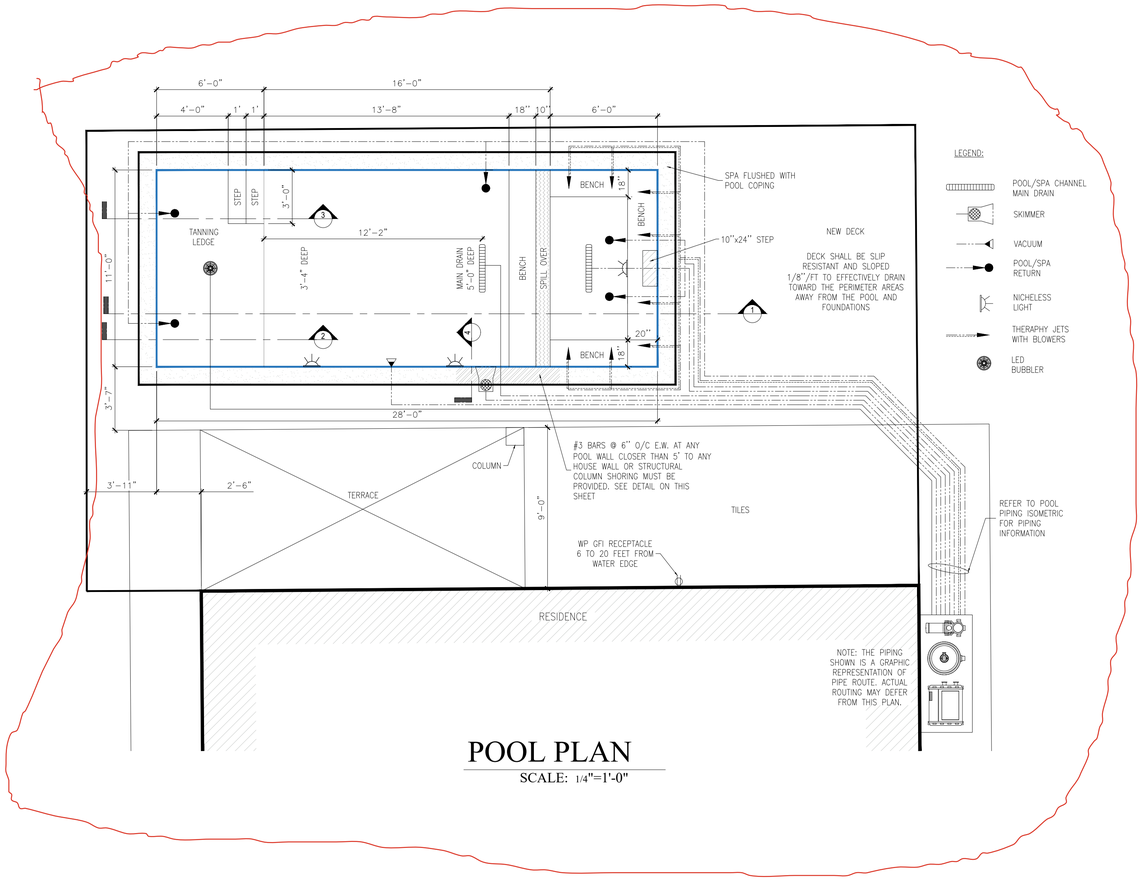



# POOL PLAN

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

## STRUCTURAL NOTES:

STRUCTURAL DESIGN SHALL COMPLY WITH FBC 2023 AND ASCE 7–22.

1. ALL POOL CONCRETE SHALL CONFORM WITH THE LATEST EDITION OF ACI 301 AND ACI 318 AND SHALL DEVELOP A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 4000 PSI. POOL CONCRETE CAN BE APPLIED PNEUMATICALLY AND SHALL COMPLY WITH LATEST EDITION OF ACI 506.2

2.ALL REINFORCEMENT STEEL TO BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60 WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. REINFORCING STEEL TO BE DETAILED AND FABRICATED IN ACCORDANCE WITH "THE MANUAL OF STANDARD PRACTICE OF DETAILING REINFORCING CONCRETE STRUCTURES" AND THE ACI 318. ALL TOP AND BOTTOM BARS SHALL BE CONTINUOUS AND SHALL TERMINATE WITH STANDARD HOOKS AT DISCONTINUOUS ENDS.

