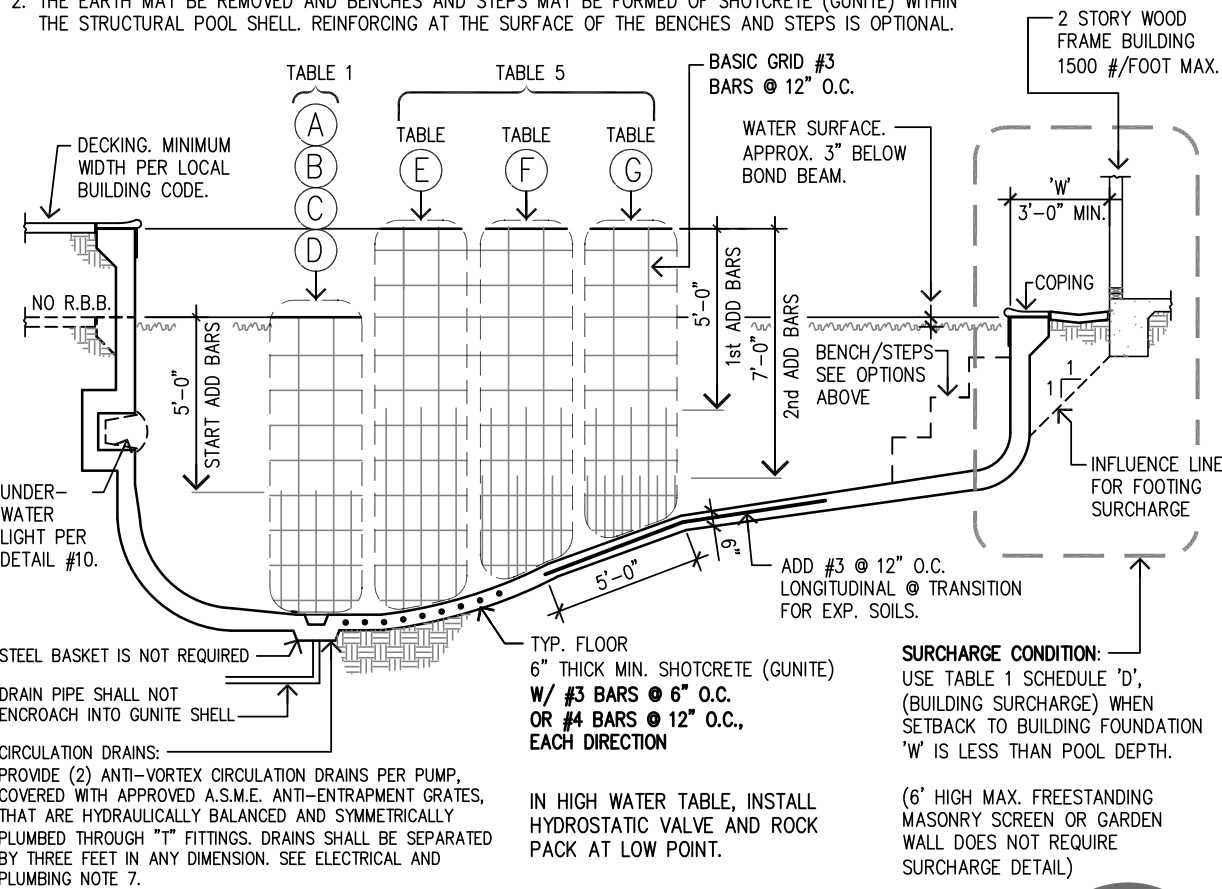


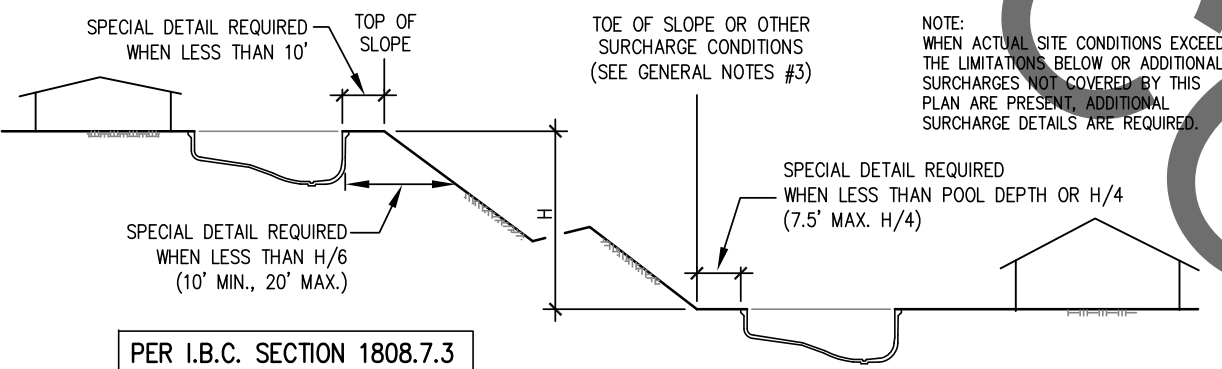
BENCH AND STEP OPTIONS:

- 1. UNDISTURBED EARTH MAY BE LEFT IN PLACE TO FORM THE STEPS OR BENCHES. REINFORCING STEEL SHOULD BE PLACED AROUND THE STEP OR BENCH SHAPED EARTH (3" CLEAR FROM EARTH).
- 2. THE EARTH MAY BE REMOVED AND BENCHES AND STEPS MAY BE FORMED OF SHOTCRETE (GUNITE) WITH THE STRUCTURAL POOL SHELL. REINFORCING AT THE SURFACE OF THE BENCHES AND STEPS IS OPTIONAL.



