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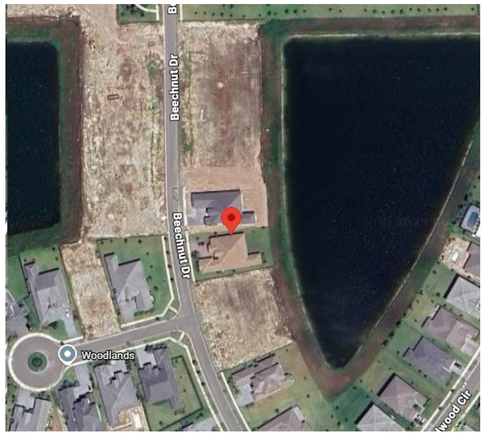
Pool Area Design

Drive, City of Westlake, FL 33470





PROPERTY LOCATION
SCALE: N.T.S.

APPLICABLE CODES:

- Florida Building Code – Residential (FBC-R), 8th Edition (2023)
- City of Westlake Zoning & Land Development Regulations
- Palm Beach County Amendments to the Florida Building Code
- National Electrical Code (NEC 2023) – Article 680 (Pools & Outdoor Electrical)
- Florida Building Code – Plumbing, Mechanical & Fuel Gas, 8th Edition (2023)
- Florida Fire Prevention Code (as applicable to outdoor gas appliances)

Design codes:

- Minimum Design Loads for Buildings and Other Structures, **ASCE 7-22**
- Building Code Requirements for Masonry Structures, **TMS 402-22 / TMS 602-22**
- National Design Specification for Wood Construction, **NDS-2021**
- American Concrete Institute, **ACI 318-19**
- Concrete Reinforcing Steel Institute, **CRSI Manual 31st Edition**
- ANSI/APSP/ICC-5 Standard for Residential Swimming Pools
- VGB Pool & Spa Safety Act (Drain & Suction Compliance)
- Aluminum Design Manual (ADM 2020) – *Aluminum structural design*
- ASCE 7-22 – Minimum Design Loads for Buildings and Other Structures
- Florida Aluminum Association (FAA) Guidelines for Screen Enclosures
- ACI 318-19 – Concrete provisions for foundations/footings
- CRSI Manual of Standard Practice – Reinforcement detailing
- ASTM E330 – Structural performance for exterior enclosures
- ASTM D3656 – Fiberglass screen material standards
- AAMA (American Architectural Manufacturers Association) standards for aluminum finishes

SCOPE OF WORK:

- Construction of a new in-ground swimming pool and pool equipment area
- Construction of the pool deck area with new concrete or paver surfacing
- Installation of an outdoor kitchen with utilities (gas/electric/water per design)
- Construction of a fire pit and surrounding seating area
- Installation of new walkways and decorative hardscape elements around the pool
- Modifications to site grading to ensure proper drainage away from the residence
- Replacement or installation of required pool barriers, gates, or alarms per FBC-R
- Installation of related electrical work, including pool lighting, bonding, and GFCI protection
- All construction to comply with applicable codes, zoning, and stormwater/impervious area limitations
- Construction of a fully engineered aluminum screen enclosure system
- Installation of aluminum posts, beams, and roof rafters per structural engineer design
- Installation of fiberglass insect-screen mesh on walls and roof panels
- Installation of screen doors, hardware, and required self-closing/self-latching mechanisms
- Construction of new concrete footings and/or attachment to existing slab per engineered foundation plan
- Integration of screen enclosure with pool deck, drainage paths, and site layout
- Ensuring roof-to-wall, post-to-slab, and beam-to-post connections using approved aluminum hardware
- Ensuring required wind-load resistance per ASCE 7-22 and FBC 2023
- Verifying setbacks and allowable height per City of Westlake Land Development Code
- Maintaining required separation and safety barriers for the swimming pool (FBC-R 4501.17)
- Providing corrosion-resistant coatings and fasteners for Florida humidity conditions
- Coordination with utilities, lighting, or fan installation if applicable (NEC clearance requirements)

No.	Label	Date

Pool Area Design

Drive, City of Westlake, FL 33470

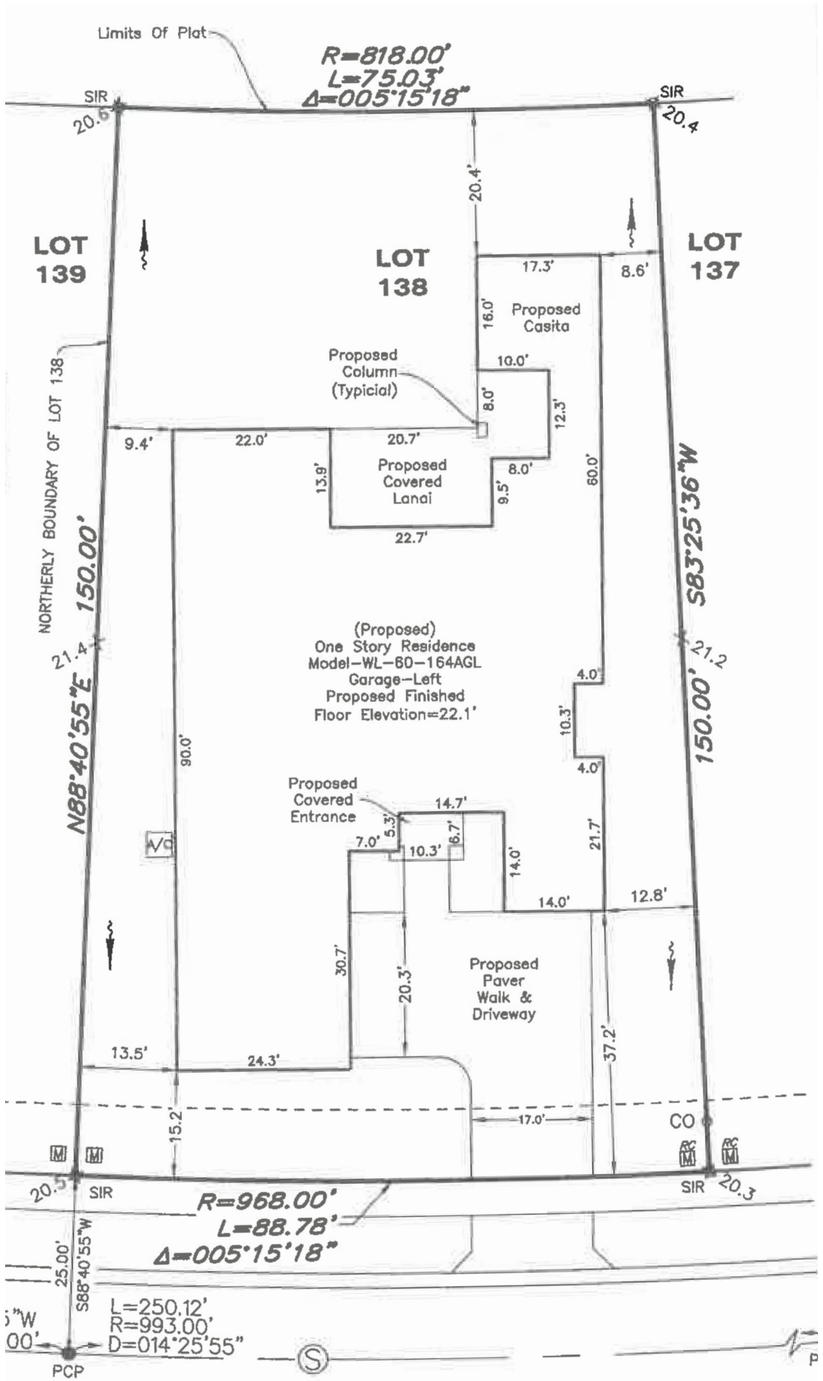
DATE: 11/27/2025

SCALE: AS DEPICTED

A1

Existing Site Plan

Drive, City of Westlake, FL 33470



1 EXISTING SITE PLAN

SCALE: 1IN = 10FT

Date

No. Label

Existing Site Plan

Drive, City of Westlake, FL 33470

DATE: 11/27/2025

SCALE: AS DEPICTED

A2

POOL BARRIER REQUIREMENT (FBC R4501.17)

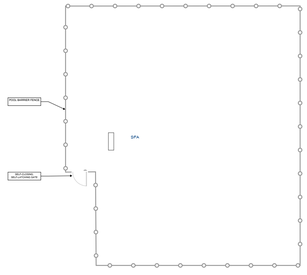
PRIOR TO FILLING THE POOL WITH WATER, A RESIDENTIAL SWIMMING POOL BARRIER MUST BE INSTALLED.

BARRIER MUST BE AT LEAST 48" HIGH ABOVE GRADE PER FBC RES R4501.17.

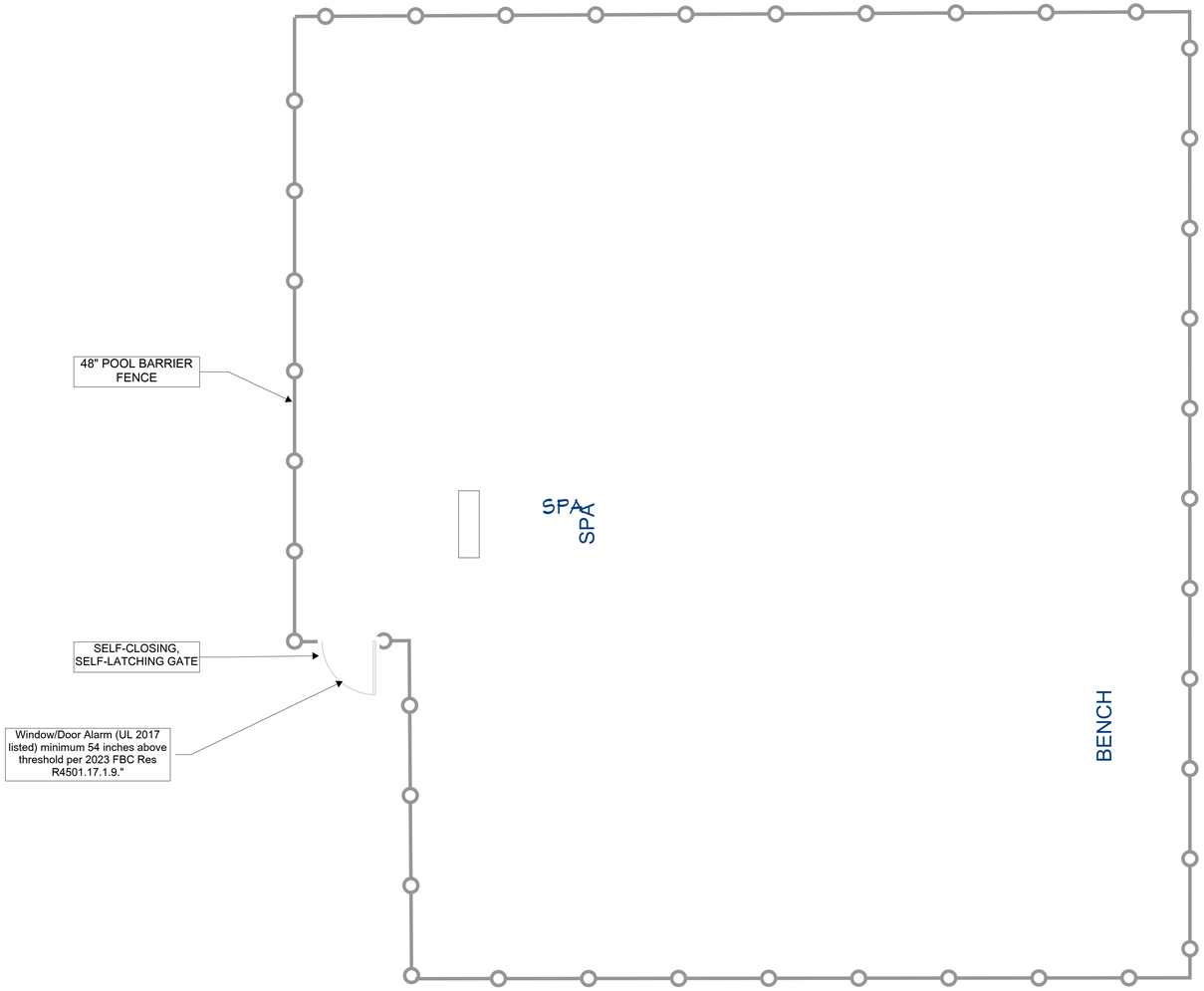
GATES MUST BE SELF-CLOSING AND SELF-LATCHING, OPENING OUTWARD AWAY FROM POOL.

ALARMS: ALL DOORS AND WINDOWS PROVIDING DIRECT ACCESS FROM THE HOME TO THE POOL MUST BE EQUIPPED WITH AN EXIT ALARM (UL 2017) UNLESS A SEPARATE ISOLATION FENCE IS PROVIDED.

NOTE: PERMIT CANNOT BE CLOSED WITHOUT PASSING FINAL BARRIER INSPECTION.

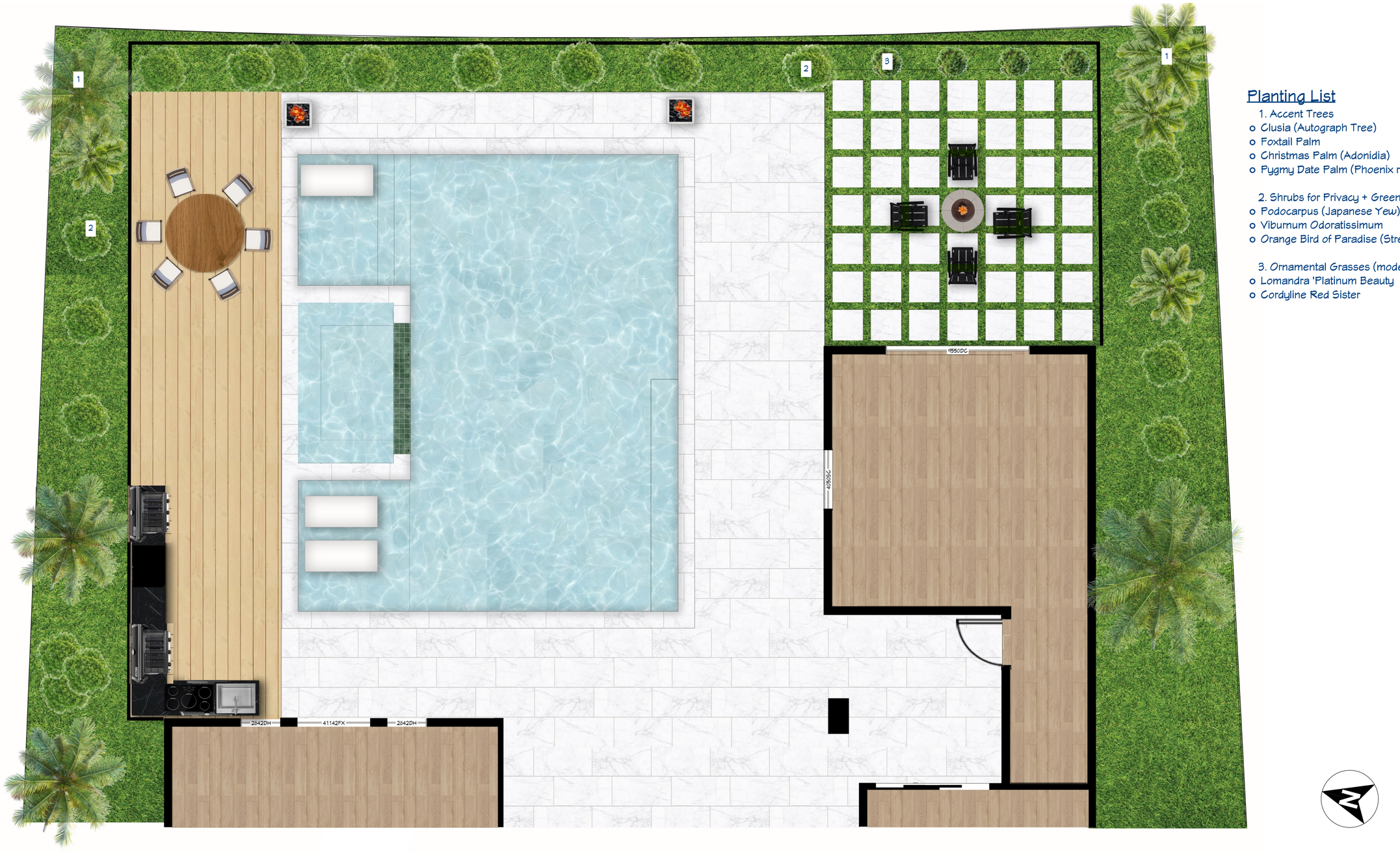





48" POOL BARRIER FENCE
SPA
SPA
SELF-CLOSING, SELF-LATCHING GATE
Window/Door Alarm (UL 2017 listed) minimum 54 inches above threshold per 2023 FBC Res R4501.17.1.9."
BENCH

Proposed pool Illustration

Drive, City of Westlake, FL 33470



Planting List

1. Accent Trees
- Clusia (Autograph Tree)
- Foxtail Palm
- Christmas Palm (Adonidia)
- Pygmy Date Palm (Phoenix roebelenii)

2. Shrubs for Privacy + Green Backdrop
- Podocarpus (Japanese Yew)
- Viburnum Odoratissimum
- Orange Bird of Paradise (Strelitzia reginae)

3. Ornamental Grasses (modern, wind-resistant)
- Lomandra 'Platinum Beauty
- Cordyline Red Sister

No.	Label	Date

Proposed pool Illustration

Drive, City of Westlake, FL 33470

DATE: 2/23/2026

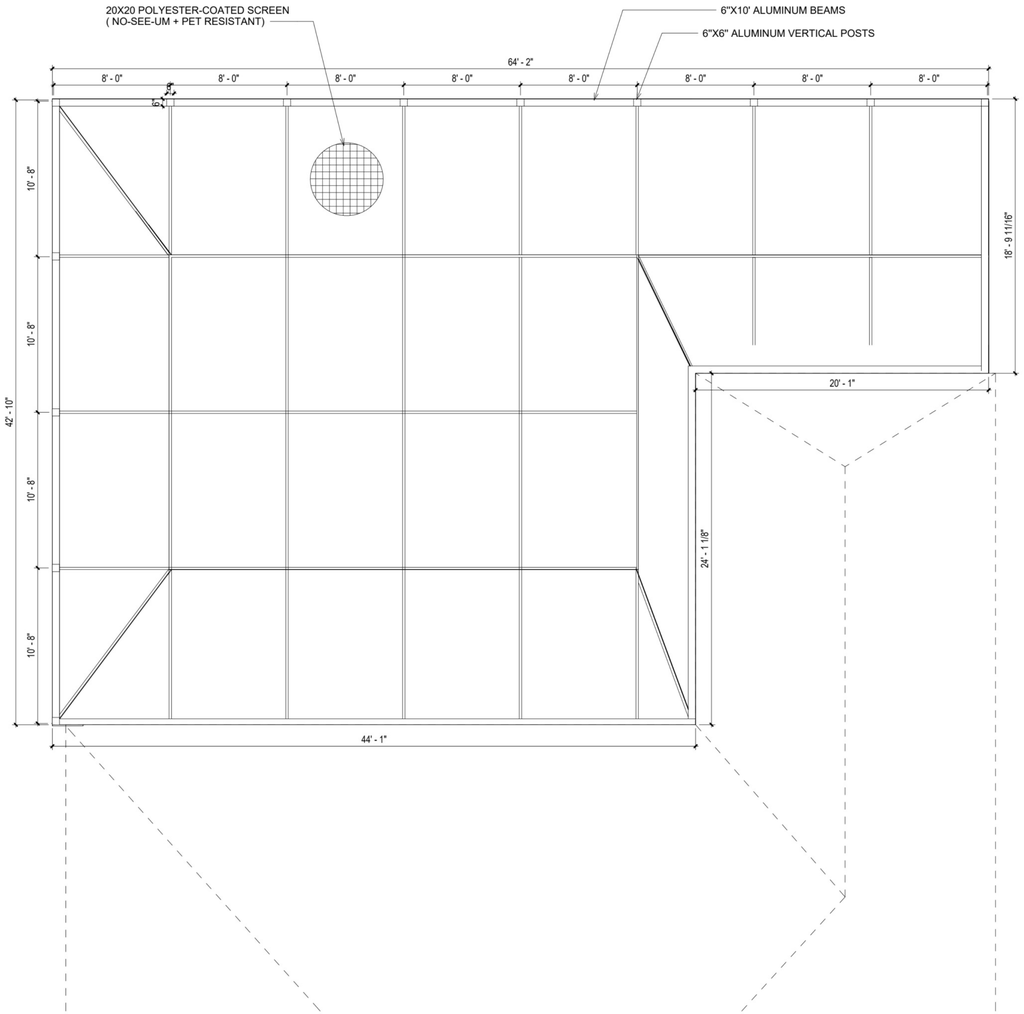
SCALE: AS DEPICTED

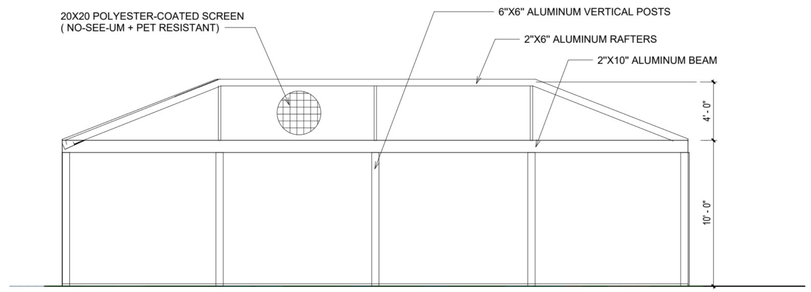
A5

**SCREEN BY OTHERS
- OUT OF SCOPE

Pool Screen Structure

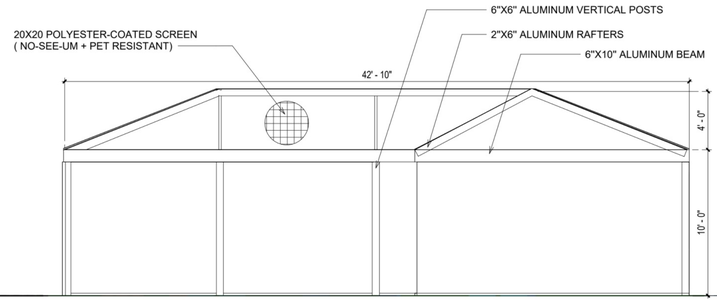
Drive, City of Westlake, FL 33470





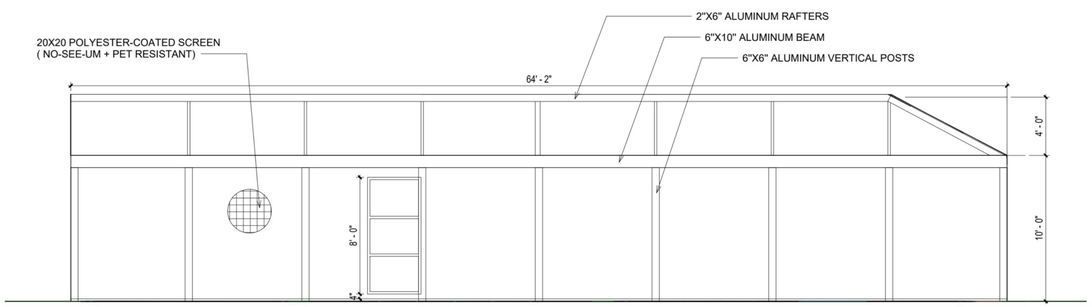
RIGHT SIDE ELEVATION

SCALE = 1/4"=1'0"



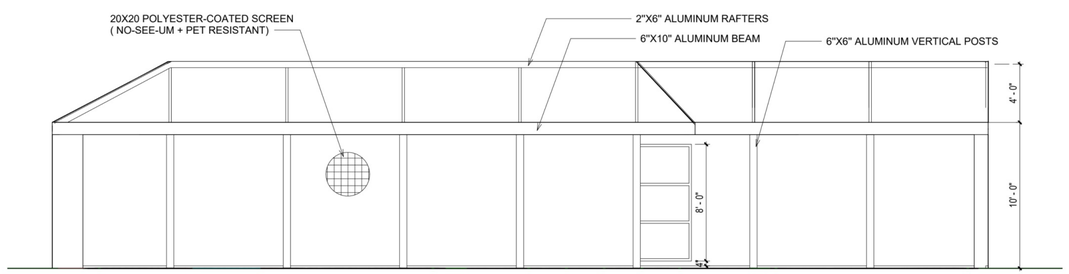
LEFT SIDE ELEVATION

SCALE = 1/4"=1'0"



FRONT SIDE ELEVATION

SCALE = 1/4"=1'0"



REAR SIDE ELEVATION

SCALE = 1/4"=1'0"

No.	Label	Date

Pool Screen Structure

Drive, City of Westlake, FL 33470

DATE: 2/23/2026

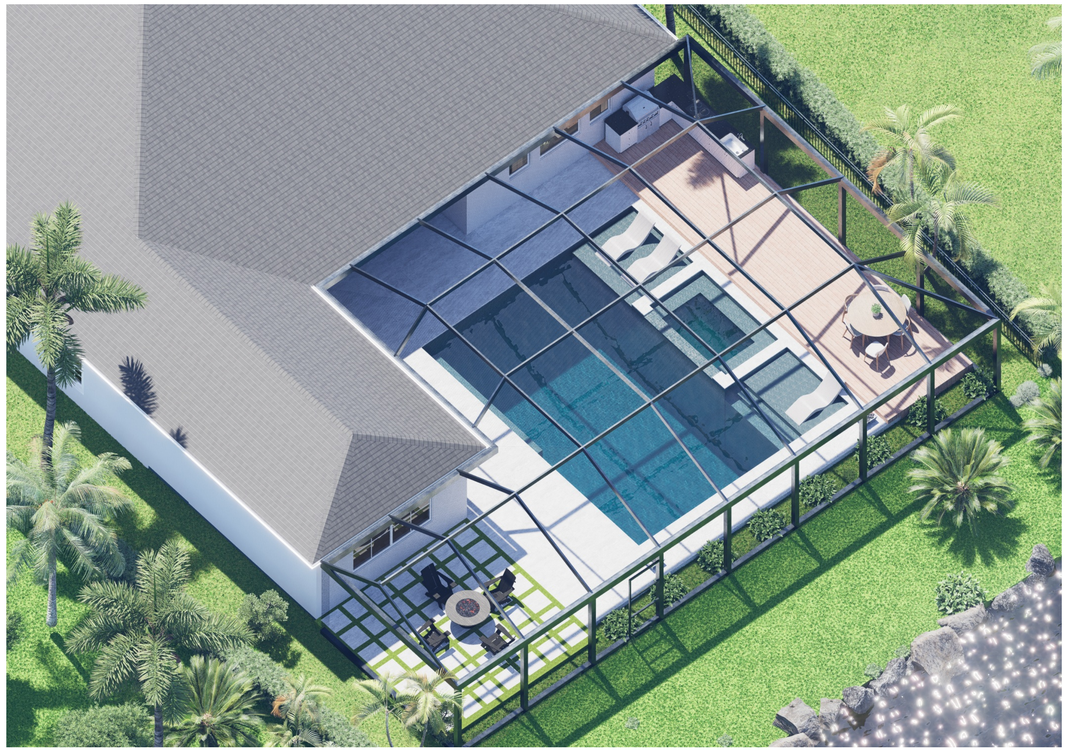
SCALE: AS DEPICTED

A6

3D perspective

Drive, City of Westlake, FL 33470









No.	Label	Date

3D perspective

Drive, City of Westlake,
FL 33470

DATE: 2/23/2026

SCALE: AS DEPICTED

A7



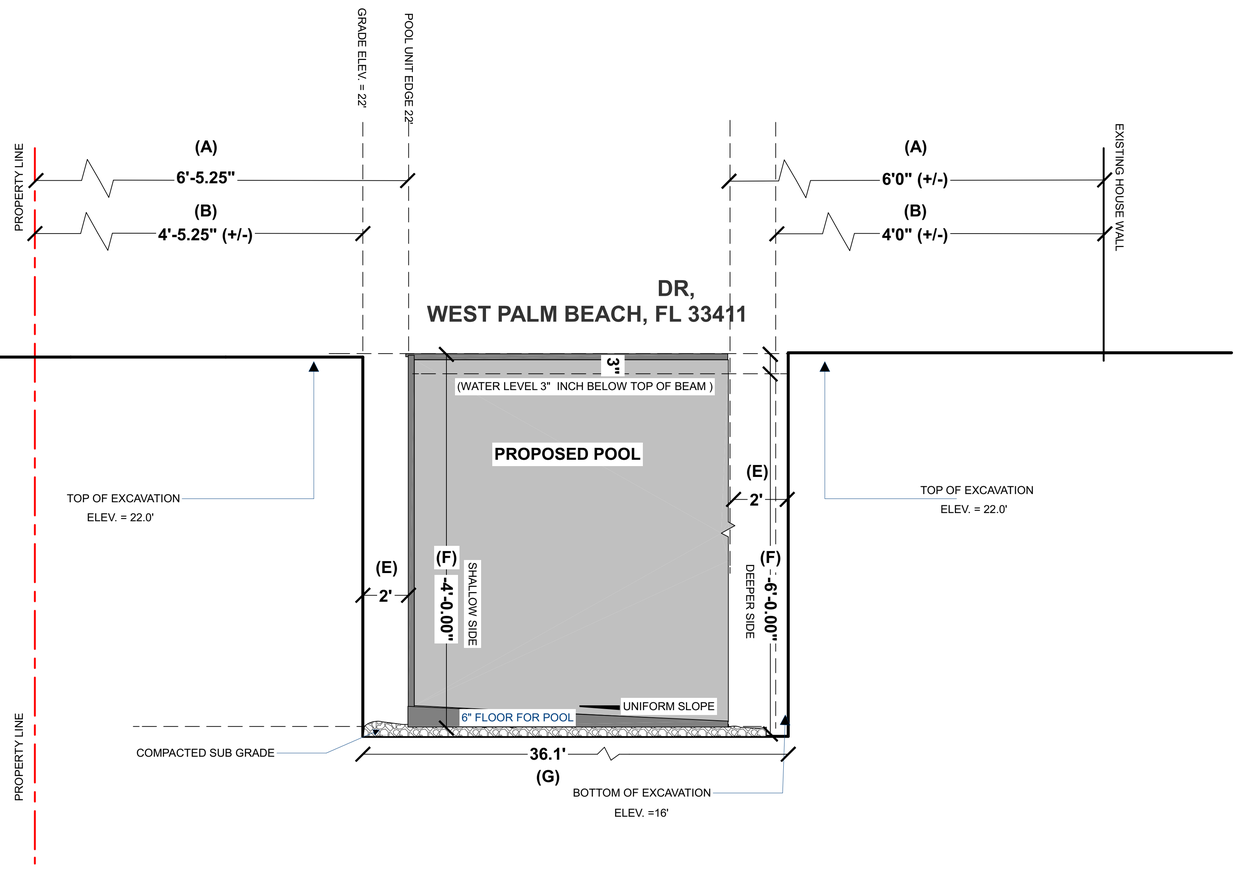


EX-1

EXCAVATION DEPTHS SHOWN ARE APPROXIMATE. EXCAVATION SHALL BE **6 INCHES DEEPER** THAN THE FINISHED POOL FLOOR ELEVATION TO ACCOMMODATE THE GUNITE SHELL THICKNESS.

