

# BROOK RUN DOG PARK

## RESTROOM FACILITY 4770 NORTH PEACHTREE ROAD DUNWOODY, GEORGIA

ISSUED FOR PERMIT -- JULY 5, 2013

### CONSULTANTS

#### OWNER

CITY OF DUNWOODY - COMMUNITY DEVELOPMENT  
41 PERIMETER CENTER EAST  
DUNWOODY, GA 30338  
678-382-6800

#### ARCHITECT

KACENA DESIGN, LLC  
2944 RIDGELOCK COURT  
DUNWOODY, GEORGIA 30360  
404-803-3869

#### MECHANICAL ENGINEER

CORNERSTONE DESIGN  
260 FLOWERS COVE LN  
LILBURN, GEORGIA 30047  
770-381-6933  
BRUCE DUFF

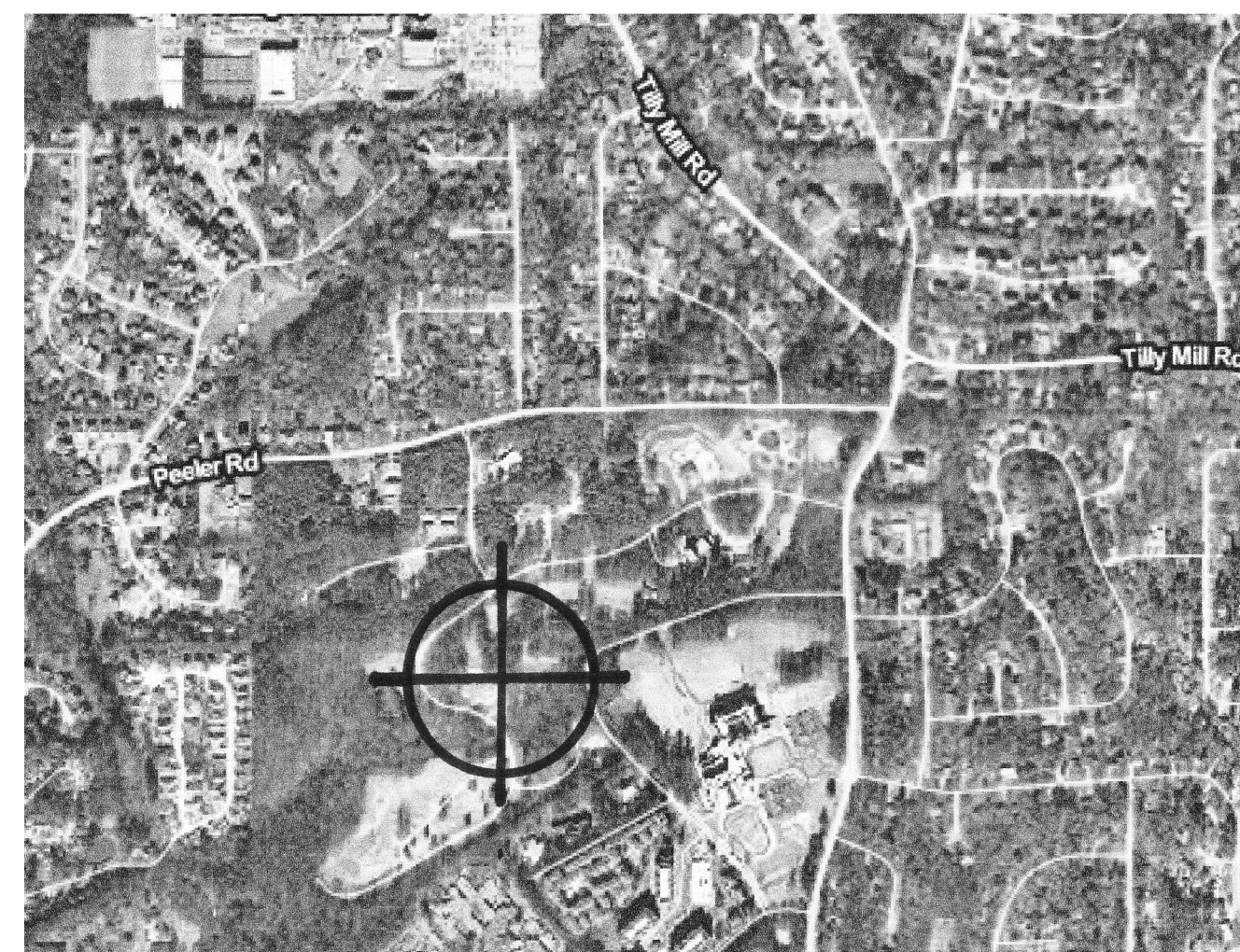
#### ELECTRICAL ENGINEER

CORNERSTONE DESIGN  
260 FLOWERS COVE LN  
LILBURN, GEORGIA 30047  
770-381-6933  
WILLIAM BELL

#### PLUMBING ENGINEER

CORNERSTONE DESIGN  
260 FLOWERS COVE LN  
LILBURN, GEORGIA 30047  
770-381-6933  
BRUCE DUFF

### VICINITY MAP



### CODE SUMMARY

#### APPLICABLE CODES

2006 INTERNATIONAL BUILDING CODE, W/ DEKALB AMENDMENTS  
RULES & REGULATIONS OF THE FIRE SAFETY COMMISSIONER  
FOR STATE MINIMUM SAFETY STANDARDS - 8/31/2003  
2006 INTL. FUEL GAS CODE, W/ DEKALB AND GA AMENDMENTS  
2006 INTL. MECHANICAL CODE, W/ DEKALB AND GA AMENDMENTS  