TYPICAL LONGITUDINAL SECTION

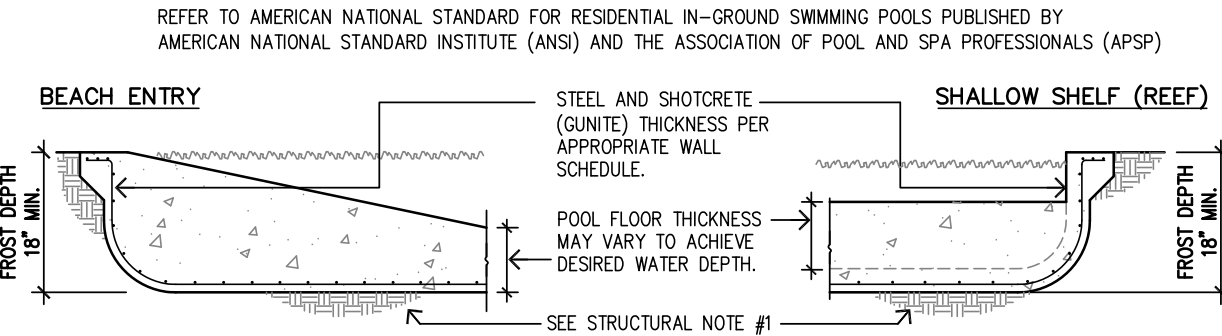
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SURCHARGE CONDITIONS

ADDITIONAL SPECIAL DETAILS REQUIRED FOR CONDITIONS ABOVE

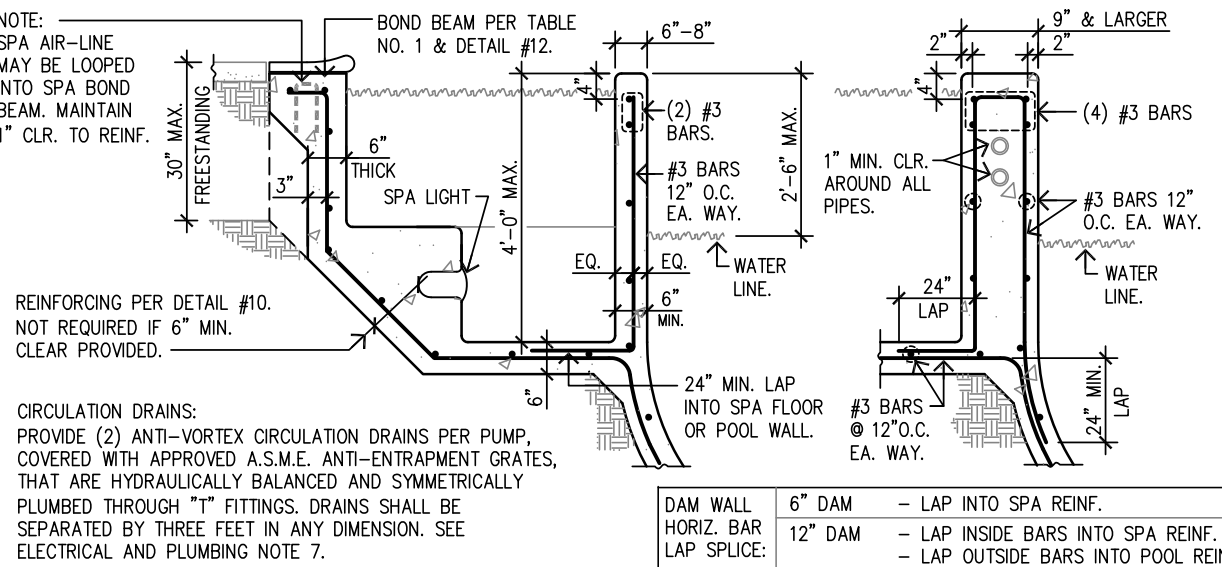
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SHALLOW FEATURES

MAINTAIN 18" MIN. EMBEDMENT INTO UNDISTURBED OR 90% COMPACTED SOIL

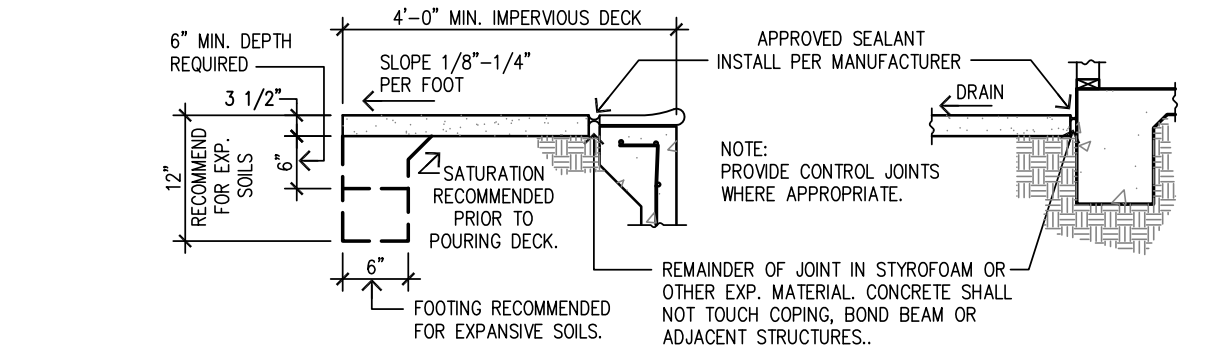
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SPA DETAILS

SPA DETAILS MAY BE USED FOR SPAS WITHOUT POOLS.

