

RevNo	Revision note	Date	Signature	Checked
C	M-CLASS PACK ELECTRICAL ADDITION PG 2	6/18/08	DP	AP

GENERAL SPECIFICATIONS

Spa Size: ____ x ____ Depth: ____
 Shape: ____ Area: ____ Sq. Ft.
 Perimeter: ____ LF Volume: ____ Gals.
 Filter Rate: ____ GPM Turnover rate: ____ Hrs.

EXCAVATION:

Access: _____ Min. Width: _____
 Fence Removal: Contr. Owner
 Fence Replaced by: Contr. Owner
 Remove Dirt Leave Dirt
 Saw Cut Concrete Removal
 Soils/Compaction Report Contr. Owner Not Req'd.

SPA Model:

Note: Refer to product specification sheet for details

SPA FILTRATION:

Filter Type: _____
 Make & Model: _____
 Size: _____ Area: _____ Sq.Ft.
 Circulation Pump Model: _____ HP: _____
 _____ GPM @ _____ Ft Head Volts _____ PH _____
 Ozone Type _____

HYDRO-THERAPY EQUIPMENT:

Therapy Pump(s): Model _____
 HP _____ GPM _____ Volts _____ Ph _____

SPA HEATING:

Fuel: _____ Natural Gas Propane Oil
 Make & Model _____ BTU Input _____
 Vent Size _____ Combustion Ventilation Req'd _____ Sq.Ft.
 Electric: Make & Model _____
 KW _____ Phase _____ Volts _____

SPA FITTINGS:

Main Output: Size _____ Qty _____
 Skimmers: Type _____ Qty _____
 Inlets: Type _____ Qty _____
 Therapy Inlets: Type _____ Qty _____

SPA PIPING / PLUMBING:

Filter Plant Face Piping ---- PVC Schedule 40
 Gas Heater Piping Copper Galvanized
 at four feet (4') preceding and following the heater.
 Pool Piping ---- PVC Schedule 40 (Size as per plan)

POOL/SPA CONTRACTOR TO IDENTIFY ALL VALVES & PIPING

ADDITIONAL:

CONTRACTOR LICENSE(S):

SITE INFORMATION

IMPORTANT NOTE FOR GENERAL CONTRACTOR
 AT ALL NEW SERVICES & GROUNING TRENCHES
 PROVIDE "WARNING" TAPE AT 12" BELOW GRADE

UNDERGROUND SERVICE ALERT




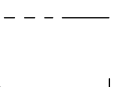

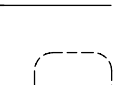
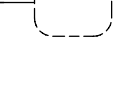

