

DRAWING INDEX

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GENERAL NOTES

- ALL MAIN DRAINS SHALL COMPLY WITH VGB REQUIREMENTS.
- CUSTOMER TO PROVIDE A SAFETY BARRIER PER LOCAL CODE OR SAFETY COVER COMPLIANT WITH ASTM F1346-91.
- EXCAVATION TO REMAIN ON SITE. (VERIFY WITH GENERAL CONTRACTOR)
- PLUMBING IS A CLOSED LOOP SYSTEM. NO FIXED/WASTE WATER CONNECTION REQUIRED.
- ALL STEEL & ELECTRICAL ITEMS IN OR NEAR THE POOL, INCLUDING LIGHTS, NICHES, RAILINGS, REINFORCING STEEL, ETC. SHALL BE BONDED & GROUNDED WITH A #8 BARE COPPER GROUND WIRE AND BE IN ACCORDANCE WITH THE MOST RECENT NATIONAL ELECTRIC CODE (N.E.C.) ARTICLE 680 OR CURRENT ADOPTED N.E.C.
- POOL/SPA STRUCTURES DESIGNED IN ACCORDANCE WITH CLIENT PROVIDED SOILS REPORT BY:
KUMAR & ASSOCIATES GEOTECHNICAL
PROJECT #20-2-187
DATED: JANUARY 29, 2021
- WHERE STRUCTURAL FILL IS USED, IS SHOULD BE PLACED IN 8-INCH LIFTS AND COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY, WITHIN 2 PERCENT OF THE OPTIMUM MOISTURE CONTENT.
- THE CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS, EXISTING CONDITIONS AND NOTED ASSUMPTIONS. ANY DEVIATIONS SHALL BE COORDINATED WITH THE ENGINEER OF RECORD PRIOR TO PROCEEDING WITH RELATED WORK.
- IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
- HOSE BIBS SHALL BE LOCATED WITHIN FIFTY FEET OF ANY DECK AREA (RE: PLUMBING PLANS BY OTHERS).
- THE GENERAL CONTRACTOR SHALL PROVIDE REQUIRED LOCKS/ALARMS ON ALL POOL AREA ACCESS POINTS FROM BUILDING PER IBC SECTION 3109.4.1.7.
- THE DECK AREA MUST HAVE A SLOPE OF NOT LESS THAN 1/4" PER FOOT AND NOT MORE THAN 1/4" PER FOOT DIRECTED AWAY FROM THE POOL/SPA/WATER FEATURE EDGE.
- A TELEPHONE OR AN EQUIVALENT ALARM SYSTEM THAT CAN BE USED IN EMERGENCIES MUST BE AVAILABLE AT ALL POOLS. THE TELEPHONE OR EQUIVALENT ALARM SYSTEM MUST BE WITHIN THE IMMEDIATE POOL AREA. IDENTIFY THE LOCATION OF THIS EQUIPMENT.

CODE REFERENCE

DESIGN, FABRICATION, ERECTION AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CODES LISTED BELOW, THESE DESIGN DRAWINGS AND SPECIFICATIONS.

- INTERNATIONAL BUILDING CODE: 2021 EDITION
- INTERNATIONAL PLUMBING CODE: 2021 EDITION
- NATIONAL ELECTRICAL CODE: 2020 EDITION
- INTERNATIONAL SWIMMING POOL AND SPA CODE (ISPSO) 2021 EDITION
- POOLS ARE ALSO DESIGNED IN ACCORDANCE WITH THE FOLLOWING PUBLICATIONS AND GUIDELINES:
 - AMERICAN NATIONAL STANDARD INSTITUTE (ANSI)
 - VIRGINIA GRAEME BAKER POOL AND SPA SAFETY ACT (VGB)
- THE STATE CODE OF COLORADO REGULATIONS (CGR) WITH THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT PERTAINING TO SWIMMING POOL AND MINERAL BATHS
- THE STRUCTURE HAS BEEN DESIGNED USING THE DESIGN LOADS AND MATERIAL SPECIFICATIONS NOTED IN THESE DRAWINGS. ALTERATIONS TO THE STRUCTURAL SYSTEM MUST BE REVIEWED BY THE STRUCTURAL ENGINEER. STRUCTEL CONSULTANTS, LLC TAKES NO RESPONSIBILITY FOR THE INTEGRITY OF THE STRUCTURE IF ALTERATIONS ARE MADE WITHOUT THE ENGINEER'S APPROVAL.