DIMENSION LEGEND:
A- POOL UNIT OUTERMOST EDGE TO PROPERTY LINE
B- TOP OF EXCAVATION TO PROPERTY LINE
C- POOL UNIT OUTERMOST EDGE TO (E) HOUSE WALL
D- TOP OF EXCAVATION TO (E) HOUSE WALL
E- VERTICAL EXCAVATION CUT TO POOL UNIT OUTERMOST EDGE - 2' TYP.
F- DEPTH OF EXCAVATION = 6'-0"
G- TOTAL BTTM. EXCAVATION WIDTH

CONTRACTOR SHALL COMPLY WITH **OSHA 29 CFR 1926 SUBPART P** REGARDING EXCAVATION SAFETY. DUE TO SANDY SOIL CONDITIONS (TYPE C), CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, SHEETING, OR SLOPING AS NECESSARY TO PREVENT CAVE-INS AND PROTECT ADJACENT STRUCTURES AND PROPERTY LINES.



E1 EXCAVATION SECTION - AA

SCALE: NTS

- POOL ELECTRICAL

DR,
WEST PALM BEACH, FL 33411

DRAWN BY:

CHECKED BY:

REVISIONS:

No.	DESCRIPTION	DATE

ISSUE RECORD:

No.	DESCRIPTION	DATE

SCALE:

SHEET CONTENTS:

PROJECT NO.:

DATE: 2/15/2026

DRAWING NO.: **EX-2**

1. FLOTATION ANALYSIS CALCULATION

MK	FLOTATION ANALYSIS CALCULATION	VALUE	UNIT
A	TOP OF POOL WALL ELEVATION (NGVD)	22.00	FT
B	DISTANCE FROM TOP OF WALL TO WATER	0.25	FT
C	DEPTH OF POOL AT SHALLOW END	3.50	FT
D	DEPTH OF POOL AT DEEP END	5.50	FT
E	SLAB THICKNESS	0.50	FT
F	ELEVATION OF POOL BOTTOM	16.00	FT
G	FLOOD CRITERIA (NGVD) ZONE AE [SHWT]	18.00	FT
H	INITIAL WATER HEAD = G - F	2.00	FT
I	LESS HYDROSTATIC RELIEF VALVE	2.00	FT
J	ADJUSTABLE WATER HEAD H - I	0.00	FT
K	WATER WEIGHT	62.40	LB/CF
L	**UPLIFT PRESSURE = J x K**	0.00	PSF
(UP)	**POOL UPLIFT PRESSURE (FORCE) = L x M**	0.00	LBS

MK	VOLUME & WEIGHT CALCULATION	VALUE	UNIT
M	POOL AREA (OUTER FOOTPRINT)	864.00	SQ.FT
N	CONCRETE VOL: SIDE WALLS (BOTH)	288.00	CF
O	CONCRETE VOL: SHALLOW END WALL	87.50	CF
P	CONCRETE VOL: DEEP END WALL	137.50	CF
Q	CONCRETE VOL: BOTTOM SLAB	432.00	CF
R	CONCRETE VOL: BENCHES / SWIMOUT	126.00	CF
S	CONCRETE VOL: SPA (INTERNAL WALLS)	159.75	CF
T	CONCRETE WEIGHT DENSITY	150.00	LB/CF
(DWN)	**TOTAL POOL WEIGHT (N+O+P+Q+R+S) x T**	184,612.50	LBS

CONCRETE WEIGHT > UPLIFT PRESSURE	**(PASS - OK)**
PROPOSED POOL WALL THICKNESS	**12" INCHES**
PROPOSED POOL SLAB THICKNESS	**6" INCHES**

2. ENGINEERING & SPECIFICATIONS

FLOOR/WALL CONCRETE (POOL)		
	THICK	REBAR
WALL	12" MIN	#3 @ 10" O.C. E.W.
FLOOR	6"	#3 @ 10" O.C. E.W.

FLOOR/WALL CONCRETE (SPA)		
	THICK	REBAR
WALL	12" MIN	#3 @ 10" E.W. BOTH FACES
FLOOR	6"	#3 @ 10" O.C. E.W.

POOL SPECIFICATION TABLE		
SIZE (INNER)	25 X 30	FT
SHALLOW END	3.50	FT
DEEP END	5.50	FT
PERIMETER	110.0	LF
AREA	750.0	SQFT
CAPACITY	24,303	GLS
PUMP	2.7 HP	
FILTER	CART.	
HEATER	130,000	BTU
TURNOVER	2.96	HRS

*RESIDENTIAL POOL FILTER PUMP MOTORS WITH A CAPACITY OF 1 HP OR GREATER SHALL HAVE THE CAPABILITY OF OPERATING AT TWO OR MORE SPEEDS PER FBC RE R403.12

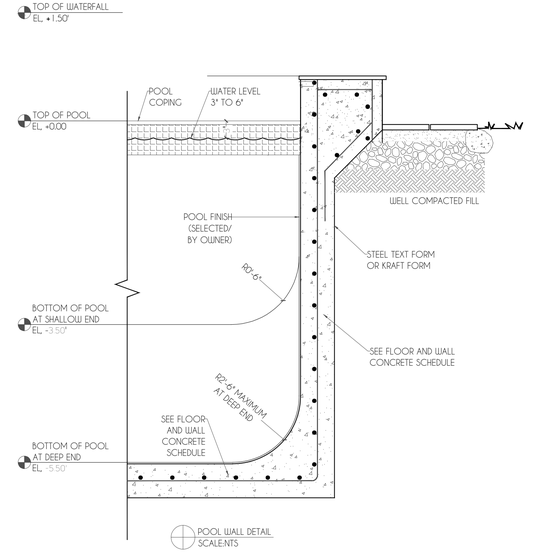
SPA SPECIFICATION TABLE		
SIZE (INNER)	6.4 X 12.9	FT
DEPTH	3.75	FT
PERIMETER	38.6	LF
AREA	82.6	SQFT
CAPACITY	2,316	GLS
PUMP	SHARED W/ POOL	
FILTER	SHARED W/ POOL	
BLOWER	YES	
HEATER	SHARED W/ POOL	
TURNOVER	0.28	HRS

*RESIDENTIAL POOL FILTER PUMP MOTORS WITH A CAPACITY OF 1 HP OR GREATER SHALL HAVE THE CAPABILITY OF OPERATING AT TWO OR MORE SPEEDS PER FBC RE R403.12

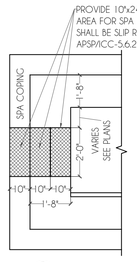
MK	EQUIPMENT	BRAND / MODEL	PIPE	CAPACITY
A	POOL PUMP	JANDY / VSFHP270DV2A	2.5"-2"	2.7 HP
B	CHLORINE KIT	CONTRACTOR STD	2"	-
C	FILTER	JANDY / CS200	2"	MATCH PUMP
D	SKIMMER	HAYWARD / SP1082	2"	-
E	CHAN. DRAIN	AQUASTAR / 32CDFL101	3"	DUAL SYS.
F	HEAT PUMP	JANDY / JRT3000R	2"	130,000
G	AIR BLOWER	SILENCER / 1.5HP	2"	SPA ONLY

3. GENERAL PLUMBING & INSTALLATION NOTES

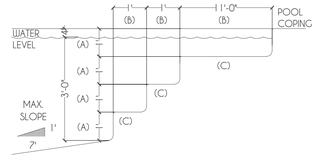
1. A JANDY / VSFHP270DV2A (2.7 HP) VARIABLE SPEED PUMP SHALL BE INSTALLED TO ACHIEVE REQUIRED 137 GPM FLOW RATE.
2. FILTRATION SHALL BE PROVIDED BY A JANDY / CS200 CARTRIDGE FILTER TO MINIMIZE SYSTEM FLOW RESISTANCE.
3. A JANDY / JRT3000R HEAT PUMP (130,000 BTU) SHALL BE UTILIZED AS THE PRIMARY HEATING SOURCE.
4. HAYWARD / SP1082 SERIES SKIMMER SHALL BE INSTALLED AND PLUMBED WITH 2" LINE.
5. **A HYDROSTATIC RELIEF VALVE MUST BE INSTALLED IN THE MAIN DRAIN ASSEMBLY IN ACCORDANCE WITH FBC 1618.24 TO NEUTRALIZE UPLIFT PRESSURE.**
6. AQUASTAR / 32CDFL101 CHANNEL DRAINS SHALL BE INSTALLED FOR SPA AND POOL.
7. ALL MAIN SUCTION AND RETURN TRUNK LINES SHALL BE CONSTRUCTED USING 3-INCH AND 2-INCH SCHEDULE 40 PVC PRESSURE PIPE WITH DEEP SOCKET FITTINGS.
8. HEAVY-DUTY SOLVENT WELD SHALL BE USED FOR EVERY JOINT TO ENSURE STRUCTURAL INTEGRITY.
9. WATER VELOCITY SHALL BE LIMITED TO 6 FEET PER SECOND ON SUCTION SIDE AND 8 FEET PER SECOND ON RETURN SIDE.
10. THE HEAT PUMP SHALL BE CONNECTED TO A DEDICATED CIRCUIT PROTECTED BY A GFCI BREAKER PER NEC ARTICLE 680.
11. A CHECK VALVE SHALL BE INSTALLED BETWEEN THE HEATER OUTLET AND ANY CHEMICAL FEEDERS TO PREVENT CORROSION.
12. A HYDROSTATIC PRESSURE TEST OF 35 PSI SHALL BE PERFORMED ON ALL WATER LINES AND VERIFIED BY INSPECTOR.
13. ALL PIPE SIZES SPECIFIED IN DRAWINGS SHALL BE STRICTLY MAINTAINED WITHOUT UNAUTHORIZED SUBSTITUTION.



POOL WALL DETAIL
SCALE:NTS



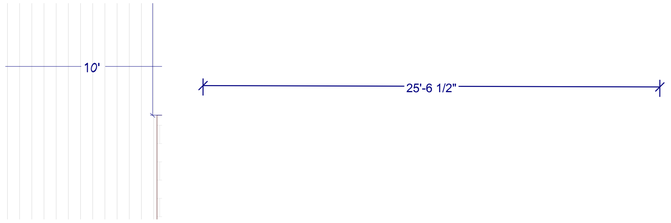
SPA STEPS DETAIL
SCALE:NTS



COMPLYING WITH ANSI/NSPI 5.6 FLOOR SLOPES

(A) RISER HEIGHT MUST BE UNIFORM (TOP & BOTTOM MAY VARY) (12" MAX).
(B) CONTRASTING TILE AT EDGE (OPTIONAL)
(C) TREADS SHALL HAVE SLIP-RESISTANT SURFACES-ANSI/ASAP-ICC-5 6.1.5

POOL STEPS DETAIL
SCALE:NTS



1 PROPOSED POOL AREA
SCALE: 1/4" = 1'-0"

STRUCTURAL PLAN

- POOL ELECTRICAL

DR,
WEST PALM BEACH, FL 33411

DRAWN BY:

CHECKED BY:

REVISIONS:

No.	DESCRIPTION	DATE

ISSUE RECORD:

No.	DESCRIPTION	DATE

SCALE:

SHEET CONTENTS:

PROJECT NO.:

DATE: 3/08/2026

DRAWING NO.: **S-1**

PLUMBING GENERAL NOTES

1. PLANS ARE SCHEMATIC IN NATURE. LAYOUT IS BASED ON BEST AVAILABLE INFORMATION. PRIOR TO SUBMITTING BID CONTRACTOR SHALL VISIT JOB SITE AND BECOME FULLY ACQUAINTED WITH EXISTING CONDITIONS OF PROJECT. NOTIFY ARCHITECT, ENGINEER AND/OR CONSTRUCTION MANAGER OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
2. COORDINATE INSTALLATION OF PLUMBING SYSTEMS WITH OTHER TRADES TO ENSURE NEAT AND ORDERLY INSTALLATION.
3. FIELD MEASURE AND VERIFY FINAL PIPING LOCATIONS PRIOR TO FABRICATION AND MAKE ADJUSTMENTS AS REQUIRED. MAINTAIN MANUFACTURER'S RECOMMENDATIONS REGARDING SERVICE CLEARANCE AND PROPER AIRFLOW CLEARANCE AROUND EQUIPMENT.
4. COORDINATE ROUTING OF PLUMBING LINES, DRAINS AND FIXTURES WITH DUCTWORK, LIGHTS, ARCHITECTURAL CEILING AND STRUCTURAL ELEMENTS. PIPING SHALL RISE AND DROP, JOG OR OFFSET AS REQUIRED TO AVOID CONFLICTS. DUCTWORK SHALL TAKE PRECEDENCE OVER ALL PIPING. PROVIDE ADDITIONAL MANUAL AIR VENTS FOR PIPING WHERE REQUIRED FOR PIPING TO OFFSET.

5. NO PIPING SHALL PENETRATE STRUCTURAL MEMBERS.
6. WALL CLEANOUT TO BE AT LOCATIONS REQUIRED BY CODE AND ACCESS DOORS SHALL MATCH ADJACENT SURFACES AND VERIFIED IN FIELD.
7. MAINTAIN MINIMUM 6"-0" CLEARANCE BETWEEN OUTSIDE AIR INTAKES AND EXHAUST/VENT TERMINATIONS.
8. DO NOT ROUTE PIPING ABOVE ELECTRICAL PANELS OR ELECTRICAL GEAR. COORDINATE ROUTING WITH OTHER TRADES.
9. ALL WALL CAPS SHALL BE PAINTED TO MATCH WALL. ROOF CAPS AND VENTS SHALL BE PAINTED, COLOR SELECTED BY CUSTOMER.
10. PROVIDE WCO AT BASE OF ALL WASTE STACKS INCLUDING LAVATORIES AND SINKS.
11. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS FOR ROUTING AND CONNECTION OF SANITARY SEWER / WATER / GAS SERVICES. COORDINATE WITH LOCAL UTILITIES AND AUTHORITIES WHERE AND AS REQUIRED.
12. REFER TO PLUMBING SCHEMATICS FOR PIPING RUN-OUT SIZES TO INDIVIDUAL PLUMBING FIXTURES.
13. CONTRACTOR SHALL VERIFY ALL CONNECTION REQUIREMENTS TO EQUIPMENT PROVIDED BY OTHERS WITH ACTUAL EQUIPMENT PROVIDED ON SITE.
14. REF. IPC CHAPTER 6, SEC. 601- SEC. 613 FOR WATER SUPPLY AND DISTRIBUTION CODES.
15. THE WATER SERVICE PIPE SHALL BE SIZED TO SUPPLY WATER TO THE STRUCTURE IN THE QUANTITIES AND AT THE PRESSURES REQUIRED IN IPC CODE. THE WATER SERVICE PIPE SHALL BE NOT LESS THAN 3/4" IN DIA. (IPC: 603.1)
16. WHERE THE WATER SERVICE PIPING IS LOCATED IN THE SAME TRENCH W/ THE BUILDING SEWER, SUCH SEWER SHALL BE CONSTRUCTED OF MATERIALS LISTED IN TABLE 702.2. WHERE SEWER PIPING IS NOT CONSTRUCTED OF MATERIALS LISTED IN TABLE 702.2, THE WATER SERVICE PIPE AND THE BUILDING SEWER PIPE SHALL BE HORIZONTALLY SEPARATED BY NOT LESS THAN 5 FT. HORIZONTALLY FROM THE SEWER PIPE CENTERLINE ON BOTH SIDES OF SUCH CROSSING. THE SLEEVE SHALL BE OF PIPE MATERIALS LISTED IN TABLES 605.3, 702.2 OR 702.3. THE REQUIRED SEPARATION DISTANCE SHALL NOT APPLY WHERE THE BOTTOM OF THE WATER SERVICE PIPE, LOCATED WITHIN 5 FT. OF THE SEWER, IS NOT LESS THAN 12 INCH. ABOVE THE HIGHEST POINT OF THE TOP OF THE BUILDING (RE. IPC: 603.2)
17. REF. TABLE 604.3; WATER DISTRIBUTION SYSTEM DESIGN CRITERIA REQ. CAPACITY AT FIXTURE SUPPLY PIPE OUTLETS
18. Water Hammer Arrestors required @ Washer Valves
19. PROVIDE ANTI-SCALD VALVES ON SHOWER OR TUB/SHOWER COMBINATION VALVES
20. PROVIDE DIELECTRIC COUPLINGS AT ALL CONNECTIONS BETWEEN DISSIMILAR METALS
21. FREEZE PROTECT PIPES PER IPC 2603.5

VENTING:
REF. IPC: CHAPTER 9, SEC. 901 THROUGH 918.
1. Horizontal vent piping shall be graded to drip back to the soil or waste pipe by gravity.
2. PROVIDE SANITARY SEWER SYSTEM CLEANOUTS AS REQUIRED BY LOCAL CODES. ALL CLEANOUTS REQUIRED ARE NOT NECESSARILY SHOWN ON PLANS. CLEANOUTS TO BE AT A MINIMUM OF 100 FEET ON CENTER, AND AT THE BASE OF EACH WASTE STACK.
3. SOIL AND WASTE STACKS IN BUILDINGS HAVING MORE THAN 10 BRANCH INTERVALS SHALL BE PROVIDED W/ A RELIEF VENT AT EACH TENTH INTERVAL INSTALLED, BEGINNING W/ THE TOP FLOOR. (IPC: 906.1)
4. THE ONLY VERTICAL PIPE OF COMBINATION WASTE AND VENT SYSTEM SHALL BE THE CONNECTION BETWEEN FIXTURE DRAIN AND THE HORIZONTAL COMBINATION WASTE AND VENT PIPE. THE VERTICAL DISTANCE SHALL NOT EXCEED 6 FEET. (IPC: 915.2)
5. THE SLOPE OF A HORIZONTAL COMBINATION WASTE AND VENT PIPE SHALL NOT EXCEED 1/2 UNIT VERTICAL IN 12 UNITS HORIZONTAL (4% SLOPE) AND SHALL BE NOT LESS THAN THAT INDICATED IN TABLE 704.1. (IPC: 915.2.1)
6. THE SIZE OF A COMBINATION WASTE AND VENT PIPE SHALL BE NOT LESS THAN THAT INDICATED IN TABLE 915.2.2. THE HORIZONTAL LENGTH OF A COMBINATION WASTE AND VENT SYSTEM SHALL BE UNLIMITED (IPC: 915.2.2)
7. THE COMBINATION WASTE AND VENT SYSTEM SHALL BE PROVIDED WITH A DRY VENT CONNECTED AT ANY POINT WITHIN THE SYSTEM OR THE SYSTEM SHALL CONNECT TO A HORIZONTAL DRAIN THAT SERVES VENTED FIXTURES ON THE SAME FLOOR. COMBINATION WASTE AND VENT SYSTEMS CONNECTING TO BUILDING DRAINS RECEIVING ONLY THE DISCHARGE FROM ONE OR MORE STACKS SHALL BE PROVIDED WITH A DRY VENT. THE VENT CONNECTION TO THE COMBINATION WASTE AND VENT PIPE SHALL EXTEND VERTICALLY TO A POINT NOT LESS THAN 6 INCH ABOVE THE FLOOD LEVEL RIM OF THE HIGHEST FIXTURE BEING VENTED BEFORE OFFSETTING HORIZONTALLY. (IPC: 915.2.3)
8. THE FIXTURE BRANCH OR FIXTURE DRAIN SHALL CONNECT TO THE COMBINATION WASTE AND VENT WITHIN A DISTANCE SPECIFIED IN TABLE 909.1. THE COMBINATION WASTE AND VENT PIPE SHALL BE CONSIDERED TO BE THE VENT FOR THE FIXTURE. (IPC: 915.2.5)
9. A DRAINAGE STACK SHALL SERVE AS A SINGLE-STACK VENT SYSTEM WHERE SIZED AND INSTALLED IN ACCORDANCE WITH SEC. 917.2 - 917.9. THE DRAINAGE STACK AND BRACH PIPING SHALL BE THE VENTS FOR THE DRAINAGE SYSTEM. THE DRAINAGE STACK SHALL HAVE A STACK VENT. (IPC 917.1)
10. STACK SIZE REF. IPC: TABLE 917.2

FLOOR DRAINS:
SHALL CONFORM TO ASME A112.3.3, ASME A112.6.3 OR CSA B79. (IPC: 413.1)
FLOOR DRAINS SHALL HAVE REMOVABLE STRAINERS. THE FLOOR DRAIN SHALL BE CONSTRUCTED SO THAT THE DRAIN IS CAPABLE OF BEING CLEANED. READY ACCESS SHALL BE PROVIDED TO FLOOR DRAINS. (IPC: 413.2)
FLOOR DRAINS SHALL HAVE A DRAIN OUTLET NOT LESS THAN 2 INCHES IN DIA. (IPC: 413.3)
ALL PATCHING SHALL BE STRUCTURAL AND AESTHETICALLY EQUAL TO THE SURFACE SURROUNDING THE AREA PATCHED. NO STRUCTURAL MEMBER SHALL BE CUT OR NOTCHED.
ALL PIPING SHALL BE CLEANED AND FLUSHED PRIOR TO SERVICE. DOMESTIC WATER PIPING SHALL BE STERILIZED.
ALL PIPING SHALL BE PROPERLY SUPPORTED, WITH PROVISIONS FOR HORIZONTAL BRACING AND EXPANSION/CONTRACTION AS REQUIRED. FOR INSULATED PIPING, AT EACH SUPPORT LOCATION, PROVIDE SHEET METAL SHIELDS FOR PIPING 2" AND SMALLER (EXCEPT WHERE REQUIRED TO BE CLAMPED) AND CALCIUM SILICATE THERMAL INSERTS WITH SHEET METAL SHIELDS FOR PIPING LARGER THAN 2". AND FOR ALL SIZES OF INSULTED PIPING REQUIRED TO BE CLAMPED. PROVIDE SUPPLEMENTAL STEEL SUPPORTS AS REQUIRED FOR INSTALLATION OF ALL PLUMBING MATERIALS, EQUIPMENT, AND APPURTENANCES.

PLAN NOTES:
ENGINEER'S FIELD VERIFICATION SITE VISIT WAS A LIMITED, NON-DESTRUCTIVE, VISUAL OBSERVATION. SOME AREAS WERE NOT AVAILABLE TO BE VERIFIED, DUE TO LOCATION OF STRUCTURAL ELEMENTS, WALLS, LIGHTS, EQUIPMENT AND PEOPLE.
UNDERGROUND WASTE LINES SHALL BE FIELD VERIFIED FOR LOCATION, DEPTH, AND DIRECTION OF FLOW PRIOR TO COMMENCING WORK, MAKING CONNECTIONS OR DEMO. EXISTING LOCATIONS ARE ASSUMED BASED UPON LIMITED SITE OBSERVATION.

DOMESTIC PLUMBING

WATER PIPING MATERIALS:
1. ALL BALL, GATE, GLOBE AND PLUG VALVES ON HOT AND COLD WATER DOMESTIC PLUMBING SHALL MEET NSF-61 FOR LEAD CONTENT ON ALL POTABLE HOT AND COLD APPLICATIONS.
2. THE STATED MATERIALS ARE PREFERRED, HOWEVER, CONTRACTOR MAY SUBMIT ON ALTERNATE MATERIALS AS ALLOWED IN CH. 6 OF THE LOCALLY ADOPTED EDITION OF THE IPC/UPC AND PER LOCAL CODES.

SANITARY WASTE AND VENT MATERIALS:
1. ALL MATERIALS ALLOWED FOR USE IN CHAPTER 7 OF THE UPC AND IPC CODES ARE ALLOWED.

WATER PIPING:
1. WATER SERVICE: PROVIDE METER, VALVES, BYPASS, AND REDUCED PRESSURE BACKFLOW PREVENTER AS REQUIRED, INSTALLED IN ACCORDANCE WITH THE LOCAL WATER AUTHORITY'S REGULATIONS.
2. RUN PIPING AS DIRECT AS POSSIBLE TO REQUIRED CONNECTIONS, AND SLOPE TO DRAIN VALVES AT LOW POINTS FOR COMPLETE DRAINING OF SYSTEM. LOCATE DRAIN VALVES AT ACCESSIBLE POINTS WITHIN THE SYSTEM.

SANITARY WASTE PIPING:
1 ALL SANITARY WASTE PIPING SHALL BE SLOPED AT A MIN. OF 1/4" PER FOOT.

INSULATION:
1. FURNISH AND INSTALL INSULATION FOR ALL PIPING SYSTEMS. ALL COLD PIPING AND EQUIPMENT INSULATION SHALL INCLUDE A VAPOR BARRIER.
2. INSULATE ALL EXPOSED WATER SUPPLY AND WASTE ON ALL LAVATORIES AND SINKS AS APPLICABLE.
3. INSULATE ALL HOT WATER RETURN LINES THROUGHOUT STRUCTURE
4. PROTECT ALL INSULATED PIPE AT POINT OF SUPPORT WITH A 360-DEGREE INSULATION INSERT.