CALL TOLL FREE
1-800-422-4133

TWO WORKING DAYS BEFORE YOU DIG

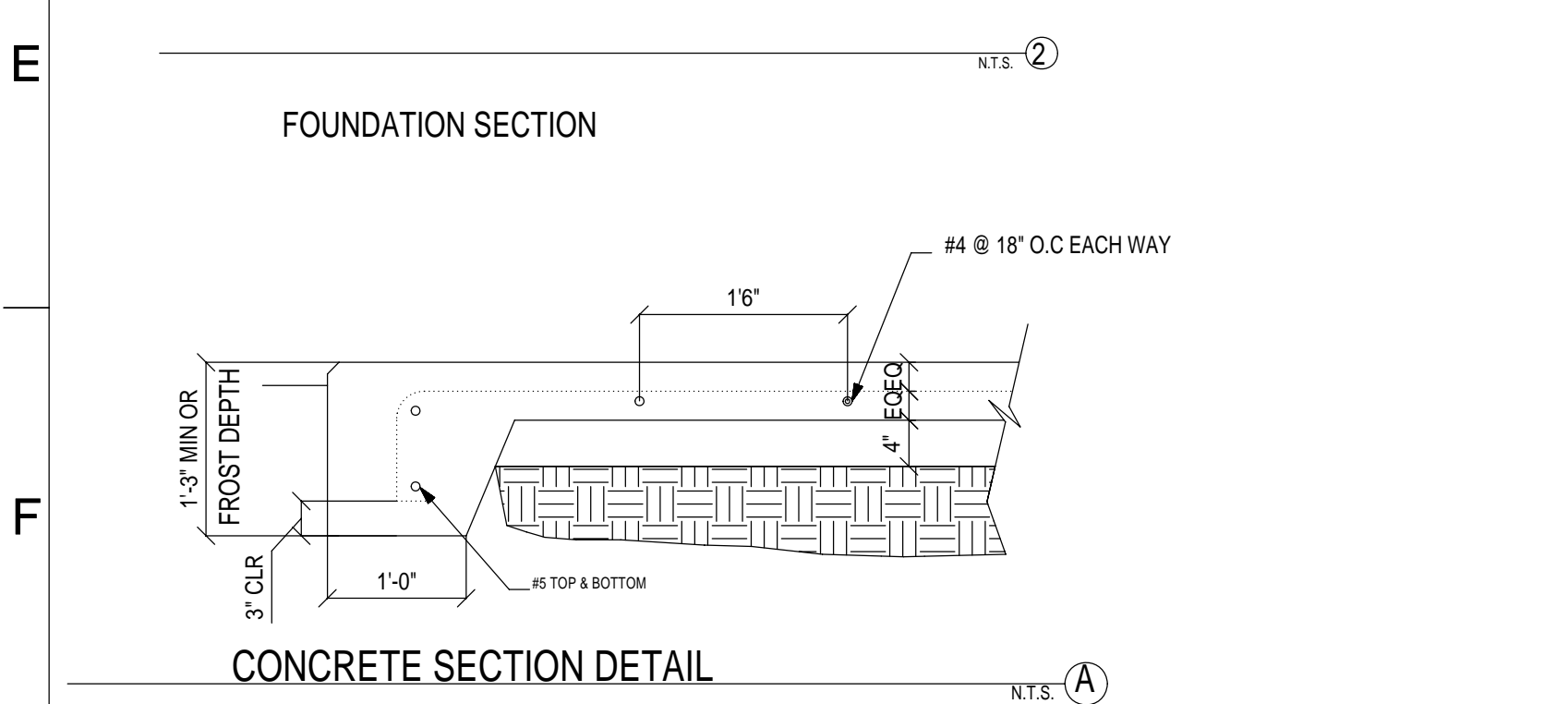
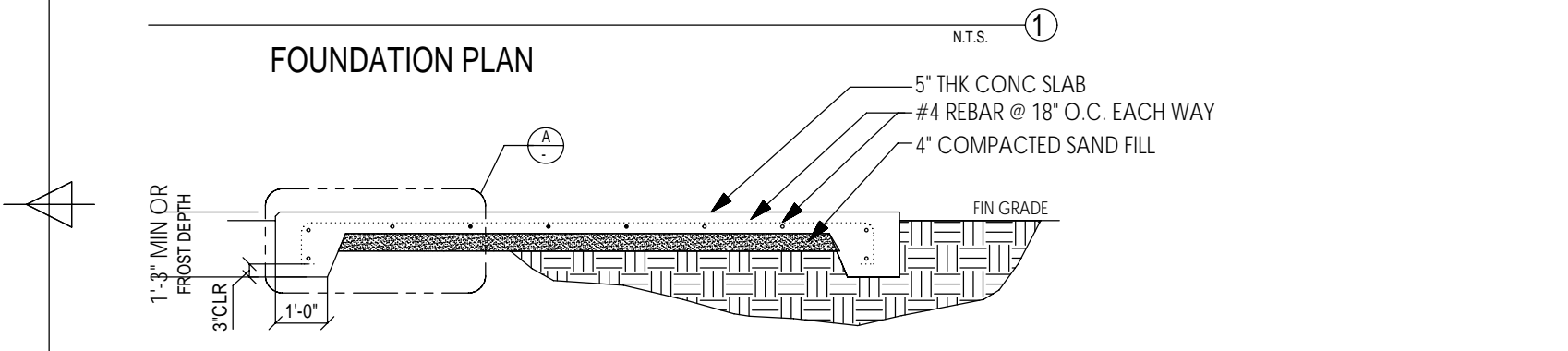
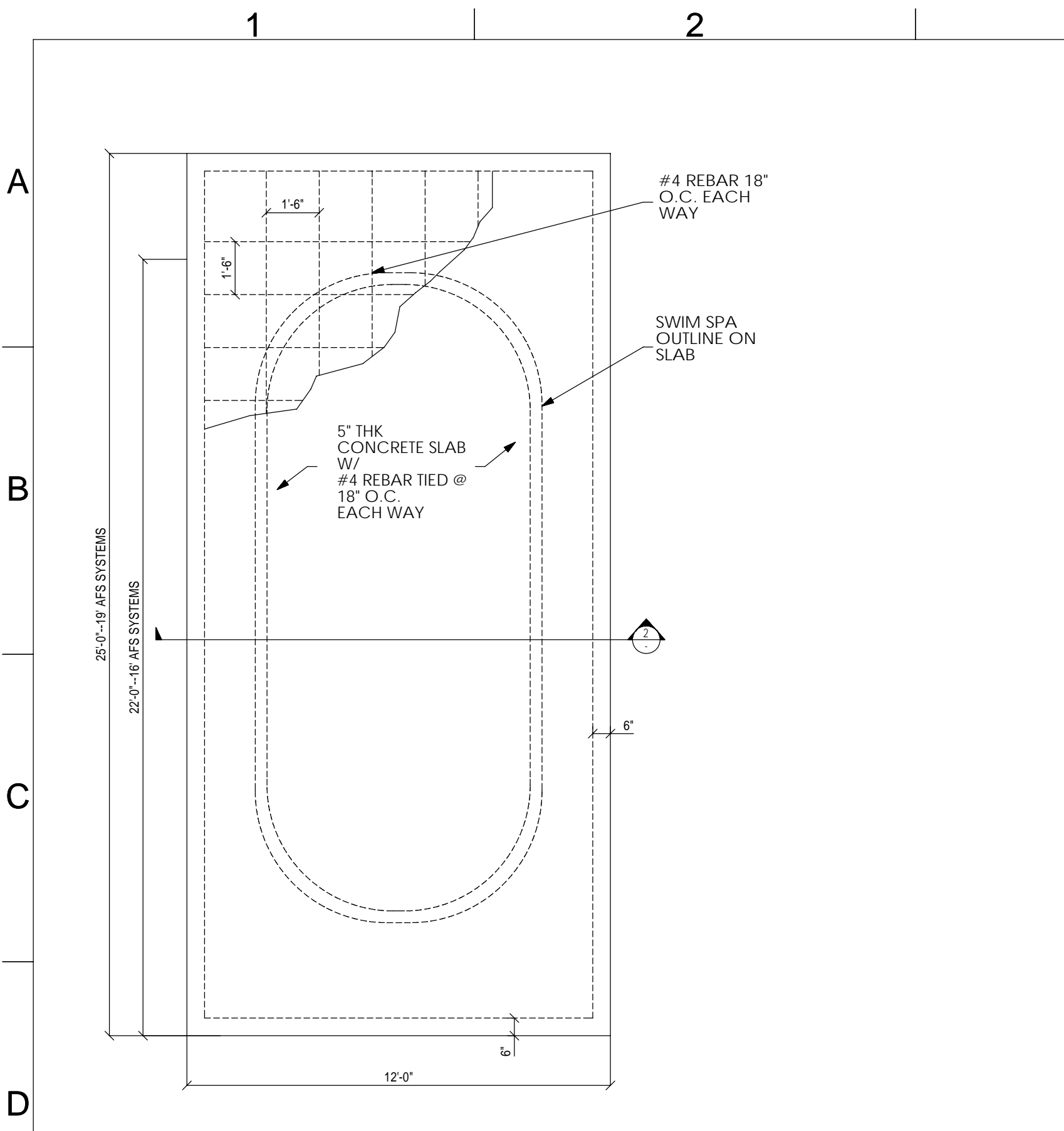
GENERAL CONDITIONS