SYMBOL KEY



ISPSO CODE COMPLIANCE

- SECTION 302.5 BACK FLOW PROTECTION SHALL BE INSTALLED PER THE IPC OR THE IRC SECTION 102.7.1. A. THE WATER SUPPLIED FOR THE POOL SHALL BE FROM POTABLE WATER SOURCE PER SECTION 318.1.
- SECTION 302.6 - NO WASTE-WATER CONNECTION IS REQUIRED. DISCHARGE OF POOL WATER SHALL BE IN CONFORMANCE WITH SECTION 320.1 TO SANITARY OR STORM SEWER, OR INTO AN APPROVED DISPOSAL SYSTEM ON THE PREMISE.
- DECKS SHALL BE CONSTRUCTED WITH NON-SLIP FINISH PER SECTION 306.
- SUCTION ENTRAPMENT AVOIDANCE SHALL BE IN IN ACCORDANCE WITH APSP7/SECTION 310 AND LABELED IN ACCORDANCE WITH UL 1563. CONTRACTOR TO PROVIDE VGB COMPLIANT GRATE & FRAME CUT SHEET TO LOCAL JURISDICTION FOR REVIEW.
- THE CIRCULATION SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH SECTION 311 AS REFERENCE IN THESE DRAWINGS AND SPECIFICATIONS.
 - SKIMMERS AND MAIN DRAINS ARE EACH DESIGNED TO ACCOMMODATE 100% OF THE CIRCULATION TURNOVER RATE.
 - RETURN INLETS PROVIDED PER EVERY 300 SQ. FT. OF SURFACE AREA OR WITHIN EVERY 1 SFT OF THE PERIMETER AND IN ACCORDANCE WITH SECTION 314.
 - SKIMMERS ARE PROVIDED FOR EVERY 400 SQ. FT. OF SURFACE AREA AND IN ACCORDANCE WITH SECTION 315 AND NSF5 / UL 1563.
- ALL PIPING AND FITTINGS TO BE IN CONFORMANCE WITH SECTION 311.4 AND LABELED PER NSF 14. ALL SUCTION OUTLET FITTINGS SHALL BE IN ACCORDANCE WITH APSP 16.
 - ALL PIPING AND FITTINGS TO BE ASTM RATED "PVC" PER TABLES 311.4 / 311.4.1.
- THE SANITIZING EQUIPMENT PER SHALL BE INSTALLED AND WIRED SO THEY CANNOT OPERATE UNLESS THERE IS ADEQUATE RETURN FLOW TO DISBURSE THE CHEMICAL THROUGHOUT AS DESIGNED PER SECTION 319. SPECIFICATIONS FOR WATER TREATMENT.
- LIGHTING TO BE PROVIDED PER SECTION 321.2.3 FOR UNDERWATER LIGHTING AS SPECIFIED IN THIS DRAWING SET. LIGHTING SHALL BE INSTALLED PER SECTION 321.4 IN ACCORDANCE WITH NFPA 70 OR THE IRC SECTION 102.7.1

