

HOUSE RENOVATION, POOL DECK, RETAINING WALL, SITE IMPERVIOUS CALCULATIONS, DRAINAGE SWALE CALCULATIONS/CROSS SECTIONS, GAS CONNECTION FOR HEATER AND TREES LOCATION-BY OTHERS UNDER PERMIT.

PROPERTY ADDRESS:
12020 SW 77th AVENUE
PINECREST, FL. 33156

LEGAL DESCRIPTION
LOT 2, BLOCK 2, OF SUNILAND ESTATES,
ACCORDING TO THE PLAT THEREOF, AS
RECORDED IN PLAT BOOK 50, PAGES 28,
OF THE PUBLIC RECORDS OF MIAMI-DADE
COUNTY, FLORIDA.

NOTES:
ALL ELEVATIONS WHEN SHOWN REFER TO 1929
NATIONAL GEODETIC VERTICAL DATUM (NGVD 1929).

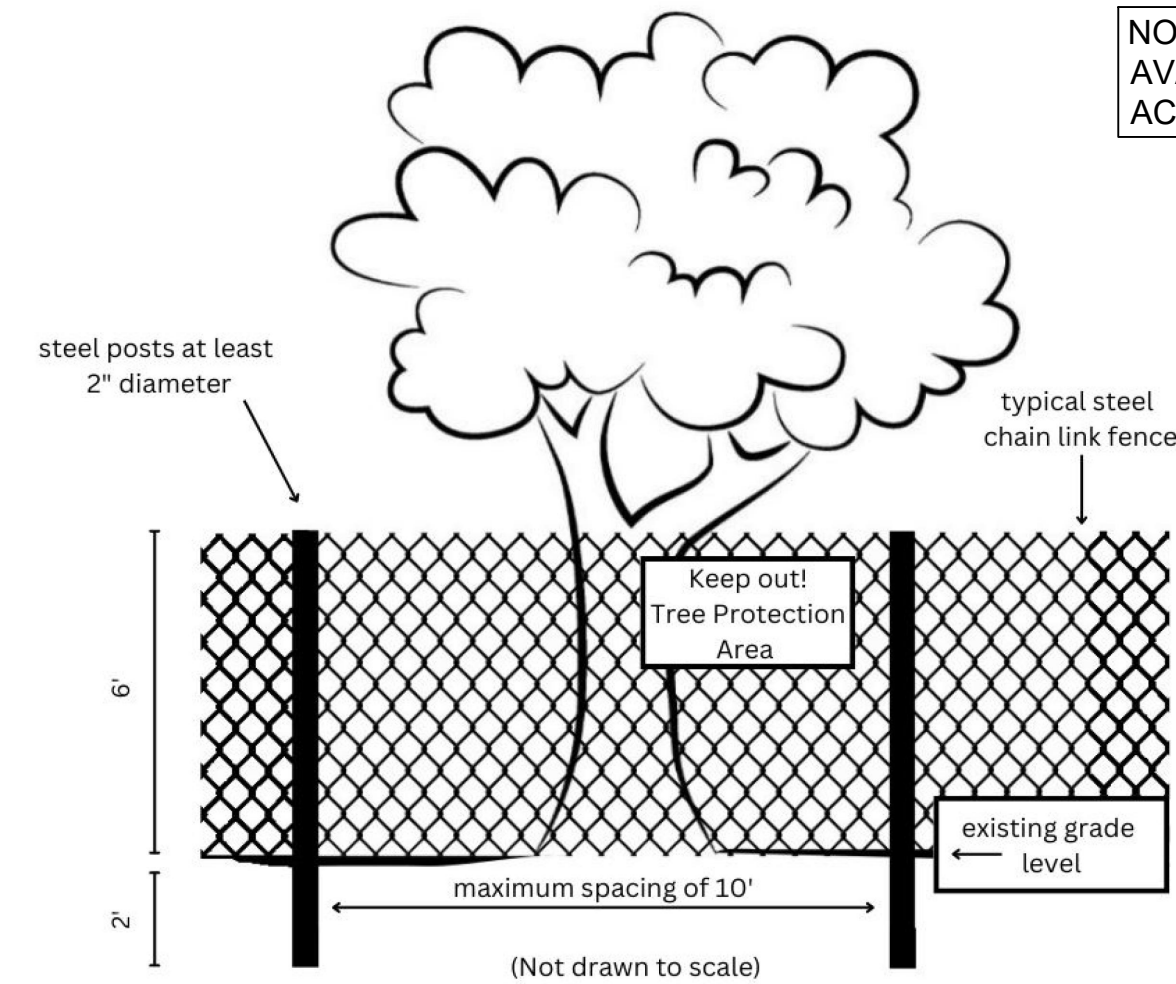
FLOOD ZONE DATA:
BASE FLOOD ELEVATION: N/A
FLOOD ZONE: X
COMMUNITY NAME & NUMBER VILLAGE OF
PINECREST 120425
MAP & PANEL NUMBER 12086C0462 SUFFIX L