- ANY SUBSTITUTIONS, REVISIONS OR ADDITIONS TO THE PLANS ARE TO BE APPROVED IN THE FIELD W/OWNER OR ARCHITECT CONTRACTOR WILL TAKE FULL RESPONSIBILITY FOR ADJUSTMENTS TO ANY MATERIAL OR WORK THAT IS NOT APPROVED
- ALL WORK IS TO BE PERFORMED BY LICENSED, INSURED FIRMS WHO ARE ACTIVE & EXPERIENCED IN THE RESPECTIVE TRADES REPRESENTED ON THE DWGS & EXECUTED TO THE HIGHEST STANDARDS OF THOSE TRADES.
- CONTRACTOR SHALL COORDINATE HIS WORK W/ ALL RELATED TRADES
- ALL WORK SHALL BE IN COMPLIANCE W/ ALL LOCAL CODES, ORDINANCES & MFG INSTRUCTIONS & SPECIFICATIONS
- ALL WORK IS SUBJECT TO APPROVAL OF THE OWNER/ARCH OR THERE REPRESENTATIVE.
- VERIFY ALL DIM ON SITE & NOTIFY THE OWNER/ARCH OF ANY DISCREPENCIES PRIOR TO CONSTRUCTION. DO NOT PROCEED UNTIL ANY NECESSARY ADJUSTMENT ARE MADE
- PROVIDE FOR RACEWAYS FOR OTHER TRADES UNDER SLABS & FOOTINGS (SUCH AS POOL, PLUMBING, IRRIGATION, ELEC ETC.)
- CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIP, MATERIALS & SUPPLIES TO INSTALL ALL WORK ON THE PLANS & AS SPECIFIED HEREIN
- CONTRACTOR SHALL OBTAIN & PAY FOR ALL REQUIRE INSPECTIONS PERMITS & FEES. PROVIDE NOTICES REQD BY GOVERNMENTAL AUTHORITIES. FILE DWGS AS NECESSARY, SCHEDULE INSPECTIONS & TESTS & SUBMIT CERTIFICATES OF APPROVAL UPON COMPLETION
- CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER/ARCH OF ANY WORK OUTLINED ON THE PLANS OR SPECS THAT IS NOT IN ACCORDANCE W/APPLICABLE LAWS, CODES & REGULATIONS. W/OUT SUCH NOTICE & APPROPRIATE MODIFICATIONS BY OWNER/ARCH, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR ANY WORK EXECUTED WHICH IS CONTRARY TO SUCH LAWS, CODES & REGULATIONS
- DUE TO MANUFACTURING TOLERANCES THERE COULD BE SOME MINOR DIFFERENCES BETWEEN THE ACTUAL MEASUREMENTS OF YOUR SPA AND THE DRAWINGS INDICATED HERE. IF SITE PLANNING IS CRITICAL TO SUCH TOLERANCES, BE SURE TO MEASURE YOUR ACTUAL SPA.

PROJECT SYMBOLS

 DATUM POINT
 PROPERTY LINE
 BLDG/WALL SECTION
 DETAIL SECTION
 DETAIL BUBBLE OR ENLARGED PLAN
 NORTH ARROW

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by V Walker	Checked by Angelo P	Approved by - date J.M. 4-26-02	Filename AFS SYSTEMS
DIMENSION ONE SPAS		INSTALLATION INFORMATION	
Doc# 138	CR# 4302	SITE INFORMATION	Edition C
		Scale NTS	Sheet 1 OF 3



Foundation:

F1 Prior to SLAB CONST, top 6" of underlying soils shall be scarified & reworked to a min of 2% above optimum moisture content, & recompact to a min of 95% of Standard Proctor Density

F2 Contractor to verify soil bearing pressure. Slab design based on assumed soil pressure of 1000 PSF. According to table no. 18-1-A, UBC 1997 pg. 2-49

F3 Contractor to provide 2 mil. vapor barrier on 4" compacted sand after soil preparation

Reinforcement:

R1 All reinforcement shall conform to ASTM A-615 Grade 60

R2 Reinforced steel shall be designed, detailed, fabricated & placed in accordance w/ latest ACI Detailing Manual (SP-40) & CRSI Manual Standard Practice

R3 Rebar to overlap 24" @ each corner

R4 Splices in reinforcement shall occur @ points of minimum stress & lap 40x bar diameter minimum u.n.o.

R5 Provide one extra #4 bar x 20'-0" into concrete footing for electrical user ground. Verify location of electrical meter w/electrical sub-contractor

Concrete:

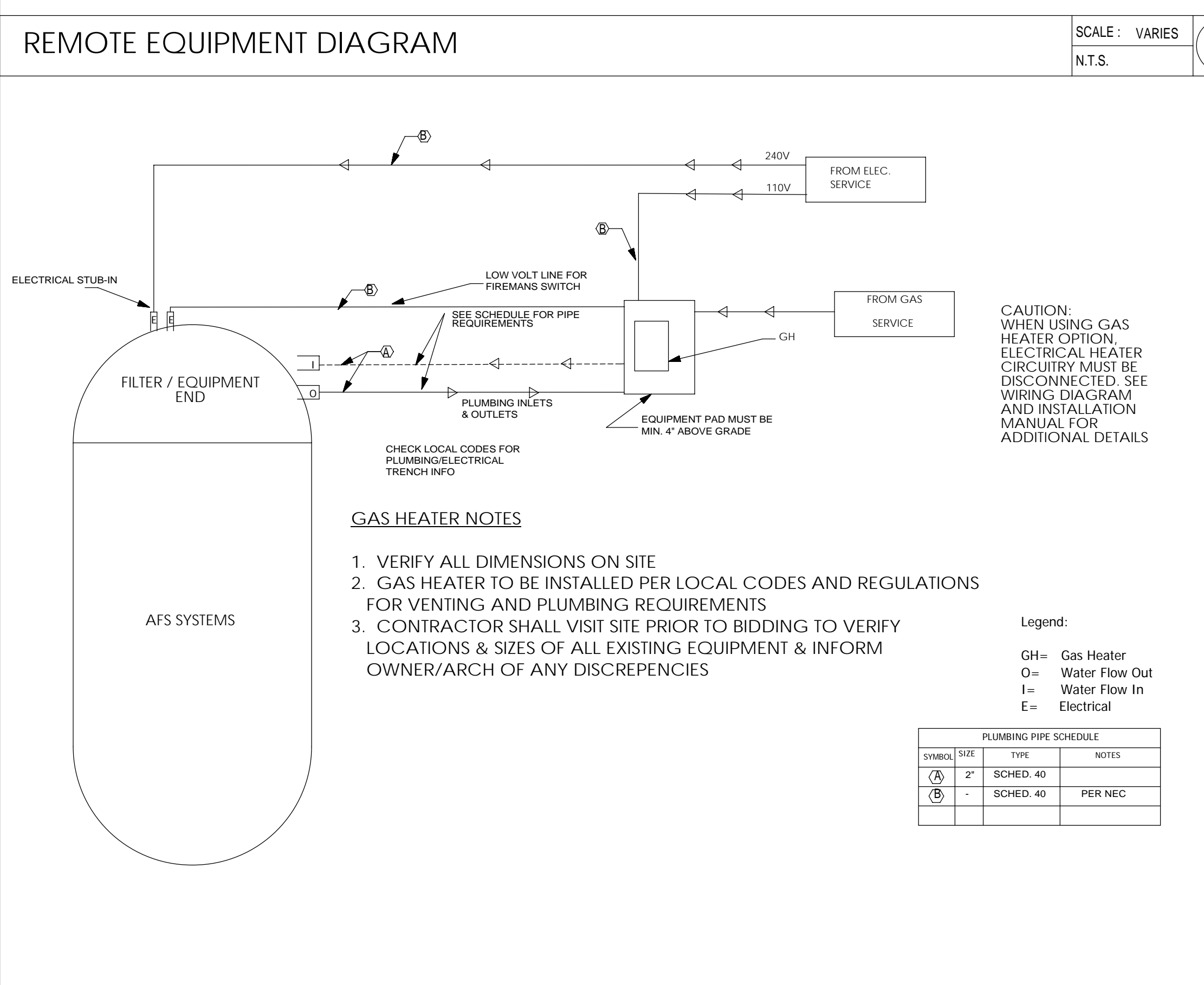
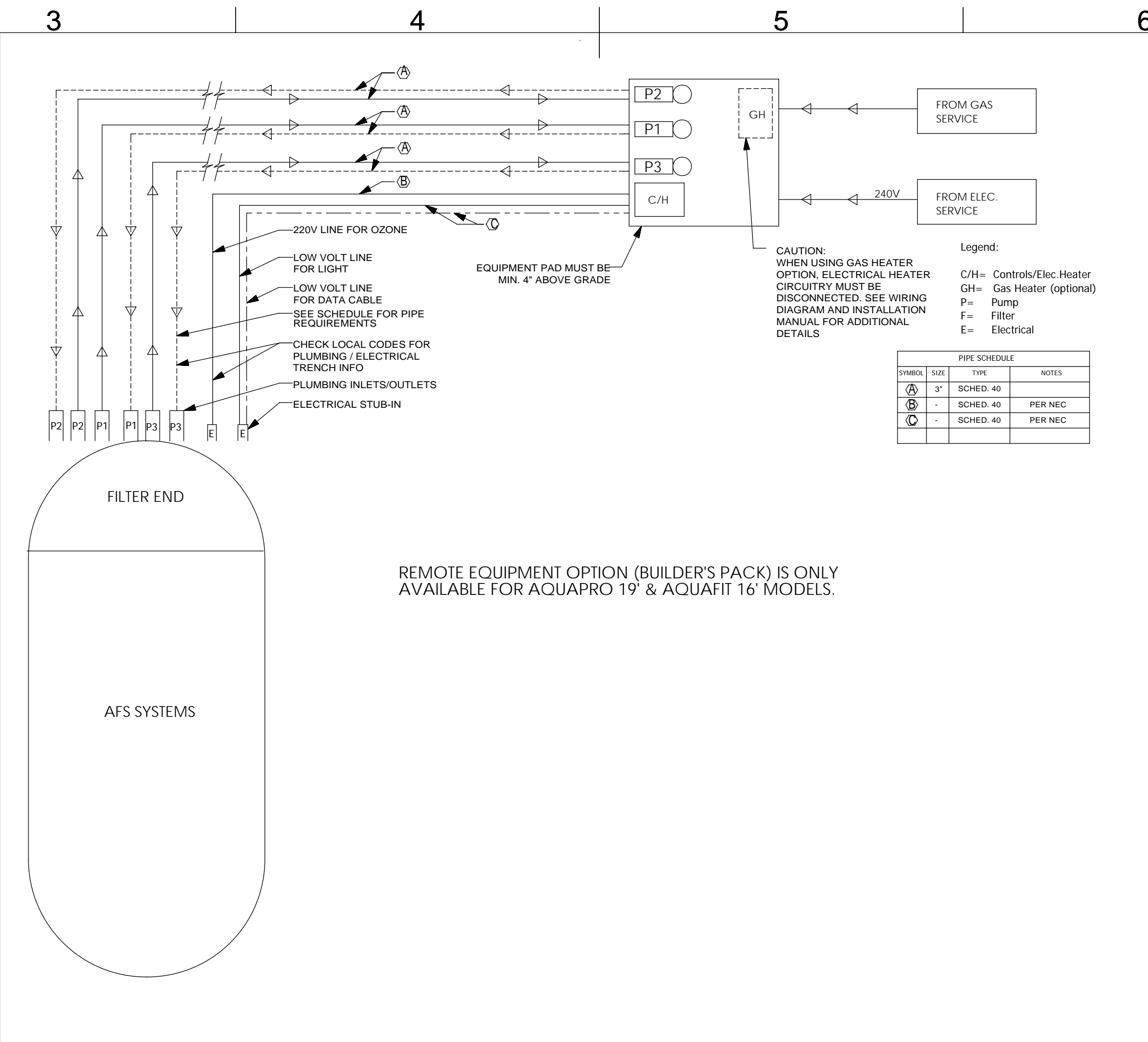
C1 Conc work shall be executed in strict accordance w/latest American Concrete Institute (ACI 318-95)