N.T.S.



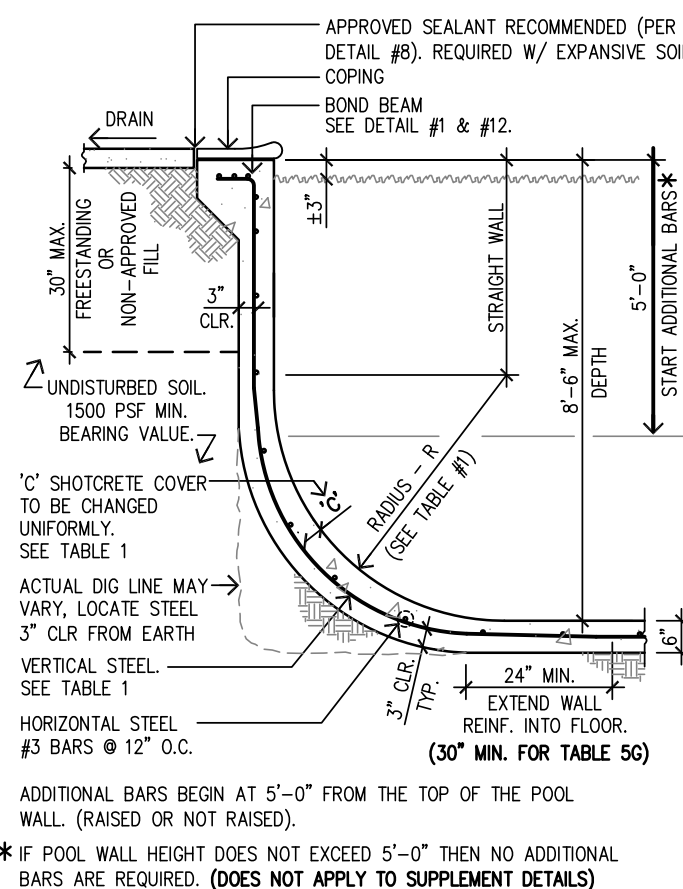
EXPANSIVE SOIL DETAILS

IN EXPANSIVE SOILS WHERE MIN DECK REQMS ARE NOT MET USE TABLE 1, SCHEDULE 'C'

N.T.S.

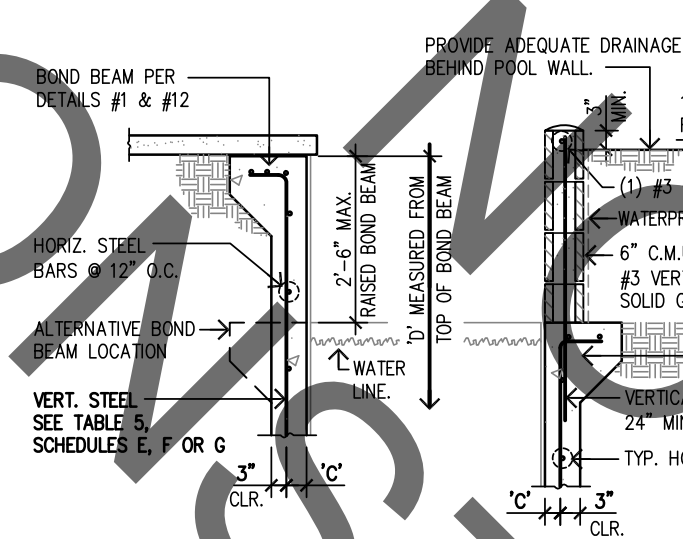
SLOPE EARTH SURFACE 1/4" PER FOOT OR SLOPE DECKING 1/8" TO 1/4" PER FOOT AWAY FROM POOL.

NOTE: BOND BEAM HORIZONTAL BARS MAY BE OVER OR UNDER VERTICAL BARS. TYPICAL INCLUDING ALL SPECIAL DETAILS.



STANDARD WALL SECTION

N.T.S.