HYDROSTATIC UPLIFT | FLOATATION ANALYSIS

MARK	VARIABLE
A. WATER LEVEL (NGVD) H	12.50
B. DEPTH OF POOL (FT)	7.00
C. FLOOD CRITERIA (NAVD) [PER FEMA FLOOD MAPS]	9.00
D. FLOOD CRITERIA (NGVD) [CONVERTED]	10.50
E. POOL BOTTOM ELEVATION (NGVD) [A - B]	5.50
F. UPLIFT (FT) [C - D]	5.00
G. LESS 2.0' FOR HYDROSTATIC UPLIFT VALVE (FT) [E - 2]	3.00

CONCRETE SLAB - DEPTH (IN) 15.00
CONCRETE SLAB - DEPTH (FT) X 150LB/CF 187.50
UPLIFT FORCE - UPLIFT [F] X 62.4LB/CF (WITH VALVE) 187.20

SLAB WEIGHT > UPLIFT = OKAY, NO UPLIFT



TREE / PALM PROTECTION DETAIL
N.T.S

SITE PLAN

SCALE: 1/16"=1'

EROSION/SEDIMENTATION CONTROL
SILT FENCE TO PREVENT ALL SOILS
AND DEBRIS FROM ENTERING INTO
THE ADJACENT PROPERTY.

PROPOSED 4' HIGH ALUM.
FENCE AND DOUBLE GATE WITH
SELF-LATCHING, SELF-CLOSING
BY OTHERS,
UNDER SEPARATE PERMIT.

NOTE: EXISTING GRADE
ELEVATIONS AROUND POOL
AREA WILL BE RE-GRADED
BY OTHERS, REFER TO
GRADING & DRAINAGE
PLAN BY OTHERS FOR
FURTHER INFORMATION.