C2 Conc specs shall be as follows:

note:	28 Day Strength	Aggregate	Slump
Portland Cement shall conform to ASTM C-150. Aggregate shall conform to ASTM C-33 (1" max aggregate size)	2500 psi	1"	2'-4"

C3 verify in field w/owner location of all depressions, openings, cast-in-place accessories etc. prior to construction

Caution:
Normal use of the Aquatic Fitness Systems causes large amounts of water to splash out of the unit. these foundation specifications are only for mechanical support of the AFS. Depending on the specific installation, additional provisions will have to be made for proper removal of the water.

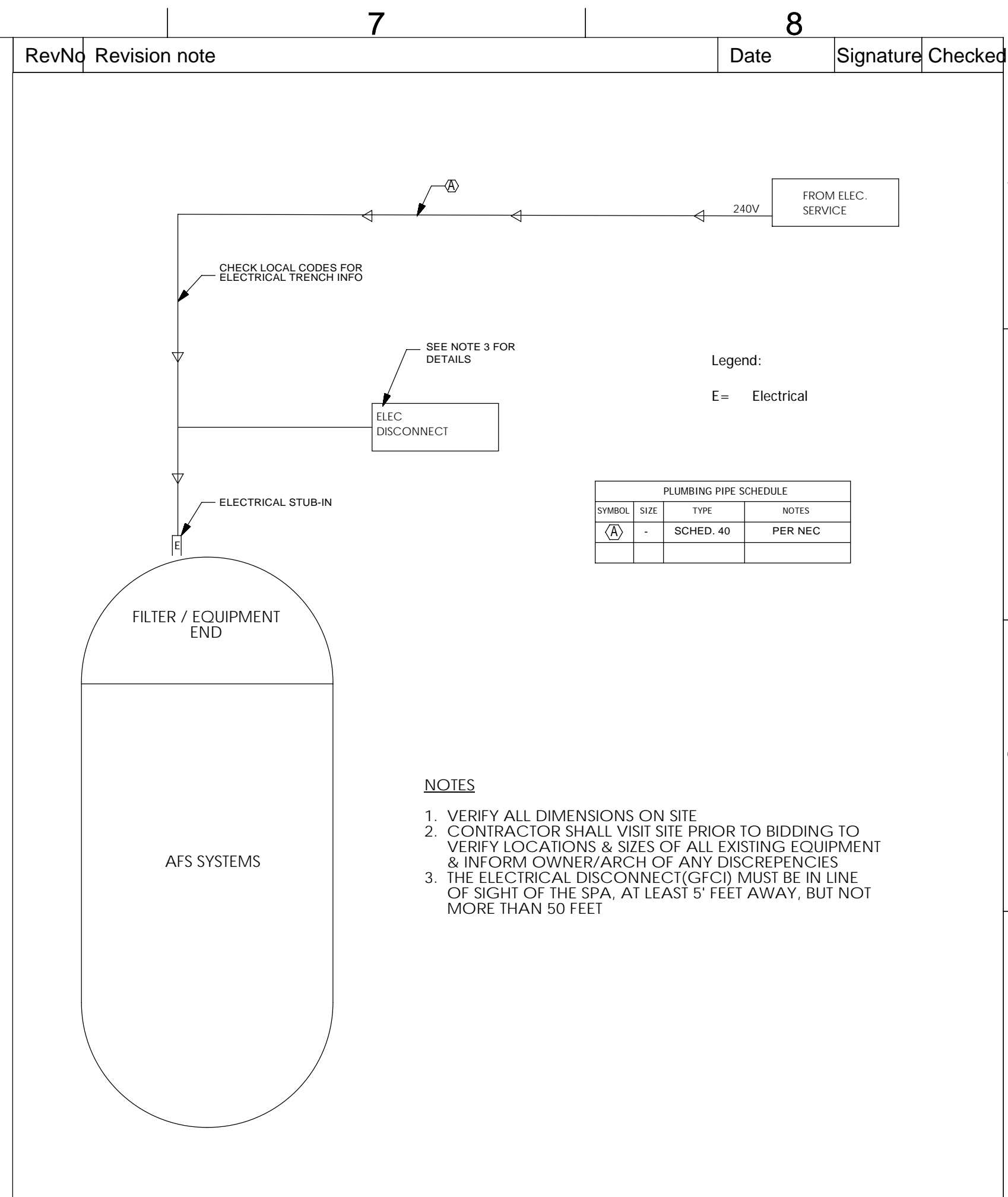


GAS HEATER NOTES

1. VERIFY ALL DIMENSIONS ON SITE
2. GAS HEATER TO BE INSTALLED PER LOCAL CODES AND REGULATIONS FOR VENTING AND PLUMBING REQUIREMENTS
3. CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING TO VERIFY LOCATIONS & SIZES OF ALL EXISTING EQUIPMENT & INFORM OWNER/ARCH OF ANY DISCREPANCIES