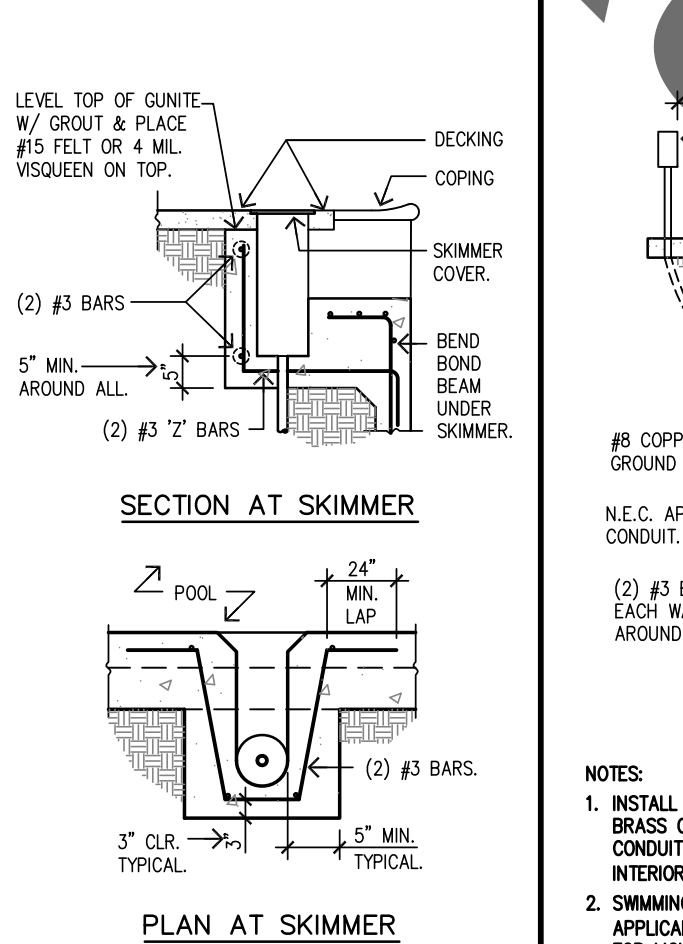


MASONRY NOTES:

- 1. CONCRETE BLOCK SHALL BE GRADE N (EXPOSED TO WEATHER), TYPE II (NON-MOISTURE CONTROLLED), NORMAL WEIGHT UNITS (135 PCF), CONFORMING TO IBC SEC. 2103, AND ASTM C 90. ALL CONCRETE BLOCK SHALL HAVE A DESIGN STRENGTH OF $f_m = 1500$ psi.
- 2. GROUT SHALL CONFORM TO IBC SEC. 2103 & ASTM C 476 WITH $f_c = 2000$ PSI. SEE IBC TABLE 2103.12 FOR PROPORTIONS OF INGREDIENTS.
- 3. MORTAR SHALL BE TYPE M WITH $f_c = 1800$ psi AND SHALL CONFORM TO IBC SEC. 2103 & ASTM C 270. SEE IBC TABLES 2103.8.1(1), (2) FOR PROPORTION AND PROPERTY SPECIFICATIONS.

RAISED BOND BEAM

N.T.S.



SKIMMER DETAIL

N.T.S.

SECTION AT LIGHT

N.T.S.

- 1. INSTALL NO. 8 COPPER GROUND WIRE FROM LIGHT NICHE TO BRASS CONDUIT TO POOL REBAR, OR NON-METALLIC CONDUIT CAN BE USED WITH INSULATED NO. 8 COPPER WIRE INTERIOR W/ APPROVED POTTING COMPOUND PER THE N.E.C.
- 2. SWIMMING POOL LIGHTING FIXTURES SHALL COMPLY WITH APPLICABLE UNDERWRITERS' LABORATORIES REQUIREMENTS FOR LIGHTING FIXTURES U.L. STANDARD 676.

COMMERCIAL POOL STRUCTURAL PLAN

PREPARED IN ACCORDANCE WITH 2015 INTERNATIONAL BUILDING CODE

TABLE NO. 1

NON-EXPANSIVE		EXPANSIVE	NO DECK/HIGH EXP.	BUILD'G SURCHARGE
A		B	C	D
(3) #3 BARS.		(4) #3 BARS.	(4) #3 BARS.	(4) #3 BARS.
30 P.C.F.		45 P.C.F.	62.4 P.C.F.	45 P.C.F.
D	R	C	C	C
3'0"	1'-0"	3"	3"	3"
3'6"	1'-0"	3"	3"	3"
4'0"	1'-0"	3"	3"	3"
4'6"	1'-0"	3"	3"	3"
5'0"	1'-6"	3"	3"	3"
5'6"	2'-0"	3"	3"	3"
6'0"	2'-6"	3"	3"	3"
6'6"	3'-0"	3"	3"	3"
7'0"	3'-6"	3"	3"	3"
7'6"	4'-0"	3"	3"	3"
8'0"	4'-6"	3"	3"	3"
8'6"	5'-0"	3"	3"	3"

INDICATES TYPICAL RADIUS (ACTUAL RADIUS MAY VARY, SEE STRUCTURAL NOTE #11)
'D' IS DISTANCE DOWN FROM TOP OF POOL WALL.

TABLE NO. 5 RAISED BOND BEAM

NON-EXPANSIVE		EXPANSIVE	NO DECK/HIGH EXP.
E		F	G
30 P.C.F.		45 P.C.F.	62.4 P.C.F.
D	C	C	C
3'6"	3"	3"	3"
4'0"	3"	3"	3"
4'6"	3"	3"	3"
5'0"	3"	3"	3"
5'6"	3"	3"	3"
6'0"	3"	3"	3"
6'6"	3"	3"	3"
7'0"	3"	3"	3"
7'6"	3"	3"	3"
8'0"	3"	3"	3"
8'6"	3"	3"	3"
9'0"	3"	3"	3"
9'6"	3"	3"	3"
10'0"	3"	3"	3"
11'0"	3"	3"	3"