GENERAL NOTES

GOVERNING CODES AND GENERAL NOTES:
2023 FLORIDA BUILDING CODE (FBC), 8TH EDITION AND ALL OTHER CODES, RULES, REGULATIONS, AND RESTRICTIONS HAVING JURISDICTION ON THE PROJECT SHALL GOVERN INCLUDING 2023 FBC 8TH EDITION BUILDING, RESIDENTIAL, ENERGY CONSERVATION, MECHANICAL, PLUMBING AND FUEL GAS, PLUS RESIDENTIAL CHAPTER 45: SWIMMING POOLS & BUILDING CHAPTER 4, SECTION 454 SWIMMING POOLS & BATHING PLACES SHALL SPECIFICALLY GOVERN
2023 FBC 8TH EDITION ENERGY CONSERVATION CE404.2, SERVICE WATER HEATING EQUIPMENT PERFORMANCE EFFICIENCY: GAS POOL HEATERS 82%, HEAT PUMP 4.0 COP AT LOW AIR TEMPERATURE, SHALL BE MET FOR THIS PROJECT.
2023 FBC 8TH EDITION R4501.6.1 CONFORMANCE STANDARD: DESIGN, CONSTRUCTION AND WORKMANSHIP SHALL BE IN CONFORMITY WITH THE REQUIREMENTS OF ANSI/APSP/ICC 3; ANSI/APSP/ICC 4; ANSI/APSP/ICC 5; ANSI/APSP/ICC 6; ANSI/APSP/ICC 7.
2023 FBC 8TH EDITION R4501.6.3 WATER VELOCITY: POOL PIPING IS DESIGNED SO THE WATER VELOCITY WILL NOT EXCEED 10 FEET PER SECOND FOR PRESSURE PIPING AND 8 FEET PER SECOND FOR SUCTION PIPING. MAIN SUCTION OUTLET VELOCITY MUST COMPLY WITH ANSI/APSP/ICC 7. EXCEPTION: JET INLET FITTINGS SHALL NOT BE DEEMED SUBJECT TO THIS REQUIREMENT.
HYDROSTATIC RELIEF VALVES: 2023 FBC 8TH EDITION SECTION 454.2.214 AND R4501.214 HYDROSTATIC RELIEF DEVICE: IN AREAS OF ANTICIPATED WATER TABLE AN APPROVED HYDROSTATIC RELIEF DEVICE SHALL BE INSTALLED. EXCEPTION: PLASTIC LINE POOLS. 2023 FBC 8TH EDITION BUILDING CHAPTER 4, SECTION 454.1.6.5.10.4: IF THE AREA IS SUBJECT TO HIGH GROUND WATER, THE POOL SHALL BE DESIGNED TO WITHSTAND HYDRAULIC UPLIFT OR SHALL BE PROVIDED WITH HYDROSTATIC RELIEF DEVICES.
POOL STRUCTURE HAS NOT BEEN DESIGNED FOR EXTERNAL SURCHARGE LOADING FROM ADJACENT EQUIPMENT, STRUCTURES, OR FOUNDATIONS, ETC. CONTRACTOR SHALL CONFIRM THAT ALL ADJACENT LOADS BEAR AT A DEPTH SUFFICIENT TO PREVENT SURCHARGE LOADING THE POOL STRUCTURE.
CONCRETE SHALL CONFORM TO THE LATEST EDITION OF ACI 301 AND ACI 318, WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI AND A W/C RATIO OF 0.45 MAXIMUM. POOL CONCRETE CAN BE APPLIED PNEUMATICALLY AND SHALL CONFORM TO THE LATEST EDITION OF ACI 506.2.