Legend:
GH= Gas Heater
O= Water Flow Out
I= Water Flow In
E= Electrical

PLUMBING PIPE SCHEDULE		
SYMBOL	SIZE	NOTES
(A)	3"	SCHED. 40
(B)	-	SCHED. 40 PER NEC
(C)	-	SCHED. 40 PER NEC



GENERAL NOTES

1. VERIFY ALL DIMENSIONS ON SITE
2. ALL CONCRETE SLABS & FOOTINGS TO BE POURED MONOLITHICALLY
3. CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING TO VERIFY LOCATIONS & SIZES OF ALL EXISTING EQUIPMENT & INFORM OWNER OF ANY DISCREPANCIES
4. CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, EQUIPMENT, TRANSPORTATION & SERVICES NECESSARY FOR COMPLETION OF WORK. ALL MATERIALS & WORK SHALL COMPLY W/APPLICABLE CODES & GOVERNING REGULATIONS & MEET THE APPROVAL OF THE LOCAL JURISDICTION
5. TAKE ALL PRECAUTIONS NECESSARY TO PROTECT THE MATERIALS BEFORE, DURING & AFTER INSTALLATION. IN THE EVENT OF DAMAGE, IMMEDIATELY REPAIR ALL DAMAGED & DEFECTIVE WORK TO THE APPROVAL OF THE OWNER/ARCH AT NO ADDITIONAL COSTS TO THE OWNER
6. THESE DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK W/ ALL OTHER TRADES.
7. ACCURATE AS-BUILT DRAWINGS SHALL BE MADE DURING CONSTRUCTION & SUBMITTED FOR APPROVAL UPON COMPLETION OF INSTALLATION
8. ALL APPLIANCES DESIGNED TO BE FIXED IN POSITION SHALL BE SECURELY FASTENED IN PLACE
9. DUE TO MANUFACTURING TOLERANCES THERE COULD BE SOME MINOR DIFFERENCES BETWEEN THE ACTUAL MEASUREMENTS OF YOUR SPA AND THE DRAWINGS INDICATED HERE. IF SITE PLANNING IS CRITICAL TO SUCH TOLERANCES, BE SURE TO MEASURE YOUR ACTUAL SPA.