GENERAL NOTES

- 1. THIS STANDARD POOL STRUCTURAL PLAN MUST BE ACCOMPANIED BY A CLEAR PLOT PLAN SHOWING POOL & OR SPA SHAPE, DEPTH AND DISTANCE TO PROPERTY LINE, SLOPES AND STRUCTURES.
- 2. REPRESENTATIVES OF POOL ENGINEERING INC. HAVE NOT INSPECTED THE SITE & ARE RELYING ON INFORMATION PROVIDED BY THE CONTRACTOR OR OWNER TO DETERMINE THE ADEQUACY OF THIS STANDARD POOL STRUCTURAL PLAN FOR THE ACTUAL SITE CONDITIONS. SHOULD SITE CONDITIONS VARY FROM THAT COVERED BY THIS STANDARD POOL STRUCTURAL PLAN, IT IS THE RESPONSIBILITY OF THE CONTRACTOR OR THE OWNER TO NOTIFY POOL ENGINEERING INC. AND OBTAIN APPLICABLE SPECIAL ENGINEERING DETAILS PRIOR TO CONSTRUCTION. EXPANSIVE SOIL DETAILS ARE VALID ONLY FOR STATED EQUIVALENT FLUID PRESSURES AND POOL ENGINEERING INC. RECOMMENDS THAT THE OWNER OR CONTRACTOR OBTAIN A SOIL REPORT.
- 3. THIS PLAN IS NOT VALID WITHOUT ADDITIONAL SURCHARGE DETAILS WHEN THE CONDITIONS AS SHOWN IN DETAIL #3 APPLY (PER IBC SECTION 1808.7.3).
- 4. THE STANDARD POOL STRUCTURAL PLAN IS NOT INTENDED TO BE APPLICABLE TO NON-STRUCTURAL ITEMS INCLUDING BUT NOT LIMITED TO PLUMBING, ELECTRICAL, FENCING, CONCRETE DECKING AND POOL GEOMETRICS.
- 5. CONSTRUCTION SHALL BE DESIGNED TO PRODUCE CIRCULATION THROUGHOUT THE POOL OR SPA. SINGLE-OUTLET SYSTEMS, SUCH AS AUTOMATIC VACUUM CLEANER SYSTEMS, OR OTHER SUCH MULTIPLE SUCTON OUTLETS WHETHER LOCATED BY VALVES OR OTHERWISE SHALL BE PROTECTED AGAINST USER ENTRAPMENT. ALL POOL AND SPA SUCTON OUTLETS SHALL BE PROVIDED WITH A COVER THAT CONFORMS TO ASME A112.19.8M, A 12-INCH BY 12-INCH DRAIN GRATE OR LARGER, OR AN APPROVED CHANNEL DRAIN SYSTEM WITH THE EXEPTION OF SURFACE SKIMMERS.