REINFORCING STEEL SHALL CONFORM TO THE LATEST EDITION OF ASTM A615, GRADE 40 (#3, #4), GRADE 60 (#5) AND HAVE A MINIMUM LAP DISTANCE OF 18" FOR #3, 24" FOR #4, AND 30" FOR #5 TO MEET THE REQUIREMENTS OF THE LATEST EDITION OF ACI 318. DISCONTINUOUS REINFORCEMENT BARS SHALL TERMINATE IN STANDARD ACI HOOKS. ALL HOOKS ARE STANDARD UNLESS OTHERWISE NOTED.
2023 FBC 8TH EDITION B1903.3 GLASS FIBER REINFORCED CONCRETE: GFRC AND THE MATERIALS USED IN SUCH CONCRETE SHALL BE IN ACCORDANCE WITH THE PCI MNL 128 STANDARD, IF SHOWN ON THE DRAWINGS.
POOL PIPING SHALL BE N.S.F. APPROVED AND MINIMUM SCHEDULE 40. 2023 FBC 8TH EDITION B454.2.6.5 PIPING INSTALLATION: ALL PIPING MATERIAL SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION STANDARDS. EXCEPTION: PRIMER AND GLUE ON EXPOSED ABOVE-GROUND PIPING ARE NOT REQUIRED TO BE COLORED.
NDPES: A SILT FENCE AND ANY OTHER ITEM, SUCH AS A CONSTRUCTION ENTRANCE, WITH TIRE WASH STATION SHALL BE INSTALLED AND INSPECTED, IF REQUIRED, PRIOR TO CONSTRUCTION SURROUNDING THE WORK AREA MEETING THE REQUIREMENTS OF THE AHJ.
OSHA 1926 SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION SHALL BE FOLLOWED ESPECIALLY DURING OPEN EXCAVATION AND TRENCHING.
EXISTING CONDITIONS, DIMENSIONS AND QUANTITIES SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION, AS THE ENGINEER HAS NOT BEEN TO THE LOCATION AND TYPICAL FIELD CONDITIONS ARE ASSUMED IN THE DESIGN. ENGINEER MAKES NO WARRANTY FOR EXISTING STRUCTURES ON-SITE OR FOR DAMAGES INCURRED BECAUSE OF THE CONTRACTOR WORK. SHOULD ANYTHING DIFFER, ADDITIONAL ENGINEERING MAY BE REQUIRED, AND THE ENGINEER SHALL BE CONTACTED TO PROVIDE DIRECTIONS. CONTRACTOR SHALL ADEQUATELY BRACE, MONITOR AND PROTECT ALL STRUCTURES IN PROXIMITY TO EXCAVATIONS AND CONSTRUCTION ACTIVITIES. CARE SHALL BE TAKEN BY THE CONTRACTOR IN ALL APPLICATIONS OF THESE DRAWINGS. THE EQUIPMENT AND PIPING PHYSICAL LOCATION MAY DIFFER IN THE FIELD DUE TO UNFORESEEN CONDITIONS OR OTHER FACTORS. THESE DRAWINGS SHALL NOT BE SCALED. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE. UNDERGROUND CONDITIONS ARE UNKNOWN, AND CAUTION SHALL BE TAKEN. CONTRACTOR SHALL BE RESPONSIBLE TO SECURE AND PROTECT ALL MATERIAL BROUGHT ON SITE, SHALL RESTORE ALL AREAS IMPACTED BY THE CONSTRUCTION WORK TO THE PREEXISTING CONDITION OR BETTER AND SHALL NOT IMPACT DRAINAGE/LAKE, RIGHT OF WAY OR ANY OTHER EASEMENTS WITHOUT CONSENT.