SHOTCRETE

- CONCRETE SHALL BE PNEUMATICALLY APPLIED MORTAR (SHOTCRETE) CLASSED AS GRADE "A" CONCRETE SUBJECT TO THE PROVISIONS OF THE LOCAL CODE AND ACI 506.2-19 SHOT CRETE SPECIFICATIONS.
- SHOTCRETE SHALL BE COMPOSED OF 8 1/2 SACKS OF CEMENT, 30% PEA GRAVEL, 70% SAND, 3 TO 5 OZ. OF AIR ENTRAINING COMPOUND, 2 TO 5 OZ. OF WATER REDUCING ADMIXTURE, 10% WATER WITH 3" TO 4" SLUMP AND 5,000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS.
- SHOTCRETE SHALL BE PLACED AGAINST UNDISTURBED NATURAL SOIL OR AGAINST FILL COMPACTED TO 90% MIN. PROCTOR DENSITY OR AS SPECIFIED IN THE SOILS REPORT.
- SHOTCRETE SHALL BE DAMP CURED FOR A MINIMUM OF 7 DAYS AFTER PLACING.
- DURING THE APPLICATION OF THE SHOT CRETE THE AIR TEMPERATURE SHALL BE A MINIMUM OF 35 DEGREES.

REINFORCING STEEL

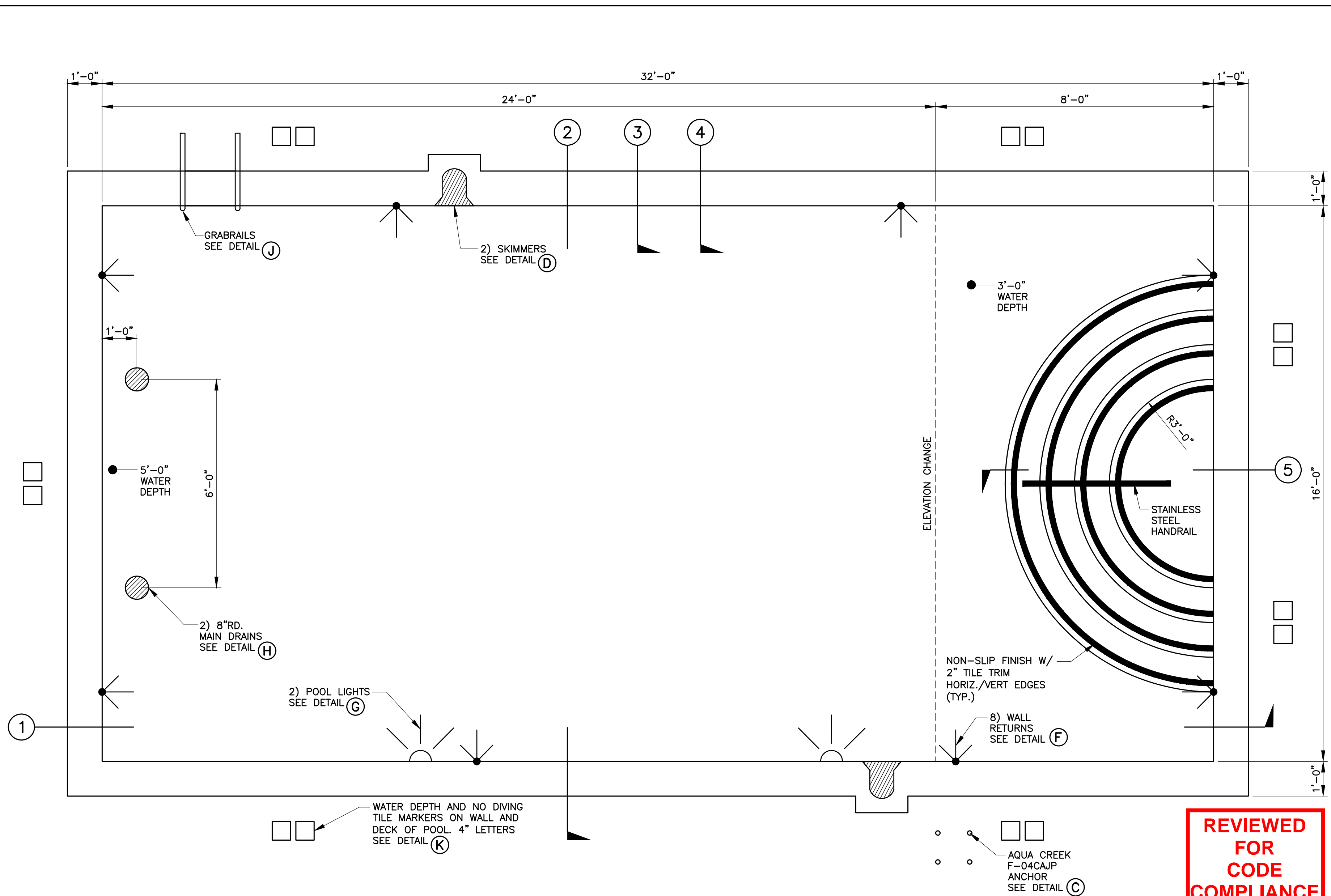
- REINFORCEMENT SHALL CONFORM TO THE ACI DETAILING MANUAL OF STANDARD PRACTICE, UNLESS OTHERWISE NOTED. REINFORCING PLACEMENT SHALL BE IN ACCORDANCE WITH SECTION 7.5 AND 7.6 OF ACI 318-19.
- DEFORMED BARS SHALL BE ASTM A615 GRADE 60, UNLESS OTHERWISE NOTED, PER "SPECIFICATION FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT".
- WHERE SPLICES IN REINFORCING ARE REQUIRED, THEY SHALL BE LAPPED AND STAGGERED SUCH THAT NO MORE THAN ONE-HALF OF THE BARS ARE LAP SPLICED WITHIN A REQUIRED LAP LENGTH, AND SHALL MEET THE REQUIREMENTS OF A CLASS "B" SPLICE. MINIMUM SPLICE LENGTHS FOR CLASS "B" (GR 60, 3000-5000 PSI CONCRETE):
 - #3 TO #5 24" MIN.
 - #6 TO #7 36" MIN.
 - #8 AND LARGER 36" MIN., OR AS DETAILED
- REINFORCING SHALL BE #4 AND LARGER A615, GR. 60, FY = 60,00PSI
- PROVIDE 2" MIN. CLEARANCE OF REINFORCEMENT FROM SOIL IN WALL AND 3" MIN. CLEARANCE IN SLABS. USE ALL #4 BARS EXCEPT AS NOTED.
- AS AN ALTERNATE, THE TOP HORIZONTAL BARS IN THE EDGE BEAM MAY BE PLACED ON TOP OF THE BENT VERTICAL BARS INSTEAD OF BELOW THEM.
- PROVIDE HORIZONTAL CORNER BARS AT HALF SPACING OF TYP. REINFORCING AT ALL WALL CORNERS.