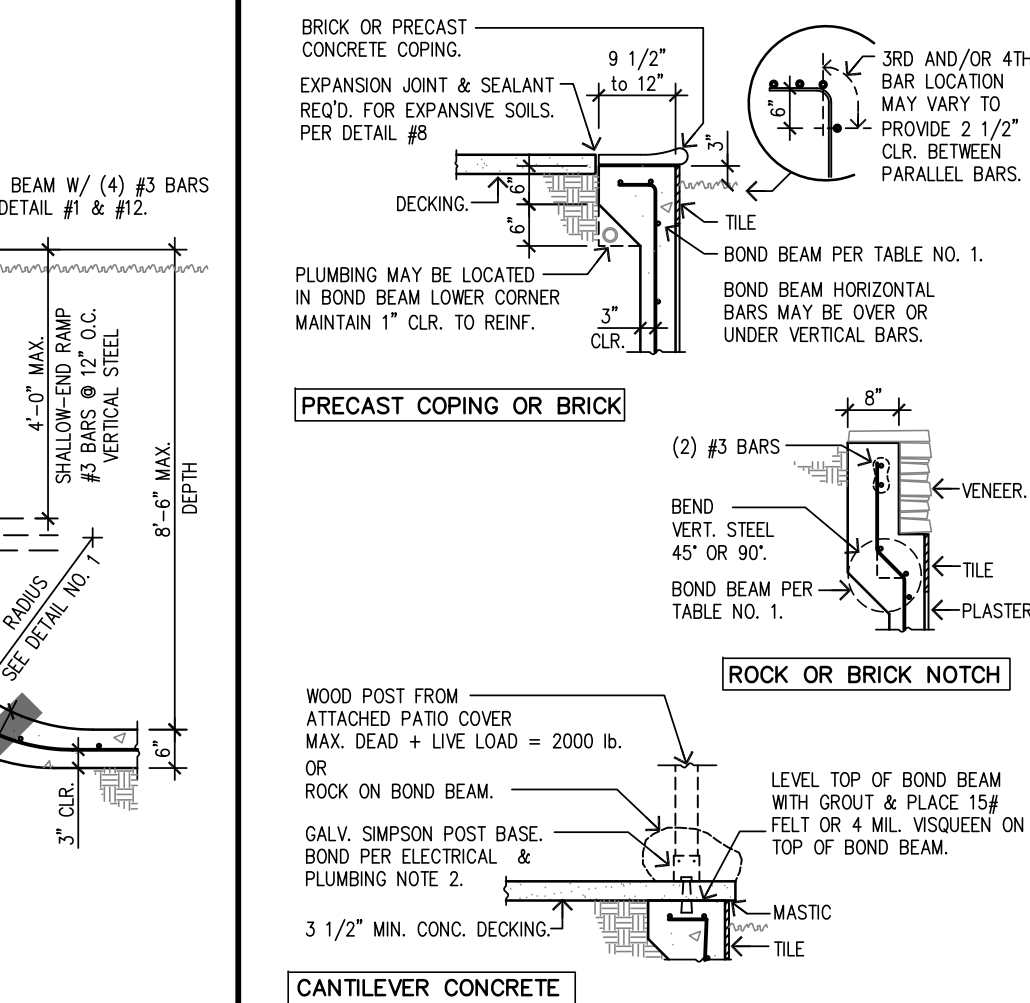
ELECTRICAL AND PLUMBING

- ALL ELECTRICAL SHALL BE IN CONFORMANCE WITH THE NEC.
- 1. IN ACCORDANCE WITH NEC SECTION 680.26, ALL METAL WITHIN 5' HORIZ. OF INSIDE WALL OF POOL AND 12' VERT. ABOVE WATER LINE MUST BE BONDED VIA EQUIPOTENTIAL BONDING GRID. BONDING GRID SHALL EXTEND UNDER PAVED WALKING SURFACES 3' HORIZ. BEYOND INSIDE WALL OF POOL. CONCRETE REINFORCING TIE WIRES SHALL BE MADE TIGHT FOR BONDING PURPOSES.
- 2. ALL ELECTRICAL AND PLUMBING PERMITS ALONG WITH POOL BUILDING PERMIT.
- 3. ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND IN ACCORDANCE WITH LOCAL REGULATIONS.
- 4. POOLS SHALL BE EQUIPPED WITH A FILTERING SYSTEM & A DRAIN.
- 5. BACKWASH SHALL BE DISPOSED OF IN AN APPROVED MANNER.
- 6. POOL/SPA WATER HEATER AND GAS PIPING INSTALLATION TO BE IN CONFORMANCE WITH THE IBC.
- 7. CONTRACTOR IS ADVISED TO REFER TO SECTION 3109.5 OF THE INTERNATIONAL BUILDING CODE AND ANS/APSP-7 FOR PROPER INSTALLATION OF THE POOL DRAIN SYSTEM.
- 8. WHERE REINFORCING STEEL IS ENCAPSULATED WITH A NONCONDUCTIVE COMPOUND, PROVISIONS SHALL BE MADE FOR AN ALTERNATIVE MEANS TO ELIMINATE VOLTAGE GRADIENTS THAT WOULD OTHERWISE BE PROVIDED BY BONDED REINFORCING STEEL.

STRUCTURAL NOTES

- 1. SOIL SHALL HAVE A MINIMUM BEARING VALUE OF 1500 PSF. CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL OR BUILDING DEPARTMENT APPROVED 90% COMPACT FILL. THIS PLAN IS NOT SUITABLE WHERE POTENTIAL EXISTS FOR DIFFERENTIAL MOVEMENT FROM DISSIMILAR SOIL CONDITIONS UNDER POOL. SUCH AS CUT-FILL.
- 2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS & CONFORM TO ASTM A615 GRADE 40 FOR #3 BARS AND #4 BARS. SPLICES TO BE LAPPED A MINIMUM OF 24". MINIMUM CLEARANCE BETWEEN PARALLEL BARS IS 2 1/2".
- 3. (1) #4 BAR IS EQUIVALENT TO AND MAY BE USED IN PLACE OF (2) #3 BARS, WITH THE EXCEPTION THAT IF #4 BARS ARE USED FOR THE BASIC GRID, THE MAXIMUM SPACING IS #4 BARS AT 18" O.C.
- 4. THE PLAN TABLES SPECIFY THE MINIMUM REQUIRED REINFORCEMENT, FOR CONVENIENCE OF THE INSTALLER, THERE MAY BE MORE REINFORCEMENT THAN SPECIFIED AT ANY GIVEN POINT IN THE POOL STRUCTURE.
- 5. GROUNDING/BONDING (PER THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE) OF THE STRUCTURAL REINFORCING MUST BE INSTALLED PRIOR TO PLACEMENT OF CONCRETE.
- 6. SHOTCRETE (GUNITE) TO BE IN CONFORMANCE WITH IBC SECTION 1908 & SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS. WHERE APPLICABLE, SHOTCRETE (GUNITE) TO BE IN CONFORMANCE WITH IBC SECTION 1904 DURABILITY REQUIREMENTS. CONCRETE THAT WILL BE EXPOSED TO FREEZING AND THAWING, DEICING CHEMICALS OR OTHER EXPOSURE CONDITIONS SHALL COMPLY WITH IBC SECTIONS 1904.2.1 THROUGH 1904.2.3. CONCRETE EXPOSED TO FREEZING AND THAWING OR DEICING CHEMICALS SHALL BE AIR ENTRAINED IN ACCORDANCE WITH ACI 318 SECTION 19.3. CONCRETE THAT WILL BE SUBJECT TO THE FOLLOWING EXPOSURES SHALL CONFORM TO THE CORRESPONDING MAXIMUM WATER-CEMENT RATIO AND MINIMUM SPECIFIED CONCRETE COMPRESSIVE STRENGTH REQUIREMENTS OF ACI 318, SECTION 19.3. CONCRETE INTENDED TO HAVE LOW PERMEABILITY WHERE EXPOSED TO WATER, CONCRETE EXPOSED TO FREEZING AND THAWING IN A MOST CONDITION OR DEICER CHEMICALS, OR CONCRETE WITH REINFORCEMENT WHERE THE CONCRETE IS EXPOSED TO CHLORIDES FROM DEICING CHEMICALS, SALT, SALT WATER, BRACKISH WATER, SEAWATER OR SPRAY FROM THESE SOURCES. IN ADDITION, CONCRETE EXPOSED TO DEICING CHEMICALS SHALL CONFORM TO THE LIMITATIONS OF IBC SECTION 1904.2.3.
- 7. CEMENT SHALL CONFORM TO IBC SECTION 1903.1, ACI 318 CHAP. 19.3 & ASTM C 150.
- 8. SHOTCRETE/GUNITE IN CONTACT WITH SOIL SHALL BE IN ACCORDANCE WITH ACI 318 SECTION 19.3 FOR CONCRETE EXPOSURE TO SULFATE AND AS DIRECTED BY LOCAL BUILDING OFFICIAL.
- 9. KEEP CONCRETE DAMP CONTINUOUSLY FOR 14 DAYS.
- 10. ALL INTERIOR SURFACES OF POOL/SPA SHALL BE COATED WITH A WATER-RESISTANT SURFACE.
- 11. FLOOR TO WALL TRANSITION RADIUS MAY VARY DEPENDING ON CONTRACTOR OR OWNER DESIGN INTENT. RADIUS SHALL NOT BE LESS THAN 1'-0" AND SHALL NOT EXCEED 5'-0".
- 12. IN AREAS WITH SOIL CONDITIONS SUBJECT TO ROOT-HEAVE, THE FOLLOWING REQUIREMENTS APPLY: IN ACCORDANCE WITH IBC SECTION 1809.5, THE ENTIRE BOTTOM OF POOL STRUCTURE AND OR PLUMBING MUST EXTEND BELOW THE FROST LINE OF THE LOCALITY.
a. ALTERNATIVELY, WHERE DAMAGE TO THE POOL STRUCTURES, PLUMBING, ADJACENT STRUCTURES AND SURFACE IMPROVEMENTS IS A CONCERN, SELF-DRAINING GRANULAR BACKFILL MAY BE EXTENDED BELOW THE FROST-LINE WITH A MEANS TO PRECLUDE BUILD-UP OF WATER.

