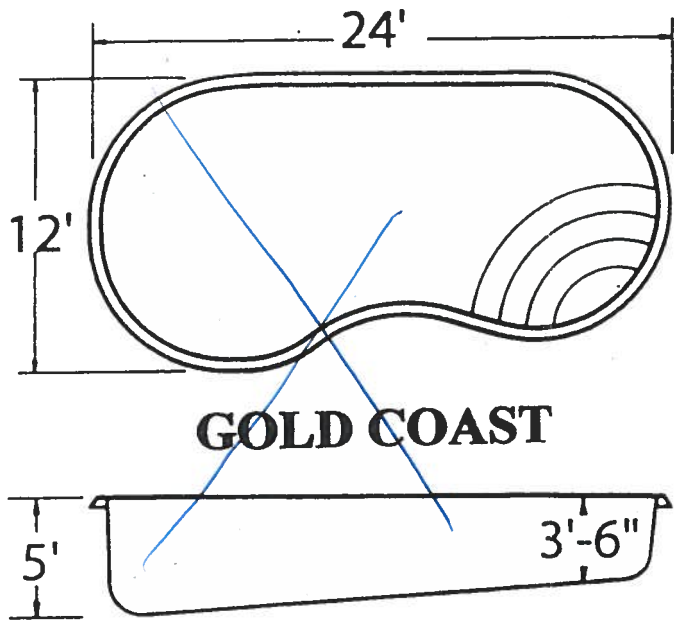
MALIBAR



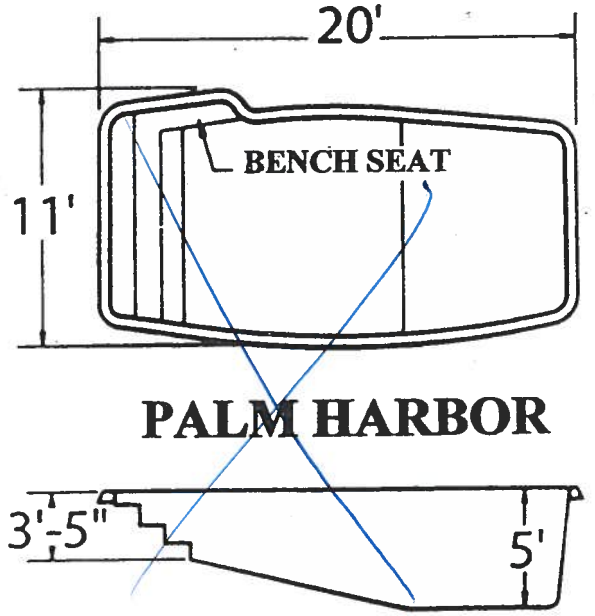
THE TITAN



MARATHON



GOLD COAST



PALM HARBOR

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

Ocean Reef Pools, Inc.
155 Valencia Drive, Box 510
Oak Hill, FL 32759
386.345.0267
1.888.345.0267
www.oceanreefpools.com

OceanReef POOLS "The Next Generation of Fiberglass"