POOL SPECS.

LENGTH: 32'-0"	WIDTH: 16'-0"
WATER DEPTH: 3'-0" - 6'-0"	SUR. AREA: 512 S.F.
INLETS: 8	PERIMETER (FT): 96'-0"
EXCAVATION TYPE: BACKHOE	
PLUMBING SIZE: 2" PVC	
SKIMMER: 2) HAYWARD SP1080	
MAIN DRAIN: 2) 8"Ø GRATES & FRAMES (VGB COMPLIANT)	
POOL CAPACITY GALLONS: 15,400 +/-	
FILTER TYPE: RE-USE EXISTING	
PUMP/FILTER GPM: 43	
PUMP TYPE: RE-USE EXISTING	
WATER TREATMENT: RE-USE EXISTING	
TURNOVER RATE: 6 HR 0 MIN.	
HEATER: RE-USE EXISTING	
TIME CLOCK: RE-USE EXISTING	
POOL LIGHT: 2 INTELLIBRITE LED	
REBAR SIZE: #4 GRD 60	
ELEC. BY: BY OTHERS	
GAS BY: BY OTHERS	
COPING: SLIP-RESISTANT POURED IN PLACE	
DECKING: SLIP RESISTANT CONCRETE (BY OTHERS)	
TILE: 6" TILE WATER LINE STRIP	
ACCENT TILE: 2" HORIZ. & VERT. EDGES	
PLASTER FINISH: DIAMOND BRITE OR EQ.	
COVER: WINTER SAFETY COVER ASTM	
MISC: 1) S.R. SMITH STAINLESS FIGURE 4 HANDRAIL	
MISC: RANGER2 ADA CHAIR LIFT ANCHORS	
MISC: --	
MISC: --	
MISC: --	