BASIC MATERIALS AND METHODS:

1. FOR ALL REMOVED EQUIPMENT CONTRACTOR SHALL REMOVE ALL SUPPORTS, HANGERS, CONTROLS, PIPING, UTILITIES, ETC. AND DISPOSE OF PROPERLY
2. FOR ANY EQUIPMENT AND DEVICES BEING REMOVED TO BE REUSED, CONTRACTOR SHALL CLEAN AND REFINISH AS NEEDED TO MAKE LIKE NEW AND INSPECT FOR PROPER FUNCTION AND THAT THEY MEET CURRENT CODES.
3. THE MECHANICAL DRAWINGS INDICATE THE GENERAL DESIGN AND ARRANGEMENT OF PIPING, EQUIPMENT, SYSTEMS, ETC. INFORMATION SHOWN IS DIAGRAMMATIC IN CHARACTER AND DOES NOT INDICATE EVERY REQUIRED OFFSET, FITTING, OR TRIMMING TO COORDINATE AS REQ.
4. THE LOCATIONS OF THE ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS AND SHALL HAVE THE APPROVAL OF THE ENGINEER BEFORE BEING INSTALLED. DO NOT SCALE THE DRAWINGS (UNLESS NOTED OTHERWISE).
5. CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND SIZES OF ALL EXISTING EQUIPMENT, DUCTWORK, PIPING, ELECTRICAL CONDUIT, STRUCTURAL MEMBERS, ETC. PRIOR TO BID. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY AND ALL DISCREPANCIES BETWEEN FIELD CONDITIONS AND CONTRACT DRAWINGS.
6. USE ADJUSTABLE PIPE HANGERS ON SUSPENDED PIPE. PROVIDE HANGERS TO SUPPORT THE SYSTEMS WITHOUT SAGGING. INCLUDE HANGERS AT EACH OFFSET OR CHANGE IN DIRECTION AND AT ENDS OF BRANCHES OVER FIVE FEET IN LENGTH. (AS APPLICABLE)
7. WHERE HORIZONTAL DUCTS AND PIPES PASS THROUGH WALLS AND VERTICAL DUCTS AND PIPES PASS THROUGH FLOORS OR ROOFS, SEAL OFF VOID BETWEEN OPENING AND DUCT OR PIPE AND SLEEVE, WITH AN APPROVED NON-COMBUSTIBLE MATERIAL.
8. PROVIDE DIELECTRIC UNIONS FOR CONNECTIONS BETWEEN DISSIMILAR METALS.
9. TEST PIPING AND DUCTWORK SYSTEMS PRIOR TO CONCEALMENT.
10. PROVIDE VIBRATION ISOLATION FOR ALL MECHANICAL EQUIPMENT TO PREVENT TRANSMISSION OF VIBRATION TO BUILDING STRUCTURE.
11. ALL VALVES SHALL BE INSTALLED SO THAT VALVE REMAINS IN SERVICE WHEN EQUIPMENT OR PIPING ON EQUIPMENT SIDE OF VALVE IS REMOVED.
12. ALL BALANCING VALVES AND BUTTERFLY VALVES SHALL BE PROVIDED WITH POSITION INDICATORS AND MAXIMUM ADJUSTABLE STOPS (MEMORY STOPS).
13. ALL VALVES (EXCEPT CONTROL VALVES) AND STRAINERS SHALL BE FULL SIZE OF PIPE BEFORE REDUCING SIZE TO MAKE CONNECTIONS TO EQUIPMENT AND CONTROLS.
14. INSTALL ALL PIPING WITHOUT FORCING OR SPRINGING.
15. ALL VALVES SHALL BE ADJUSTED FOR SMOOTH AND EASY OPERATION.
16. ALL CLEANOUTS SHALL BE FULL SIZE OF PIPE FOR PIPE SIZES 8 INCHES AND SMALLER AND SHALL BE 6 INCHES FOR PIPE SIZES LARGER THAN 6 INCHES.
17. PROVIDE ACCESS PANELS FOR INSTALLATION IN WALLS AND CEILINGS, WHERE REQUIRED, TO SERVICE DAMPERS, VALVES, SMOKE DETECTORS, AND OTHER CONCEALED MECHANICAL EQUIPMENT. ACCESS PANELS SHALL BE TURNED OVER TO GENERAL CONTRACTOR FOR INSTALLATION.
18. ALL OPENINGS IN FIREWALLS DUE TO DUCTWORK, PIPING, CONDUIT, ETC., SHALL BE FIRE STOPPED WITH A PRODUCT SIMILAR TO 3M OR APPROVED EQUAL. (AS APPLICABLE)
19. ALL AIR CONDITIONING CONDENSATE DRAIN LINES FROM EACH AIR HANDLING UNIT OR ROOFTOP UNIT SHALL BE PIPED FULL SIZE OF THE UNIT DRAIN OUTLET, WITH A P-TRAP, AND PIPED TO NEAREST DRAIN. PROVIDE A CONDENSATE PUMP IF REQUIRED. FIELD VERIFY.
20. ALL DUCTWORK AND PIPING SHALL CLEAR DOORS AND WINDOWS.
21. TUBS/SHOWERS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THE THERMOSTATIC MIXING TYPE. THE WATER TEMPERATURE SHALL BE SET TO A MAXIMUM OF 120°F.
22. EACH HOSE BIB SHALL BE EQUIPPED WITH A BACK FLOW PREVENTION DEVICE ANTI-FREEZE/FROST PROOF HOSE BIB.
23. INSULATE WASTE LINES FOR SOUND CONTROL AND FREEZE PROTECTIONS

MECHANICAL IDENTIFICATION:
IDENTIFY PIPING, DUCTS AND VALVES ABOVE CEILINGS, AS WELL AS EXPOSED TO VIEW EXCEPT IN FINISHED AREAS. CONFORM TO ASME A13.1. (AS APPLICABLE)
CONTRACTOR TO LABEL APPLIANCES IN AN APPROVED MANNER THAT UNIQUELY IDENTIFIES THE APPLIANCE AND THE AREA IT SERVES. WHEN APPLIANCE IS REMOTELY LOCATED FROM SPACE IT SERVES.

GENERAL COMPLIANCE & CODES

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2024 ISPSC, 2023 NEC ARTICLE 680, AND 2024 IFGC.
ALL LOCAL MUNICIPAL ORDINANCES AND BUILDING AMENDMENTS SHALL BE STRICTLY ADHERED TO.
PERMITS SHALL BE OBTAINED AND POSTED ON-SITE PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION OR PLUMBING WORK.

PLUMBING & EQUIPMENT SPECIFICATIONS

SCHEDULE 40 PVC PRESSURE PIPE, DEEP SOCKET FITTINGS, AND HEAVY-DUTY SOLVENT WELD SHALL BE UTILIZED FOR ALL JOINTS.
PIPE SIZES AS INDICATED ON THE APPROVED PLANS SHALL BE MAINTAINED WITHOUT UNAUTHORIZED SUBSTITUTIONS.
A 3.0 HP VARIABLE SPEED PUMP SHALL BE INSTALLED TO ENSURE A MINIMUM FLOW RATE OF 137 GPM..
WATER VELOCITIES SHALL BE RESTRICTED TO 6 FPS ON SUCTION PIPING AND 8 FPS ON RETURN PIPING.
ALL SUCTION OUTLETS SHALL BE DUAL-PLUMBED, SPACED 3 FEET APART, AND EQUIPPED WITH VGB-CERTIFIED COVERS RATED FOR 150 GPM.

SITE WORK & INSTALLATION

TRENCHES SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 18 INCHES AND PROVIDED WITH A 2-INCH SAND BEDDING.
POSITIVE SLOPE TOWARD THE EQUIPMENT PAD SHALL BE MAINTAINED ON ALL HORIZONTAL PLUMBING RUNS.
UNDERGROUND UTILITIES SHALL BE LOCATED AND MARKED PRIOR TO THE START OF ANY DIGGING.

GAS & FIRE PIT REQUIREMENTS

GAS PIPING SHALL BE SIZED TO DELIVER A MINIMUM CAPACITY OF 100,000 BTUS TO THE FIRE PIT FEATURE.
A MANUAL GAS SHUT-OFF VALVE SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION 3 TO 5 FEET FROM THE BURNER.
CROSS-VENTILATION SHALL BE PROVIDED IN THE FIRE PIT ENCLOSURE VIA TWO OPPOSING VENTS TOTALING 18 SQUARE INCHES.

TESTING & INSPECTIONS

A HYDROSTATIC PRESSURE TEST OF 35 PSI SHALL BE MAINTAINED ON ALL WATER LINES FOR A MINIMUM OF 24 HOURS.
GAS PIPING SHALL BE PRESSURE TESTED AT 15 PSI AND VERIFIED BY THE INSPECTOR PRIOR TO BURIAL.
ALL PRESSURE GAUGES SHALL REMAIN VISIBLE AND ACTIVE FOR INSPECTION DURING THE ENTIRE BACKFILL PROCESS.

APPLICABLE CODES:

FLORIDA BUILDING CODE – RESIDENTIAL (FBC-R), 8TH EDITION (2023)
CITY OF WESTLAKE ZONING & LAND DEVELOPMENT REGULATIONS
PALM BEACH COUNTY AMENDMENTS TO THE FLORIDA BUILDING CODE
NATIONAL ELECTRICAL CODE (NEC 2023) – ARTICLE 680 (POOLS & OUTDOOR ELECTRICAL)
FLORIDA BUILDING CODE – PLUMBING, MECHANICAL & FUEL GAS, 8TH EDITION (2023)
FLORIDA FIRE PREVENTION CODE (AS APPLICABLE TO OUTDOOR GAS APPLIANCES)

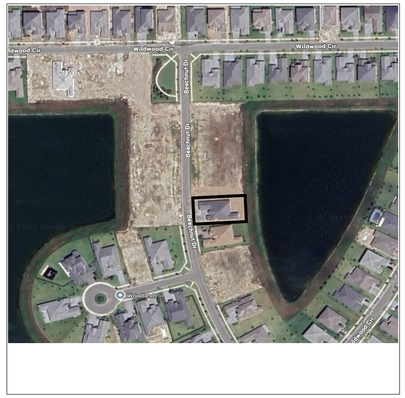
DESIGN CRITERIA:

PROJECT CITY: CITY OF WESTLAKE
PROJECT COUNTY: PALM BEACH COUNTY
PROJECT ELEVATION: 20 FT. ABOVE SEA LEVEL
ZONING DISTRICT: R-1—RESIDENTIAL - 1 (77-WESTLAKE)

CONTRACTOR HAS REVIEWED THESE PLANS AND CONFIRMS THE SITE CONDITIONS ALLOW FOR THE INSTALLATION AS DESIGNED

SHEET SCHEDULE

SHEET NUMBER	SHEET NAME
P-1	COVER SHEET & GENERAL NOTES
P-2	PLUMBING PLAN- GAS LINE
P-3	PLUMBING PLAN- POOL WATER
P-4	PLUMBING PLAN- WATER AND WASTE
P-5	PLUMBING - TYPICAL DETAIL AND GAS ISO



SITE PLAN

ACT - ACOUSTIC CEILING TILE
AD - AREA DRAIN
AFF - ABOVE FINISHED FLOOR
ALUM - ALUMINUM
ANOD - ANODIZED
BSMT - BASEMENT
BYND - BEYOND
BOT - BOTTOM
CIP - CAST IN PLACE
CHNL - CHANNEL
CJ - CONTROL JOINT
CLG - CEILING
CLR - CLEAR
CMU - CONCRETE MASONRY UNIT
COL - COLUMN
COMPR - COMPRESSIBLE
CONC - CONCRETE
CONT - CONTINUOUS
CPT - CARPET
CT - CERAMIC TILE
CTYD - COURTYARD
DBL - DOUBLE
DEMO - DEMOLISH OR DEMOLITION
DIA - DIAMETER
DIM - DIMENSION
DIMS- DIMENSIONS
DN - DOWN
DR - DOOR
DWG - DRAWING
EA - EACH
EJ - EXPANSION JOINT
EL - ELEVATION
ELEC - ELECTRICAL
ELEV - ELEVATOR OR ELEVATION
EP - ELECTRIC PANEL
EPDM - ETHYLENE PROPYLENE DIENE M-CLASS (ROOFING)
EQ - EQUAL
EXIST - EXISTING
EXP JT - EXPANSION JOINT
EXT - EXTERIOR
FD - FLOOR DRAIN OR FIRE DEPT.
FEC - FIRE EXTINGUISHER CABINET
FIXT - FIXTURE
FLR - FLOOR
FM - FILLED METAL
FO - FACE OF
FND - FOUNDATION
GA - GAUGE
GALV - GALVANIZED
GWB - GYPSUM WALL BOARD
HC - HOLLOW CORE
HI - HIGH
HM - HOLLOW METAL
HP - HIGH POINT
HR - HOUR
HVAC - HEATING, VENTILATING, AND AIR CONDITIONING

REFERENCES

EX. LOT AREA:
0.28 Acres

PROJECT DATA

EXISTING BUILDING HEIGHT:
EXISTING 281'0" HIGHEST RIDGE (+/-) FROM TERRAIN

CONSTRUCTION TYPE:
V-B

OCCUPANCY TYPE:
Residential R3

FIRE PROTECTION:
-

NUMBER OF STORIES:
1

EXISTING STORIES (ABOVE GROUND)
1

ATTACHED GARAGE
YES

GAS: NATURAL

SEWER: CITY

WATER: CITY

COOLING: CENTRAL AIR

HEATING: FORCED AIR

LOT AREA : 12,286 SQFT
BUILDING: 4,786 SQFT
BACK CONC. SLAB: 1,073 SQFT
PAVED DRIVEWAY : 1,093 SQFT
POOL : 750 SQFT
POOL DECK: 409 SQFT
FIRE PIT: 324 SQFT
IMPERVIOUS AREA : 8,435 SQFT (68.65%)
PERVIOUS AREA : 3,851 SQFT (31.35%)

ZONING ANALYSIS

POOL ARE- PLUMBING

DRAWN BY:

CHECKED BY:

REVISIONS:

No.	DESCRIPTION	DATE
1	CITY COMMENT	7/15/2026
2	CITY COMMENT	9/22/2026	

ISSUE RECORD:

No.	DESCRIPTION	DATE

SCALE:

SHEET CONTENTS:
COVER SHEET & GENERAL NOTES

PROJECT NO.:

DATE: 9/26/2026

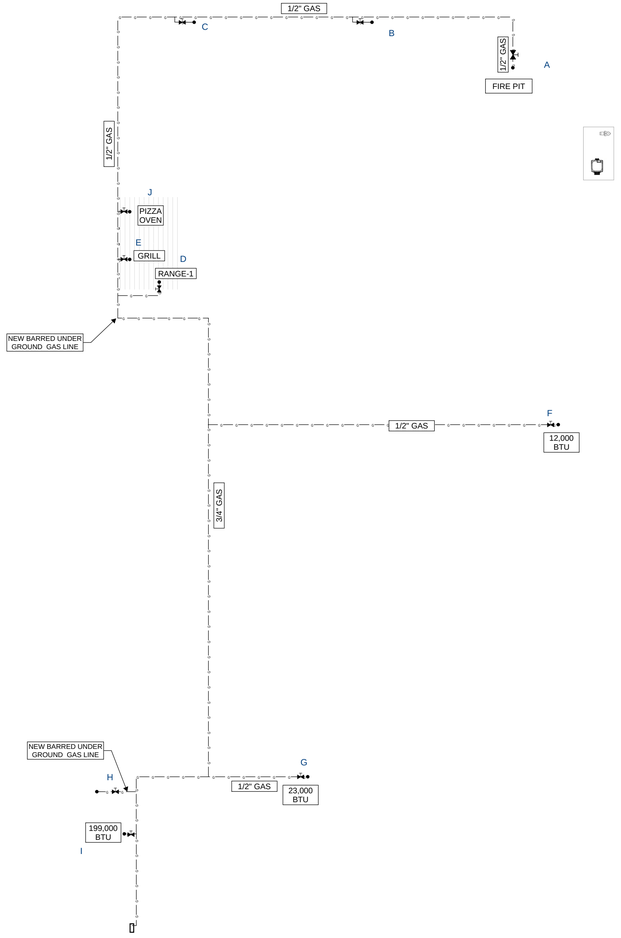
DRAWING NO.: **P-1**

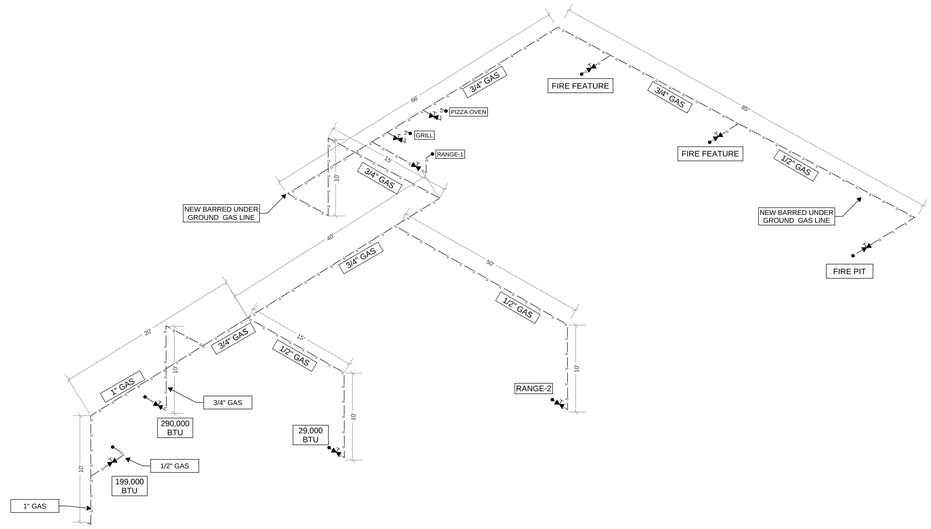
GAS DEMAND SCHEDULE					
MARK #	EQUIPMENT	BRAND/MODEL	OUTLET SIZE	BTU LOAD	CFH
A	(N) FIRE PIT	TOR-FPPK57X 19-HF-FLEX	1/2"	200,000	200
B	(N) FIRE BOWL	SFB2407-ML-N G-BLK	1/2"	91,000	91
C	(N) FIRE BOWL	SFB2407-ML-N G-BLK	1/2"	91,000	91
D	(N) RANGE-1	DM527-05	1/2"	11.262	11.262
E	(N) GRILL	-	1/2"	63,700	63.7
F	(E) RANGE-2 (Inside)	DM527-05	1/2"	11,262	11.262
G	(E) DRYER		1/2"	29,000	29
H	(N) GENERATOR	KOHLER/ 26RCA(L)	3/4"	290,000	290
I	(E) WATER HEATER	-	1/2"	199,000	199
J	(N) PIZZA OVEN	P001A-SS	1/2"	15,355	15.355
		MAIN LINE	1"	1001.579	1001.579
			TOTAL DEMAND		

** DESIGNATED WITH INLET PRESSURE 2PSI AND PRESSURE DROP OF 1-PSI USING THE LONGEST LENGTH METHOD NFPA 54: TABLE 6.2(e). THE GAS LOADS CALCULATED @ 0.60 SPECIFIC GRAVITY AND A HEATING VALUE OF 1,000 BTU/FT3.*
** GAS BTU LOADS ARE GENERIC, TYPICAL LOADS FOR VARIOUS APPLIANCES - F.V. FINAL BTU LOADS PER SPECIFIC CHOSEN APPLIANCE AND ADJUST ACCORDINGLY AND LET ENGINEER KNOW OF ANY CHANGES.*

TABLE 1215.2(4)
SCHEDULE 40 METALLIC PIPE [NFPA 54: TABLE 6.2(e)]*

							GAS:	NATURAL	
							INLET PRESSURE:	2.0 psi	
							PRESSURE DROP:	1.0 psi	
							SPECIFIC GRAVITY:	0.60	
	PIPE SIZE (inch)								
NOMINAL:	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
ACTUAL ID:	0.622	0.824	1.049	1.380	1.610	2.067	2.469	3.068	4.026
LENGTH (feet)	CAPACITY IN CUBIC FEET OF GAS PER HOUR								
10	1510	3040	5560	11 400	17 100	32 900	52 500	92 800	189 000
20	1070	2150	3930	8070	12 100	23 300	37 100	65 600	134 000
30	869	1760	3210	6590	9880	19 000	30 300	53 600	109 000
40	753	1520	2780	5710	8550	16 500	26 300	46 400	94 700
50	673	1360	2490	5110	7650	14 700	23 500	41 500	84 700
60	615	1240	2270	4660	6980	13 500	21 400	37 900	77 300
70	569	1150	2100	4320	6470	12 500	19 900	35 100	71 600
80	532	1080	1970	4040	6050	11 700	18 600	32 800	67 000
90	502	1010	1850	3810	5700	11 000	17 500	30 900	63 100
100	462	934	1710	3510	5260	10 100	16 100	28 500	58 200
125	414	836	1530	3140	4700	9060	14 400	25 500	52 100
150	372	751	1370	2820	4220	8130	13 000	22 900	46 700
175	344	695	1270	2601	3910	7530	12 000	21 200	43 300
200	318	642	1170	2410	3610	6960	11 100	19 600	40 000
250	279	583	1040	2140	3210	6180	9850	17 400	35 500
300	253	528	945	1940	2910	5600	8920	15 800	32 200
350	232	486	869	1790	2670	5150	8210	14 500	29 600
400	216	452	809	1660	2490	4790	7640	13 500	27 500
450	203	424	759	1560	2330	4500	7170	12 700	25 800
500	192	401	717	1470	2210	4250	6770	12 000	24 400





KEYED NOTES: #

1. MAIN GAS LINE TO BE SIZED @1" SCH 40 BLACK STEEL (MIN.)

2. OUTLET FROM THE MANIFOLD TO BE SIZED @1/2" MIN.

3. G.C. AND PLUMBING CONTRACTOR TO FIELD VERIFY ALL NEW LINES, CONNECTION POINTS, LOCATIONS, VALVES.

4. EACH APPLIANCE OUTLET TO HAVE AN INDEPENDENT APPROVED SHUT OFF VALVE AND PRESSURE REGULATOR PROVIDED BY THE MANUFACTURER.

GAS LINE MATERIAL: ALL UNDERGROUND FUEL GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE, ASTM A53, GRADE B.

CORROSION PROTECTION: ALL UNDERGROUND STEEL PIPING SHALL BE PROTECTED AGAINST CORROSION PER 2023 FBC FUEL GAS SECTION 404.11. PIPING SHALL BE WRAPPED WITH APPROVED CORROSION-RESISTANT TAPE OR FACTORY-COATED.

CATHODIC PROTECTION: PROVIDE MAGNESIUM SACRIFICIAL ANODE ATTACHED TO BURIED STEEL PIPE TO PREVENT GALVANIC CORROSION.
DEPTH: INSTALL PIPING WITH A MINIMUM BURIAL DEPTH OF 12 INCHES BELOW FINISHED GRADE. 1

PENETRATIONS: WHERE PIPING PASSES THROUGH CONCRETE OR MASONRY, IT SHALL BE PROTECTED BY A SLEEVE. SEAL ANNULAR SPACE WITH NON-CORROSIVE SEALANT. 1

OUTDOOR KITCHEN EQUIPMENT & CONNECTION NOTES:

1. EQUIPMENT CLASSIFICATION: ALL OUTDOOR COOKING EQUIPMENT (GRILL, RANGE, ETC.) IS CLASSIFIED AS NON-FIXED, PORTABLE APPLIANCES.

2. GAS CONNECTION: GAS SUPPLY TO THE BBQ AREA SHALL TERMINATE AT A LISTED NATURAL GAS CONVENIENCE OUTLET SECURED TO THE ADJACENT WALL OR POST. THE COOKING APPLIANCE SHALL CONNECT EXCLUSIVELY VIA A DETACHABLE QUICK-DISCONNECT HOSE. APPLIANCES SHALL NOT BE HARD-PIPED DIRECTLY TO THE RESIDENTIAL GAS DISTRIBUTION SYSTEM.

3. MECHANICAL/VENTILATION: AS A FULLY PORTABLE OUTDOOR APPLIANCE, NO OVERHEAD MECHANICAL EXHAUST HOOD OR MAKEUP AIR SYSTEM IS REQUIRED.

4. STRUCTURAL/WIND-LOAD: DUE TO ITS PORTABLE AND QUICK-DISCONNECT CLASSIFICATION, THE EQUIPMENT REMAINS FULLY MOBILE AND IS EXEMPT FROM FBC RESIDENTIAL R301 WIND-LOAD ANCHORING AND TIE-DOWN REQUIREMENTS. 1

POOL ARE- PLUMBING

DRAWN BY:

CHECKED BY:

REVISIONS:

No.	DESCRIPTION	DATE
1	CITY COMMENT	7/15/2026
2	CITY COMMENT	9/22/2026

ISSUE RECORD:

No.	DESCRIPTION	DATE

SCALE:

SHEET CONTENTS:
PLUMBING PLAN- GAS LINE

PROJECT NO.:

DATE: 9/26/2026

DRAWING NO.: **P-2**

GENERAL NOTES:

ALL DESIGN, CONSTRUCTION, AND MATERIAL SPECIFICATIONS SHALL CONFORM TO THE **2024 ISPSC (INTERNATIONAL SWIMMING POOL AND SPA CODE).**
ELECTRICAL INSTALLATIONS, INCLUDING EQUIPOTENTIAL BONDING AND GFCI PROTECTION, MUST BE EXECUTED IN STRICT ACCORDANCE WITH **2023 NEC ARTICLE 680.**
SUCTION OUTLETS SHALL BE CONSTRUCTED AS DUAL-PLUMBED SYSTEMS TO MEET ALL VIRGINIA GRAEME BAKER (VGB) ACT AND **ANSI/PHTA/ICC-7** ENTRAPMENT AVOIDANCE STANDARDS.
GAS PIPING, VENTILATION, AND SAFETY SHUT-OFFS FOR THE FIRE PIT FEATURE SHALL ADHERE TO **THE 2024 IFGC (INTERNATIONAL FUEL GAS CODE).**
THE FILTRATION AND CIRCULATION SYSTEM SHALL BE ENGINEERED TO MEET **ANSI/PHTA/ICC-15 ENERGY EFFICIENCY STANDARDS** THROUGH THE USE OF VARIABLE SPEED TECHNOLOGY AND REDUCED HEAD-LOSS PIPING.
BARRIER REQUIREMENTS, INCLUDING GATES AND COVERS, SHALL BE VERIFIED TO MEET **ASTM F1346-91** SPECIFICATIONS FOR RESIDENTIAL POOL SAFETY.
ALL PLUMBING AND GAS WORK MUST COMPLY WITH APPLICABLE LOCAL BUILDING AMENDMENTS AND MUNICIPAL ORDINANCES IN EFFECT AT THE TIME OF PERMIT ISSUANCE.
PRESSURE TESTING RESULTS FOR BOTH WATER (35 PSI) AND GAS (15 PSI) SHALL BE MAINTAINED AND VERIFIED BY THE INSPECTOR OF RECORD PRIOR TO BACKFILL.

KEYED NOTE:

1. A JANDY/VSFHP270DV2A 2.7 HP VARIABLE SPEED PUMP SHALL BE INSTALLED TO ACHIEVE THE REQUIRED 125 GPM FLOW RATE FOR THE POOL AND SPA.

2. FILTRATION SHALL BE PROVIDED BY A JANDY/CS200 CARTRIDGE FILTER TO MINIMIZE SYSTEM FLOW RESISTANCE.

3. A JANDY JRT3000R HEAT PUMP (130,000 BTU) SHALL BE UTILIZED AS THE PRIMARY HEATING SOURCE.

4. HAYWARD AUTO-SKIM SERIES SKIMMER SHALL BE INSTALLED AND PLUMBED WITH 2 LINE.

5.TWO AQUASTAR/32CDFL101 DRAINS SHALL BE INSTALLED FOR SPA AND POOL - GBA 2017 COMPLIANT, 316 GPM MAX RATING

6. ALL MAIN SUCTION AND RETURN TRUNK LINES SHALL BE CONSTRUCTED USING 3-INCH AND 2 1/2-INCH SCHEDULE 40 PVC PRESSURE PIPE WITH DEEP SOCKET FITTINGS.