BY THE USE OF THIS PLAN, THE USER ACKNOWLEDGES THAT HE HAS READ & UNDERSTANDS ALL OF THE NOTES INCLUDED HEREIN.



OWNER

- 1. KEEP SHOTCRETE (GUNITE) DAMP CONTINUOUSLY FOR 14 DAYS AFTER INSTALLATION.
- 2. DO NOT TURN ON LIGHT WHEN POOL IS EMPTY.
- 3. DO NOT USE BLACK RUBBER HOSE WHEN FILLING POOL (IT MARKS THE PLASTER).

GLAZING IN HAZARDOUS LOCATIONS

WHEN REQUIRED BY THE BUILDING OFFICIAL, GLAZING SHALL COMPLY WITH IBC SECTION 2406.4 ITEM 9 INCLUDING LOCALLY ADOPTED AMENDMENTS.

- 1. GLAZING IN WALLS AND FENCES ENCLOSING INDOOR AND OUTDOOR SWIMMING POOLS, HOT TUBS AND SPAS WHERE ALL OF THE FOLLOWING CONDITIONS ARE PRESENT:
A. THE BOTTOM EDGE OF THE GLAZING ON THE POOL OR SPA SIDE IS LESS THAN 60 INCHES ABOVE A WALKING SURFACE ON THE POOL OR SPA SIDE OF THE GLAZING; AND
B. THE GLAZING IS WITHIN 60 INCHES HORIZONTALLY OF THE WATER'S EDGE OF A SWIMMING POOL OR SPA.

ENCLOSURES AND SAFETY DEVICES

- 1. PRIOR TO FILLING, THE POOL AND OR SPA SHALL BE COMPLETELY ENCLOSED BY 4" MIN. HIGH FENCING & GATES WITH NO OPENINGS GREATER THAN 4". GATES TO BE SELF-CLOSING & SELF-LATCHING WITH LATCH A MIN. OF 4" HIGH. WHERE THIS VARIES FROM LOCAL CODES, THE LOCAL CODES SHALL PREVAIL.
- 2. WHEN REQUIRED BY THE BUILDING OFFICIAL, BARRIERS SHALL COMPLY WITH IBC 2015 SECTION 3109 INCLUDING LOCALLY ADOPTED AMENDMENTS.
- 3. WHEN REQUIRED BY THE BUILDING OFFICIAL, ENTRAPMENT AVOIDANCE SHALL COMPLY WITH IBC 2015 SECTION 3109.5 AND ANS/APSP-7. SUCTON OUTLETS SHALL BE DESIGNED TO PRODUCE CIRCULATION THROUGHOUT THE POOL OR SPA. SINGLE-OUTLET SYSTEMS, SUCH AS AUTOMATIC VACUUM CLEANER SYSTEMS, OR OTHER SUCH MULTIPLE SUCTON OUTLETS WHETHER LOCATED BY VALVES OR OTHERWISE SHALL BE PROTECTED AGAINST USER ENTRAPMENT. ALL POOL AND SPA SUCTON OUTLETS SHALL BE PROVIDED WITH A COVER THAT CONFORMS TO ASME A112.19.8M, A 12-INCH BY 12-INCH DRAIN GRATE OR LARGER, OR AN APPROVED CHANNEL DRAIN SYSTEM WITH THE EXEPTION OF SURFACE SKIMMERS.

IN ADDITION, WHEN REQUIRED BY THE BUILDING OFFICIAL, ALL POOL AND SPA SINGLE- OR MULTIPLE-OUTLET CIRCULATION SYSTEMS SHALL BE EQUIPPED WITH AN ATMOSPHERIC VACUUM RELIEF SHOT CRETE COVERS LOCATED THEREIN BECOME MISSING OR BROKEN. SUCH VACUUM RELIEF SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING METHODS OF THE TYPE SPECIFIED HEREIN, AS FOLLOWS: 1. SAFETY VACUUM RELEASE SYSTEMS CONFORMING TO ASME A112.19.17; OR 2. APPROVED GRAVITY DRAINAGE SYSTEM.