THE PHOENIX AT STEAMBOAT SWIMMING POOL

2315 APRES SKI WAY
STEAMBOAT SPRINGS, CO 80487



A SWIMMING POOL PLAN
SCALE: 1/4" = 1'-0"



12248 KITTREDGE ST.
BRIGHTON, CO 80603
PHONE: 720.979.4417
EMAIL: STRUCTEL@LIVE.COM

IN COORDINATION WITH:

MTN POOLS/SPA
38825 PINE ST.
STEAMBOAT SPRINGS, CO 80487
PHONE: 970-846-4886



REVISIONS:

DATE	INIT.	DESCRIPTION

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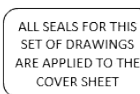
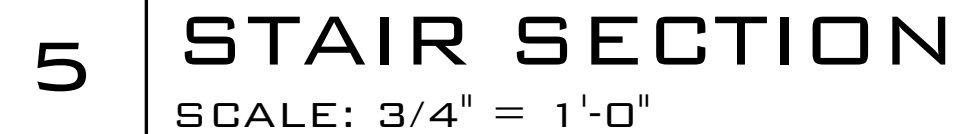
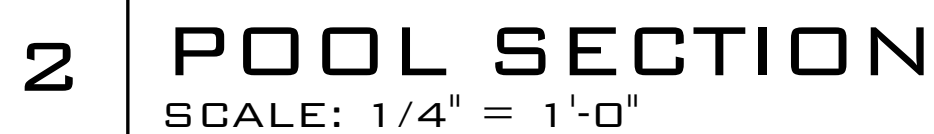
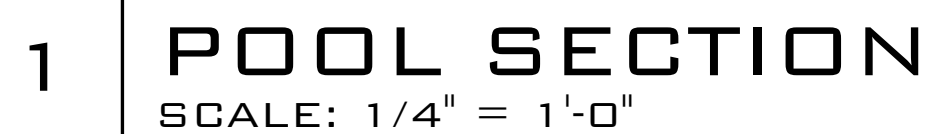
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ISSUE DATE:	05-09-23
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CHECKED BY:	KFL

THE PHOENIX AT STEAMBOAT
2315 APRES SKI WAY
STEAMBOAT SPRINGS, CO 80487

GENERAL NOTES &
SWIMMING POOL PLAN

DRAWING NO.