7. HEAVY-DUTY SOLVENT WELD SHALL BE USED FOR EVERY JOINT TO ENSURE STRUCTURAL INTEGRITY.

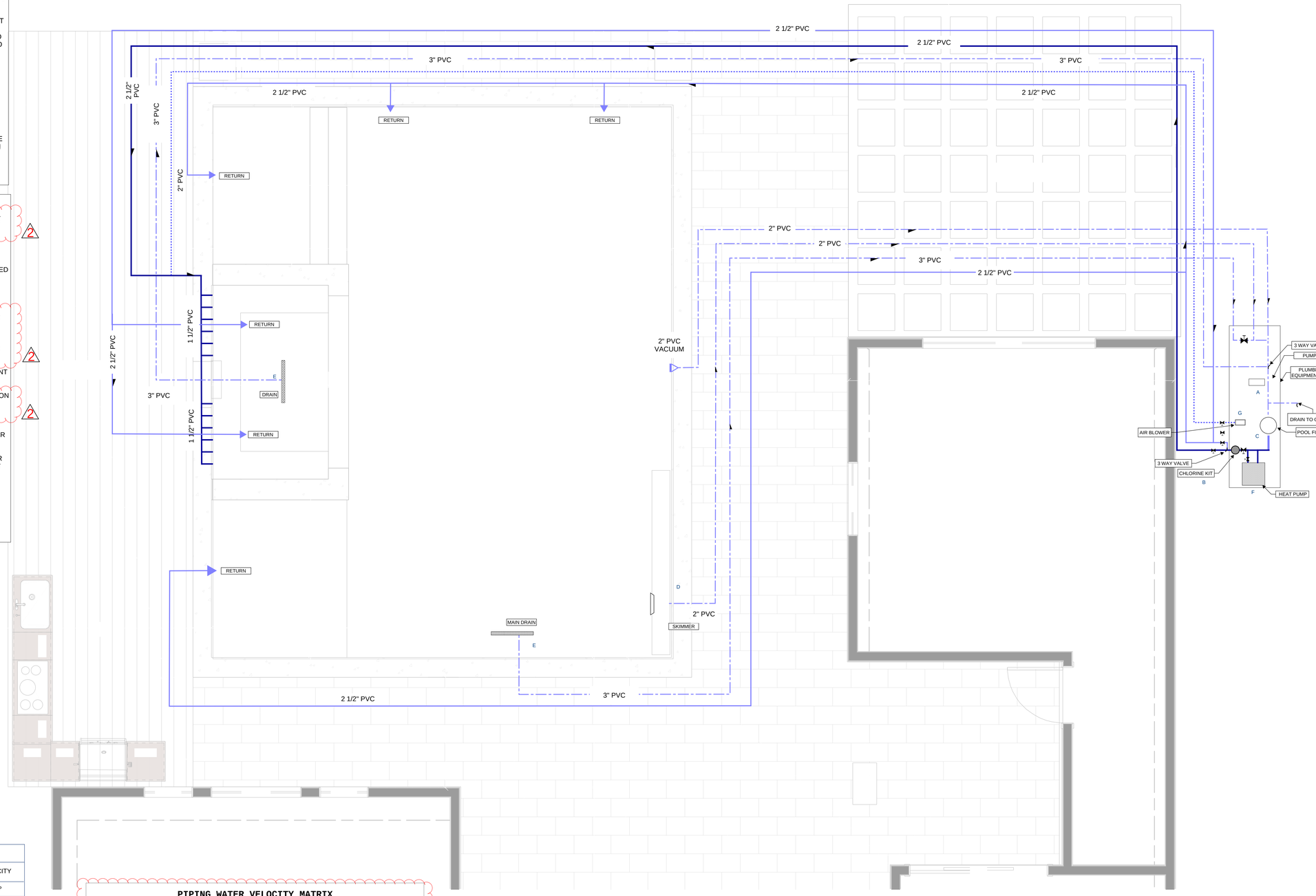
8. WATER VELOCITY SHALL BE LIMITED TO 8 FEET PER SECOND ON THE SUCTION SIDE AND 10 FEET PER SECOND ON THE RETURN SIDE PER **FBC R4501.6.3.**

9. THE HEAT PUMP SHALL BE CONNECTED TO A DEDICATED 50-AMP OR 60-AMP CIRCUIT PROTECTED BY A GFCI BREAKER PER NEC ARTICLE 680.

10. A CHECK VALVE SHALL BE INSTALLED BETWEEN THE HEATER OUTLET AND ANY CHEMICAL FEEDERS TO PREVENT EQUIPMENT CORROSION.

11. A HYDROSTATIC PRESSURE TEST OF 35 PSI SHALL BE PERFORMED ON ALL WATER LINES AND VERIFIED BY THE INSPECTOR PRIOR TO BACKFILLING TRENCHES.

12. ALL PIPE SIZES SPECIFIED IN THE ENGINEERING DRAWINGS SHALL BE STRICTLY MAINTAINED WITHOUT UNAUTHORIZED SUBSTITUTION.



NEW POOL EQUIPMENT SCHEDULE

MARK	EQUIPMENT	BRAND/MODEL	PIPE SIZE	CAPACITY
A	POOL PUMP	JANDY/ VSFHP270DV2A	3" - 2 1/2"	2.7 HP
B	CHLORINE KIT	JANDY	2 1/2"	-
C	CARTRIDGE FILTER	JANDY/CS200	2 1/2"	45,000 @6Hr
D	SKIMMER	HAYWARD/SP1082	2"	-
E	CHANNEL DRAIN	AQUASTAR/ 32CDFL101	3"	32" LONG
F	HEAT PUMP	JANDY/JRT3000R	2 1/2"	130,000 BTU
G	AIR BLOWER	SILENCER/1.5HP	2"	105 CFM

PIPING WATER VELOCITY MATRIX
PER FLORIDA BUILDING CODE (FBC) R4501.6.3

Line Type	Flow (GPM)	Pipe Size (Sch 40)	Velocity (fps)	Code Max (fps)	Status
Main Suction	125	3.0"	5.42	8.0	**PASS**
Main Return	125	2.5"	8.38	10.0	**PASS**

UNITS ARE PERFORMANCE BASED AND ALTERNATIVES MAY BE SUBSTITUTED FOR THOSE SPECIFIED SO LONG AS THEY MEET OR EXCEED ALL PERFORMANCE SPECIFICATIONS AND CODE REQUIREMENTS.

POOL ARE- PLUMBING

DRAWN BY:

CHECKED BY:

REVISIONS:

No.	DESCRIPTION	DATE
1	CITY COMMENT	7/15/2026
2	CITY COMMENT	9/22/2026

ISSUE RECORD:

No.	DESCRIPTION	DATE

SCALE:

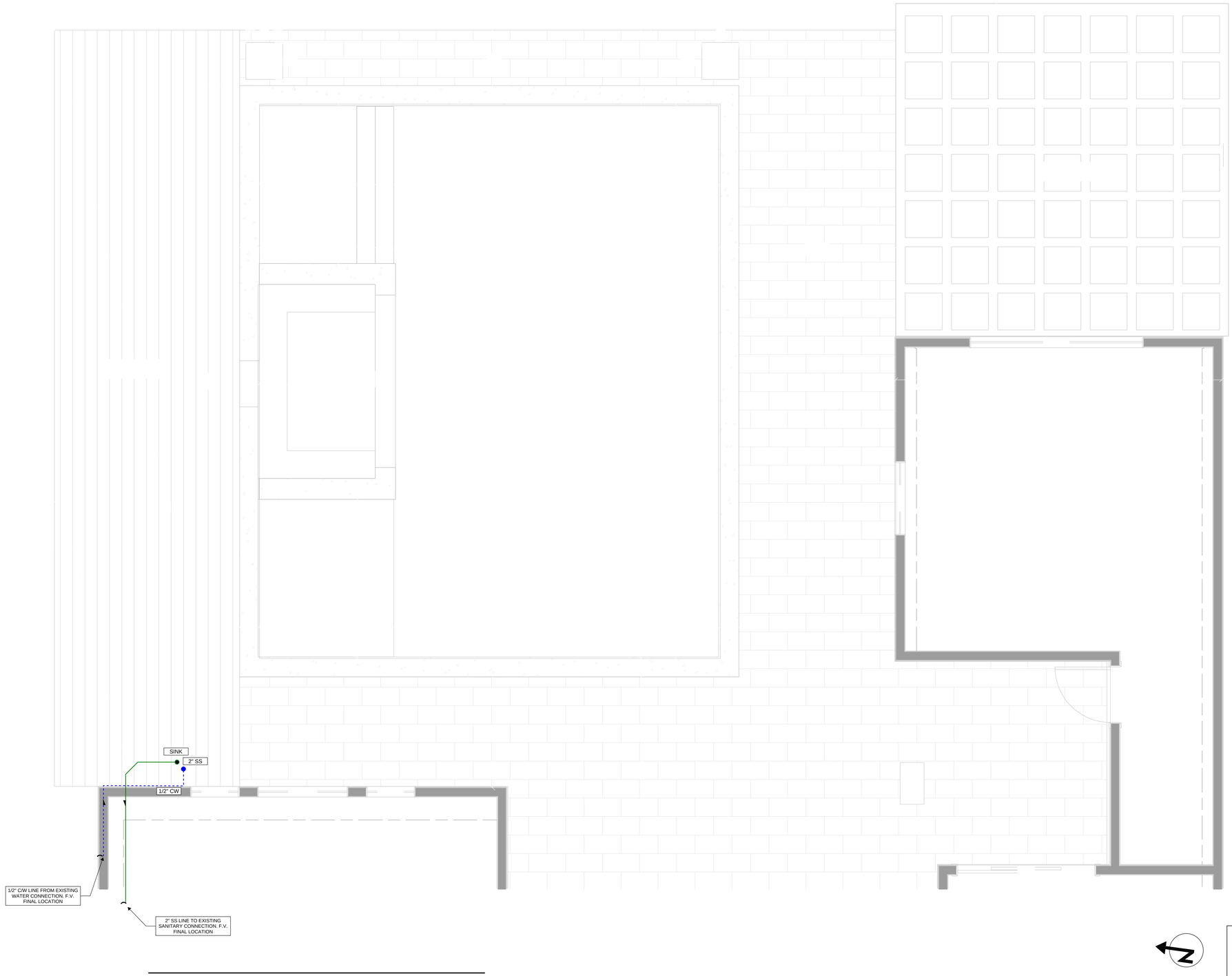
SHEET CONTENTS:

PLUMBING PLAN - POOL WATER

PROJECT NO.:

DATE: 9/26/2026

DRAWING NO.: **P-3**



POOL ARE- PLUMBING

DRAWN BY:

CHECKED BY:

REVISIONS:

No.	DESCRIPTION	DATE
1	CITY COMMENT	7/15/2026
2	CITY COMMENT	9/22/2026

ISSUE RECORD:

No.	DESCRIPTION	DATE

SCALE:

SHEET CONTENTS:

PLUMBING PLAN- WATER AND WASTE

PROJECT NO.:

DATE: 9/26/2026

DRAWING NO.: **P-4**

BBQ GAS PLUG™ STAINLESS STEEL

GAS OUTLETS IN 1/2" AND 3/4" SIZES



Model# BBQ-SS-50

- BRUSHED STAINLESS STEEL ENCLOSURE
- DIRECT CONNECTION TO EXISTING RESIDENTIAL GAS SYSTEMS FOR INDOOR/OUTDOOR USE
- C/W ADJUSTABLE STANDOFFS FOR SIDING INSTALLATIONS
- CLEAN, COMPACT DESIGN, CONCEALS UNSIGHTLY PIPES AND VALVES
- AVAILABLE WITH EITHER 1/2" OR 3/4" KWIK DISCONNECT SAFETY SHUT-OFFS WITH EASY ACCESS



Model# BBQ-SS-75

THIS OUTLET BOX IS AN IDEAL MEANS OF SAFELY AND SECURELY CONNECTING YOUR NATURAL GAS OR PROPANE BARBEQUE OR PATIO HEATER TO YOUR EXISTING HOME'S GAS SUPPLY. THIS PROVIDES THE OWNER WITH NOT ONLY PEACE OF MIND BUT ALSO A PRACTICAL AND CLEAN METHOD OF CONCEALING UNSIGHTLY PIPES AND VALVES.

SPECIFICATIONS

Capacity: 1/2" – 90,000 BTU (NG) 3/4" 245,000 BTU (NG)
1/2" – 138,000BTU (LP) 3/4" 375,000 BTU (LP)

Inlet Connection: 1/2" or 3/4" NPT pipe connection

Hose Connection: 1/2" or 3/4"

Overall Size: 1/2"- 8 1/2" x 5 1/4" x 2 1/8"
3/4" - 8 1/2" x 5 1/4" x 3 1/8"

Approved for temperatures to -40 deg.



WHY FILL UP WHEN YOU CAN HOOK UP

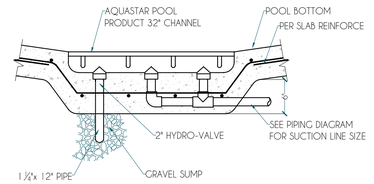
BURNABY MANUFACTURING LTD.

2190-580 Nicola Ave, Port Coquitlam, B.C. V3B 0P2
TEL: (604) 877-1599 • FX: (604) 875-6776
EMAIL: info@bbymfg.com • WEB: www.bbymfg.com

Distributed by:

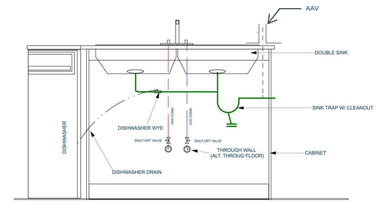
1

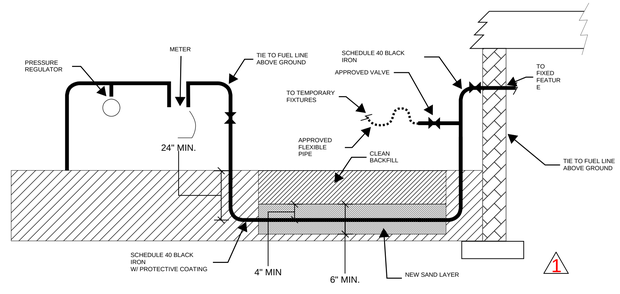
BBQ-SS - 0524



CHANNEL DRAIN DETAIL
SCALE:NTS

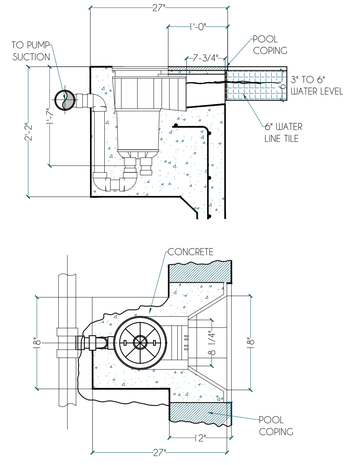
AQUASTAR POOL PRODUCT 32" CHANNEL DRAIN FLAT CRATE ANTI-ENTRAPMENT SUCTION OUTLET COVER AND THREE PORT MANUFACTURERS MODEL 32CDFL COMPLY W/ PROVISIONS OF THE ANSI/ASME A112.19.8-2009 (VIRGINIA GRAHAM BAKER)





TYP. GAS PIPE UNDERGROUND DETAIL

SCALE: NTS



POOL ARE- PLUMBING

DRAWN BY:

CHECKED BY:

REVISIONS:

No.	DESCRIPTION	DATE
1	CITY COMMENT	7/15/2026
2	CITY COMMENT	9/22/2026

ISSUE RECORD:

No.	DESCRIPTION	DATE

SCALE:

SHEET CONTENTS:

PLUMBING - TYPICAL DETAIL AND GAS ISO

PROJECT NO.:

DATE: 9/26/2026

DRAWING NO.: **P-5**

ELECTRICAL GENERAL NOTES

1 GENERAL CONTRACTOR IS RESPONSIBLE FOR THE SITE, VERIFICATION OF ALL EXISTING AND NEW EQUIPMENT AND SYSTEMS TO REMAIN. IF ANY SYSTEMS OR EQUIPMENT ARE MISSING, DAMAGED OR MALFUNCTIONING THE CONTRACTOR SHALL PROVIDE NEW TO BE INSTALLED AS SPECIFIED AND REQUIRED BY 2020 NEC (NATIONAL ELECTRICAL CODE) AND 2020 FBC (FLORIDA BUILDING CODE).

2 GENERAL CONTRACTOR AND ELECTRICAL TRADES INVOLVED IN THE PROJECT ARE TO INSTALL ALL ELECTRICAL EQUIPMENT IN ACCORDANCE WITH THEIR SPECIFIC MANUFACTURERS WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS, SPECIFIC CONTRACT DOCUMENTS AND ANY AND ALL APPLICABLE CODES AND REGULATIONS.

3 GENERAL CONTRACTOR TO COORDINATE ALL EQUIPMENT CONNECTIONS WITH MANUFACTURERS CERTIFIED DRAWINGS AND/OR DOCUMENTS. COORDINATE WITH AND PROVIDE ALL CONDUIT AND TRANSITIONS REQUIRED FOR FINAL EQUIPMENT CONNECTIONS TO FURNISHED EQUIPMENT.

4 APPLY AND PAY FOR ALL PERMITS, FEES, LICENSEES AND INSPECTIONS FOR THIS DIVISION OF WORK.

5 COMPLY WITH ALL STATE AND LOCAL CODE REQUIREMENTS AND ORDINANCES, SPECIFICALLY THE CITY OF WESTLAKE AND PALM BEACH COUNTY. COMPLY WITH REQUIREMENTS OF THE UTILITY COMPANIES. IN THE CASE OF DIFFERENCES BETWEEN THESE REQUIREMENTS AND ORDINANCES, THE MOST STRINGENT SHALL GOVERN.

6 THE LOCATION OF EXISTING UNDERGROUND/OVERHEAD/CONCEALED UTILITIES IS SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PAY FOR AND REPAIR ALL DAMAGES CAUSED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

7 MAINTAIN ONE SET OF REDLINED DRAWINGS ON THE JOB SITE INDICATING ALL CHANGES AND DEVIATIONS FROM THE WORK SHOWN ON THE DRAWINGS.

8 PROVIDE A WRITTEN WARRANTY TO THE OWNER COVERING THE ENTIRE ELECTRICAL WORK TO BE FREE FROM DEFECTIVE MATERIALS, EQUIPMENT AND WORKMANSHIP FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE.

9 UNLESS OTHERWISE NOTED OR AGREED UPON, THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL WIRING, CABLES AND ELECTRICAL DEVICES EXISTING IN WALLS TO BE DEMOLISHED AND THE REMOVAL OF ALL OTHER REDUNDANT ELECTRICAL DEVICES NOT SHOWN ON PLANS. CUT BACK AND CAP UNUSED RACEWAYS AND OUTLETS AND REMOVE UNUSED WIRING BACK TO PANEL BOARD.

10 CONNECTIONS TO EQUIPMENT THAT PRODUCE NOISE AND OR VIBRATIONS (TRANSFORMERS, MOTORS, GENERATORS, ETC.) SHALL BE MADE WITH FLEXIBLE CONDUIT. USE A MINIMUM 3 FEET OF FLEXIBLE CABLE WITH SLACK AT EACH DEVICE.

11 BONDING (CRITICAL): ALL SWIMMING POOL BONDING SHALL STRICTLY COMPLY WITH NEC ARTICLE 680.26. AN EQUIPOTENTIAL BONDING GRID (#8 AWG SOLID COPPER) SHALL BE INSTALLED EXTENDING 3 FEET HORIZONTALLY FROM THE INSIDE WALL OF THE POOL UNDER THE PERIMETER SURFACE.

12 EQUIPOTENTIAL BONDING: THE CONTRACTOR MUST BOND ALL METAL PARTS WITHIN 5 FEET OF THE POOL WATER'S EDGE, INCLUDING: POOL SHELL (4 POINTS MINIMUM), SCREEN ENCLOSURE FOOTERS, PUMP MOTORS, HEATER SHELL, AND OUTDOOR KITCHEN METAL FRAMING.

13 UNDERWATER LIGHTING: ALL UNDERWATER LUMINAIRES SHALL BE LOW VOLTAGE (12V) LISTED FOR SWIMMING POOL USE. TRANSFORMER SHALL BE AN ISOLATED WINDING TYPE LISTED FOR POOL USE. JUNCTION BOXES SHALL BE LOCATED MINIMUM 4 INCHES ABOVE GRADE AND MINIMUM 4 FEET FROM POOL EDGE PER NEC 680.24.

14 GENERATOR INSTALLATION: GENERATOR INSTALLATION SHALL COMPLY WITH NFPA 37 AND NEC ARTICLE 445. THE GENERATOR FRAME SHALL BE BONDED TO THE SYSTEM GROUNDING ELECTRODE CONDUCTOR. VERIFY EXHAUST CLEARANCE IS MINIMUM 5 FEET FROM ANY BUILDING OPENING.

15 WIRING METHODS: UNDERGROUND CONDUIT FOR POOL EQUIPMENT SHALL BE PVC SCHEDULE 40 OR 80, BURIED MINIMUM 18 INCHES BELOW GRADE (NEC 300.5). ALL CONDUCTORS SHALL BE COPPER (THHN/THWN). AN INSULATED EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED FOR ALL POOL CIRCUITS (NEC 680.21).

16 GFCI PROTECTION: ALL POOL MOTORS INCLUDING BLOWER AND CHLORINATOR EQUIPMENT 150 VOLTS OR LESS TO GROUND SHALL BE PROVIDED WITH GFCI PROTECTION PER 2020 NEC 680.21 (C). 2

17 LIGHTING SYSTEM TEMPORARY LIGHTING SHALL BE PROVIDED THROUGHOUT PROJECT AS REQUIRED BY GENERAL CONTRACTOR.

18 CIRCUITRY SHOWN ON PLANS IS FOR GROUPING PURPOSES ONLY. EXACT CIRCUITS ARE TO BE DETERMINED ON SITE BASED ON AVAILABILITY. EXISTING CIRCUITRY SHALL BE VERIFIED FOR CONTINUITY AND CODE COMPLIANCE ON SITE BY THE GENERAL CONTRACTOR PRIOR TO COMMENCING NEW WORK.

19 CONTRACTOR TO VERIFY AND MAKE NECESSARY ADJUSTMENTS TO ENSURE THAT LOADING ON EACH PHASE IS BALANCED. PROVIDE A TYPED CIRCUIT DIRECTORY IN EACH PANEL.

20 SYSTEMS SHALL BE TESTED FOR PROPER OPERATION. IF TESTS SHOW THAT WORK IS DEFECTIVE, CONTRACTOR SHALL MAKE CORRECTIONS NECESSARY AT NO COST TO THE OWNER.

21 THE ELECTRICAL DRAWINGS ARE SCHEMATIC IN NATURE AND INDICATE THE GENERAL DESIGN AND ARRANGEMENT OF CONDUIT AND WIRING, EQUIPMENT, SYSTEMS, ETC. INFORMATION SHOWN IS DIAGRAMMATIC IN CHARACTER AND DOES NOT INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. ANY AND ALL DESIGN ELEMENTS, FIXTURE LOCATIONS, ETC. TO BE FIELD VERIFIED BY THE GENERAL CONTRACTOR AND THE ELECTRICIAN ON SITE.

22 THE LOCATIONS OF THE ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS AND SHALL HAVE THE APPROVAL OF THE ENGINEER BEFORE BEING INSTALLED. DO NOT SCALE THE DRAWINGS (UNLESS NOTED OTHERWISE).

23 CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND SIZES OF ALL EXISTING EQUIPMENT, ELECTRICAL CONDUIT, STRUCTURAL MEMBERS, ETC. PRIOR TO BID.

24 SLEEVES AND BOXES SHALL BE PROVIDED WHEREVER CONDUITS PASS THROUGH FLOOR, WALL AND ROOF CONSTRUCTION.

25 FURNISH AND INSTALL ALL FOUNDATIONS, BASES AND SUPPORTS.

26 WORK, MATERIALS AND EQUIPMENT SHALL CONFORM TO THE LATEST EDITIONS OF LOCAL AND STATE CODES AND STANDARDS. SPECIFICALLY THE 2020 NEC AND 2020 FLORIDA BUILDING CODE.

27 PROVIDE PERMITS AND INSPECTIONS AS REQUIRED.

28 VERIFY EXACT LOCATIONS OF EXISTING AND NEW UNDERGROUND UTILITIES, PIPING, AND RACEWAY SYSTEMS PRIOR TO TRENCHING. PROVIDE NECESSARY TRENCHING, BACKFILL, EXCAVATION, SUPPORTS, SERVICE FEEDERS (CONDUIT AND/OR WIRE), PULLBOXES, TRANSFORMER PADS, SAWCUTTING AND PATCHING, CONCRETE/PAVING, ETC. REQUIRED. BACKFILL TRENCHES TO 90 PERCENT COMPACTION AND PATCH TO MATCH EXISTING.

29 FINAL CONNECTIONS TO EQUIPMENT SHALL BE IN ACCORDANCE WITH MANUFACTURERS APPROVED WIRING DIAGRAMS, DETAILS AND INSTRUCTIONS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED AND SOURCED.

30 ALUMINUM WIRE AND CABLE IN SIZES #1/0 AND LARGER MAY BE SUBSTITUTED FOR COPPER ON SERVICES AND FEEDERS IF AMPACITY IS EQUAL TO OR GREATER THAN COPPER AND VOLTAGE DROP IS EQUAL TO OR LESS THAN COPPER.

31 ALL ELECTRICAL SYSTEMS COMPONENTS SHALL BE LISTED OR LABELED BY U.L. OR OTHER RECOGNIZED TESTING FACILITY.



N

LOCATION MAP

ABBREVIATIONS

ACT - ACOUSTIC CEILING TILE
AD - AREA DRAIN
AFF - ABOVE FINISHED FLOOR
ALUM - ALUMINUM
ANOD - ANODIZED
BSMT - BASEMENT
BYND - BEYOND
BOT - BOTTOM
CIP - CAST IN PLACE
CHNL - CHANNEL
CJ - CONTROL JOINT
CLG - CEILING
CLR - CLEAR
CMU - CONCRETE MASONRY UNIT
COL - COLUMN
COMPR - COMPRESSIBLE
CONC - CONCRETE
CONT - CONTINUOUS
CPT - CARPET
CT - CERAMIC TILE
CTYD - COURTYARD
DBL - DOUBLE
DEMO - DEMOLISH OR DEMOLITION
DIA - DIAMETER
DIM - DIMENSION
DIMS- DIMENSIONS
DN - DOWN
DR - DOOR
DWG - DRAWING
EA - EACH
EJ - EXPANSION JOINT
EL - ELEVATION
ELEC - ELECTRICAL
ELEV - ELEVATOR OR ELEVATION
EP - ELECTRIC PANEL
EPDM - ETHYLENE PROPYLENE DIENE M-CLASS (ROOFING)
EQ - EQUAL
EXIST - EXISTING
EXP JT - EXPANSION JOINT
EXT - EXTERIOR
FD - FLOOR DRAIN OR FIRE DEPT. CONNECTION
FEC - FIRE EXTINGUISHER CABINET
FIXT - FIXTURE
FLR - FLOOR
FM - FILLED METAL
FO - FACE OF
FND - FOUNDATION
GA - GAUGE
GALV - GALVANIZED
GWB - GYPSUM WALL BOARD
HC - HOLLOW CORE
HI - HIGH
HM - HOLLOW METAL
HP - HIGH POINT
HR - HOUR
HVAC - HEATING, VENTILATING, AND AIR CONDITIONING
ILO - IN LIEU OF
INSUL - INSULATED OR INSULATION
INT - INTERIOR
LO - LOW
MAX - MAXIMUM
MO - MASONRY OPENING
MECH - MECHANICAL
MEMBR - MEMBRANE
MIN - MINIMUM
MRGWB - MOISTURE-RESISTANT GYPSUM WALL BOARD
MTL - METAL
NIC - NOT IN CONTACT
NO - NUMBER
NOM - NOMINAL
OC - ON CENTER
OH - OVERHANG OR OPPOSITE HAND
OPP - OPPOSITE OR OPPOSITE HAND
OZ - OUNCE
PCC - PRE CAST CONCRETE
PLUMB - PLUMBING
PLYD - PLYWOOD
PT - PRESSURE TREATED
PNT - PAINT OR PAINTED
PVC - POLYVINYL CHLORIDE
RBR - RUBBER
RCP - REFLECTED CEILING PLAN
RD - ROOF DRAIN
REQD - REQUIRED
RM - ROOM
SIM - SIMILAR
SPEC - SPECIFIED OR SPECIFICATION
SPK - SPRINKLER OR SPEAKER
SSTL - STAINLESS STEEL
STC - SOUND TRANSMISSION COEFFICIENT
STL - STEEL
STRUCT - STRUCTURE OR STRUCTURAL
T&G - TONGUE AND GROOVE
TELE - TELEPHONE
TME - TO MATCH EXISTING
TO - TOP OF
TOC - TOP OF CONCRETE
TOS - TOP OF STEEL
T/D - TELEPHONE/DATA
TYP - TYPICAL
UNO - UNLESS NOTED OTHERWISE
U/S - UNDERSIDE
VIF - VERIFY IN FIELD
VP - VISION PANEL
W/ - WITH
WD - WOOD

SYMBOLS

ELECTRICAL CONN.
CONCRETE
ELEVATION MARKER

BUILDING CONTRACTOR/HOME OWNER TO REVIEW AND VERIFY ALL DIMENSIONS, SPECS, AND CONNECTIONS BEFORE CONSTRUCTION BEGINS.