CURTIS – SINCLAIR, INC.
8259 N. MILITARY TRAIL, SUITE 3
PALM BEACH GARDENS, FL 33418
C.O.A. – 5725

STEPHEN M. SINCLAIR LICENSE No 35631 STATE OF FLORIDA PROFESSIONAL ENGINEER

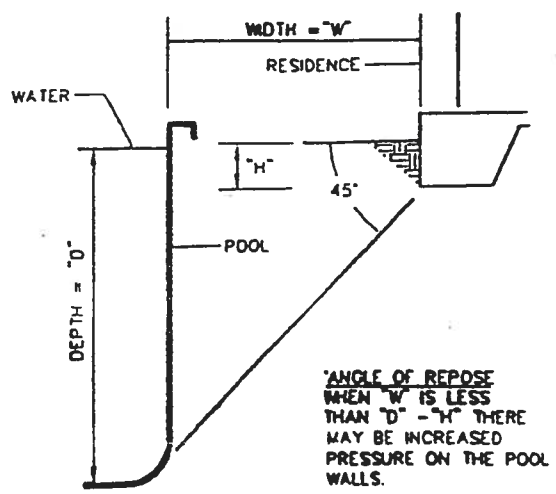
STEPHEN M. SINCLAIR, P.E.
PROFESSIONAL ENGINEER
FLORIDA LICENSE NO. 35631

AUG 17 2007

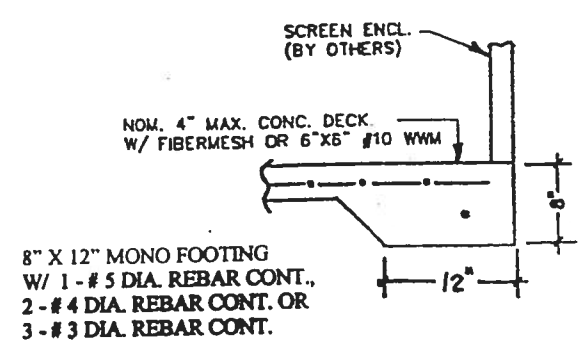
THE OCEAN REEF FIBERGLASS POOL AND SPA.

OCEAN REEF POOLS, INC. PRODUCES VARIOUS STYLES OF SWIMMING POOLS AND SPAS, THE OVERALL POOL DIMENSIONS, DEPTHS AND CAPACITIES ARE SHOWN IN TABLE 1. MEASUREMENTS ARE MADE TO THE OUTSIDE EDGE AND MAY VARY UP TO 3%.

POOL NAME	SIZE	GALLONS	PERIMETER FEET	SURFACE AREA	DEPTH	WEIGHT
ATLANTIC	15' X 33'	14,800	89	400	3' - 6' - 3'	2,000
BELLE ISLE	15' X 37'	20,000	98	486	3'5" - 8'2"	2,100
BISCAYNE - SPA	8' OCTAGON	475	25	40	36"	245
CORAL SPRINGS	10' X 20'	3,750	48	151	3' - 5'	980
CYRPESS - SPA	6' OCTAGON	400	20	34	32"	200
DAYTONA	7'6" X 14'	1,200	37	80	3'6"	340
EDGEWATER - SPA	7'10" ROUND	525	22	38	43"	275
FLORIDIAN	16' X 40'	19,620	111	640	3'6" - 7'11"	2,442
GOLD COAST	12' X 24'	6,000	60	218	3'6" - 5'	1,210
MALIBAR	12' X 25'	6,000	69	230	3'7" - 5'7"	1,200
MARATHON	12' X 25'7"	9,000	69	238	3'4" - 6'	1,400
MIAMI	14' X 28'	10,000	70	303	3'5" - 5'10"	1,375
MYSTIC - SPA	6' OCTAGON	500	21	34	38"	225
THE ORLANDO	14' X 30'	12,000	88	312	3'6" - 6'	1,600
PALM HARBOR	11' X 20'	4,000	58	171	3'5" - 5'	965
RIVIERA	11'10" X 25'2"	8,100	65	225	4'6"	1,400
ROYAL PALM	14' X 31'	12,800	82	372	3'6" - 6'	1,672
SANIBEL	8'6" X 14'	2,100	42	87	4'	684
SEABRING	15' X 34'	13,200	83	408	3'5" - 6'6"	2,000
TALLAHASSEE	14' X 30'	12,500	76	318	3'6" - 6'6"	1,600
THE VENICE	8' X 10'	2,500	36	80	3'3"	525
CORAL SPRINGS - DISPLAY	10' X 20'	3,750	48	151	22"	980
KEY LARGO	14' X 31'	13,000	88	395	3'5" – 6'	1,672
THE TITAN	12' x 28'	8800	74	295	4' 6"	1400



ANGLE OF REPOSE
N.T.S.



FOOTING FOR SCREEN. ENCL.
N.T.S. – WHEN APPLICABLE

ENGINEERING REPORT ON THE OCEAN REEF POOL
MARCH 21, 2005

THIS REPORT DEALS PRIMARILY WITH THE STRENGTH AND CHARACTERISTICS OF THE FIBERGLASS POLYESTER MATERIAL USED IN THE CONSTRUCTION OF THE OCEAN REEF POOLS. THESE POOLS ARE MANUFACTURED BY THE FIRM OCEAN REEF POOLS, INC.