USE OF THESE DRAWINGS WITHOUT PERMISSION FROM THE ENGINEER IS PROHIBITED. THE ENGINEER DOES NOT REVIEW THE DRAWINGS FOR COMPLIANCE WITH THE AGREEMENT BETWEEN CONTRACTOR AND HOMEOWNER. THE ENGINEER IS NOT RESPONSIBLE FOR ANY ENCROACHMENT INTO EASEMENTS OR SETBACKS, EVEN IF APPROVED BY THE AHJ. THE ENGINEER REVIEWS THE PLANS FOR CODE COMPLIANCE TO THE BEST OF HIS KNOWLEDGE, HOWEVER THE CONTRACTOR IS RESPONSIBLE FOR CODE COMPLIANT CONSTRUCTION.

FLOOD ZONE:
2023 FBC 8TH EDITION RESIDENTIAL R322 FLOOD RESISTANT CONSTRUCTION STRUCTURES CONSTRUCTED IN WHOLE OR PART IN FLOOD HAZARD AREAS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS SECTION, ESPECIALLY R322.1.2, R322.1.3 AND R322.2.5. STRUCTURES LOCATED IN WHOLE OR IN PART IN IDENTIFIED FLOODWAYS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH ASCE 24.

NOTES:
WARNING: TO EMPTY POOL OF WATER AFTER CONSTRUCTION FOR ANY REASON, THE HYDROSTATIC UPLIFT PRESSURES BENEATH THE POOL MUST BE ELIMINATED TO PREVENT THE POOL FROM FLOATING UPWARD. OWNER MUST CONSULT A POOL CONTRACTOR EXPERIENCED IN ELIMINATING UPLIFT PRESSURE.
ADJACENT PROPERTY: THERE SHALL BE NO EFFECT ON THE ADJACENT PROPERTIES DUE TO POOL/SPA/DECK CONSTRUCTION, ESPECIALLY DRAINAGE.

SOIL BEARING AND FOUNDATION NOTES:
FBC 8TH EDITION BUILDING 1803 GEOTECHNICAL INVESTIGATIONS: THE BUILDING OFFICIAL SHALL BE PERMITTED TO WAIVE THE REQUIREMENT OR THE ENGINEER CAN PROVIDE A SOIL BEARING LETTER AT THEIR REQUEST. ALLOWABLE BEARING CAPACITY: BASED ON RATIONAL ANALYSIS THROUGH KNOWLEDGE OF OTHER PROJECTS IN THE VICINITY AND A VISUAL EXAMINATION OF THE SURFACE SOIL, FINDING SAND AND ROCK, THE POOL FOUNDATION HAS BEEN DESIGNED ASSUMING 2,000 PSF SOIL BEARING CAPACITY PER TABLE R401.4.1. IF DURING EXCAVATION DELETERIOUS MATERIAL (SUCH AS SILT, PEAT, MUCK, CLAY, ETC.) IS FOUND THAT CANNOT PROVIDE 2,000 PSF, THE ENGINEER SHALL BE CONTACTED TO PROVIDE DIRECTION

SWIMMING BARRIER REQUIREMENTS:
2023 FBC 8TH EDITION R4501.17 RESIDENTIAL SWIMMING BARRIER REQUIREMENT RESIDENTIAL SWIMMING POOLS SHALL COMPLY WITH SECTIONS R4501.17.1 THROUGH R4501.17.14. EXCEPTION: A SWIMMING POOL WITH AN APPROVED SAFETY POOL COVER COMPLYING WITH ASTM F1346.
2023 FBC 8TH EDITION R4501.19 FINAL INSPECTION: FINAL ELECTRICAL, AND BARRIER CODE, INSPECTION SHALL BE COMPLETED PRIOR TO FILLING THE POOL WITH WATER. EXCEPTION: VINYL LINER AND FIBERGLASS POOLS ARE REQUIRED TO BE FILLED WITH WATER UPON INSTALLATION.