ELECTRICAL NOTES

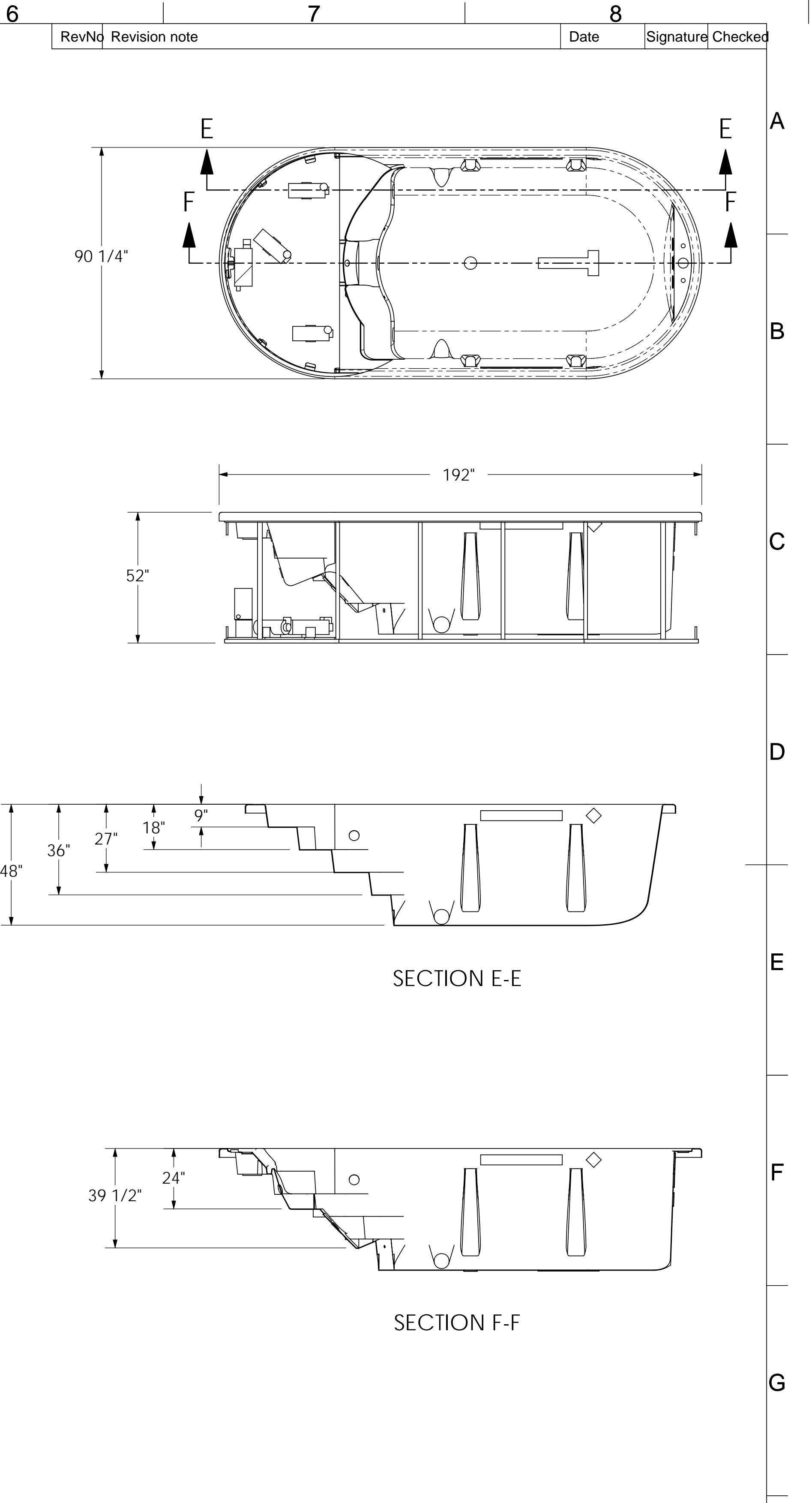
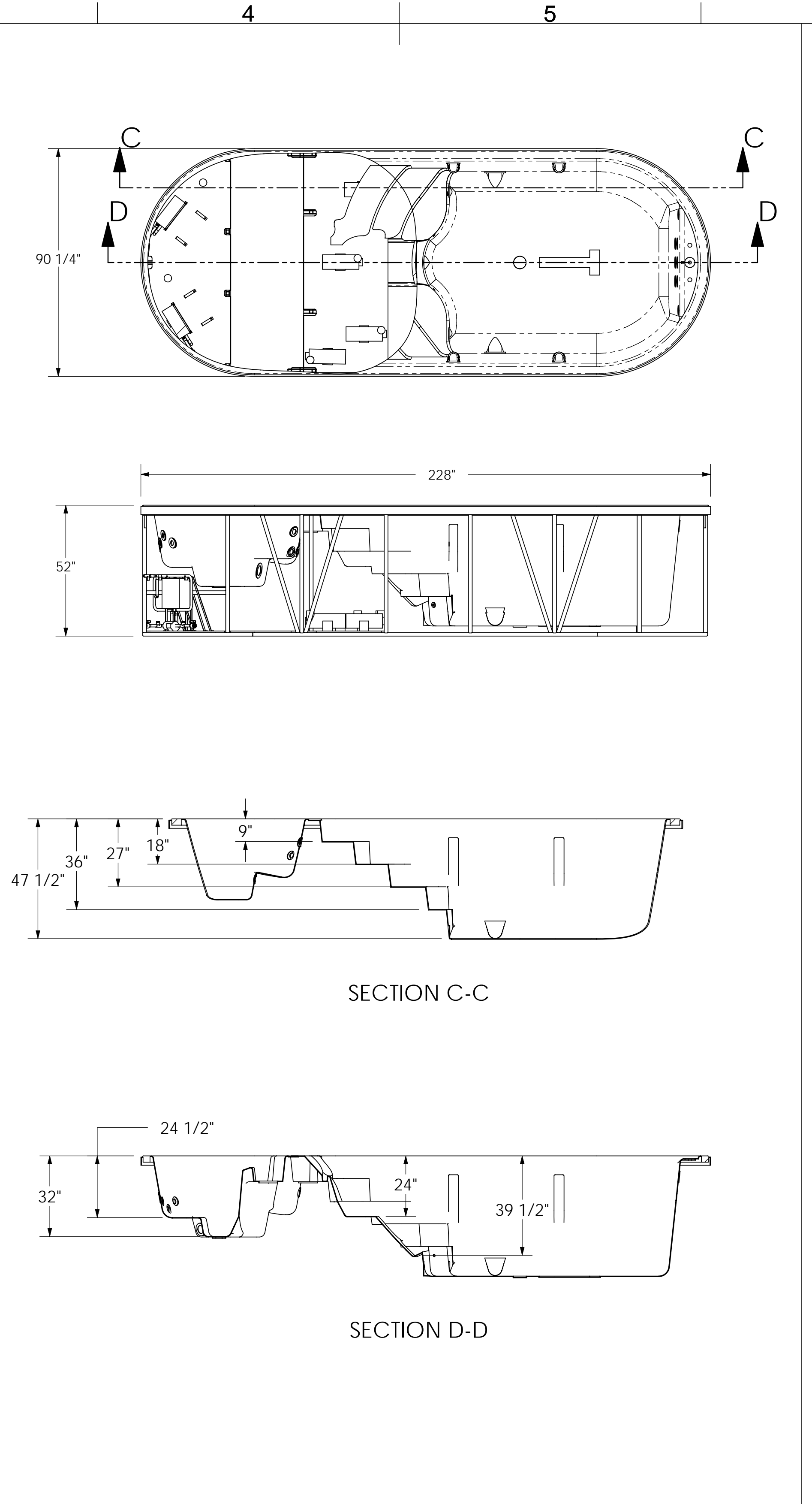
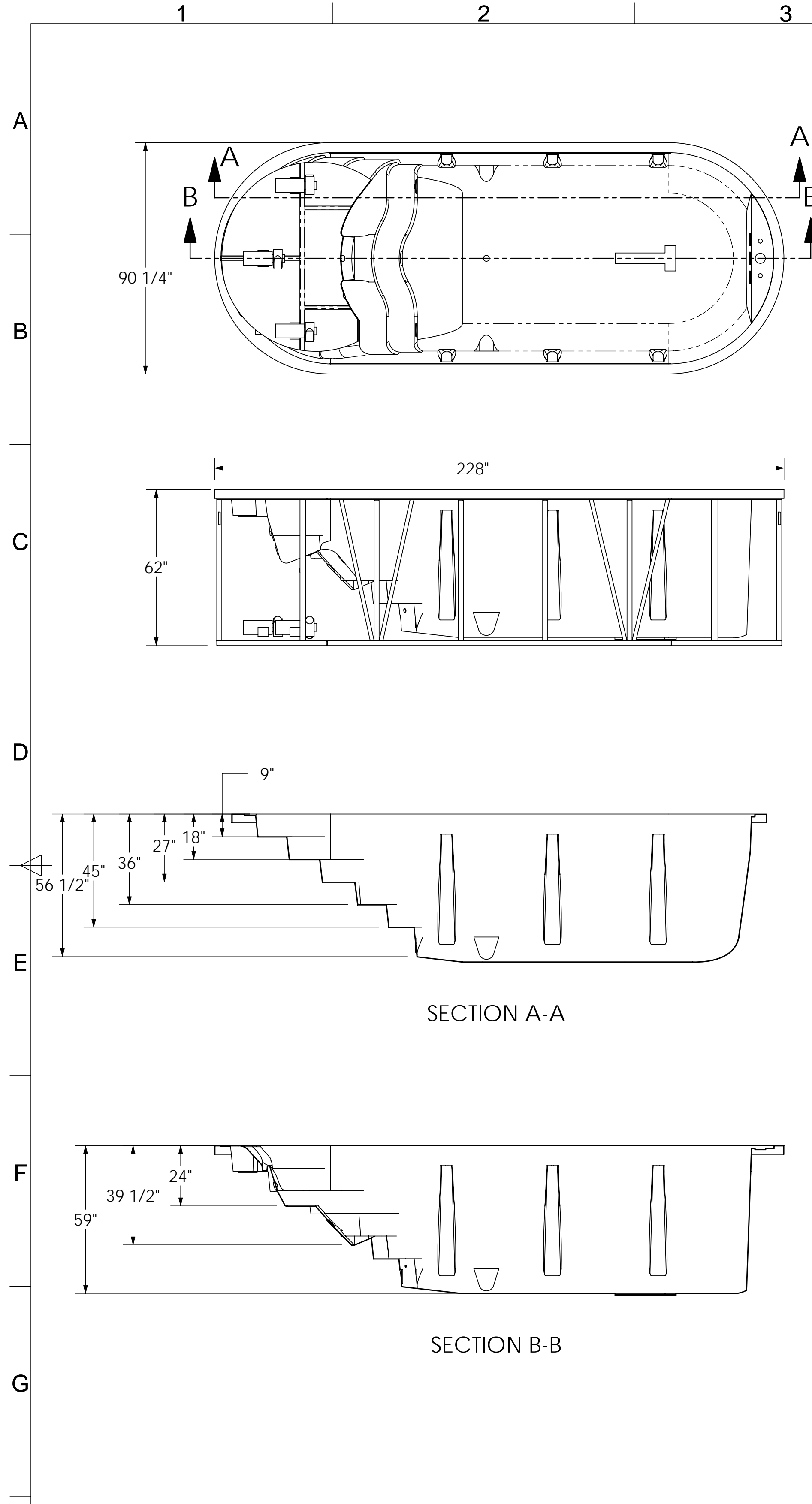
1. INSTALL SPA AT LEAST 5 FEET FROM ALL UNBOUNDED METAL SURFACES
2. ELECTRICAL SUPPLY FOR THE SPA MUST COMPLY WITH SECTION 680-42 OF THE NATIONAL ELECTRICAL CODE, ANSI/NFPA 70-1993
3. THE ELECTRICAL DISCONNECT (GFCI) MUST BE IN LINE OF SIGHT OF THE SPA, AT LEAST 5' FEET AWAY, BUT NOT MORE THAN 50 FEET
4. SUPPLY WIRE MUST BE A MINIMUM #6 AWG COPPER OR OTHER APPROVED BY LOCAL CODES AND GUIDELINES DEPENDING ON INSTALLATION
5. WITH LX-15 LOWER CONTROL: MINIMUM 60 AMP SERVICE REQUIRED FOR SPAS WITH LOAD SHARING
6. WITH GECKO M-CLASS LOWER CONTROL: MINIMUM 40 AMP SERVICE REQUIRED FOR SPAS WITH LOAD SHARING
7. WITH LX-15 LOWER CONTROL: NON LOAD SHARING SPAS WILL REQUIRE (1) 60 AMP + (1) 50 AMP SERVICE
8. WITH GECKO M-CLASS LOWER CONTROL: NON LOAD SHARING SPAS WILL REQUIRE (1) 50 AMP SERVICE
9. DUAL TEMP WILL REQUIRE (1) ADDITIONAL 40 AMP SERVICE.
10. ALL WORKS & MATERIALS SHALL BE IN FULL ACCORDANCE W/ THE NATIONAL ELECTRICAL CODE (ENFORCED BY LOCAL AUTHORITY) & ALL APPLICABLE STATE & LOCAL LAWS & REGULATIONS. NOTHING IN THESE PLANS OR SPECS SHALL BE CONSTRUCTED AS TO PERMIT WORK NOT CONFORMING TO THE MOST STRINGENT OF THESE CODES. SHOULD CHANGES BE NECESSARY IN THE DWGS OR SPECS TO MAKE WORK COMPLY W/THESE REQUIREMENTS, THE SUBCONTRACTOR SHALL IMMEDIATELY (ESPECIALLY BEFORE BIDDING SUBMITTAL) NOTIFY OWNER/ARCH IN WRITING & CEASE WORK ON PARTS ON THE CONTRACT WHICH ARE AFFECTED