SHEET SCHEDULE

SHEET NUMBER	SHEET NAME
E0.0	COVER SHEET & NOTES
E0.1	ELECTRICAL NOTES & PANEL SCHEDULE
E1.0	LOT UTILITIES- ELECTRIC
E2.0	ELECTRICAL LAYOUT - POOL SIDE
E2.1	ELECTRICAL SERVICE - ELECTRICAL NOTES
E3.0	ELECTRICAL SERVICE - ONE LINE DIAGRAM
E3.1	ELECTRICAL EQUIPMENT SCHEDULE
E3.2	GENERATOR PAD SPECS

DESIGN CRITERIA & CONDITIONS

PROJECT CITY: CITY OF WESTLAKE
PROJECT COUNTY: PALM BEACH COUNTY
PROJECT ELEVATION: 20 FT. ABOVE SEA LEVEL
ZONING DISTRICT: R-1—RESIDENTIAL - 1 (77-WESTLAKE)

APPLICABLE CODES:
- FLORIDA BUILDING CODE – RESIDENTIAL (FBC-R), 8TH EDITION (2020)
- CITY OF WESTLAKE ZONING & LAND DEVELOPMENT REGULATIONS
- PALM BEACH COUNTY AMENDMENTS TO THE FLORIDA BUILDING CODE
- NATIONAL ELECTRICAL CODE (NEC 2020) – ARTICLE 680 (POOLS & OUTDOOR ELECTRICAL)
- FLORIDA BUILDING CODE – PLUMBING, MECHANICAL & FUEL GAS, 8TH EDITION (2020)
- FLORIDA FIRE PREVENTION CODE (AS APPLICABLE TO OUTDOOR GAS APPLIANCES)

PROJECT SCOPE

SCOPE OF WORK LIMITATION: ALL ELECTRICAL WORK UNDER THIS SUBMITTAL IS FOR SWIMMING POOL INSTALLATION ONLY.

PROJECT DIRECTORY

OWNER 1:

A &
VENTE

S:
DR
L 33470 5428

PROJECT DATA

EXISTING BUILDING HEIGHT:
EXISTING 280'. HIGHEST RIDGE (+/-) FROM TERRAIN

CONSTRUCTION TYPE:
V-B

OCCUPANCY TYPE:
RESIDENTIAL R3

FIRE PROTECTION:
-

NUMBER OF STORIES:
1

EXISTING STORIES (ABOVE GROUND)
1

ATTACHED GARAGE
YES

GAS: NATURAL

SEWER: CITY

WATER: CITY

COOLING: CENTRAL AIR

HEATING: FORCED AIR

LOT AREA : 12,286 SQFT
BUILDING: 4,788 SQFT
BACK CONC. SLAB: 1,073 SQFT
PAVED DRIVEWAY : 1,093 SQFT
POOL : 750 SQFT
POOL DECK: 409 SQFT
FIRE PIT: 324 SQFT
IMPERVIOUS AREA : 8,435 SQFT (68.65%)
PERVIOUS AREA : 3,851 SQFT (31.35%)

ZONING ANALYSIS

EX. LOT AREA:
.28 ACRES

REFERENCES

DR,
H, FL 33411

MUNICIPALITY
WESTLAKE

ZONING DISTRICT:
R-1—RESIDENTIAL - 1 (77-WESTLAKE)

SUBDIVISION:
WOODLANDS OF WESTLAKE

PARCEL CONTROL NUMBER:
77-41-43-05-04-000-1380

LEGAL DESCRIPTION:
WOODLANDS OF WESTLAKE LT 138

PROPERTY CLASS:
SINGLE FAMILY RESIDENTIAL

- POOL ELECTRICAL

DR,
WEST PALM BEACH, FL 33411

DRAWN BY:

CHECKED BY:

REVISIONS:

No.	DESCRIPTION	DATE
1	CITY COMMENT	7/15/2026
2	CITY COMMENT	9/22/2026

ISSUE RECORD:

No.	DESCRIPTION	DATE

SCALE:

SHEET CONTENTS:

PROJECT NO.:

DATE: 9/27/2026

DRAWING NO.: **E0.0**

ENGINEERS NOTE:

1. ALL ELECTRICAL INSTALLATIONS SHALL STRICTLY COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES, INCLUDING THE NEC 2020 EDITION.
2. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL WORK WITH PLUMBING, GAS, AND STRUCTURAL TRADES PRIOR TO COMMENCING TRENCHING OR ROUGH-IN.
3. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD REGARDING ANY UNFORESEEN FIELD CONDITIONS OR SITE DISCREPANCIES PRIOR TO PROCEEDING WITH WORK.
4. ALL MATERIALS AND EQUIPMENT SHALL BE NEW, UL-LISTED, AND INSTALLED STRICTLY PER MANUFACTURER SPECIFICATIONS.

ELECTRICAL SCHEDULE

2D SYMBOL	DESCRIPTION	COMMENTS
◇	POOL LAMP	POOL LAMP AT THE DECK AREA. WEATHER AND DAMP PROOF LED FIXTURE. MANUFACTURE, TYPE TBD BY G.C
GFCI	GFCI DUPLEX FLOOR RECEPTACLE	PROVIDE GFCI PROTECTED OUTLET INSIDE CABINETS FOR UNDERCABINET BEVARAGE COOLER. G.C TO FIELD VERIFY
	NICHELESS LED	UNDER WATER LED FIXTURE JANDY OR SIMILAR
	WALLL SCONE	LED FIXTURE -FV WITH G.C
EP	MLO PANEL 200AMP	120/240V 1PHASE 200A MLO - PANEL 'A' F.V
ATS	ATS	INSTALL AUTOMATIC TRANFER SYSTEM FOR GENERATOR AT EXTERIOR WALL. F.V
	MCB PANEL 'B'	120/240V 1PHASE 200A MCB - METER AND PANEL COMBO - PANEL 'B' F.V
J	JUNCTION BOX	LISTED POTTING COMPOUND J-BOX MIN. 4" ABOVE GRADE AND MIN. 48" FROM INSIDE WALL OF POOL. RUN CONDUIT TO AUTOMATION PANEL LIGHT RELAY.
GFCI WP	GFCI WP	ROVIDE 120V GFCI RECEPTACLE PER NEC 680.22
TL	LOW VOLTAGE TRANSFORMER	LOW VOLTAGE TRASNFORMER FOR UNDERWATER LIGHTS AND POOL SIDE LAMPS POSTS
POOL CONTROL PANEL	POOL AUTOMATION PANEL	JANDY AQUALINK OR SIMILAR POOL AUTOMATION CONTROL PANEL, POWERED FROM EXISTING PANEL. F.V FINAL LOCATION AND MOUNTING
	DISCONNECT FOR POLE	PROVIDE DISCONNECT FOR POOL HEATER WITHIN SIGHT OF EQUIPMENT
	DISCONNECT FOR POOL PUMP	PROVIDE DISCONNECT FOR POOL PUMP WITHIN SIGHT OF EQUIPMENT
	DISCONNECT FOR SPA PUMP	PROVIDE DISCONNECT FOR SPA PUMP WITHIN SIGHT OF EQUIPMENT

POOL ELECTRICAL EQUIPMENT

ITEM	EQUIPMENT NAME	BRAND / MODEL	ELECTRICAL DATA
1	HEAT PUMP	JANDY / JRT3000R	240V, RLA 32.5A, MOCP 50A
2	POOL FILTER PUMP	JANDY / VSFHP270DV2A(S)	230VAC, 10.5A, 2250W
3	AIR BLOWER	SILENCER / 1.5 HP	240V, 4.0A
4	CHLORINATOR	JANDY TRUECLEAR	120V, 4.0A, MOCP 15A

DWELLING UNITS:

ALL 120-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY ANY OF THE MEANS DESCRIBED IN 210.12(A)(1) THROUGH (6):

1 A LISTED COMBINATION-TYPE ARC-FAULT CIRCUIT INTERRUPTER INSTALLED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT

2 A LISTED BRANCH/FEEDER-TYPE AFCI INSTALLED AT THE ORIGIN OF THE BRANCH-CIRCUIT IN COMBINATION WITH A LISTED OUTLET BRANCH-CIRCUIT-TYPE ARC-FAULT CIRCUIT INTERRUPTER INSTALLED AT THE FIRST OUTLET BOX ON THE BRANCH CIRCUIT. THE FIRST OUTLET BOX IN THE BRANCH CIRCUIT SHALL BE MARKED TO INDICATE THAT IT IS THE FIRST OUTLET OF THE CIRCUIT.

3 A LISTED SUPPLEMENTAL ARC PROTECTION CIRCUIT BREAKER INSTALLED AT THE ORIGIN OF THE BRANCH CIRCUIT IN COMBINATION WITH A LISTED OUTLET BRANCH-CIRCUIT-TYPE ARC-FAULT CIRCUIT INTERRUPTER INSTALLED AT THE FIRST OUTLET BOX ON THE BRANCH CIRCUIT WHERE ALL OF THE FOLLOWING CONDITIONS ARE MET:
1 THE BRANCH-CIRCUIT WIRING SHALL BE CONTINUOUS FROM THE BRANCH-CIRCUIT OVERCURRENT DEVICE TO THE OUTLET BRANCH-CIRCUIT ARC-FAULT CIRCUIT INTERRUPTER.
2 THE MAXIMUM LENGTH OF THE BRANCH-CIRCUIT WIRING FROM THE BRANCH-CIRCUIT OVERCURRENT DEVICE TO THE FIRST OUTLET SHALL NOT EXCEED 15.2 M (50 FT) FOR A 14 AWG CONDUCTOR OR 21.3 M (70 FT) FOR A 12 AWG CONDUCTOR.
3 THE FIRST OUTLET BOX IN THE BRANCH CIRCUIT SHALL BE MARKED TO INDICATE THAT IT IS THE FIRST OUTLET OF THE CIRCUIT.

4 A LISTED OUTLET BRANCH-CIRCUIT-TYPE ARC-FAULT CIRCUIT INTERRUPTER INSTALLED AT THE FIRST OUTLET ON THE BRANCH CIRCUIT IN COMBINATION WITH A LISTED BRANCH-CIRCUIT OVERCURRENT PROTECTIVE DEVICE WHERE ALL OF THE FOLLOWING CONDITIONS ARE MET:
1 THE BRANCH-CIRCUIT WIRING SHALL BE CONTINUOUS FROM THE BRANCH-CIRCUIT OVERCURRENT DEVICE TO THE OUTLET BRANCH-CIRCUIT ARC-FAULT CIRCUIT INTERRUPTER.
2 THE MAXIMUM LENGTH OF THE BRANCH-CIRCUIT WIRING FROM THE BRANCH-CIRCUIT OVERCURRENT DEVICE TO THE FIRST OUTLET SHALL NOT EXCEED 15.2 M (50 FT) FOR A 14 AWG CONDUCTOR OR 21.3 M (70 FT) FOR A 12 AWG CONDUCTOR.
3 THE FIRST OUTLET BOX IN THE BRANCH CIRCUIT SHALL BE MARKED TO INDICATE THAT IT IS THE FIRST OUTLET OF THE CIRCUIT.
4 THE COMBINATION OF THE BRANCH-CIRCUIT OVERCURRENT DEVICE AND OUTLET BRANCH-CIRCUIT AFCI SHALL BE IDENTIFIED AS MEETING THE REQUIREMENTS FOR A SYSTEM COMBINATION-TYPE AFCI AND SHALL BE LISTED AS SUCH.

5 IF METAL RACEWAY, METAL WIREWAYS, METAL AUXILIARY GUTTERS, OR TYPE MC, OR TYPE AC CABLE MEETING THE APPLICABLE REQUIREMENTS OF 250.118, WITH METAL BOXES, METAL CONDUIT BODIES, AND METAL ENCLOSURES ARE INSTALLED FOR THE PORTION OF THE BRANCH CIRCUIT BETWEEN THE BRANCH-CIRCUIT OVERCURRENT DEVICE AND THE FIRST OUTLET, IT SHALL BE PERMITTED TO INSTALL A LISTED OUTLET BRANCH-CIRCUIT-TYPE AFCI AT THE FIRST OUTLET TO PROVIDE PROTECTION FOR THE REMAINING PORTION OF THE BRANCH CIRCUIT.

6 WHERE A LISTED METAL OR NONMETALLIC CONDUIT OR TUBING OR TYPE MC CABLE IS ENCASED IN NOT LESS THAN 50 MM (2 IN.) OF CONCRETE FOR THE PORTION OF THE BRANCH CIRCUIT BETWEEN THE BRANCH-CIRCUIT OVERCURRENT DEVICE AND THE FIRST OUTLET, IT SHALL BE PERMITTED TO INSTALL A LISTED OUTLET BRANCH-CIRCUIT-TYPE AFCI AT THE FIRST OUTLET TO PROVIDE PROTECTION FOR THE REMAINING PORTION OF THE BRANCH CIRCUIT.

EXCEPTION: AFCI PROTECTION SHALL NOT BE REQUIRED FOR AN INDIVIDUAL BRANCH CIRCUIT SUPPLYING A FIRE ALARM SYSTEM INSTALLED IN ACCORDANCE WITH 760.41(B) OR 760.121(B). THE BRANCH CIRCUIT SHALL BE INSTALLED IN A METAL RACEWAY, METAL AUXILIARY GUTTER, STEEL-ARMORED CABLE, TYPE MC OR TYPE AC, MEETING THE APPLICABLE REQUIREMENTS OF 250.118, WITH METAL BOXES, CONDUIT BODIES, AND ENCLOSURES.

INFORMATIONAL NOTE NO. 1: FOR INFORMATION ON COMBINATION-TYPE AND BRANCH/FEEDER-TYPE ARC-FAULT CIRCUIT INTERRUPTERS, SEE UL 1699-2011, STANDARD FOR ARC-FAULT CIRCUIT INTERRUPTERS. FOR INFORMATION ON OUTLET BRANCH-CIRCUIT TYPE ARC-FAULT CIRCUIT INTERRUPTERS, SEE UL SUBJECT 1699A, OUTLINE OF INVESTIGATION FOR OUTLET BRANCH CIRCUIT ARC-FAULT CIRCUIT-INTERRUPTERS. FOR INFORMATION ON SYSTEM COMBINATION AFCIS, SEE UL SUBJECT 1699C, OUTLINE OF INVESTIGATION FOR SYSTEM COMBINATION ARC-FAULT CIRCUIT INTERRUPTERS.

INFORMATIONAL NOTE NO. 2: SEE 29.6.3(5) OF NFPA 72-2013, NATIONAL FIRE ALARM AND SIGNALING CODE, FOR INFORMATION RELATED TO SECONDARY POWER-SUPPLY REQUIREMENTS FOR SMOKE ALARMS INSTALLED IN DWELLING UNITS.

INFORMATIONAL NOTE NO. 3: SEE 760.41(B) AND 760.121(B) FOR POWER-SUPPLY REQUIREMENTS FOR FIRE ALARM SYSTEMS.

PANEL "A" - STANDARD

SIEMENS OR EQUAL 200 MLO 1-3/8 SW 120/240V

WIRE	PHASE	POLE	TRIP	LOAD	DESCRIPTION	CIRCUIT NO.		CIRCUIT NO.	DESCRIPTION	LOAD	TRIP	POLE	PHASE	WIRE
6	A	2	50	12000	RANGE	1		2	BATHROOMS	-	20	1	A	12
						3		4	GENERAL	-	20	1	C	12
12	A	1	20	300	WATER HEATER	5		6	GENERAL	-	15	1	A	14
						7		8	GENERAL	-	15	1	C	14
10	A	2	30	5000	DRYER	9		10	GENERAL	-	15	1	A	14
						11		12	GENERAL	-	15	1	C	14
6	A	2	60	11200	AHU-1	13		14	AHU-2	####	60	2	A	6
						15		16						
12	A	1	20	1500	WASHER	17		18	GENERAL	-	15	1	A	14
12	C	2	20	1000	MICROWAVE	19		20	GENERAL	-	15	1	C	14
12	A	1	20	700	REFRIGERATOR	21		22	GENERAL	-	15	1	A	14
12	C	1	20	1200	DISHWASHER	23		24	GENERAL	-	15	1	C	14
12	A	1		700	GARBAGE DISP	25		26	GENERAL	-	20	1	A	12
12	C	1	20	1500	APPLIANCES	27		28	GENERAL	-	20	1	C	12
12	A	1	20	1500	APPLIANCES	29		30	GENERAL	-	15	1	A	14
12	C	1	20	1500	APPLIANCES	31		32	GAR. DR. OPNERS	700	20	1	C	12
-	-	-	-	-	SPACE	33		34	GENERAL	-	20	1	A	12
8	C	2	60	8000	OPT COOKTOP	35		36	GENERAL	-	20	1	C	12
						37		38	SPACE	-	-	-	-	-
-	-	-	-	-	SPACE	39		40	SPACE	-	-	-	-	-

PANEL "B" - STANDARD

SIEMENS OR EQUAL 200 MCB 1-3/8 SW 120/240V

WIRE	PHASE	POLE	TRIP	LOAD	DESCRIPTION	CIRCUIT NO.		CIRCUIT NO.	DESCRIPTION	LOAD	TRIP	POLE	PHASE	WIRE
8	A	2	30	8570	** CONDENSER	1		2	** CONDENSER	8570	30	2	A	8
						3		4						
10	A	2	25	-	SPR SOLENOID	5		6	COMMUNICATOR WIRE	700	20	1	A	12
						7		8	OPT EV CHARGER	####	60	2	A	8
-	-	-	-	-	SPACE	9		10						
-	-	-	-	-	SPACE	11		12	SPACE	-	-	-	-	-
-	-	-	-	-	SPACE	13		14	SPACE	-	-	-	-	-
-	-	-	-	-	SPACE	15		16	SPACE	-	-	-	-	-

EXISTING PANEL SCHEDULE

PROJECT: 5776 Beechnut Dr, Westlake, FL — PANEL: Panel B - MCB — DATE: 4/29/2026

Project Type: (•) RESIDENTIAL ( ) COMMERCIAL
Mounting: (•) SURFACE ( ) FLUSH
Status: ( ) RELOCATED ( ) NEW (•) EXISTING
Type: (•) MAIN ( ) MLO ( ) SUB
Info: Volt: 240/120 — Phase: 1 — Wire: 3 — Circuits: 20 — Bus Rating: 200 — Main Breaker: 200 — AIC Rating: 22000 — Load Unit: VA

**Arc fault circuit interrupters (AFCI) per NEC required in all living areas
**Panel schedule/setup can be altered as conditions required

Ckt #	Wire	Code	Description	Load (VA)	Bkr	P	Ph A	Ph B	P	Bkr	Load (VA)	Description	Code	Wire	Ckt #
1	8	6	(E) Condenser	8570	30	2	•		2	30	8570	(E) Condenser	6	8	2
3	8		(see ckt #1)		/	/		•	/	/		(see ckt #2)		8	4
5	12	4	(E) SPR SOLENOID	300	20	2	•		1	20	700	(E) Communicator wire	2	12	6
7	12		(see ckt #5)		/	/		•	1	20	500	(N) Outdoor Kitchen Ignition		12	8
9		2	(N) Pool Control Panel - JANDY	24000	125	2	•		1	20	500	(N) Outdoor Beverage Cooler- single		12	10
11			(see ckt #9)		/	/		•	1	20	500	(N) Outdoor Beverage Cooler double		12	12
13		1	SPARE			1	•		1			SPARE			14
15			SPARE			1		•	1			SPARE			16
17			SPARE			1	•		1			SPARE			18
19			SPARE			1		•	1			SPARE			20

RESIDENTIAL Demand Calculations

Code	Description	Load	Factor	Demand
1	SMALL APPLIANCE (MIN. 2 CKT @ 1500VA)	0	100% fixed	0
2	Lighting/Outlets	24700	100% 1st 3k, 35% Rem	10595
3	APPLIANCE W/MOTOR	0	125% largest, 75% rest	0
4	APPLIANCE W/O MOTOR	300	100%	300
5	KITCHEN EQUIPMENT	0	80%	0
6	AC/HEAT	17140	100%	17140
7	ELECTRIC DRYER	0	100%	0
8	LAUNDRY WASHER	0	100%	0

LOAD SUMMARY
Phase A: 21920 VA
Phase B: 21720 VA
Balance: 99.1%
Total Conn: 43640 VA
Total Demand: 28035 VA
Conn Amps: 181.83 A
Demand Amps: 116.81 A

MIN FEEDER: 2/0 AWG (Cu) or 4/0 AWG (Al) — GROUND: #4 AWG (Cu) or #2 AWG (Al)

PROJECT: 5776 Beechnut Dr, Westlake, FL — PANEL: Jandy Aqualink Pool Control Panel — DATE: 4/29/2026

Project Type: (•) RESIDENTIAL ( ) COMMERCIAL
Mounting: (•) SURFACE ( ) FLUSH
Status: ( ) RELOCATED (•) NEW ( ) EXISTING
Type: ( ) MAIN (•) MLO ( ) SUB
Info: Volt: 240/120 — Phase: 1 — Wire: 3 — Circuits: 20 — Bus Rating: 100 — Upstream: 100 — AIC Rating: 22000 — Load Unit: VA

**Arc fault circuit interrupters (AFCI) per NEC required in all living areas
**Panel schedule/setup can be altered as conditions required
UPSTREAM OCPD (AMP): 100

Ckt #	Wire	Code	Description	Load (VA)	Bkr	P	Ph A	Ph B	P	Bkr	Load (VA)	Description	Code	Wire	Ckt #
1		6	HEATER- JANDY VERSATEMP	7500	50	2	•		2	15	800	AIR BLOWER SILENCER 1.5 HP	3		2
3	6		(SEE CKT #1)		50	2		•	2	20		(SEE CKT #2)		12	4
5	10	3	POOL PUMP JANDY/ VSFHP270DV2A	2852	30	2	•		1	15	500	CHLORINE KIT - JANDY	4		6
7	10		(SEE CKT #5)		30	2		•	1		0	SPARE	6		8
9	12	2	POOL LIGHTING	800	20	1	•		2	20	800	POOL UNDER WATER LIGHTING	2	12	10
11			SPARE			1		•	1	20	1200	POOL MAINTENACE OUTLET - DEDICATE	2	12	12
13			N/A			1	•		1			N/A			14
15			N/A			1		•	1			N/A	2		16
17			N/A			1	•		1			N/A			18
19			N/A			1		•	1			N/A			20

RESIDENTIAL Demand Calculations

Code	Description	Load	Factor	Demand
1	SMALL APPLIANCE (MIN. 2 CKT @ 1500VA)	0	100% fixed	0
2	Lighting/Outlets	2800	100% 1st 3k, 35% Rem	2800
3	APPLIANCE W/MOTOR	3652	125% largest, 75% rest	4165
4	APPLIANCE W/O MOTOR	500	100%	500
5	KITCHEN EQUIPMENT	0	80%	0
6	AC/HEAT	7500	100%	7500
7	ELECTRIC DRYER	0	100%	0
8	LAUNDRY WASHER	0	100%	0

LOAD SUMMARY
Phase A: 7276 VA
Phase B: 7176 VA
Balance: 98.6%
Total Conn: 14452 VA
Total Demand: 14965 VA
Conn Amps: 60.22 A
Demand Amps: 62.35 A

MIN FEEDER: #3 AWG (Cu) or #1 AWG (Al) — GROUND: #8 AWG (Cu) or #6 AWG (Al)

NO CHANGES TO EXISTING MLO "PANEL A"

PROPOSED PANEL SCHEDULE

Westlake

LOAD CALCULATIONS

MODEL: 60-164 GRAND (Casita)

DESCRIPTION	Sq Ft	Load KW
GENERAL LTG (3) WATTS PER SQ.FT.	3752	11,256
RANGE		12,000
COOKTOP		8,000
DRYER		5,000
SMALL APPLIANCE		1,500
SMALL APPLIANCE		1,500
SMALL APPLIANCE		1,500
WATER HEATER IGNITOR		300
WASHER		1,500
MICROWAVE		1,200
HOOD		1,000
REFRIGERATOR		700
WINE COOLER		500
DISHWASHER		1,200
DISPOSAL		700
GARAGE DOOR OPENER		700
POOL HEATER (GAS) (OPTIONAL)		700
POOL PUMP (OPTIONAL)		2,400
EV CHARGING OUTLET (OPTIONAL)		12,000
TOTAL:		52,400
AHU HEAT #1		10,000
AHU HEAT #2 (CASITA)		10,000
TOTAL A/C		20,000
FIRST 10KW		10,000
BALANCE @ 40%		12,960
AC LOAD		13,000
TOTAL LOAD		35,960
		240
		149.83
	SERVICE SIZE	200

5776 Beechnut Drive, Westlake

OPTIONAL CALCULATION FOR ONE-FAMILY DWELLING
(REFER TO NEC SEC. 220-82)

DESCRIPTION	Sq Ft	Load KW
(E) GENERAL LTG (3) WATTS PER SQ.FT.	3752	11,256
(E) GAS RANGE		500
(E) OVEN		8,000
(E) DRYER		1,200
(E) SMALL APPLIANCE		1,500
(E) SMALL APPLIANCE		1,500
(E) SMALL APPLIANCE		1,500
(E) WATER HEATER IGNITOR		300
(E) WASHER		1,500
(E) MICROWAVE		1,200
(E) HOOD		1,000
(E) REFRIGERATOR		700
(N) BEVERAGE COOLER - OUTDOOR		1000
(E) DISHWASHER		1,200
(E) DISPOSAL		700
(E) GARAGE DOOR OPENER		700
(N) POOL HEATER - JANDY		7500
(N) CHLORINATOR		500
(N) POOL PUMP		5,600
(N) OUTDOOR KITCHEN IGNITIONS		500
(N) AIR BLOWER		1,800
EV CHARGING OUTLET (OPTIONAL)		
TOTAL GENERAL LOADS:		49,656
HEATING AND COOLING		
(E) AHU HEAT #1		10000
(E) AHU HEAT #2 (CASITA)		10000
TOTAL A/C		20,000
APPLICATION OF DEMAND FACTOR		
FIRST 10KVA OF GENERAL LOAD @ 100%		10,000
REMAINDER OF GENERAL LOAD @ 40%		15,862
AC LOAD		20,000
TOTAL LOAD		45,862
TOTAL (APP. OF D.F.(ABOVE))/240V		191.09
THEREFORE, THE EXISTING METER PANEL COMBO WILL WORK		

The affia perfor 553.7 licens comp

- POOL ELECTRICAL

DR,
WEST PALM BEACH, FL 33411

DRAWN BY:
CHECKED BY:

REVISIONS:

No.	DESCRIPTION	DATE
1	CITY COMMENT	7/15/2026
2	CITY COMMENT	9/22/2026

ISSUE RECORD:

No.	DESCRIPTION	DATE

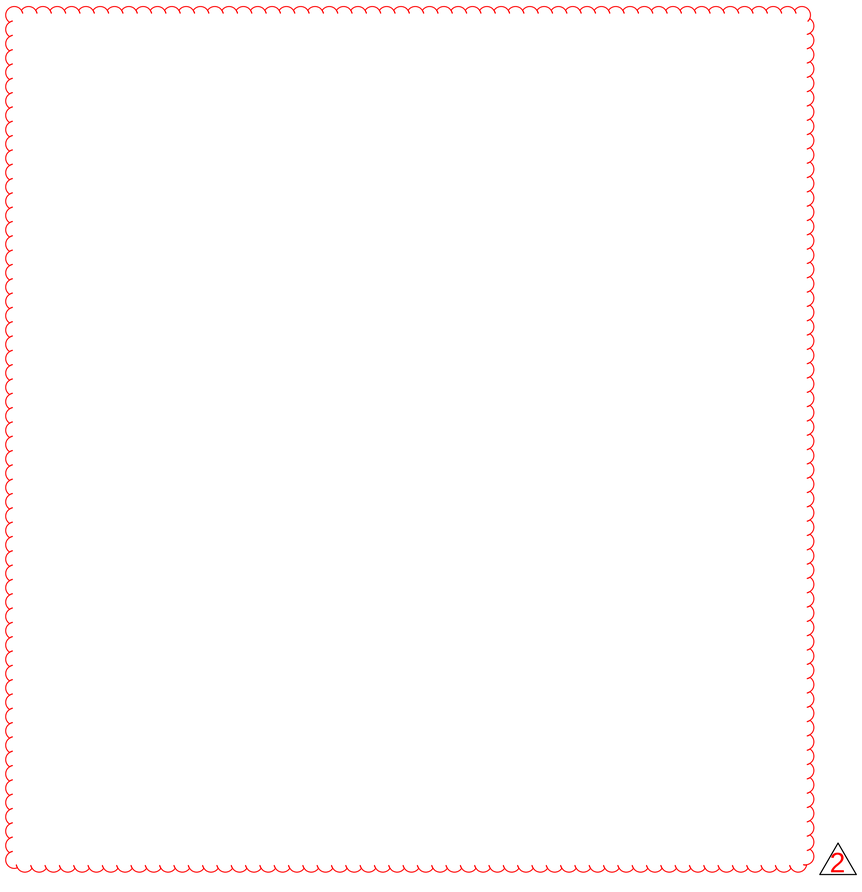
SCALE:

SHEET CONTENTS:

PROJECT NO.:
DATE: 9/27/2026

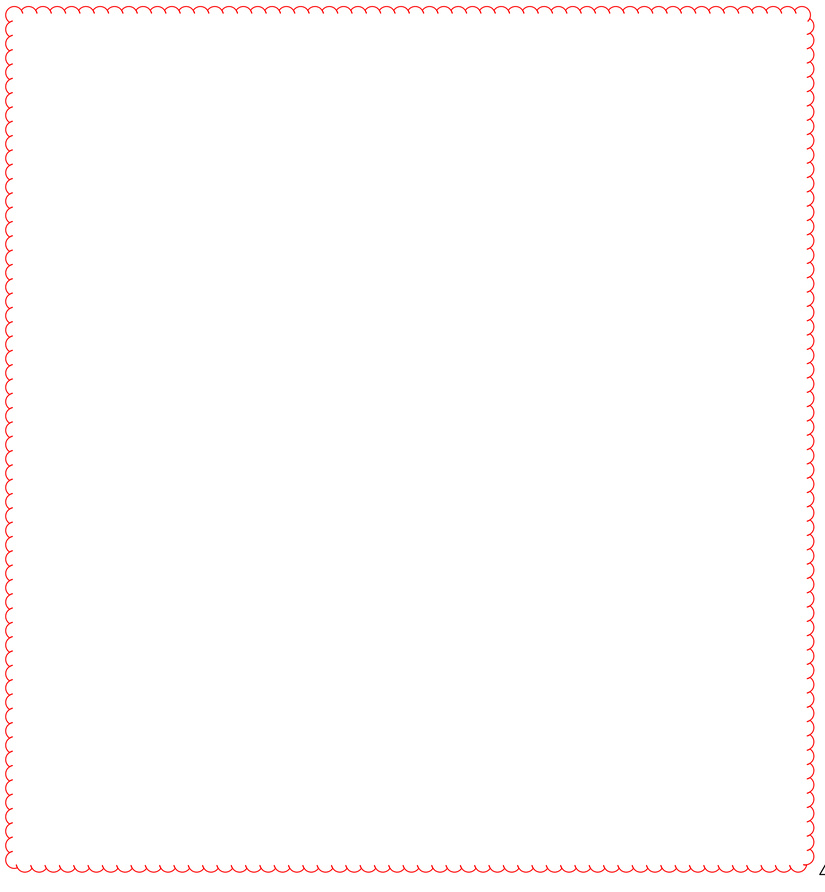
DRAWING NO.: **E0.1**

1 ELECTRICAL NOTES & PANEL SCHEDULE
SCALE: NO SCALE



ELECTRICAL LINES

1	CITY COMMENT	7/15/2026
2	CITY COMMENT	9/22/2026



1	CITY COMMENT	7/15/2026
2	CITY COMMENT	9/22/2026

1. THE ELECTRICAL CONTRACTOR SHALL EXAMINE THE DRAWINGS OF ALL TRADES WHOSE WORK RELATES TO OR IS DEPENDENT ON ELECTRICAL WORK TO BECOME FULLY INFORMED OF THE EXTENT AND CHARACTER OF THEIR SPECIFIED WORK AND BE ABLE TO COORDINATE IT WHILE AVOIDING POSSIBLE INTERFERENCE WITH THE ELECTRICAL WORK.