R4501.17.19
WHERE A WALL OF A DWELLING SERVES AS PART OF THE BARRIER, ONE OF THE FOLLOWING SHALL APPLY:
1. ALL DOORS AND WINDOWS PROVIDING DIRECT ACCESS FROM THE HOME TO THE POOL SHALL BE EQUIPPED WITH AN EXIT ALARM COMPLYING WITH UL 2017 THAT HAS A MINIMUM SOUND PRESSURE RATING OF 85 DBA AT 10 FEET. ANY DEACTIVATION SWITCH SHALL BE LOCATED AT LEAST 54 INCHES ABOVE THE THRESHOLD OF THE ACCESS. SEPARATE ALARMS ARE NOT REQUIRED FOR EACH DOOR OR WINDOW IF SENSORS WIRED TO A CENTRAL ALARM SOUND WHEN CONTACT IS BROKEN AT ANY OPENING. EXCEPTIONS: A. SCREENED OR PROTECTED WINDOWS HAVING A BOTTOM SILL HEIGHT OF 48 INCHES OR MORE MEASURED FROM THE INTERIOR FINISHED FLOOR AT THE POOL ACCESS LEVEL. B. WINDOWS FACING THE POOL ON FLOOR ABOVE THE FIRST STORY. C. SCREENED OR PROTECTED PASS-THROUGH KITCHEN WINDOWS 42 INCHES OR HIGHER WITH A COUNTER BENEATH.
2. ALL DOORS PROVIDING DIRECT ACCESS FROM THE HOME TO THE POOL MUST BE EQUIPPED WITH A SELF-CLOSING, SELF-LATCHING DEVICE WITH POSITIVE MECHANICAL LATCHING/LOCKING INSTALLED A MINIMUM OF 54 INCHES ABOVE THE THRESHOLD, WHICH IS APPROVED BY THE AUTHORITY HAVING JURISDICTION.
3. A SWIMMING POOL ALARM THAT, WHEN PLACED IN A POOL, SOUNDS AN ALARM UPON DETECTION OF AN ACCIDENTAL OR UNAUTHORIZED ENTRANCE INTO THE WATER. SUCH POOL ALARM MUST MEET AND BE INDEPENDENTLY CERTIFIED TO ASTM STANDARD F2208, TITLED "STANDARD SAFETY SPECIFICATION FOR RESIDENTIAL POOL ALARMS," WHICH INCLUDES SURFACE MOTION, PRESSURE, SONAR, LASER, AND INFRARED ALARMS. FOR PURPOSES OF THIS PARAGRAPH, THE TERM "SWIMMING POOL ALARM" DOES NOT INCLUDE ANY SWIMMING PROTECTION ALARM DEVICE DESIGNED FOR INDIVIDUAL USE, SUCH AS AN ALARM ATTACHED TO A CHILD THAT SOUNDS WHEN THE CHILD EXCEEDS A CERTAIN DISTANCE OR BECOMES SUBMERGED IN WATER.

NOTES:
1. DECK MATERIAL SHALL BE CERTIFIED SLIP RESISTANT BY THE MANUFACTURER.
2. SITE DRAINAGE SHALL DIRECT ALL PERIMETER DECK RUNOFF AND GENERAL SITE AND ROOF RUNOFF AWAY FROM POOL AREA.
3. PROPOSED IMPROVEMENTS SHALL PRESERVE THE HISTORIC FLOW PATTERN EXISTING ON SITE TO AVOID RUNOFF INTO ADJACENT PROPERTIES.
4. A MINIMUM SLOPE OF 1% SHALL BE MAINTAINED THROUGHOUT ALL DECKING AREAS.

CHILD FENCE NOTE:
FBC-R4101.17.13 THE CHILD BARRIER MUST BE PLACED SUFFICIENTLY AWAY FROM WATER'S EDGE TO PREVENT A YOUNG CHILD OR MEDICALLY FRAIL ELDERLY PERSON WHO MAY GET THROUGH THE BARRIER FROM IMMEDIATELY FALLING INTO THE WATER. "SUFFICIENTLY AWAY FROM WATER'S EDGE" MEANS NO LESS THAN 20 INCHES (508mm) FROM THE BARRIER TO THE WATER'S EDGE.

FBC-R4101.17.12 THE BARRIER CANNOT HAVE ANY GAPS, OPENINGS, INDENTATIONS, OR STRUCTURAL COMPONENTS THAT COULD ALLOW A YOUNG CHILD TO CRAWL UNDER, SQUEEZE THROUGH, OR CLIMB OVER BARRIER. ONE END OF THE BARRIER MUST BE REMOVABLE ONLY WITH THE AID OF TOOLS.

SHEET 1

DRAWN DATE: 10/01/2025

ORDER: N/A

JOB NO. : HUBE-25-133

SALESMAN: KVK

DRAWN BY: ML

HUBER RESIDENCE

SUBD.: SUNILAND ESTATES

LOT 2 BLK 2

ADDRESS: 12020 SW 77th AVENUE

CITY: PINECREST, FL. 33156

DATE

10/24/2025

ADD ELECTRIC HEAT PUMP.

REVISIONS / CORRECTIONS



3144 SW 13th DRIVE
DEERFIELD BEACH, FL. 33442
(954) 755-4402

DATE: 11/17/2025

ZAKARY JAMES LATA
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