THE ABILITY OF THE POOL STRUCTURE TO CARRY THE LOADS IMPOSED ON IT (WHICH ARE PRIMARILY STATIC LOADS, DUE TO WATER PRESSURE, GROUND SETTINGS AND DYNAMIC LOADS DUE TO EARTHQUAKES) DEPENDS ON THE STRENGTH AND ENERGY ABSORPTION QUALITIES FO THE FIBERGLASS REINFORCED PLASTIC MATERIAL COMPOSED OF ISOPHTHALIC RESIN, VINYL ESTER RESIN, FIBERGLASS AND CERAMIC.

TO ASCERTAIN THE MECHANICAL BEHAVIOR OF THE ABOVE MATERIAL, TENSILE AND FLEXURE SPECIMENS WERE MADE FROM MATERIALS REMOVED FROM THE WALLS OF EXISTING POOLS. ALL OF THESE SPECIMENS WERE TESTED AT STRUCTURAL COMPOSITES, INC. THE TESTS WERE CONDUCTED IN ACCORANCE WITH ASTM D-638-91 FOR "TENSILE PROPERTIES OF PLASTICS" AND ASTM D –790-92 FOR FLEXURAL PROPERTIES OF UNREINFORCED AND REINFORCED PLASTICS AND ELECTRICAL INSULATING MATERIALS.

FROM THE LOAD TESTS IN TENSION AND FLEXURE, THE FOLLOWING MECHANICAL PROPERTIES WERE EVALUATED:

(1) TENSILE STRENGTH.
(2) FLEXURAL STRENGTH.

THE AVERAGE VALUE OF THESE PROPERTIES APPEAR AS FOLLOWS:

ASTM D 638 TENSILE STRENGTH = 19,555 psi, TENSILE MODULUS = 1.053 Mpsi
ASTM D 790 TENSILE STRENGTH = 29,377 psi, TENSILE MODULUS = 0.9369 Mpsi

THE FIBER REINFORCED PLASTIC IS STRONG, TOUGH AND RESILIENT MATERIAL. COMPARED TO GUNITE, THIS MATERIAL IS STRONGER UNDER TENSILE AND FLEXURAL LOADINGS.

IN CONCLUSION, OCEAN REEF POOLS, WHEN PROPERLY INSTALLED IN COMPACTEDGROUND AGAINST A COMPACTED SAND CUSHION (COMPACTED BY WETTING) CAN SAFELY CARRY THE LOADS DUE TO WATER PRESSURE AND GROUND MOVEMENT.

OceanReef POOLS "The Next Generation of Fiberglass"
Ocean Reef Pools, Inc.
155 Valencia Drive, Box 510
Oak Hill, FL 32759
386.345.0267
1.888.345.0267
www.oceanreefpools.com

NOTES:

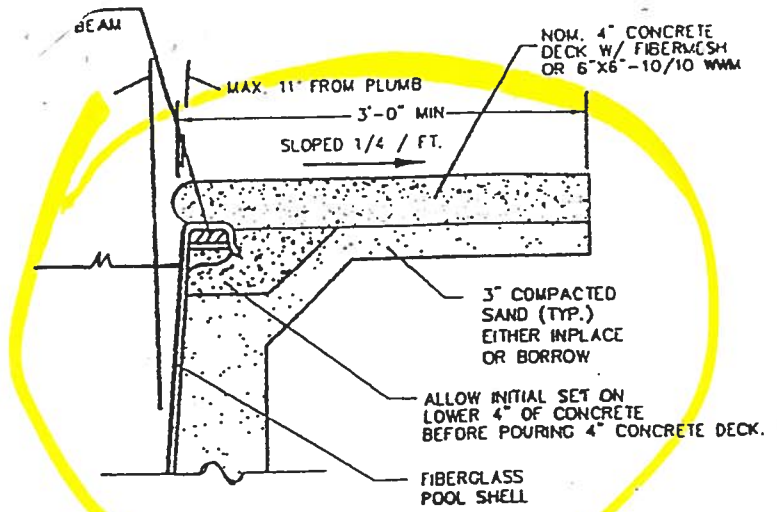
1. PROVIDE MAIN DRAINS W/ ANTI-VORTEX COVER.
2. PROVIDE SKIMMER.
3. AS A SAFETY PRECAUTION, VALVE MAIN DRAIN ONLY.
4. PROVIDE AIR RELIEF VALVE AND PRESSURE GAUGE AT FILTER
5. ELECTRICAL CONNECTIONS AND BONDING SHALL BE IN ACCORDANCE WITH 2005 NATIONAL ELECTRICAL CODE.
6. SLOPE DECK AT ¼" PER FOOT AWAY FROM POOL
7. FENCES, BARRIERS AND OTHER SAFETY REQUIREMENTS TO BE AS REQUIRED BY THE 2006 SUPPLEMENT OF THE 2004 FLORIDA BUILDING CODE - RESIDENTIAL.
8. THIS DRAWING TO BE USED IN CONJUNCTION WITH OCEAN REEF POOLS SPECIFICATOINS AND INSTALLATION REQUIREMENTS.
9. THIS DRAWING IS PREPARED TO SHOW GENERAL INFORMATION REGARDING POOL GEOMETRY AND DIMENSIONS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR MANUFACTURING VARIANCE NOR THE INSTALLATION ON A SPECIFIC SITE WITHOUT KNOWLEDGE AND INVESTIGATION BY THE ENGINEER.
10. A SITE PLAN SHALL ACCOMPANY THIS DRAWING AND SHALL SPECIFY SETBACKS, BARRIER TYPE AND DECK SPECIFICATONS INCLUDING DRAINAGE.
11. ALL POOLS ARE TYPE "O"- NO DIVING - FLOOR SLOPES ARE CONSTANT. (NO SLOPE BREAK EXCEPT AS SHOWN)
12. STEPS TO HAVE 10" MIN. TREAD, 12" MAX. RISER.
13. THE POOL DESIGN, CONSTRUCTION AND WORKMANSHIP SHALL CONFORM WITH THE FOLLOWING REQUIREMENTS:
    ANSI/NSPI 3-99 FOR PERMANENTLY INSTALLED RESIDENTIAL SPAS.
    ANSI/NSPI 5-03 STANDARDS FOR RESIDENTIAL INGROUND SWIMMING POOLS.
    2005 NATIONAL ELECTRICAL CODE.
14. PLAN DIMENSIONS ARE TO OUTSIDE EDGE OF POOL COPING. COPING WIDTH IS 6" TYPICAL, WATERLINE DIMENSIONS ARE, THEREFORE, 12" LESS THAN PLAN DIMENSIONS.
15. POOL PLANS ARE DESIGNED TO MEET THE 2006 SUPPLEMENT OF THE 2004 FLORIDA BUILDING CODE - RESIDENTIAL – CHAPTER 41 SWIMMING POOLS – SECTION 4101.6.