2. ALL EQUIPMENT, INCLUDING MECHANICAL, MOTORS AND CONTROLS SHALL BE FURNISHED, SET IN PLACE, AND WIRED. THE EXACT FURNISHING AND INSTALLATION OF THE EQUIPMENT SHALL BE COORDINATED BY THE CONTRACTORS INVOLVED.

3. IT IS THE INTENTION OF THESE SPECIFICATIONS AND DRAWINGS TO CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION. WHEREVER THE WORD "PROVIDE" IS USED, IT SHALL MEAN, "FURNISH AND INSTALL COMPLETE AND READY FOR USE."

4. THE ARCHITECTURAL SPECIFICATIONS, GENERAL AND SPECIAL CONDITIONS FOR THE WORK OF THIS PROJECT SHALL BE EXAMINED BY ELECTRICAL CONTRACTOR BEFORE SUBMITTING A BID.

5. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE AND SATISFACTORY ELECTRICAL INSTALLATION IN ACCORDANCE WITH THE TRUE INTENT OF THE DRAWINGS AND SPECIFICATIONS. HE SHALL PROVIDE, WITHOUT EXTRA CHARGE, ALL INCIDENTAL ITEMS REQUIRED, AS A PART OF THIS ELECTRICAL INSTALLATION. THE INSTALLATION SHALL BE SO MADE THAT ITS SEVERAL COMPONENT PARTS WILL FUNCTION TOGETHER AS A WORKABLE SYSTEM, AND SHALL BE LEFT WITH ALL PARTS ADJUSTED AND IN WORKING ORDER.

6. SECURE AND PAY FOR ALL PERMITS, TAXES, ROYALTIES, LICENSES, AND INSPECTIONS IN ASSOCIATION WITH THE WORK SPECIFIED UNDER ELECTRICAL DIVISION AND INDICATED ON THE DRAWINGS. FILE ALL NECESSARY PLANS, PREPARE ALL DOCUMENTS, AND OBTAIN ALL NECESSARY APPROVALS REQUIRED BY ALL GOVERNMENTAL DEPARTMENTS HAVING JURISDICTION. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL REMAIN EXPOSED TO VIEW UNTIL APPROVED BY THE INSPECTION AUTHORITY.

7. ALL WORK SHALL COMPLY WITH NATIONAL ELECTRICAL CODE (NEC), NATIONAL FIRE PROTECTION ASSOCIATION CODES (NFPA), INTERNATIONAL CODE COUNCIL (ICC) CODES, INCLUDING INTERNATIONAL ENERGY CONSERVATION CODE (IECC), AND ALL APPLICABLE LOCAL, STATE, MUNICIPAL, AND CITY CODES, ORDINANCES AND REGULATIONS.

8. THE NAMING OF THE MANUFACTURER OR BRAND WITH CATALOG NUMBER OR OTHER PRODUCT IDENTIFICATION WITHOUT THE WORDS "OR EQUAL" IN THE SPECIFICATIONS OR NOTES SHALL INDICATE THAT IT IS THE ONLY PRODUCT APPROVED FOR PURCHASE. IF THE WORDS "OR EQUAL" ARE USED, THEY SHALL BE INTERPRETED AS ESTABLISHING A QUALITY OR PERFORMANCE STANDARD FOR THE MATERIAL OR PRODUCT TO BE PURCHASED. THIS SHALL INDICATE THAT THE ELECTRICAL CONTRACTOR IS NOT RESTRICTED TO THE USE OF THE NAMED AND IDENTIFIED PRODUCT IF A SUBSTITUTE APPROVED BY THE ARCHITECT/ENGINEER IS AVAILABLE; HOWEVER, WHERE A SUBSTITUTION IS REQUESTED, IT WILL BE PERMITTED ONLY WITH THE WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER. NO SUBSTITUTE MATERIAL OR PRODUCT SHALL BE ORDERED, FABRICATED, SHIPPED, OR PROCESSED IN ANY MATTER PRIOR TO THE APPROVAL OF THE ARCHITECT/ENGINEER. THE ELECTRICAL CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ADDITIONAL EXPENSES, AS REQUIRED, MAKING CHANGES FROM THE ORIGINAL MATERIAL OR PRODUCT SPECIFIED.

9. THE TERM "AS REQUIRED" REFERS TO COMPONENTS THAT MAY BE REQUIRED TO COMPLETE THE NOTED SYSTEM INDICATED IN THE PROJECT DOCUMENTS.

10. THE TERM "VERIFY" REFERS TO A CONDITION WHICH MUST BE CONFIRMED PRIOR TO PROCEEDING WITH THE ORDERING OF MATERIAL OR THE FABRICATION AND INSTALLATION OF A COMPONENT.

11. ABBREVIATIONS THROUGHOUT THE DOCUMENTS COMPLY WITH DOCUMENT ABBREVIATION LIST ON LEGEND OR ARE THOSE IN COMMON USE. ENGINEER WILL DEFINE THE INTENT OF ANY IN QUESTION.

12. THE DRAWINGS ARE DIAGRAMMATIC IN CHARACTER. LOCATIONS SHOWN FOR ELECTRICAL EQUIPMENT, DEVICES, CIRCUITING, ETC., ARE APPROXIMATE. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE WORK WITH THE ARCHITECTURAL, PLUMBING, HVAC, AND OTHER TRADE DRAWINGS FOR THE EXACT DIMENSIONS, CLEARANCES, AND ROUGHING-IN LOCATIONS. THE ELECTRICAL CONTRACTOR SHALL COOPERATE WITH THE OTHER TRADES IF FIELD ADJUSTMENTS ARE REQUIRED TO ACCOMMODATE THE WORK OF OTHERS.

13. DRAWINGS SHALL NOT BE SCALED FOR ROUGH-IN MEASUREMENTS OR USED AS SHOP DRAWINGS. WHERE DIMENSIONS ARE SHOWN ON PLANS OR DETAILS, THESE DIMENSIONS ARE TO BE FIELD-VERIFIED BY THE ELECTRICAL CONTRACTOR AGAINST EXISTING FIELD CONDITIONS, INSTALLATION REQUIREMENTS OF OTHER TRADES, AND THE MANUFACTURER'S SUBMITTALS FOR EQUIPMENT TO BE INSTALLED. SHOULD ANY CONFLICTS ARISE WHICH CANNOT BE EASILY RESOLVED IN THE FIELD WITHOUT CHANGING THE DESIGN INTENT, THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.

14. RECORD DOCUMENTS
   A. THE ELECTRICAL CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF ALL DEVIATIONS IN WORK AS INSTALLED FROM WORK SPECIFIED ON THE DRAWINGS, OR IN THE SPECIFICATIONS, AND IDENTIFY ORIGIN OF CHANGE.
   B. KEEP A COMPLETE SET OF RECORD DOCUMENT PRINTS IN CUSTODY DURING ENTIRE PERIOD OF CONSTRUCTION AT THE CONSTRUCTION SITE. ON COMPLETION OF THE PROJECT, TWO COMPLETE SETS OF MARKED-UP PRINTS SHOWING THESE DEVIATIONS SHALL BE DELIVERED TO GENERAL CONTRACTOR AND ARCHITECT/ENGINEER. THIS CONTRACT WILL NOT BE CONSIDERED COMPLETED UNTIL THESE RECORD DRAWINGS HAVE BEEN RECEIVED AND REVIEWED BY THE ENGINEER.
   C. THE FOLLOWING ITEMS ARE REPRESENTATIVE, BUT NOT ALL-INCLUSIVE, OF THE INFORMATION WHICH SHALL BE RECORDED ON THE AS-BUILT DRAWINGS:
      - POWER DISTRIBUTION SYSTEM, INCLUDING DISTRIBUTION EQUIPMENT AND EACH CONDUIT AND WIRE SIZE INSTALLED.
      - FINAL LAYOUT AND CIRCUITING FOR POWER AND LIGHTING, SURFACE RACEWAYS AND RELATED EQUIPMENT, INCLUDING EACH CONDUIT AND WIRE SIZE.
      - CHANGES IN PLAN, SECTIONS, ELEVATIONS, AND DETAILS, SUCH AS SHIFTS IN LOCATION OF WALLS, DOORS, AND WINDOWS.
      - LAST LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND CONNECTIONS TO EXISTING UTILITIES, INCLUDING ELECTRICAL AND PHONE/TV.

17. BEFORE ANY EQUIPMENT IS INSTALLED, DETERMINE THAT SAID EQUIPMENT WILL PROPERLY FIT WITHIN THE SPACE ALLOCATED. INSTALL ALL EQUIPMENT AND MATERIALS IN SUCH A MANNER AS TO PROVIDE REQUIRED ACCESS FOR SERVICING AND MAINTENANCE. ALLOW AMPLE SPACE FOR REMOVAL OF ALL PARTS THAT REQUIRE REPLACEMENT OR SERVICING.

18. SUFFICIENT ACCESS AND WORKING SPACE SHALL BE PROVIDED AND MAINTAINED ABOUT ALL ELECTRICAL EQUIPMENT TO PERMIT READY AND SAFE OPERATION AND MAINTENANCE OF SUCH EQUIPMENT PER NEC ARTICLE 110 REQUIREMENTS.

19. ALL MATERIALS AND EQUIPMENT SHALL BE NEW, UNDAMAGED, BEAR THE UL LABEL WHERE APPLICABLE, AND BE AS SPECIFIED FOR USE IN EACH SPECIFIC LOCATION. ANY INCIDENTAL ACCESSORIES NECESSARY TO COMPLETE THE WORK IN ALL RESPECTS AND MAKE IT READY FOR OPERATION, EVEN IF NOT SPECIFICALLY SPECIFIED, SHALL BE FURNISHED, DELIVERED, AND INSTALLED BY THE ELECTRICAL CONTRACTOR WITHOUT ADDITIONAL EXPENSE TO THE CLIENT.

20. MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR THE PROPER INSTALLATION AND OPERATION OF A SYSTEM OR EQUIPMENT, SHALL BE INCLUDED IN THE ELECTRICAL CONTRACTOR'S ESTIMATE, AS IF SPECIFIED OR SHOWN HEREIN.

21. COORDINATE THE INSTALLATION OF ELECTRICAL MATERIALS AND EQUIPMENT ABOVE AND BELOW CEILINGS WITH SUSPENSION SYSTEM, MECHANICAL EQUIPMENT, AND OTHER BUILDING COMPONENTS. ALL COMPONENTS SHALL BE LOCATED AS TIGHT TO STRUCTURE AS POSSIBLE. COORDINATE CEILING CAVITY SPACE CAREFULLY WITH ALL TRADES.

22. THE CONTRACTOR SHALL PREPARE AN OPERATING AND MAINTENANCE MANUAL COVERING ALL SYSTEMS AND EQUIPMENT INSTALLED UNDER THIS DIVISION. SUBMIT AN OUTLINE OF A PREVENTATIVE MAINTENANCE PROGRAM FOR EACH SYSTEM.

23. WARRANTIES:
   A. PROVIDE COMPLETE WARRANTY INFORMATION FOR EACH ITEM, WHICH SHALL INCLUDE NAME OF PRODUCT OR EQUIPMENT, DATE OF BEGINNING OF WARRANTY OR BOND, DURATION OF WARRANTY OR BOND, AND NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF MANUFACTURING/SERVICING PERSONNEL, AS WELL AS PROCEDURES FOR FILING A CLAIM AND OBTAINING WARRANTY SERVICES.
   B. THE CONTRACTOR SHALL WARRANT ALL MATERIALS, WORKMANSHIP AND THE SUCCESSFUL OPERATION OF ALL EQUIPMENT AND APPARATUS INSTALLED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE ENTIRE WORK AS IDENTIFIED IN THE GENERAL CONDITIONS.

25. THE CONDUIT SYSTEM AND ELECTRICAL ENCLOSURES SHALL BE SECURELY BONDED TOGETHER AND SUPPORTED PER NEC REQUIREMENTS.

26. CONDUIT JOINTS SHALL BE CUT SQUARE AND REAMED SMOOTH. BENDS OR OFFSETS SHALL BE MADE WITH AN APPROVED BENDER OR HICKEY, OR HUB-TYPE CONDUIT FITTINGS. BENDS SHALL BE MADE SO THAT THE CONDUIT IS NOT DAMAGED AND ITS INTERNAL DIAMETER IS NOT EFFECTIVELY REDUCED. THERE SHALL NOT BE MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360° TOTAL) BETWEEN PULL POINTS.

27. CONCEALED CONDUIT SYSTEMS SHALL BE RUN IN A DIRECT LINE WITH LONG SWEEP BENDS AND OFFSETS. EXPOSED CONDUIT RUNS SHALL BE PARALLEL TO AND AT RIGHT ANGLES TO BUILDING LINES, USING CONDUIT FITTINGS FOR ALL TURNS AND OFFSETS.

28. FEEDERS AND BRANCH CIRCUITS SHALL BE PROVIDED WITH APPROPRIATELY SIZED INSULATED EQUIPMENT GROUNDING CONDUCTOR, WHETHER SPECIFICALLY NOTED OR NOT. IF NOTED, THE ELECTRICAL CONTRACTOR IS REQUIRED TO USE THE SIZE OF GROUNDING CONDUCTOR INDICATED ON DRAWINGS. THIS CONDUCTOR SHALL BE CONNECTED FROM THE ELECTRICAL PANEL GROUND BAR TO THE DESIGNATED GROUNDING CONNECTION ON THE ELECTRICAL DEVICE SERVED. ENSURE LISTED GROUND BAR KITS HAVE BEEN INSTALLED PER NEC REQUIREMENTS IN THE ELECTRICAL PANELS.

29. FLOATING CONDUIT GROUNDS ARE NOT ACCEPTABLE. ENSURE ALL FEEDERS (NEW AND EXISTING) ARE PROVIDED WITH APPROPRIATELY-SIZED INSULATED GROUND WIRE, WHETHER NOTED OR NOT. IF NOTED, THE ELECTRICAL CONTRACTOR IS REQUIRED TO USE THE SIZE OF GROUND WIRE INDICATED ON DRAWINGS. THE GROUND WIRE SHALL BE CONNECTED FROM THE ELECTRICAL PANEL GROUNDED BUS BAR TO THE ELECTRICAL DEVICES. ENSURE FULL SIZE GROUND BUS HAS BEEN INSTALLED PER N.E.C. IN EXISTING ELECTRICAL PANELS. IF REQUIRED, PROVIDE GROUND BUS BAR KIT AND CONNECT AS REQUIRED PER N.E.C. ARTICLE 250.

30. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL JUNCTION AND PULL BOXES TO PROVIDE ACCESS POINTS FOR PULLING AND FEEDING CONDUCTORS INTO A RACEWAY SYSTEM. JUNCTION AND PULL BOXES AND THEIR COVERS SHALL BE FORMED FROM SHEET STEEL, AND SHALL BE BARE METAL OR FINISHED IN GRAY ENAMEL PAINT. BOXES SHALL BE IN INDUSTRY STANDARD SIZES.

31. OUTLET BOXES WITH THE CORRECT FITTING FOR THE APPLICATION SHALL BE LOCATED AT EACH CONDUCTOR SPLICE POINT, AT EACH OUTLET, SWITCH POINT, OR JUNCTION POINT, AND AT EACH PULL POINT FOR THE CONNECTION OF CONDUIT AND OTHER RACEWAYS. OUTLET BOXES FOR CONCEALED WIRING SHALL BE MADE FROM GALVANIZED OR CADMIUM-PLATED SHEET STEEL, AND THEY SHALL HAVE A DEPTH OF AT LEAST 1.5 INCHES, WHETHER SINGLE OR GANGED. THE BOXES SHALL BE LARGE ENOUGH SIZE TO ACCOMMODATE THE NUMBER OF WIRING DEVICES AND CONDUCTORS AS SPECIFIED IN THE FILL SCHEDULE OF THE CURRENT NEC. SECURE BOXES WITH MOUNTING BRACKET, BRACES, HANGER OR BOX MOUNTING SUPPORT.

32. REFER TO ARCHITECTURAL DRAWINGS FOR DEVICE INSTALLATION HEIGHTS PRIOR TO ROUGH-IN.

33. ELECTRICAL DEVICES (SWITCHES, RECEPTACLES, ETC.) SHALL BE 20A RATED UNLESS OTHERWISE SPECIFIED ON DRAWINGS. VERIFY DEVICE CONFIGURATION, COLOR, FINISH, AND MATERIAL REQUIREMENTS WITH ARCHITECT. DEVICES IN RESIDENTIAL UNITS SHALL BE A MINIMUM OF 15A RATED.

34. WIRING INSIDE THE BUILDING SHALL BE COPPER, INSULATION TYPE THHN/THWN, UNLESS OTHERWISE NOTED. THE MINIMUM CONDUCTOR SIZE SHALL BE 12 AWG. CONDUCTORS SIZED FROM #10 AWG AND LARGER SHALL BE STRANDED. WHERE MC TYPE FLEXIBLE CABLE IS INSTALLED IN LIEU OF WIRE AND CONDUIT, FULL-SIZE EQUIPMENT GROUNDING CONDUCTOR SHALL RUN WITH CURRENT CARRYING CONDUCTORS. NM TYPE CABLE MAY BE USED ONLY AS AUTHORIZED BY THE OWNER AND DESIGN ENGINEER, AND WITH APPROVAL OF LOCAL CODE AUTHORITY.

35. CONDUCTORS SIZES #6 AWG AND SMALLER SHALL BE FACTORY COLOR-CODED WITH AN INDUSTRYSTANDARD DESIGNATED COLOR FOR EACH PHASE AND A NEUTRAL CONDUCTOR. CONDUCTORS SIZES #4 AWG AND LARGER SHALL HAVE COLORS FIELD APPLIED USING THE COLOR MARKING TAPE OR BY PAINTING THE INSULATION. THESE COLORS SHALL BE USED CONSISTENTLY THROUGHOUT THE SYSTEM.

36. ALL JOINTS OR SPLICES FOR #10 AWG CONDUCTORS OR SMALLER SHALL BE MADE WITH UL-APPROVED WIRE NUTS, "IN-SURE" PUSH-IN CONNECTORS, OR COMPRESSION-TYPE CONNECTORS.

37. ALL JOINTS OR SPLICES FOR CONDUCTORS #8 AWG AND LARGER SHALL BE MADE WITH A MECHANICAL COMPRESSION CONNECTOR. AFTER THE CONDUCTORS HAVE BEEN MADE MECHANICALLY AND ELECTRICALLY SECURE, THE ENTIRE JOINT OR SPLICE SHALL BE COVERED WITH 3M SCOTCH BRAND NO. 33 TAPE, OR APPROVED EQUAL, TO MAKE THE INSULATION VALUE AT THE JOINT OR SPLICE EQUAL TO THE VALUE OF THE CONDUCTORS INSULATION. THE CONNECTORS SHALL BE UL APPROVED.

38. UNLESS OTHERWISE INDICATED, ALL WIRING FOR BRANCH CIRCUITS SHALL BE #12 AWG WHEN PROTECTED BY A 15- OR 20- AMP CIRCUIT BREAKER. IF DISTANCE FROM PANEL TO FIRST DEVICE IS 100 FEET OR GREATER FOR 120-VOLT CIRCUITS, OR 150 FEET OR GREATER FOR 277-VOLT CIRCUITS, #10 AWG WIRING SHALL BE INSTALLED.

39. FOR ALUMINUM CONDUCTOR TERMINATIONS, ALUMINUM BI-METALLIC PIN CONNECTORS ARE RECOMMENDED UNLESS COMPACT-TYPE CONDUCTORS ARE USED. THESE CONNECTORS SHALL BE UL LISTED PER UL486B, RATED FOR USE UP TO 600V AND TEMPERATURE UP TO 90°C. CONNECTORS SHALL BE INSTALLED WITH MANUFACTURER'S SPECIFIED CRIMPING TOOLS AND DIES.

40. INSTALLATION IN AREAS OF DRYWALL CEILING SHALL BE COORDINATED SUCH THAT ACCESS PANELS ARE NOT REQUIRED. ELEMENTS REQUIRING ACCESS SHALL BE LOCATED IN THE AREAS OF ACCESSIBLE CEILING, OR IN THE LOCATIONS COORDINATED WITH ARCHITECT. ACCESS PANELS REQUIRED WITHIN DRYWALL CEILINGS SHALL BE INSTALLED SYMMETRICALLY WITH OTHER PANELS OR DEVICES, AND SHALL BE MINIMUM SIZE REQUIRED, "MUD-IN" TYPE, AND FIRE RATED, IF REQUIRED. ACCESS PANELS IN FIRE-RATED WALLS AND CEILINGS SHALL HAVE PROPER UL LABEL AND FIRE RATING LISTING.

41. WALL AND CEILING ROUGH-IN INSTALLATIONS FOR LOW-VOLTAGE CONTROL WIRING OF ANY TYPE SUCH AS DATA/TELECOMMUNICATIONS WIRING, FIRE ALARM WIRING, HVAC CONTROL WIRING, SECURITY SYSTEMS WIRING, TV CABLING, OPTICAL FIBER CABLING, ETC., SHALL BE COMPLETE AND READY FOR INSPECTION AT THE TIME ELECTRICAL ROUGH-IN INSPECTIONS ARE REQUESTED. ALL SHARP EDGES, CONDUIT ENDS AND METAL STUDS, ETC., FOR LOW-VOLTAGE CABLING SHALL BE PROTECTED BY INSULATED BUSHINGS OR GROMMETS, AND SECURELY FASTENED IN THE OPENINGS FOR THE WALL ROUGH-IN INSPECTIONS. WORK SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER (GROUPED CABLES ROUTED WITH SQUARE CORNERS AND PARALLEL TO BUILDING LINES.) CABLES SHALL BE INSTALLED PER NEC REQUIRED SEPARATIONS, AND SUPPORTED FROM THE BUILDING STRUCTURE. CABLE TIES USED IN DUCTS, PLENUMS, AND OTHER AIR-HANDLING SPACES ARE REQUIRED TO HAVE A TESTING LABORATORY LISTING NUMBER AND LABEL ON EACH UNOPENED PACKAGE AS BEING APPROVED FOR USE IN THESE LOCATIONS.

42. ELECTRICAL CABINETS AND ENCLOSURES LOCATED IN PUBLIC AREAS SHALL BE LOCKABLE TYPE.

43. PENETRATIONS THROUGH STRUCTURAL MEMBERS SHALL NOT BE PERMITTED WITHOUT SPECIFIC WRITTEN PERMISSION FROM STRUCTURAL ENGINEER AND ARCHITECT. SUBMIT REQUESTS FOR PENETRATIONS TO ARCHITECT FOR REVIEW AND DISPOSITION. PRIOR TO CORE DRILLING THROUGH FLOORS, VERIFY CLEARANCE OF BEAMS, DUCTWORK, ETC., IN CEILING SPACE BELOW, AND X-RAY FOR CONDUIT AND/OR REBAR IN SLAB.

44. ALL ROOF PENETRATIONS SHALL BE SEALED WATER TIGHT. PROVIDE FLASHING AND COUNTER FLASHING AS REQUIRED. COORDINATE ROOFING WORK WITH THE GENERAL CONTRACTOR.

45. RACEWAYS SHALL BE PROVIDED WITH EXPANSION FITTINGS WHERE NECESSARY TO COMPENSATE FOR THERMAL EXPANSION AND CONTRACTION, AND TO ALLOW FOR MINOR MOVEMENT OF THE STRUCTURAL ELEMENTS OF THE BUILDING. EXPANSION FITTINGS FOR METAL RACEWAYS SHALL BE MADE ELECTRICALLY CONTINUOUS BY EQUIPMENT BONDING JUMPERS OR OTHER MEANS.

46. PROVIDE TYPEWRITTEN PANELBOARD DOOR DIRECTORIES WITH ACCURATE BRANCH CIRCUIT DESTINATIONS. CLEARLY MARK JUNCTION BOXES IN CEILING SPACE WITH PANEL DESIGNATIONS AND CIRCUIT NUMBERS. PROVIDE ENGRAVED PLASTIC LABELS FOR ALL DISTRIBUTION EQUIPMENT. ATTACH THESE LABELS PERMANENTLY TO EQUIPMENT WITH RIVETS OR SCREWS. SELF ADHESIVE TYPE IS NOT ACCEPTABLE. LABEL OUTLET AND SWITCH COVER PLATES WITH PANEL DESIGNATION AND CIRCUIT NUMBERS.

47. REQUIREMENTS FOR MECHANICAL EQUIPMENT ELECTRICAL CONNECTIONS:
   A. ELECTRICAL CONTRACTOR SHALL REVIEW MECHANICAL AND PLUMBING DRAWINGS AND SCHEDULES FOR VERIFICATION OF THE EQUIPMENT USED, WIRING AND ADDITIONAL INSTALLATION REQUIREMENTS PRIOR TO PROVIDING REQUIRED STARTERS/DISCONNECT SWITCHES. WHEN EQUIPMENT DELIVERED TO JOB SITE, ELECTRICAL CONTRACTOR SHALL VERIFY THIS DATA WITH EQUIPMENT NAMEPLATES OR MANUALS. IF SIGNIFICANT DISCREPANCIES OCCUR CONTACT ELECTRICAL ENGINEER FOR REVISION OF THE CONSTRUCTION DOCUMENTS.
   B. PROVIDE SAFETY DISCONNECT SWITCHES FOR ALL MECHANICAL EQUIPMENT UNLESS PROVIDED BY MECHANICAL CONTRACTOR AS SPECIFICALLY DIRECTED ON MECHANICAL DRAWING OR SPECIFICATION REQUIREMENTS.
   C. ELECTRICAL WIRING IN CONNECTION WITH THE AUTOMATIC TEMPERATURE CONTROL SYSTEM, WHERE SHOWN ON THE ELECTRICAL DIVISION DRAWINGS, SHALL BE PERFORMED BY THE ELECTRICAL CONTRACTOR. ALL OTHER WIRING, INCLUDING 120V REQUIRED FOR PROPER OPERATION OF THE AUTOMATIC TEMPERATURE CONTROL SYSTEM, SHALL BE PERFORMED BY THE MECHANICAL CONTRACTOR.