S-1

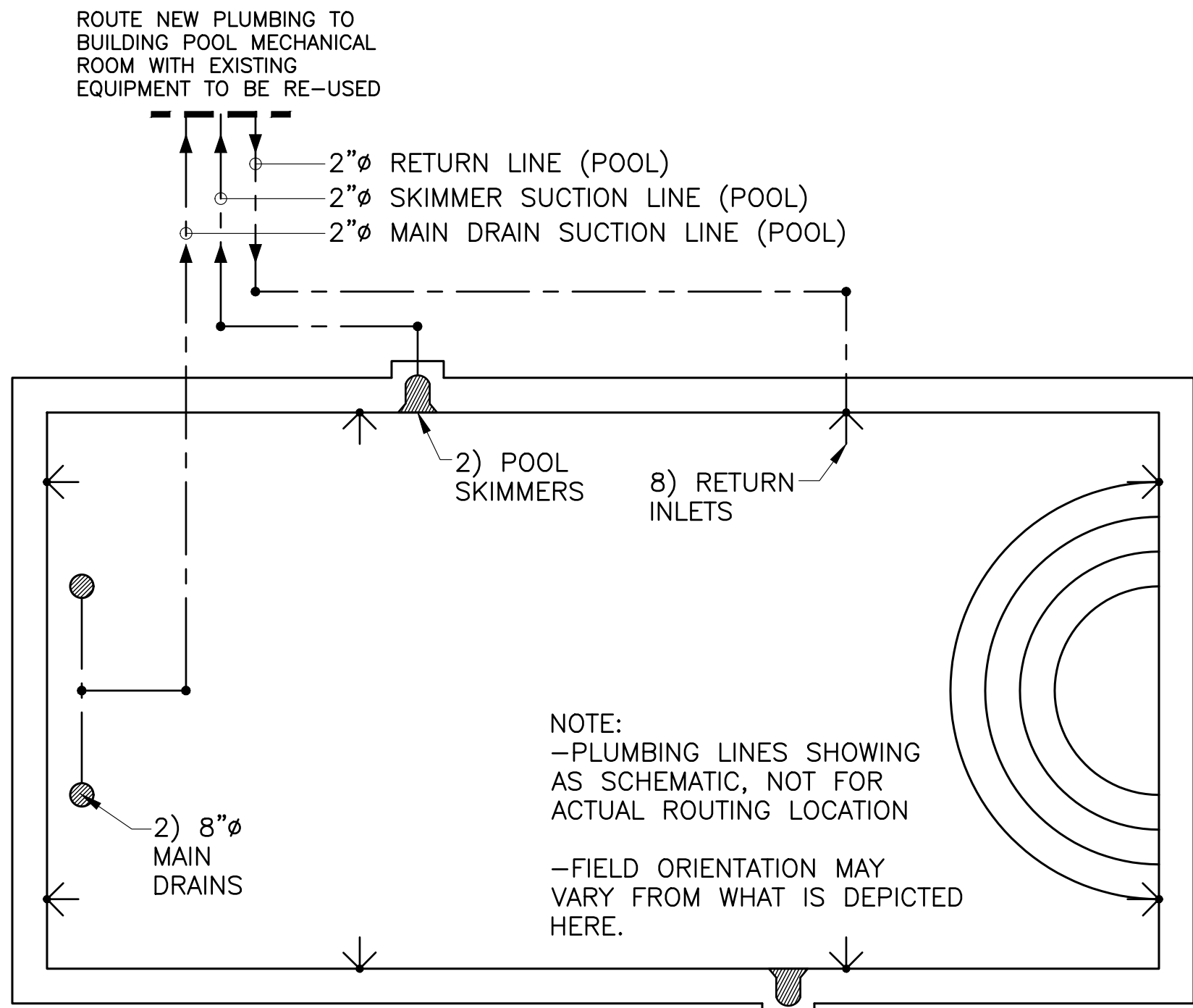


POOL SECTIONS & DETAILS

S-2

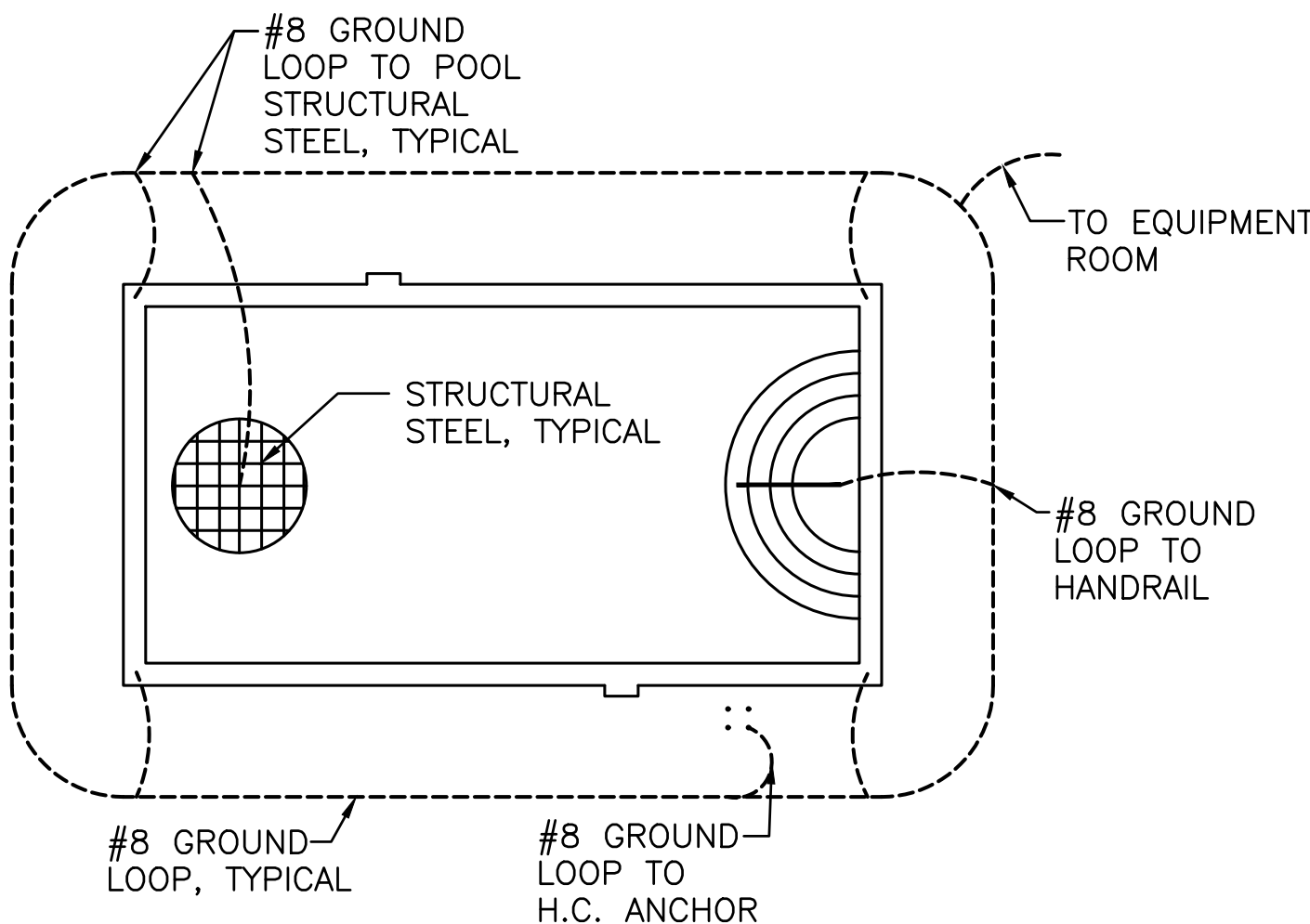
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PLUMBING SCHEMATIC
SCALE: NTS



M

ELECTRICAL BONDING
SCALE: NTS



GROUNDING NOTES

1. ALL WIRE TO BE #8 SOLID BARE COPPER
2. CONNECTION SHALL BE LISTED PRESSURE TYPE OR EXOTHERMIC WELD.
3. GROUND LOOP AROUND POOL AND ASSOCIATED STRUCTURAL SHALL BE 18"-24" FROM PERIMETER OF POOL.
4. GROUND LOOP SHALL FOLLOW CONTOUR OF FEATURE EDGE BURIED 4"-6" BELOW GRADE.
5. ALL PUMPS, HEATERS, & LIGHTS SHALL BE GFI PROTECTED.
6. ALL DECK BONDING TO BE WITHIN 6FT. OF STRUCTURE
7. ALL PRE-WIRED FIXTURES TO BE ROUTED TO ABOVE GRADE JUNCTION BOX WHICH IS ATTACHED TO THE BONDING GROUND LOOP.
8. INSTALLATION TO BE IN COMPLIANCE WITH NEC 2020 REQUIREMENTS

REVIEWED
FOR
CODE
COMPLIANCE
06/02/2023



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5/10/2023

ALL SEALS FOR THIS
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THE PHOENIX AT STEAMBOAT
2315 APRES SKI WAY
STEAMBOAT SPRINGS, CO 80487

MECHANICAL/PLUMBING SCHEMATICS
& ELECTRICAL BONDING

DRAWING NO.

0-3