CURTIS – SINCLAIR, INC.
8259 N. MILITARY TRAIL, SUITE 3
PALM BEACH GARDENS, FL 33418
C.O.A. – 5725

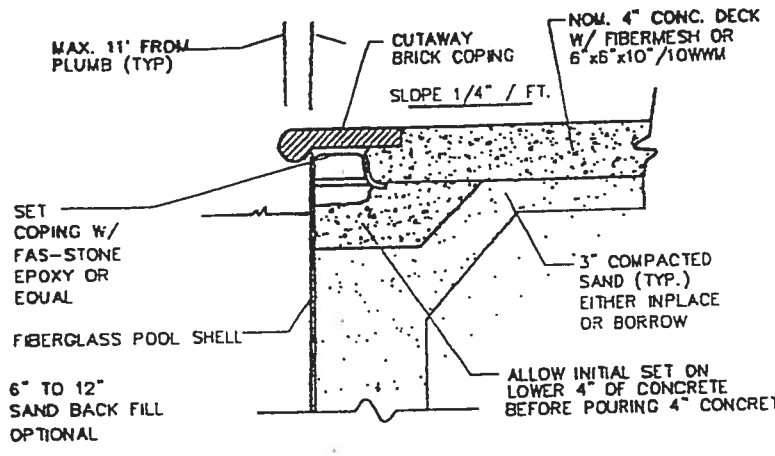
STEPHEN M. SINCLAIR LICENSE No 35631 STATE OF FLORIDA PROFESSIONAL ENGINEER

STEPHEN M. SINCLAIR, P.E.
PROFESSIONAL ENGINEER
FLORIDA LICENSE NO. 35631

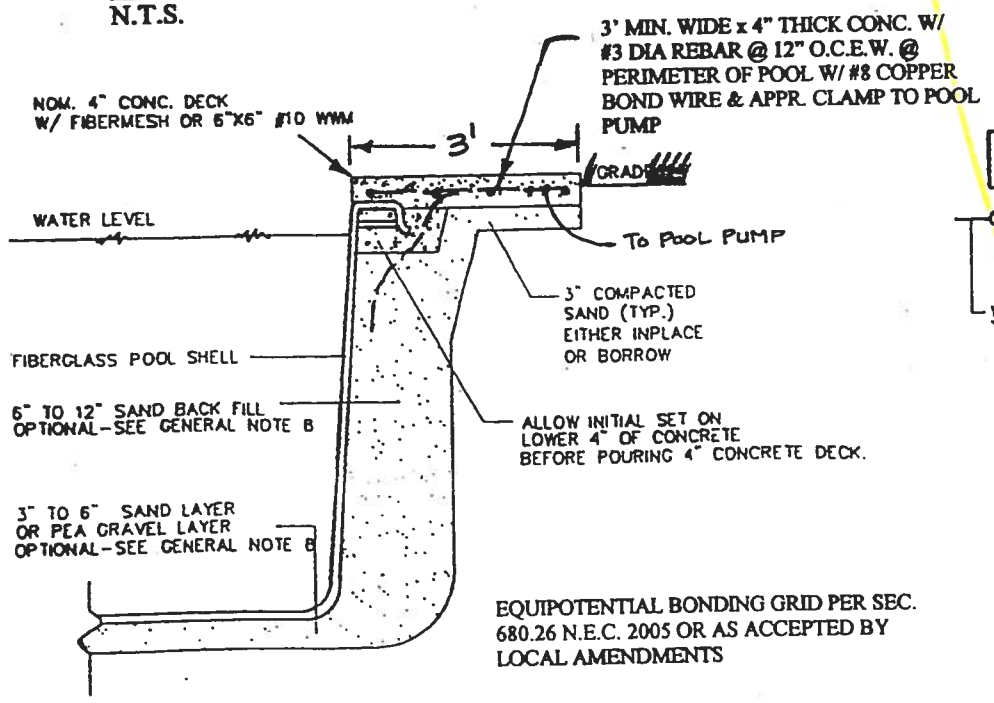
AUG 17 2007



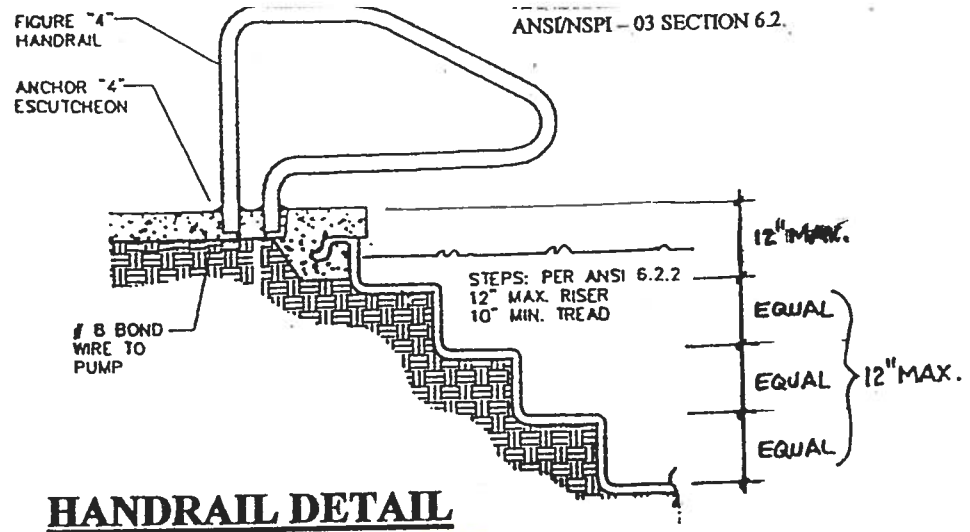
TYP. CANTILEVER DECK DETAIL
N.T.S.