48. PROVIDE FIRE STOPPING MATERIAL AND SYSTEMS, AS LISTED IN THE UL FIRE RESISTANCE DIRECTORY, EQUAL TO THE FIRE RESISTANCE RATING OF THE RESPECTIVE WALL OR FLOOR ASSEMBLY FOR ALL PENETRATIONS OF CONDUIT, SLEEVES, WIRING, CABLES AND OTHER ELECTRICAL ITEMS THROUGH FIRERATED CORRIDOR WALLS, FIRE RESISTIVE WALLS, FIRE RESISTIVE SHAFTS, AND FLOOR PENETRATIONS.

4 ELECTRICAL SERVICE - ELECTRICAL NOTES

SCALE: NO SCALE

- POOL ELECTRICAL

DR,
WEST PALM BEACH, FL 33411

DRAWN BY:

CHECKED BY:

REVISIONS:

No.	DESCRIPTION	DATE
1	CITY COMMENT	7/15/2026
2	CITY COMMENT	9/22/2026

ISSUE RECORD:

No.	DESCRIPTION	DATE

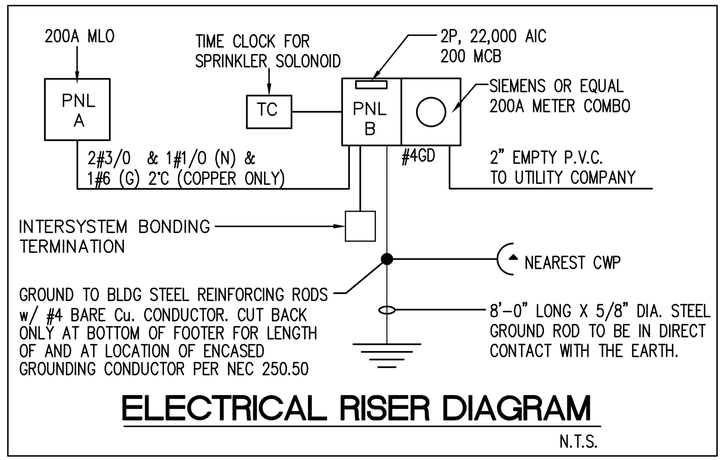
SCALE:

SHEET CONTENTS:

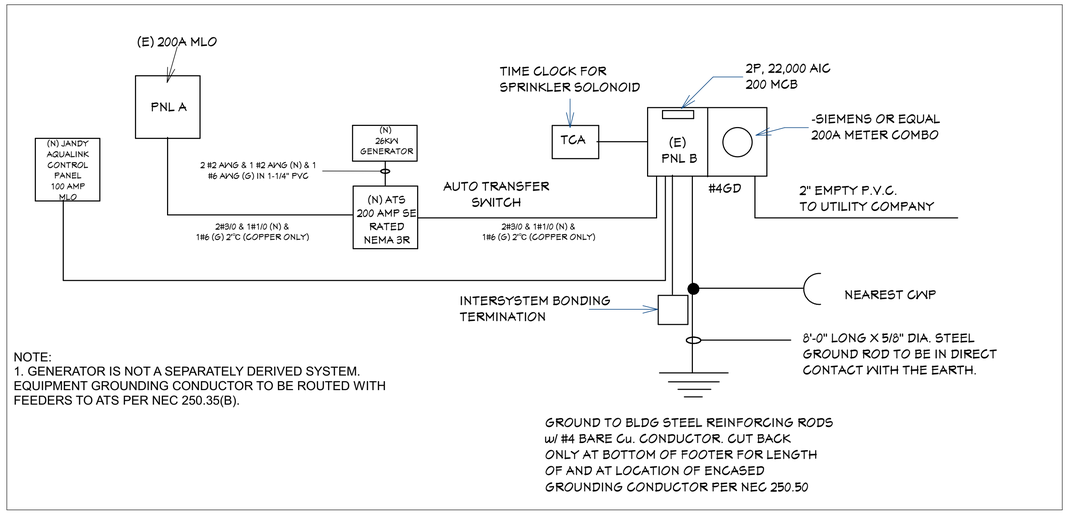
PROJECT NO.:

DATE: 9/27/2026

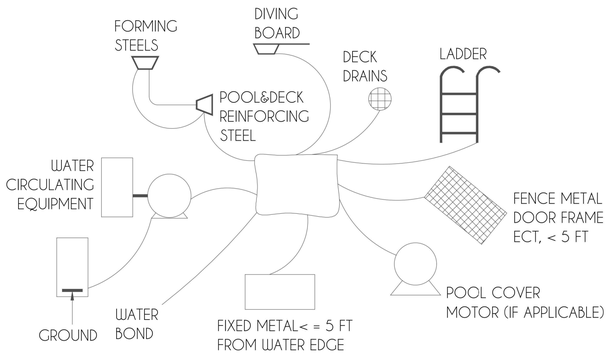
DRAWING NO.: **E2.1**



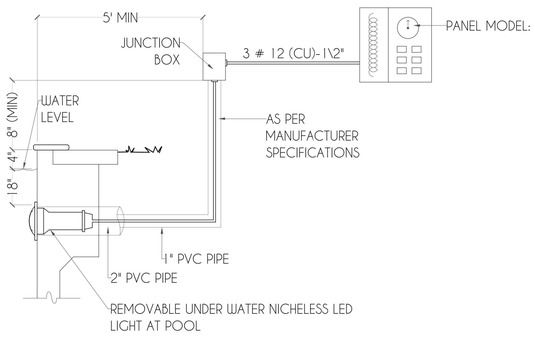
EXISTING ONE LINE DIAGRAM



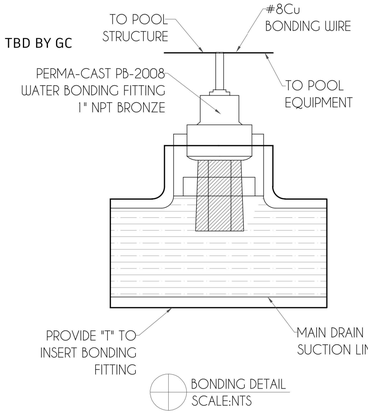
PROPOSED ONE LINE DIAGRAM



COMMON BONDING DETAIL (SEE PLANS FOR APPLICABLE ITEMS)
SCALE: NTS



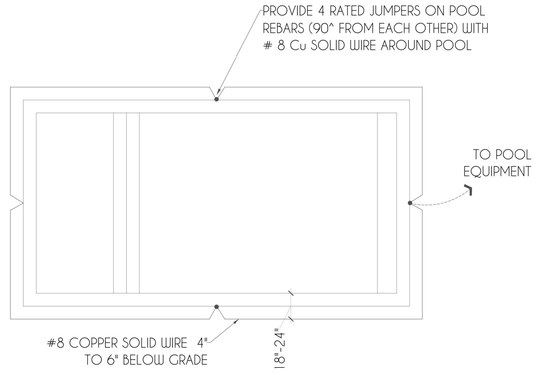
UNDER WATER LAMP DETAIL
SCALE:NTS



TBD BY GC

BONDING DETAIL
SCALE:NTS

AN APPROVED CORROSION-RESISTANT CONDUCTIVE ELEMENT THAT EXPOSES NOT LESS THAN 9 SQ.IN. PART OF THE POOL BONDING SYSTEM MUST BE IN DIRECT CONTACT WITH THE POOL WATER AT ALL TIMES. IN THE ABSENCE OF RAILS, LADDERS OR NICHES, A WATER BONDING SHALL MEET THE REQUIREMENT. NEC 680.26 (C)



EQUIPOTENTIAL BONDING DETAIL
SCALE:NTS

680.26 NEC 2020 EDITION.
ALTERNATE EQUAL POTENTIAL BONDING GRID OF ONE #8 SOLID COPPER PLACED 18" TO 24" FROM THE INSIDE EDGE OF POOL ENCOMPASSING 360 DEGREES WITH 4 EQUAL BONDING POINTS TO THE STEEL. THE EQUAL POTENTIAL BONDING NEEDS TO BE 4" TO 6" BELLOW GRADE AND SECURED IN PLACE.

5 ELECTRICAL SERVICE - ONE LINE DIAGRAM
SCALE: NO SCALE

- POOL ELECTRICAL

DR,
WEST PALM BEACH, FL 33411

DRAWN BY:

CHECKED BY:

REVISIONS:

No.	DESCRIPTION	DATE
1	CITY COMMENT	7/15/2026
2	CITY COMMENT	9/22/2026

ISSUE RECORD:

No.	DESCRIPTION	DATE

SCALE:

SHEET CONTENTS:

PROJECT NO.:

DATE: 9/27/2026

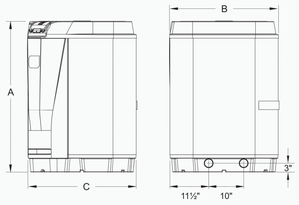
DRAWING NO.:
E3.0

Jandy

SPECIFICATIONS

	JRT2000R	JRT2500R	JRT3000R	JRT3000R3
Output (BTU) (80/80/80)	103,000	116,000	130,000	130,000
Input (kWH) (80/80/80)	4.72	5.23	6.57	6.20
COP (80/80/80)	6.4	6.5	5.8	6.1
Output (BTU) (80/63/80)	96,000	109,000	124,000	124,000
COP (80/63/80)	6.1	6.1	5.6	5.9
Output (BTU) (50/63/80)	62,000	70,000	82,000	85,000
COP (50/63/80)	4.1	4.1	4.0	4.4
Voltage	208/230V/60Hz	208/230V/60Hz	208/230V/60Hz	208/230V/60Hz-3ph
Minimum Circuit Ampacity	38	39	40	40
Max Over Current Protection	40	50	50	50
LRA	178	145	148	179
RLA	28.3	29	32.5	33
Compressor			Scroll	
Heat Exchanger			Titanium	
Optimal Water Flow (GPM)	42	48	57	57
Minimum Water Flow (GPM)	20	20	30	30
Maximum Water Flow (GPM)			70	
Weight	232	242	252	300

DIMENSIONS



Model	Dimensions A	B	C
JRT2000R	42"	32"	32"
JRT2500R	42"	32"	32"
JRT3000R / JRT3000R3	45"	32"	32"

A Fluidra Brand | Jandy.com | 1.800.822.7933

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Intertek

AHRI CERTIFIED Certification No. 9999999 Globally Recognized. Industry Respected.

POOL HEATER

Easy to Use, Easy to Maintain

The TruClear® Salt Chlorinator was designed for simple operation and maintenance without sacrificing performance or reliability.

Transparent Lid Design

- Visually inspect for calcium buildup in seconds
- No need to open or uninstall TruClear
- UV inhibitors ensure the inspection window remains clear for years — even in direct sunlight





Additional Features

- Auto-reversing polarity reduces calcium buildup
- Tool free inspection, servicing, and cleaning
- Compact design integrates into most equipment pads
- Digital display shows chlorine output.
- Self-contained — Works with or without automation
- Patented gas trap, detects flow with NO moving parts.

- **Extreme Reliability**
  Constructed using legendary Jandy Never Lube® Valve material for long-term durability
- **Easy to Install**
  Two models available — one for new construction and one with 2-2½" unions for retrofit installations
- **Simple to Inspect**
  Clear window on top allows easy visual inspection of blades
- **Convenient to Clean**
  Unscrew the cell from the body, hold on to the cord, and easily dip into the cleaning solution
- **Versatile**
  Tool-free twist-lock cord connector for one-step, foolproof electrical connection to the power pack
- **Energy-Efficient**
  Works at extremely low-flow rates, so TruClear is fully compatible with today's variable-speed pumps



PRO SPECS

- Produces 18 grams per hour of chlorine for pools up to 35,000 gallons
- 2-port cell, stand-alone system
- Low-flow sensing and operation — works at 20 GPM
- Easy cleaning with attached cord
- 120V / 240V field-wired

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Intertek NSF

Chlorinator

Built Small. Built Strong. Built Jandy.®

With a 20% improvement in hydraulic performance*, dual voltage capability, plus two auxiliary relays, the VS FloPro® delivers more possibilities than ever before.

- **Powerful Performance**
  The improved VS FloPro 2.7HP now generates higher head pressure and flow rates to accommodate large pool and spa designs with features such as waterfalls, jets, in-floor cleaning and solar heating systems.
- **Programmable Auxiliary Relays for Instant Automation**
  Two programmable† auxiliary relays allow the pump to control other equipment, such as a salt chlorinator and booster pump, without a separate timeclock.



- **115v/230v Dual Voltage Capability**
  The ability to operate with either 115v or 230v power sources provides installation flexibility and eliminates expensive main power rewiring, making the VS FloPro 2.7HP the ideal aftermarket replacement pump.
- **Lower Electricity Costs**
  Save over $1,100‡ per year in energy costs!
  The variable-speed motor allows for dramatic energy savings and quieter operation.
- **Choose Your Own Controller**
  Designed to work with the following Jandy control systems for complete programmability and customization:
  - SpeedSet Controller (included and preinstalled from factory on all DV2AS model(s)
  - iQPUMP01 with iAquaLink® App Control
  - Jandy AquaLink® Automation Sysytems
  - JEP-R Controller
- **Additional Features**
  - Adjustable base for seamless direct replacement of a variety of other pumps in the aftermarket
  - Zero Clearance TEFC Motor for cool, quiet operation in tight spaces
  - 2" unions included or utilize 2" internal threads
  - Easy Controller Setup auto detects connection to an automation system or a traditional controller, eliminating the need to adjust settings manually
  - RS485 Quick Connect Port for faster installation and maintenance
  - Four-Speed Dry Contact Relay Control
  - Tool-free lid for easy debris removal
  - Ergonomic easy-transport handle

MODELS

Model No.	Option Description
VSFHP270DV2AS	VS FloPro 2.7 HP, SpeedSet Controller Preinstalled
VSFHP270DV2A	VS FloPro 2.7 HP, Controller Sold Separately

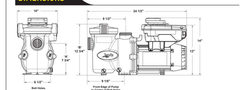
SPECIFICATIONS

Model No.	THP	WEF*	Voltage	Max Watts	Amps	Union Size	Rec. Pipe Size	Carton Weight	Overall Length
VSFHP270DV2AS†	2.70	7.2 8.7	230 VAC 115 VAC	2,250W 1,840W	10.5 16.0	2"	2"- 3"	53 lbs.	24 1/2"

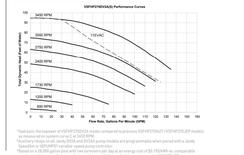
ADJUSTABLE BASE CONFIGURATIONS^

Base	Fits	'A' Dimension	'B' Dimension
No Base	Hayward® Super Pump®, Pentair® SuperFlo®, Sta-Rite® SuperMax®	7-3/4"	12-3/4"
Small Base	Hayward Super II™, Jandy FloXHP® and MaxHP Pumps	8-7/8"	13-7/8"
Small Base w/ Spacers	Pentair WhisperFlo® and IntelliFlo® VSF, Sta-Rite Dyna-Glas™	9-1/8"	14-1/8"
Small Base + Large Base	Sta-Rite Max-E-Pro®, Sta-Rite Dura-Glas®, Sta-Rite Dura-Glas II, Sta-Rite Max-E-Glas®	10-3/4"	15-3/4"

DIMENSIONS



PERFORMANCE



^Refer only for suction of VSFHP270DV2A model compared to previous VSFHP270AUT1/SVSFHP270JEP models when using Jandy SpeedSet Controller (JEP-R).
†Auxiliary relays on all Jandy DV2A and DV2AS pump models are programmable when paired with a Jandy SpeedSet or iQPUMP01 variable-speed pump controller.
‡Energy savings are based on a pump running 24 hours a day at an energy cost of $0.79/kWh vs. comparable single-speed pumps, when tested in accordance with the applicable requirements of 10 CFR 431.
*WEF = weighted energy factor in kgal/kWh. WEF is a performance-based metric adopted by the Department of Energy (DOE) for measuring the energy performance of dedicated-purpose pool pumps. Department of Energy, 10 CFR Parts 429 and 431.
†Always follow local building and safety codes for pipe sizing and guidelines.
Canada does not recognize Energy Star® on all FloPro pumps.
Large base is optional part #SPX4620.

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POOL PUMP

OUTDOOR BLOWERS

Air Supply at the Future, Inc.

QUALITY SPA AND HOT TUB PRODUCTS

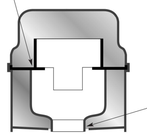
Your Search For A Quiet Blower Will Lead You To One Source, The Silencer™ By Air Supply

The New Silencer by Air Supply has taken a quantum leap in quiet performance. The unique motor mount is the secret to our success. A thick rubber cup encases the fan while allowing the motor to vibrate freely on a flexible rubber base. This combination eliminates noise so well that virtually no foam is required. Many competitive blowers use filter foam to reduce noise, but foam may clog over time causing starvation and overheating.

Included with each Silencer is a durable spring check valve. This is far more effective than flapper valves at stopping motor damage, which means fewer service calls and more satisfied customers.
Air Supply is committed to quality and service. Call us on our toll free line for technical information and blower sizing. In addition, an over the counter warranty is available at your locally authorized Air Supply distributor.



Acoustical anti-vibration motor mount ensures quiet operation



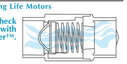
9"L x 9"W x 10.5"H

HP	AMPS/VOLTAGE	AIR-FLOW (CFM)	SEALED PRESSURE* INCHES OF H20
1.0	4.5 AMPS 110/120 VOLTS	105	65
1.5	8.0 AMPS 110/120 VOLTS	115	105
2.0	11.0 AMPS 110/120 VOLTS	115	130
1.0	2.5 AMPS 220/240 VOLTS 50/60 CYCLE	105	70
1.5	4.0 AMPS 220/240 VOLTS 50/60 CYCLE	115	105
2.0	5.0 AMPS 220/240 VOLTS 50/60 CYCLE	115	120

Thermally Protected Long Life Motors

Air intake at bottom of the Silencer™ creates a tortuous path, trapping noise inside the blower.

Durable spring check valve included with each Silencer™.



Silencer_Brochure

- POOL ELECTRICAL

DR,
WEST PALM BEACH, FL 33411

DRAWN BY:

CHECKED BY:

REVISIONS:

No.	DESCRIPTION	DATE
1	CITY COMMENT	7/15/2026
2	CITY COMMENT	9/22/2026

ISSUE RECORD:

No.	DESCRIPTION	DATE

SCALE:

SHEET CONTENTS:

PROJECT NO.:

DATE: 9/27/2026

DRAWING NO.: **E3.1**

KOHLER.

Models: **26RCA(L)**

Multi-Fuel LPG/Natural Gas

ISO 9001 KOHLER NATIONALLY REGISTERED



The Kohler® Advantage

- **High Quality Power**
  Home generators provide advanced voltage and frequency regulation along with ultra-low levels of harmonic distortion for excellent generator power quality to protect your valuable electronics.
- **Premium 5-yr/2000-hr Limited Warranty Included**
  Kohler is known for extraordinary reliability and performance. Kohler's premium limited warranty covers parts, labor, and travel for the full warranty period.
- **Powerful Performance**
  Exclusive Powerboost™ technology provides excellent starting power. §
- **Aluminum Enclosure**
  - Attractive aluminum enclosure allows installation as close as 18 inches from your home or small business. †
  - Enclosure panels can be removed without tools to allow easy access for maintenance and service.
- **Enclosure Options** for single-phase units
  - **Kohler® Exclusive Colors** are available. Go to homeenergy.kohlerenergy.com to see the latest colors.
  - **Camouflage Enclosures** are available for single-phase units (optional). Go to homeenergy.kohlerenergy.com /MossyOak to view the available patterns.

Mossy Oak is a trademark used under license from Haas Outdoors, Inc., by Kohler Co.

Standard Features

- **RDC2 Controller**
  - One digital controller manages both the generator set and transfer switch functions (with optional Model RXT).
  - Electronic speed control responds quickly to varying demand.
  - KOHLER Energy Management System for remote monitoring is included with the generator.
- **Command PRO Engine Features**
  - Command PRO® OHV engine with hydraulic valve lifters for reliable performance without routine valve adjustment or lengthy break-in requirements.
- **Designed for Easy Installation**
  - Sturdy aluminum base can be mounted on gravel or a concrete mounting pad.
  - Fuel and electrical connections through the enclosure wall eliminate the need for stub-ups through the base.
  - Customer connection terminal block located near the controller allows easy access for field wiring.
  - Designed for outdoor installation only.
- **Certifications**
  - Meets emission regulations for U.S. Environmental Protection Agency (EPA) with both natural gas and LPG.
  - cULus listed.
  - Accepted by the Massachusetts Board of Registration of Plumbers and Gas Fitters.
  - Meets 181 mph wind rating.
- Approved for stationary standby applications in locations served by a reliable utility source (on-grid).
- **Exercise Modes**
  - EcoExercise, unloaded, with system diagnostics (90 seconds). Reduces fuel costs and minimizes sound disruption.
  - Unloaded exercise with complete system diagnostics (20 minutes).
  - Unloaded full-speed exercise (20 minutes).
  - Loaded full-speed exercise (20 minutes; Model RXT ATS required).
  - Weekly, bi-weekly, or new monthly exercise intervals.
- Model 26RCAL includes a model RXT automatic transfer switch. See last page for more details.

Generator Ratings

			Standby Ratings, 60 Hz						Standby Ratings, 50 Hz					
			Natural Gas		LPG		Line Circuit Breaker		Natural Gas		LPG		Line Circuit Breaker	
Model	Alt.	Ph.	Volts	kW/ kVA	kW/ kVA	A	Poles	Volts	kW/ kVA	A	kW/ kVA	A	Poles	
26RCAL	2F8	1	120/240	24/24	100	26/26	109	110	2	115/230	18/18	78	18/18	78	80	2
		3	120/208	21/26	73	22/27	77	80	3	220/380	16/20	30	16/20	30	30	3
26RCA	2G8	1	120/240	21/26	64	22/27	67	80	3	230/400	16/20	29	16/20	29	30	3
		3	277/480	21/26	32	22/27	34	40	3	240/416	16/20	28	16/20	28	30	3

Note: The line circuit breaker is automatically selected based on the generator set model and voltage configuration.

RATINGS: Standby ratings apply to installations served by a reliable utility source. All single-phase units are rated at 1.0 power factor. The standby rating is applicable to variable loads with an average load factor of 80% for the duration of the power outage. No overload capacity is specified at this rating. Ratings are in accordance with ISO-3046/1, BS5514, AS2789, and DIN 6271. GENERAL GUIDELINES FOR DERATING. ALTITUDE: Derate 4% per 305 m (1000 ft.) elevation above 153 m (500 ft.). TEMPERATURE: Derate 2% per 5.5°C (10°F) temperature increase above 16°C (60°F). Availability is subject to change without notice. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. Contact your local Kohler Co. generator dealer for availability.

§ Check the appliance manufacturer's specifications for actual power requirements. Consult a Kohler® Power Systems professional to calculate your exact residential power system requirements.

† Meets NFPA guidelines for 18 inch clearance to combustible materials. Check state and local codes for minimum distance required from a structure.

G4-315 (26RCA) 10/24e

Generator

Alternator Specifications

Specifications	Alternator
Manufacturer	Kohler
Type	2-Pole, Rotating Field
Leads, quantity	
2F8	4
2G8	12
Voltage regulator	Digital
Insulation:	NEMA MG1-1.66
Material	Class H
Temperature rise	130°C Standby
Bearing: quantity, type	1, Sealed
Coupling	Direct
Amortisseur windings	Full
Voltage regulation, no-load to full-load	±1.0%
RMS	
One-step load acceptance	100% of Rating
Peak motor starting kVA: (35% dip for voltages below)	
240 V, 1 ph, 2F8 (4 lead)	39 (60 Hz) 27 (50 Hz)
240 or 480 V, 3 ph, 2G8 (12 lead)	63 (60 Hz) 50 (50 Hz)

Alternator Features

- Compliance with NEMA, IEEE, and ANSI standards for temperature rise.
- Self-ventilated and dripproof construction.
- Windings are vacuum-impregnated with epoxy varnish for dependability and long life.
- Superior voltage waveform and minimum harmonic distortion from skewed alternator construction.
- Digital voltage regulator with ±1.0% no-load to full-load RMS regulation.
- Rotating-field alternator with static exciter for excellent load response.
- Total harmonic distortion (THD) from no load to full load with a linear load is less than 5%.

Application Data

Engine

Engine Specifications	60 Hz	50 Hz
Manufacturer	Kohler	
Engine: model, type	CH1006 4-Cycle	
Cylinder arrangement	V-2	
Displacement, cm³ (cu. in.)	999 (61)	
Bore and stroke, mm (in.)	90 x 78.5 (3.54 x 3.1)	
Compression ratio	10.5:1	
Main bearings: quantity, type	2, Heavy-Duty Sleeve Bearings	
Rated RPM	3600	3000
Max. engine power at rated RPM, kW (HP)		
LPG	26.1 (36.4)	22.7 (30.4)
Natural gas	24.5 (33.0)	19.5 (26.2)
Cylinder head material	Aluminum	
Valve material	Steel/Stellite®	
Piston type and material	Aluminum Alloy	
Crankshaft material	Heat Treated, Ductile Iron	
Governor: type	Electronic	
Frequency regulation, no load to full load	Isochronous	
Frequency regulation, steady state	±0.5%	
Air cleaner type	Dry	

Engine Electrical

Engine Electrical System	
Ignition system	Electronic, Capacitive Discharge
Starter motor rated voltage (DC)	12
Battery (purchased separately):	
Ground	Negative
Volts (DC)	12
Battery quantity	1
Recommended cold cranking amps:	
(CCA) rating for -18°C (0°F)	500
Group size	51

Exhaust

Exhaust System	
Exhaust temperature exiting the enclosure at rated kW, dry, °C (°F)	260 (500)

Lubrication

Lubricating System	
Type	Full Pressure
Oil capacity (with filter), L (qt.) §	1.9 (2.0)
Oil filter: quantity, type §	1, Cartridge
Oil cooler	Integral

§ Kohler recommends the use of Kohler Genuine oil and filters.

Fuel Requirements

Fuel System	
Fuel types	Natural Gas or LPG
Fuel supply inlet	3/4 NPT
Fuel supply pressure, kPa (in. H_2O):	
Natural gas	0.9-2.7 (3.5-11)
LP	1.7-2.7 (7-11)

Fuel Composition Limits *	Nat. Gas	LPG
Methane, % by volume (minimum)	90 min.	—
Ethane, % by volume (maximum)	4.0 max.	—
Propane, % by volume	1.0 max.	85 min.
Propene, % by volume (maximum)	0.1 max.	5.0 max.
C_4 and higher, % by volume	0.3 max.	2.5 max.
Sulfur, ppm mass (maximum)	25 max.	
Lower heating value, MJ/m^3 (Btu/ft^3), (minimum)	33.2 (890)	84.2 (2260)

* Contact your local dealer for suitability and rating derates based on fuel compositions outside these limits.

Minimum Gas Pipe Size Recommendation, in. NPT			
Pipe Length, m (ft.)		Natural Gas 290,000 Btu/hr.	LPG 322,500 Btu/hr.
8	(25)	1	3/4
15	(50)	1 1/4	1
30	(100)	1 1/4	1
46	(150)	1 1/4	1
61	(200)	1 1/2	1 1/4

Fuel Consumption, m^3/hr. (cfh) @ 60Hz			
% Load	Natural Gas	LPG	
100	8.2 (290)	3.6	(129)
75	6.7 (238)	3.1	(111)
50	5.1 (180)	2.4	(85)
25	3.9 (137)	1.8	(64)
Exercise	1.9 (67)	0.9	(31)

Fuel Consumption, m^3/hr. (cfh) @ 50Hz			
% Load	Natural Gas	LPG	
100	6.9 (245)	2.9	(102)
75	6.2 (220)	2.5	(89)
50	5.4 (190)	1.8	(65)
25	3.7 (131)	1.3	(46)
Exercise	1.9 (67)	0.9	(31)

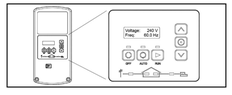
Nominal fuel rating:	Natural gas:	37 MJ/m^3 (1000 Btu/ft^3)
	LPG:	93 MJ/m^3 (2500 Btu/ft^3)
LPG conversion factors:	8.58 ft.³ = 1 lb. 0.535 m^3 = 1 kg 36.39 ft.³ = 1 gal.	