IN ADDITION, WHEN REQUIRED BY THE BUILDING OFFICIAL, SINGLE- OR MULTIPLE-PUMP CIRCULATION SYSTEMS SHALL BE PROVIDED WITH A MINIMUM OF TWO SUCTON OUTLETS OF THE APPROVED TYPE. A MINIMUM HORIZONTAL OR VERTICAL DISTANCE OF 3 FEET SHALL SEPARATE SUCH OUTLETS. THESE SUCTON OUTLETS SHALL BE PIPED SO THAT WATER IS DRAWN THROUGH THEM SIMULTANEOUSLY THROUGH A VACUUM-RELIEF-PROTECTED LINE TO THE PUMP OR PUMPS.

IN ADDITION, WHERE PROVIDED, VACUUM OR PRESSURE CLEANER FITTING(S) SHALL BE LOCATED IN AN ACCESSIBLE POSITION(S) AT LEAST 6 INCHES AND NOT GREATER THAN 12 INCHES BELOW THE MINIMUM OPERATIONAL WATER LEVEL OR AS AN ATTACHMENT TO THE SKIMMER(S).

SHOTCRETE MIX

DUE TO THE LENGTH OF THIS SWIMMING POOL AND OTHER SPECIFIC DESIGN ELEMENTS, THE USE OF A LOW SHRINKAGE SHOTCRETE MIX DESIGN IS REQUIRED. THE SHOTCRETE MIX SUPPLIER, THE SHOTCRETE APPLICATOR AND POOL ENGINEERING, INC. SHALL COLLABORATE ON THE DEVELOPMENT OF A SHOTCRETE MIX DESIGN THAT WILL RESULT IN THE LOWEST POSSIBLE DRYING SHRINKAGE. THE MIX SHALL BE DEVELOPED BASED ON BUT NOT LIMITED TO:

- 1. THE USE OF SHRINKAGE REDUCING ADMIXTURES
- 2. THE HARDEST AVAILABLE AGGREGATES, QUARTZ, LIMESTONE, DOLOMITE, GRANITE AND FELDSPAR ARE GENERALLY CLASSIFIED AS HIGHER MODULUS AGGREGATES AND RESULT IN LOWER CONCRETE SHRINKAGE. GRADATION SELECTED TO MINIMIZE CEMENT PASTE CONTENT AND WATER DEMAND.
- 3. MINIMIZING BOTH WATER CONTENT AND CEMENT PASTE CONTENT.
- 4. CEMENT - TYPE 1. CEMENT SUPPLIER SELECTED BASED ON CERTIFIED MILL REPORTS FOR THE LOWEST AVAILABLE SHRINKAGE CEMENT.
- 5. FLY ASH TO REDUCE INITIAL HYDRATION AND THERMAL DIFFERENTIALS.
- 6. WATER REDUCERS.
- 7. AIR ENTRAPMENT AS A WATER REDUCER AND PUMP ABILITY AID.

SHOTCRETE APPLICATION

ALL PNEUMATICALLY APPLIED CONCRETE SHELL BE PERFORMED BY AN AMERICAN CONCRETE INSTITUTE (ACI) CERTIFIED NOZZLEMAN.

CURING

AS SOON AS POSSIBLE AFTER INITIAL SET, BEGIN SHOTCRETE CURING BY MISTING, SOAKER HOSES, SPRINKLERS, WATER PONDING WHERE APPROPRIATE OR OTHER APPROVED MEANS. SHOTCRETE MUST BE MAINTAINED CONTINUOUSLY WET FOR A MINIMUM OF 14 DAYS AND PREFERABLY LONGER.

EXAMINATION FOR SHRINKAGE CRACKS

PRIOR TO THE APPLICATION OF THE POOLS WATERPROOF FINISH SURFACE COATING, THE SHOTCRETE SHELL SHALL BE CLOSELY EXAMINED TO LOCATE ANY SHRINKAGE CRACKS. THE SHRINKAGE CRACKS SHALL BE INJECTED WITH HIGH PRESSURE EPOXY TO THE GREATEST DEPTH POSSIBLE IN THE CRACK.

CERTIFICATION BY PROJECT GEOTECHNICAL ENGINEER

THE PROJECT GEOTECHNICAL CONSULTANT SHALL EXAMINE THE POOL SITE AND POOL SUBGRADE AFTER EXCAVATION. PRIOR TO REINFORCEMENT PLACEMENT THE PROJECT GEOTECHNICAL CONSULTANT SHALL CERTIFY THAT THE MODULUS OF SUBGRADE REACTION IS UNIFORM UNDER ALL AREAS OF THE POOL STRUCTURE AND THAT THE POOL SUBGRADE IS CAPABLE OF SUPPORTING THE POOL. SUPPORT OF THE POTENTIAL FOR SIGNIFICANT DIFFERENTIAL SETTLEMENT. FURTHER, THE PROJECT GEOTECHNICAL CONSULTANT SHALL CERTIFY THAT ALL GEOTECHNICAL RELATED ISSUES, INCLUDING FOUNDATION SETBACK FROM THE FACE OF ANY DESCENDING SLOPES, ARE IN CONFORMANCE WITH APPLICABLE CODES AND GOOD ENGINEERING PRACTICE.

CALCS BY: A.J.C.

DRAWN BY: T.L.L.

CHECKED BY: R.L.L.

I have a stamped set

Ta Re

PLAN VALID ONLY WITH WET STAMP & ENGINEER'S SIGNATURE IN RED INK ON PLAN.

AUTHORIZED SIGNATURES: TODD L. LACHER, P.E.

SHEET:

100-C

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