3. ALL DECK CONCRETE (WHEN INSTALLED UNDER THESE PLANS) SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 2500 PSI. REINFORCED STEEL FROM POOL WALL SHALL NOT BE BENT INTO A NEW OR FUTURE CONCRETE DECK. CONCRETE DECK SHALL BE FREE TO FLOAT BEYOND POOL WALL. EXCEPTION: STRUCTURAL DECKS SHALL COMPLY WITH THE DESIGN FOR SUPPORT SHOWN ON THESE PLANS.

4. SPLICES IN REINFORCING BARS SHALL NOT BE LESS THAN 1'–6" FOR #3 BARS AND 2'–0" FOR #4 BARS AND REINFORCEMENT SHALL BE CONTINUOUS AROUND ALL CORNERS OR CHANGES IN DIRECTION BY BENDING THE LONGITUDINAL STEEL AROUND THE CORNER 48 BAR DIAMETERS OR BY ADDING MATCHING REINFORCEMENT STEEL WHICH SHALL EXTEND 48 BAR DIAMETERS FROM EACH CORNER OR CHANGE IN DIRECTION.

5. THE DESIGN OF THIS PROJECT HAS INCORPORATED A RATIONAL DESIGN APPROACH BASED ON ACCEPTED ENGINEERING PRINCIPALS.

6. POOL WALL REINFORCEMENT IS ADEQUATE TO WITHSTAND THE HORIZONTAL WATER LOADS PLACED ON THE POOL WALL FOR UP TO 18" OF EXPOSED POOL WALL ABOVE GRADE.

| DATA | POOL (WET AREA) | SPA (WET AREA) | DECK |
|---|---|---|---|
| SURFACE AREA (SQ. FT.) | 233 | 66 | 800 |
| PERIMETER (FEET) | 65 | 34 | – |
| VOLUME (GALLONS) | 7252 | 1401 | – |
| TURNOVER (HOURS) | 1.8 | 0.4 | – |

*8653 GALLONS RE–CIRCULATED IN 2.2 HOURS
PUMP RATED AT 68 GPM @ 60' TDH
2.7 HP ENERGY EFFICIENT
VARIABLE SPEED POOL PUMP

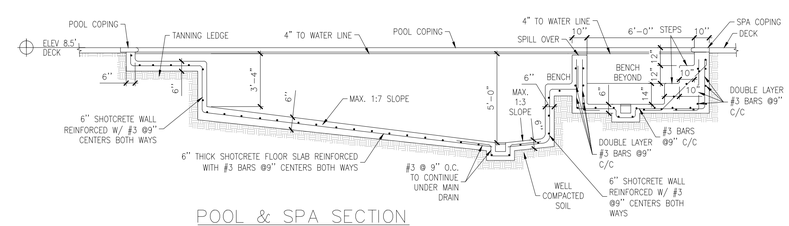
FLOOD ZONE AE

| FLOTATION ANALYSIS | | UNITS |
|---|---|---|
| TOP OF WALL ELEV. | 8.50 | FT |
| DIST. FROM TOP OF WALL TO WATER LEVEL | 0.33 | FT |
| WATER DEPTH AT DEEP END | 5.00 | FT |
| WATER DEPTH AT SHALLOW END | 3.30 | FT |
| AVERAGE POOL WATER DEPTH | 4.15 | FT |
| LEVEL @ AVERG DEPTH @ BOTT OF SLAB | 3.52 | FT |
| FLOOD CRITERIA | 6.00 | FT |
| INITIAL WATER HEAD | 2.48 | FT |
| LESS HYDROVERTICAL RELIEF | -2.00 | FT |
| ADJUSTED WATER HEAD | 0.48 | FT |
| UP LIFT PRESURE | 29.95 | PSF |

| UPLIFT RESISTANCE CALCULATION | | UNITS |
|---|---|---|
| POOL & SPA AREA A | 233.00 | SF |
| WALL PERIMETER P | 65.00 | LF |
| AVERAGE WALL HEIGHT | 4.15 | FT |
| WATER DENSITY | 62.40 | PCF |
| CONCRETE DENSITY | 144.00 | PCF |
| SLAB THICKNESS | 0.50 | FT |
| WALL THICKNESS | 0.50 | FT |
| WALL UPLIFT RESISTING PRESSURE | 83.36 | PSF |
| SIAB UPLIFT RESISTING PRESSURE | 72.00 | PSF |
| | | |
| TOTAL UPLIFT RESISTANCE | 155.36 | PSF |
| | | |
| UPLIFT/ UPLIFT RESIST. | 0.1927956 | <1 OK |