Generator Set Sound Data

Model 26RCA sound levels are 56 dB(A) during engine exercise and 67 dB(A) during full-speed generator diagnostics and normal operation.*
All sound levels are measured at a distance of 23 ft. (7 m) from the generator set.

* Lowest of 8 points measured around the generator. Sound levels at other points around generator may vary depending on installation parameters.

RDC2 Controller Features



The RDC2 controller provides integrated control for the generator set, Kohler® Model RXT transfer switch, programmable interface module (PIM), and load shed kit.

- Membrane keypad:
  - OFF, AUTO, and RUN pushbuttons
  - Select and arrow buttons for access to system configuration and adjustment menus
- LED indicators for OFF, AUTO, and RUN modes
- LED indicators for utility power and generator set source availability and ATS position (Model RXT transfer switch required)
- LCD display:
  - Two lines x 16 characters per line
  - Backlit display with adjustable contrast for excellent visibility in all lighting conditions
- Scrolling system status display:
  - Generator set status
  - Voltage and frequency
  - Engine temperature
  - Oil pressure
  - Battery voltage
  - Engine runtime hours
- Date and time displays
- Smart engine cooldown senses engine temperature
- Digital isochronous governor maintains steady-state speed at all loads
- Digital voltage regulation: ±1.0% RMS no-load to full-load
- Automatic start with programmed cranking cycle
- Built-in 2.5 amp battery charger
- Programmable exerciser can be set to start automatically on any future day and time
- Exercise modes:
  - New 90-second Eco Exercise with complete system diagnostics (factory default setting)
  - Lowers fuel cost
  - Minimizes sound disruption
  - In cold temperatures, limits condensation build-up in the crankcase
  - Unloaded 20-minute exercise with complete system diagnostics
  - Unloaded 20-minute full-speed exercise
  - Loaded 20-minute full-speed exercise (Model RXT ATS required)
- Weekly, bi-weekly, or new monthly exercise intervals
- Front-access mini USB connector for SiteTech™ or USB Utility connection
- Integral Ethernet connector for Kohler Energy Management
- Remote two-wire start/stop capability for optional connection of a Model RDT transfer switch
- Diagnostic messages: Displays diagnostic messages for the engine, generator, Model RXT transfer switch, programmable interface module (PIM), and load management device.
- Maintenance reminders
- System settings:
  - System voltage, frequency, and phase
  - Voltage adjustment
  - Measurement system, English, or metric
- ATS status (Model RXT ATS required):
  - Source availability
  - ATS position (normal/utility or emergency/generator)
  - Source voltage and frequency
- ATS control (Model RXT ATS required):
  - Source voltage and frequency settings
  - Engine start time delay
  - Transfer time delays
  - Voltage calibration
  - Fixed pickup and dropout settings
- Programmable Interface Module (PIM) status displays:
  - Input status (active/inactive)
  - Output status (active/inactive)
- Load control menus:
  - Load status
  - Test function

G4-315 (26RCA) 10/24e

Generator



RXT ATS - 200-amp, Service Entrance

Model RXT-JFNC-200ASEQS5

Codes and Standards

The ATS meets or exceeds the requirements of the following specifications:

- Underwriters Laboratories UL 1008, Standard for Automatic Transfer Switches for Use in Emergency Systems, file #ES8962
- Underwriters Laboratories UL 508, Standard for Industrial Control Equipment
- CSA certification available, file #LR58301 (not available for 150, 300, or 400 amp service entrance or 100 amp load center models). Must be selected when the transfer switch is ordered.
- NFPA 70, National Electrical Code
- NFPA 110, Emergency and Standby Power Systems
- NEMA Standard IC10- 1993, AC Automatic Transfer Switches

Specifications

Standard Interface Board	
Controller interface connections A and B	#20 AWG shielded twisted-pair Belden 9402 or 8762 or equivalent
Controller interface connections PWR and COM	#12- 20 AWG (see ATS Installation Manual)
Load control contact rating	10 A @ 250 VAC
Load control connections	#12- 18 AWG

Environmental Specifications	
Operating temperature	– 20° C to 70° C (– 4° F to 158° F)
Storage temperature	– 40° C to 85° C (– 40° F to 185° F)
Humidity	5 to 95% noncondensing

Contact Ratings	
Engine start	10 A @ 32 VDC SPST normally closed (NC)
Load control	10 A @ 125 VAC SPST normally open (NO)

Auxiliary Position-Indicating Contacts		
Model	Number of contacts Normal, Emergency	Contact Rating
100- 200A 1 Ph	1, 1 Optional	15 A @ 250VAC
100- 200 A 1 Ph SE	1, 1 Optional	15 A @ 250VAC
300- 400 A 1 Ph SE	2, 2 Standard 1, 1 Optional	10 A @ 480 VAC
400 A 1 Ph and 3Ph/3P	2, 2 Standard 1, 1 Optional	10 A @ 480 VAC
400 A 3Ph/4P	8, 8 Standard	10 A @ 480 VAC

Note: For combined interface/load management board specifications, see page 3.

Cable Sizes AL/CU UL-Listed Solderless Screw-Type Terminals for External Power Connections					
Switch Size, Amps	Switch	Ph.	Range of Wire Sizes, Cu/Al Normal (per phase)	Emergency and Load (per phase)	Neutral	Ground
100	Standard	1	(1) #14 - 1/0 AWG	(1) #14 – 1/0 AWG	(5) #12 - 250 KCMIL (Cu) or (5) #10 - 250 KCMIL (Al)	(6) #6 – #14 AWG or (4) #14 - 1/0 AWG
	12- or 16-space load center (NEMA 1)	1	(1) #14 – 1/0 AWG	Emerg: (1) #14 – 1/0 AWG Load: per customer-supplied circuit breaker	(26) #4 - 14 AWG or (2) #14 - 1/0 AWG or (1) #6 – 2/0 AWG	
	16-space load center (NEMA 3R)	1	(1) #14 – 1/0 AWG		(26) #4 - 14 AWG or (2) #14 - 1/0 AWG or (1) 2/0 AWG	
	Service Entrance	1	(1) #12 – 2/0 AWG	(1) #14 – 1/0 AWG	(5) #12 - 250 KCMIL (Cu) or (5) #10 – 250 KCMIL (Al)	
	3-Phase	3	(1) #14 – 4/0 AWG	(1) #14 – 4/0 AWG	(3) #14 – 1/0 AWG	
150 200	Service Entrance	1	(1) #4 – 300 KCMIL	(1) #6 – 250 KCMIL	(5) #12 - 250 KCMIL (Cu) or (5) #10 – 250 KCMIL (Al)	(6) #6 – 3/0 AWG
200	Standard	1	(1) #6 AWG – 250 KCMIL	(1) #6 – 250 KCMIL	(5) #12 - 250 KCMIL (Cu) or (5) #10 – 250 KCMIL (Al)	
	3-Phase	3	(1) #14 – 4/0 AWG	(1) #14 – 4/0 AWG	(3) #14 – 1/0 AWG	
300 400	Service Entrance	1	(1) #1 – 600 KCMIL or (2) #1 – 250 KCMIL	(2) 1/0 - 250 KCMIL or (1) #4 – 600 KCMIL	(12) 1/0 - 250 KCMIL or (6) #4 AWG – 600 KCMIL	
	Standard	1	(1) #4 - 600 KCMIL or (2) 1/0 – 250 KCMIL	(1) #4 - 600 KCMIL or (2) 1/0 – 250 KCMIL	(3) #4 AWG – 600 KCMIL or (6) 1/0 AWG – 250 KCMIL	
		3				

Note: Data is subject to change. Refer to the transfer switch dimension drawings and wiring diagrams for planning and installation.

ATS SERVICE ENTRANCE RATED

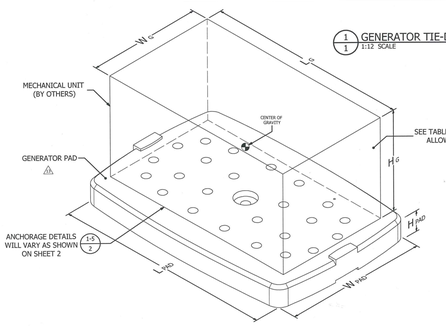
6 ELECTRICAL EQUIPMENT SCHEDULE

NTS

MAINSTREAM ENGINEERING CORP.

QWIKPAD™ GENERATOR PAD

GENERATOR TIE-DOWN SYSTEM FOR HIGH-VELOCITY HURRICANE-ZONE (HVHZ)



1 / 1 GENERATOR TIE-DOWN SYSTEM — 1:12 SCALE — ISOMETRIC

GENERATOR PAD SCHEDULE:

QWIKPAD™ GENERATOR PAD						
PART NO.	INSTALLED PAD WEIGHT	L_{PAD}	W_{PAD}	H_{PAD}	RATED WIND SPEED*	ULTIMATE PRESSURE
-	LB	IN	IN	IN	MPH	PSF
QT8200	330	56	38	5	180	66.2
QT8215	330	56	38	5	180	66.2
QT8230	330	56	38	5	180	66.2
QT8230	330	56	38	5	180	66.2
QT8240	330	56	38	5	180	66.2

GENERATOR							
MAKE	NOMINAL RATING	MODEL NO. (SEE DESIGN NOTE 6)	L_G	W_G	H_G	WEIGHT	MIN. WEIGHT
-	-	-	IN	IN	IN	LB	LB
(UNIVERSAL)		ALL LISTED MAKES/MODELS	SEE DESIGN NOTE 6				
BRIGGS & STRATTON	17, 20 kW	17 AND 20 kW MODELS†	46.5	26.8	27.8	400	400
GENERAC	9 kW	G007029, G007030	48	25.1	28.6	340	340
	11 kW	G007031, G007032, G007033				348	348
	16 kW	G007035, G007036, G007037				409	409
	20 kW	G007038, G007039				448	448
HONEYWELL	22 kW	G007042, G007043				466	466
	16 kW	G007059				409	409
	20 kW	G007062				448	448
	22 kW	G007065				466	466
KOHLER	14 kW	14RESA				440	440
	14 kW	14RESAL				490	490
	14 kW	14RCA				440	430
	14 kW	14RCAL-2005ELS				490	467
	14 kW	14RESAL, 20RESC				555	555
	20 kW	20RESA, 20RESC				535	600
	20 kW	20RESAL, 20 RESCL				580	535
	20 kW	20RCA				555	580
	20 kW	20RCAL-2005ELS				600	

† 180 MPH WIND SPEED RATING ACHIEVED WITH USE OF QT8110 OR QT8111 ANCHOR KITS (FOR SOIL AND CONCRETE INSTALLATION SITES, RESPECTIVELY)

‡ BRIGGS & STRATTON MODELS WITH LENGTH AND HEIGHT DIMENSIONS MATCHING OR BELOW THE LISTED DIMENSIONS AND A WEIGHT MATCHING OR EXCEEDING THE LISTED MINIMUM WEIGHT

DESIGN NOTES:

1. THIS PRODUCT HAS BEEN DESIGNED IN ACCORDANCE WITH ASCE 7-16 AND THE FLORIDA BUILDING CODE - SEVENTH EDITION (2020) FOR USE WITHIN AND OUTSIDE THE HIGH-VELOCITY HURRICANE ZONE (HVHZ).
2. DESIGN CONSIDERS ASCE 7-16 SECTION 29.4 DESIGN WIND LOADS - OTHER STRUCTURES. ALL OTHER DESIGN VARIABLES AND LOADING FACTORS ARE IN ACCORDANCE WITH ASCE 7-16 CHAPTERS 26 & 29 FOR EXPOSURE CATEGORY C.
3. PRODUCTS DETAILED HEREIN ARE INCLUDED WITH QWIKPAD™ GENERATOR PAD (SERIES QT82XX) HIGH-VELOCITY HURRICANE ZONE GENERATOR MOUNTING PADS, UNLESS OTHERWISE SPECIFIED. APPROPRIATE PAD MODEL ASSUMED TO BE DETERMINED BY CONTRACTOR/INSTALLER BASED ON GENERATOR MAKE/MODEL.
4. THIS INSTALLATION SPECIFICATION IS FOR INSTALLATION OF THE GIVEN GENERATOR MODELS ATOP ANY QWIKPAD™ GENERATOR PAD (SERIES QT82XX), WITH THE PAD LEVELED AND LOCATED AT GRADE LEVEL ON COMPACTED GROUND OR ATOP EXISTING CONCRETE SLAB.
5. INSTALLATIONS ATOP EXISTING CONCRETE SLAB WHERE VULT WIND SPEEDS EXCEED DESIGN CHECK IN TABLE 2 REQUIRE (1) ANCHOR INSTALLED WITH S.S. FENDER WASHER THROUGH CENTER HOLE TO PREVENT SLIDING.
6. MODEL NUMBER LISTS IN GENERATOR PAD SCHEDULE AND WIND LOAD TABLES MAY NOT BE ALL INCLUSIVE. MODEL NUMBER VARIANTS MAY EXIST, OR MAY BE ADDED TO PRODUCT LINES, WHICH MEET WIND LOAD RATINGS. GENERATOR MODELS OTHER THAN THOSE LISTED HAVING EQUIVALENT, OR SMALLER, EXTERIOR DIMENSIONS (LG, WG, HG), MATCHING ANCHORAGE PATTERNS, AND WEIGHT GREATER THAN OR EQUAL TO THOSE LISTED SHALL BE CONSIDERED TO MEET GIVEN VULT WIND SPEEDS. OTHERWISE, UNITS MUST BE CONSIDERED ON A CASE-BY-CASE BASIS.
7. GENERATOR MOUNT BOLTS TO BE INSTALLED INTO MAKE/MODEL SPECIFIC ACHORAGE POINTS PER THE DEPICTED CONFIGURATION VIEWS. PROPER BOLT LENGTH ASSUMED TO BE DETERMINED BY CONTRACTOR/INSTALLER BASED ON GENERATOR MAKE/MODEL AND MINIMUM THREAD ENGAGEMENT SPECIFIED HEREIN.
8. DESIGN IS BASED ON INSPECTED PRODUCTS AND MANUFACTURING DRAWINGS PRODUCED BY MAINSTREAM ENGINEERING CORP. NO SUBSTITUTIONS WITHOUT WRITTEN APPROVAL BY THIS ENGINEER SHALL BE PERMITTED.
⚠ BOLTS SHALL BE 18-8 STAINLESS STEEL PER ASTM F593 IN ACCORDANCE WITH ANSI B18.2.1 WITH UNC CLASS 2A THREADS (PER ASME B1.1).
⚠ WASHERS SHALL BE 18-8 STAINLESS STEEL.
⚠ THREADED INSERTS SHALL BE BRASS PER ASTM B16 WITH UNC CLASS 2B THREADS (PER ASME B1.1) AND SHALL HAVE A PULL-OUT STRENGTH GREATER THAN 250 LB.
⚠ GENERATOR PAD SHALL BE LOW-DENSITY POLYETHYLENE (LDPE) WITH YIELD STRENGTH = 1,675 KSI OR BETTER PER ASTM D638 AND NOMINAL WALL THICKNESS = .220 (.1875 MIN.).
⚠ GENERATOR PAD SHALL BE FILLED WITH WATER AT INSTALLATION SITE TO ACHIEVE INSTALLED WEIGHTS GIVEN IN THE GENERATOR PAD SCHEDULE. WEIGHT OF FILLED PAD IS 330 LB.

GENERAL NOTES:

1. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM.
2. CENTER OF GRAVITY ASSUMED TO ACT AT GEOMETRIC CENTER OF UNIT.
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR METALS TO PREVENT ELECTROLYSIS.
4. ELECTRICAL GROUND, WHEN REQUIRED, SHALL BE DESIGNED AND INSTALLED BY OTHERS.
5. THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER SHALL PREPARE SITE SPECIFIC DOCUMENTS IN CONJUNCTION WITH THIS DOCUMENT.
6. FOR AN EXPLANATION OF RISK AND EXPOSURE CATEGORIES THAT ACCOMPANY THE VULT WIND SPEEDS USED IN THIS APPROVAL, SEE SECTIONS 1.5.1 AND 26.7.3, RESPECTIVELY, OF ASCE 7-16. VULT WIND SPEEDS FOR RISK CATEGORY II DETERMINED BY FIGURE 26.5-1B OF ASCE 7-16.
7. GENERATOR WEIGHTS AND DIMENSIONS PER MANUFACTURER DOCUMENTATION, TO BE VERIFIED BY OTHERS.
8. ALL DIMENSIONS SHOWN ARE REFERENCE AND IN INCHES, UNLESS OTHERWISE SPECIFIED.

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QWIKPAD™ GENERATOR PAD GENERATOR TIE-DOWN SYSTEM FOR HVHZ — FBC 7TH EDITION (2020) PRODUCT APPROVAL FL# 27646.1

REV	REMARKS	DRWN	CHKD	DATE
A	INITIAL RELEASE	A. CARPENTIER	R. SCARINGE	8/17/2018
B	ADD QT8240 MODELS	B. WOODS	A. CARPENTIER	4/9/2020
C	UPDATE NOTES/DETAILS	B. WOODS	A. CARPENTIER	5/14/2020
D	UPDATE NOTES/DETAILS	B. WOODS	A. CARPENTIER	12/4/2020

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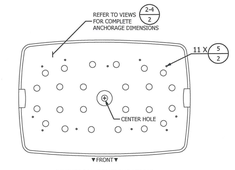
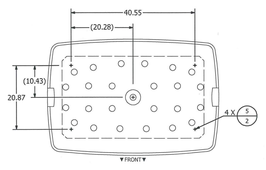
QT8200 — DWG NO. 5010794 REV D — SHEET 1 OF 3

ANCHORAGE DETAILS FOR QT82XX SERIES GENERATOR PADS:



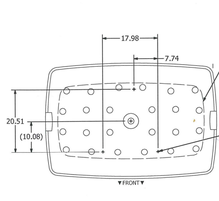
(UNIVERSAL CONFIGURATION)

1 / 2 QT8200 ANCHORAGE — 1:20 SCALE — TOP VIEW



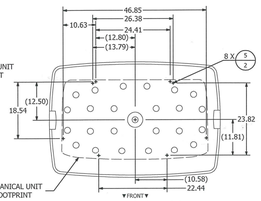
(BRIGGS & STRATTON CONFIGURATION)

2 / 2 QT8215 ANCHORAGE — 1:20 SCALE — TOP VIEW



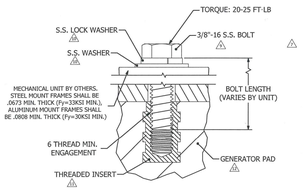
(GENERAC/HONEYWELL CONFIGURATION)

3 / 2 QT8230 ANCHORAGE — 1:20 SCALE — TOP VIEW



(KOHLER CONFIGURATION)

4 / 2 QT8240 ANCHORAGE — 1:20 SCALE — TOP VIEW



5 / 1:1 ANCHOR DETAIL — 1:1 SCALE — SECTION VIEW

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QT8200 — DWG NO. 5010794 REV D — SHEET 2 OF 3

WIND LOAD CALCULATIONS FOR QT82XX SERIES GENERATOR PADS:

APPROPRIATE PAD MODEL DETERMINED USING PAD SCHEDULE ON SHEET 1

TABLE 1. WIND LOAD OVERTURN DESIGN CHECK FOR QT82XX SERIES GENERATOR PADS FOR USE WITH RISK CATEGORY II STRUCTURE (EXPOSURE 'C') IN THE HVHZ.

GENERATOR													
MAKE	NOMINAL RATING	MODEL NO.	L_G	W_G	H_G	WEIGHT	ΔXDEAD LOAD (UNIT + PAD)	DEAD LOAD MOMENT	$F_{WIND,\ PAD}$	$F_{WIND,\ UNIT}$	$F_{WIND,\ TOT}$	ULTIMATE PRESSURE	WIND SPEED	DESIGN CHECK (NO ANCHORS)	DESIGN CHECK (1 ANCHOR) †
-	-	-	IN	IN	IN	LB	LB	FT-LB	LB	LB	LB	PSF	MPH	-	-
BRIGGS & STRATTON	17, 20 kW	17 AND 20 kW MODELS*	46.5	26.8	27.8	400	438.0	693.5	128.8	594.5	723.2	80.2	198.1	OK FOR 180 MPH	OK FOR 180 MPH
GENERAC	9 kW	G007029, G007030	48	25.1	28.6	340	402.0	636.5	128.8	631.3	760.1	68.0	182.4	OK FOR 180 MPH	OK FOR 180 MPH
	11 kW	G007031, G007032, G007033				348	406.8	644.1	128.8	631.3	760.1	68.8	183.4	OK FOR 180 MPH	OK FOR 180 MPH
	16 kW	G007035, G007036, G007037				409	443.4	702.1	128.8	631.3	760.1	75.0	191.5	OK FOR 180 MPH	OK FOR 180 MPH
	20 kW	G007038, G007039				448	466.8	739.1	128.8	631.3	760.1	78.9	196.5	OK FOR 180 MPH	OK FOR 180 MPH
HONEYWELL	22 kW	G007042, G007043				466	477.6	756.2	128.8	631.3	760.1	80.8	198.8	OK FOR 180 MPH	OK FOR 180 MPH
	16 kW	G007059				409	443.4	702.1	128.8	631.3	760.1	75.0	191.5	OK FOR 180 MPH	OK FOR 180 MPH
	20 kW	G007062				448	466.8	739.1	128.8	631.3	760.1	78.9	196.5	OK FOR 180 MPH	OK FOR 180 MPH
	22 kW	G007065				466	477.6	756.2	128.8	631.3	760.1	80.8	198.8	OK FOR 180 MPH	OK FOR 180 MPH
KOHLER	14 kW	14RESA				420	450.0	712.5	128.8	640.1	768.9	74.3	190.7	OK FOR 180 MPH	OK FOR 180 MPH
	14 kW	14RESAL				467	478.2	757.2	128.8	640.1	768.9	79.0	196.5	OK FOR 180 MPH	OK FOR 180 MPH
	14 kW	14RCA				440	462.0	731.5	128.8	698.1	826.9	64.7	177.9	UP TO 177 MPH	OK FOR 180 MPH
	14 kW	14RCAL-2005ELS				490	492.0	779.0	128.8	698.1	826.9	68.9	183.5	OK FOR 180 MPH	OK FOR 180 MPH
	20 kW	20RESA, 20RESC				535	519.0	821.8	128.8	640.1	768.9	85.7	204.8	OK FOR 180 MPH	OK FOR 180 MPH
	20 kW	20RESAL, 20 RESCL				580	546.0	864.5	128.8	640.1	768.9	90.1	210.0	OK FOR 180 MPH	OK FOR 180 MPH
	20 kW	20RCA				555	531.0	840.8	128.8	698.1	826.9	74.3	190.7	OK FOR 180 MPH	OK FOR 180 MPH
	20 kW	20RCAL-2005ELS				600	558.0	883.5	128.8	698.1	826.9	78.1	195.5	OK FOR 180 MPH	OK FOR 180 MPH

TABLE 2. WIND LOAD SLIDING DESIGN CHECK FOR QT82XX SERIES GENERATOR PADS INSTALLED **ATOP EXISTING CONCRETE SLAB** FOR USE WITH RISK CATEGORY II STRUCTURE (EXPOSURE 'C') IN THE HVHZ.

GENERATOR													
MAKE	NOMINAL RATING	MODEL NO.	L_G	W_G	H_G	WEIGHT	NOMINAL FORCE	STATIC FRICTION (μs = 0.6)	$F_{WIND,\ PAD}$	$F_{WIND,\ UNIT}$	$F_{WIND,\ TOT}$	ULTIMATE PRESSURE	WIND SPEED	DESIGN CHECK (NO ANCHORS)	DESIGN CHECK (1 ANCHOR) †
-	-	-	IN	IN	IN	LB	LB	LB	LB	LB	LB	PSF	MPH	-	-
BRIGGS & STRATTON	17, 20 kW	17 AND 20 kW MODELS*	46.5	26.8	27.8	400	730.0	438.0	78.0	360.0	438.0	40.1	140.1	UP TO 140 MPH	OK FOR 180 MPH
GENERAC	9 kW	G007029, G007030	48	25.1	28.6	340	670.0	402.0	68.1	333.9	402.0	35.0	130.9	UP TO 130 MPH	OK FOR 180 MPH
	11 kW	G007031, G007032, G007033				348	678.0	406.8	68.9	337.9	406.8	35.4	131.7	UP TO 131 MPH	OK FOR 180 MPH
	16 kW	G007035, G007036, G007037				409	739.0	443.4	75.1	368.3	443.4	38.6	137.5	UP TO 137 MPH	OK FOR 180 MPH
	20 kW	G007038, G007039				448	778.0	466.8	79.1	387.7	466.8	40.7	141.1	UP TO 141 MPH	OK FOR 180 MPH
HONEYWELL	22 kW	G007042, G007043				466	796.0	477.6	80.9	396.7	477.6	41.6	142.7	UP TO 142 MPH	OK FOR 180 MPH
	16 kW	G007059				409	739.0	443.4	75.1	368.3	443.4	38.6	137.5	UP TO 137 MPH	OK FOR 180 MPH
	20 kW	G007062				448	778.0	466.8	79.1	387.7	466.8	40.7	141.1	UP TO 141 MPH	OK FOR 180 MPH
	22 kW	G007065				466	796.0	477.6	80.9	396.7	477.6	41.6	142.7	UP TO 142 MPH	OK FOR 180 MPH
KOHLER	14 kW	14RESA				420	750.0	450.0	75.4	374.6	450.0	38.8	137.7	UP TO 137 MPH	OK FOR 180 MPH
	14 kW	14RESAL				467	797.0	478.2	80.1	398.1	478.2	41.2	142.0	UP TO 141 MPH	OK FOR 180 MPH
	14 kW	14RCA				440	865.0	519.0	86.9	432.1	519.0	44.7	147.9	UP TO 147 MPH	OK FOR 180 MPH
	14 kW	14RCAL-2005ELS				490	910.0	546.0	91.4	454.6	546.0	47.0	151.7	UP TO 151 MPH	OK FOR 180 MPH
	20 kW	20RESA, 20RESC				535	770.0	462.0	71.9	390.1	462.0	37.0	134.5	UP TO 134 MPH	OK FOR 180 MPH
	20 kW	20RESAL, 20 RESCL				580	820.0	492.0	76.6	415.4	492.0	39.4	138.8	UP TO 138 MPH	OK FOR 180 MPH
	20 kW	20RCA				555	885.0	531.0	82.7	448.3	531.0	42.5	144.8	UP TO 144 MPH	OK FOR 180 MPH
	20 kW	20RCAL-2005ELS				600	930.0	558.0	86.9	471.1	558.0	44.7	147.9	UP TO 147 MPH	OK FOR 180 MPH

† FOR VULT WIND SPEEDS ABOVE THE 'DESIGN CHECK (NO ANCHORS)' WIND SPEED, (1) Ø1/4" X 5" ITW TAPCON CONCRETE SCREW (1.25" MIN. EMBEDMENT IN 3000 PSI MIN. CONCRETE AT 3.0" MIN. EDGE DISTANCE) INSTALLED WITH S.S. FENDER WASHER (13 GA MIN.) REQUIRED TO PREVENT SLIDING ON CONCRETE UP TO VULT WIND SPEEDS OF 180 MPH.

‡ ANCHOR MUST HAVE A MIN. PULL OUT RATING OF 24 LBS TO PREVENT OVERTURN FOR VULT WIND SPEEDS UP TO 180 MPH IF 'DESIGN CHECK (NO ANCHORS)' IS BELOW 180 MPH.

* BRIGGS & STRATTON MODELS WITH LENGTH AND HEIGHT DIMENSIONS MATCHING OR BELOW THE LISTED DIMENSIONS AND A WEIGHT MATCHING OR EXCEEDING THE LISTED MINIMUM WEIGHT

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QT8200 — DWG NO. 5010794 REV D — SHEET 3 OF 3

7 GENERATOR PAD SPECS

SCALE: 1" = 10FT

- POOL ELECTRICAL

DR,
WEST PALM BEACH, FL 33411

DRAWN BY:

CHECKED BY:

REVISIONS:

No.	DESCRIPTION	DATE
1	CITY COMMENT	7/15/2026
2	CITY COMMENT	9/22/2026

ISSUE RECORD:

No.	DESCRIPTION	DATE

SCALE:

SHEET CONTENTS:

PROJECT NO.:

DATE: 9/27/2026

DRAWING NO.: **E3.2**