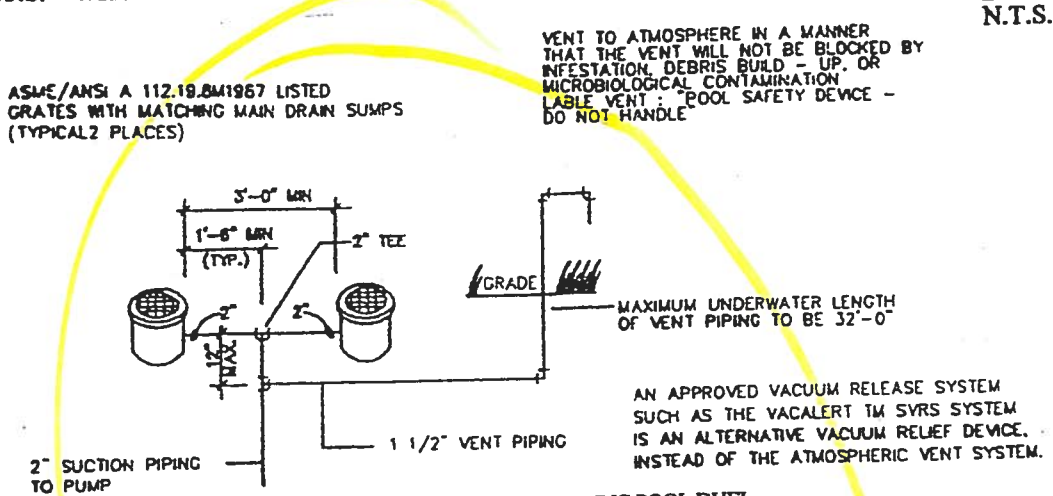
TYP. BRICK COPING DETAIL
N.T.S.



TYP. INSTALLATION SECTION
N.T.S.