WARNING:

TO EMPTY THE POOL AFTER CONSTRUCTION FOR AHY REASON, HIDROSTATIC UPLIFT PRESSURES BENEATH THE POOL MUST BE ELIMINATED TO PREVENT POOL FROM FLOATING UPWARD. THE OWNER MUST CONSULT A CONTRACTOR EXPERIENCED IN ELIMINATING PRESSURES.



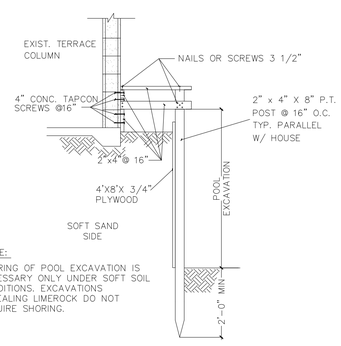

POOL & SPA SECTION
SECTION 1
NTS

NOTE:

REINFORCING STEEL SHALL HAVE A MINIMUM CLEAR COVER AS FOLLOWS, U.O.N. IN DRAWINGS:

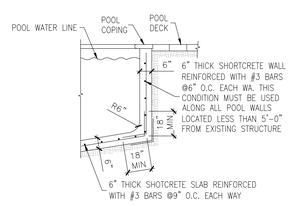
>> CONCRETE POURED AGAINST EARTH . . . . . 3"

>> CONCRETE EXPOSED TO EARTH OR WEATHER:
5' OR SMALLER . . . . . 1–1/2"
6' OR LARGER . . . . . 2"



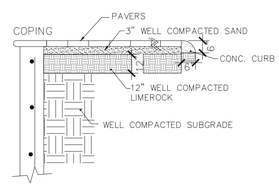

NOTE:
SHORING OF POOL EXCAVATION IS NECESSARY ONLY UNDER SOFT SOIL CONDITIONS. EXCAVATIONS REVEALING LIMEROCK DO NOT REQUIRE SHORING.

SHORING DETAIL
NTS

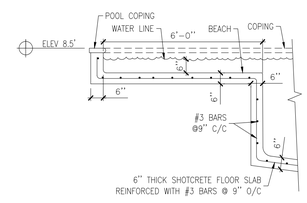



NOTE: PROVIDE 18" MIN. SPLICE AND 3" MIN. CONCRETE COVER

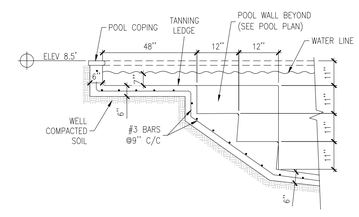
SECTION 4
NTS



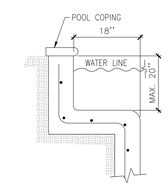

PAVERS DETAIL
(TYP.)
NTS




TANNING LEDGE DETAIL (TYP.)
SECTION 2
NTS




STEPS AND TANNING LEDGE DETAIL (TYP.)
SECTION 3
NTS




BENCH DETAIL
NTS


DCM PATIO DESIGNS
denia@dcmpatiodesigns.com
3055879995


REVISIONS

| NUMBER | DATE |
|---|---|
| | |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THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY CHAU M LUONG ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED, AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.


CHAU M LUONG LICENSE NO. 68215 STATE OF FLORIDA PROFESSIONAL ENGINEER

Project
Proposed Swimming Pool

JUAN GABRIEL ALDANA
15450 NW 88 CT
MIAMI LAKES, FL 33018

| | |
|---|---|
| JOB No: | |
| DESIGNED BY: | CLM |
| CHECKED BY: | CLM |
| SCALE: | AS SHOWN |
| DATE: | 06/01/2026 |