11. EXTENT OF WORK IS INDICATED BY DRAWINGS & SPECIFICATIONS & IS SUBJECT TO THE TERMS & CONDITIONS OF CONTRACT. THE WORK SHALL CONSIST OF FURNISHING ALL LABOR, EQUIP, MATERIALS & SUPPLIES NECESSARY FOR A COMPLETE & OPERATIONAL ELECTRICAL SYSTEM. THIS INCLUDES WORK NOT MENTIONED OR SHOWN WHICH IS NECESSARY FOR SUCCESSFUL OPERATION OF ALL SYSTEMS. UTILITY SERVICE REQUIREMENTS ARE SHOWN ON DRAWINGS BASED ON INFORMATION AVAILABLE @ THE TIME & IS NOT GUARANTEED

SEE OWNERS MANUAL FOR ADDITIONAL ELECTRICAL CONNECTION DETAILS

GENERAL NOTES & CONDITIONS

SCALE: NONE N.T.S.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by V Walker	Checked by Angelo P	Approved by - date J.M. 1-27-02	Filename DETAILS
Date 1-27-02	Scale NTS		



AQUAPRO 19

SCALE: VARIES 1

AQUAFIT 19 DUAL TEMP

SCALE: VARIES 2

AQUAFIT 16

SCALE: VARIES 3

NOTE:
DUE TO MANUFACTURING TOLERANCES THERE COULD BE SOME MINOR DIFFERENCES BETWEEN THE ACTUAL MEASUREMENTS OF YOUR SPA AND THIS DRAWING. IF SITE PLANNING IS CRITICAL TO SUCH TOLERANCES, BE SURE TO MEASURE YOUR ACTUAL SPA.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by V Walker	Checked by Angelo P	Approved by - date J.M. 1-27-02	Filename SWIM SPA	Date 1-27-02	Scale NTS	
DIMENSION ONE SPAS			INSTALLATION INFORMATION			
Doc# 138	CR# 4302	AFS Systems		Edition C	Sheet 3 OF 3	