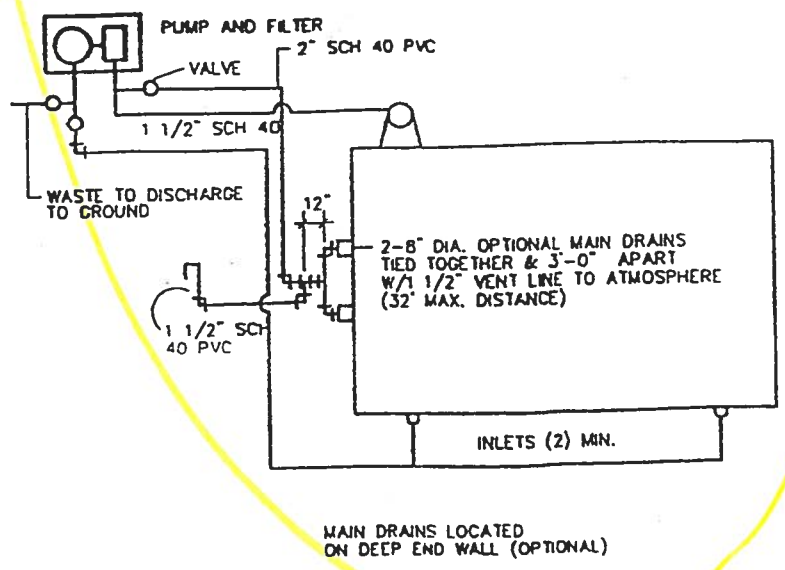


HANDRAIL DETAIL
N.T.S. – WHEN APPLICABLE

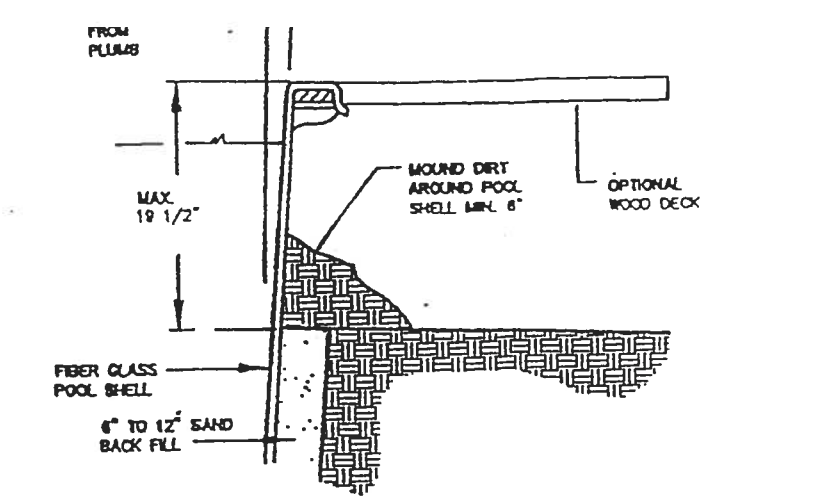


APPROVED SWIMMING POOL, SPA AND WADING POOL DUEL MAIN DRAIN ATMOSPHERIC VENT ARRANGEMENT FOR COMPLIANCE WITH SECTION R 4101.6.6.3 OF THE 2006 SUPPLEMENT OF THE 2004 FLORIDA CODE - RESIDENTIAL. HANDRAILS TO COMPLY WITH ANSI/NSPI – 03 SECTION 6.2.

OPTIONAL DRAINS DETAIL
N.T.S.

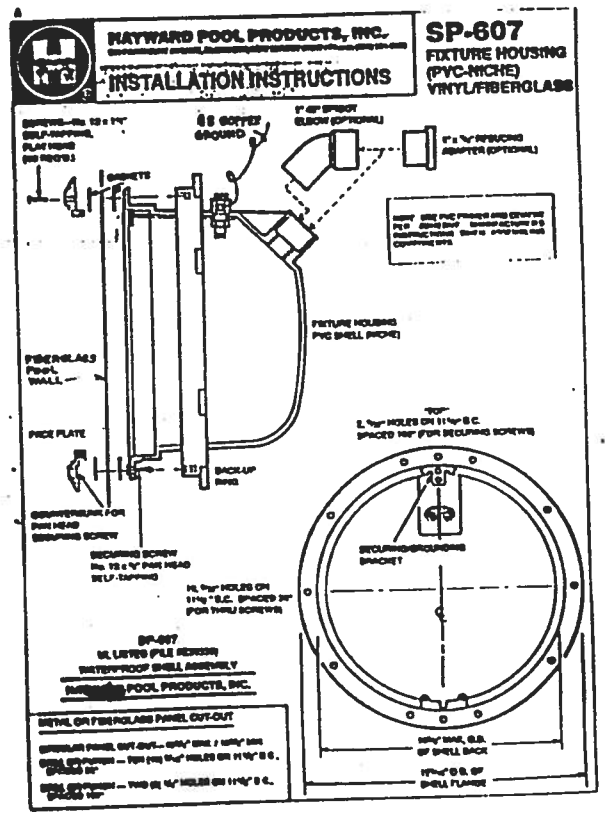


TYP. PLUMBING SCHEMATIC
N.T.S.



TYP. ABOVE GROUND INSTALLATION
N.T.S.

1 1/2" ATMOSPHERIC VENT LENGTH TABLE 3 SECOND RELEASE	
PUMP SIZE	UNDERWATER LENGTH
3/4 HP	12' MIN. – 19' MAX.
1 HP	12' MIN. – 24' MAX.
1 1/2 HP	12' MIN. – 31' MAX.
2 HP	12' MIN. – 41' MAX.



LIGHT DETAIL
N.T.S.

Ocean Reef Pools, Inc.
155 Valencia Drive, Box 510
Oak Hill, FL 32759
386.345.0267
1.888.345.0267
www.oceanreefpools.com

OceanReef POOL
"The Next Generation of Fiberglass"

CURTIS – SINCLAIR, INC.
8259 N. MILITARY TRAIL, SUITE 3
PALM BEACH GARDENS, FL 33418
C.O.A. – 5725

STEPHEN M. SINCLAIR LICENSE No 35631 STATE OF FLORIDA PROFESSIONAL ENGINEER

STEPHEN M. SINCLAIR, P.E.
PROFESSIONAL ENGINEER
FLORIDA LICENSE NO. 35631

AUG 17 2007