2006 INTL. PLUMBING CODE, W/ DEKALB AND GA AMENDMENTS  
2011 NATIONAL ELECTRIC CODE, W/ DEKALB AND GA AMENDMENTS  
2006 INTL. FIRE CODE, W/ GA AMENDMENTS  
GA ACCESSIBILITY CODE, CH. 120-3-20A-016 (01-08) 2010 ADA STANDARDS

#### PROJECT DESCRIPTION-

PROPOSED SCOPE OF WORK INCLUDES THE CONSTRUCTION OF A RESTROOM FACILITY, APPROXIMATELY 200 SQUARE FEET IN AREA. THE STRUCTURE IS A ONE STORY BUILDING WITH A SLAB ON GRADE FOUNDATION. WALLS ARE TO BE CMU CONSTRUCTION, AND ROOF IS TO BE WOOD FRAMED WITH A METAL FINISH SURFACE.

THE WORK IS TO BE PERFORMED IN CONJUNCTION WITH OTHER SITE IMPROVEMENTS TO BE IMPLEMENTED AT THE BROOK RUN DOG PARK.

THE STRUCTURE IS UNDERSTOOD TO EXPEND LESS THAN THE PRESCRIBED AMOUNT OF ENERGY FOR SPACE CONDITIONING. THUS NO ENERGY LOAD CALCULATION FORMS HAVE BEEN INCLUDED.

CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS.

### DRAWING INDEX

#### ARCHITECTURE

C COVER SHEET  
A1.1 FLOOR PLAN  
A2.1 ELEVATIONS AND DETAILS

#### STRUCTURAL

S-1 SCHEDULE OF INSPECTIONS

#### MECHANICAL

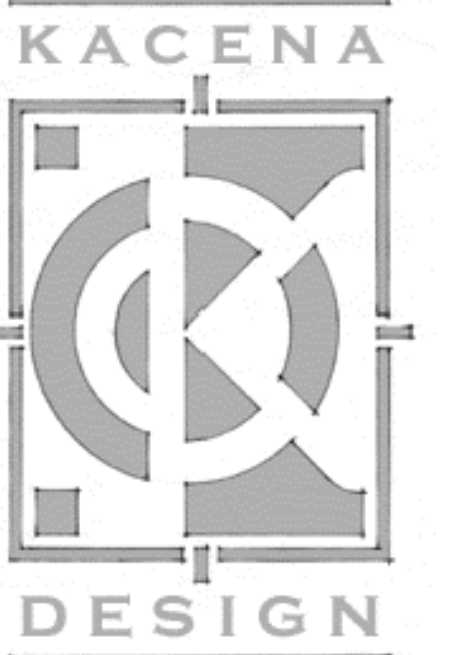
M1 HVAC NOTES, ETC.  
M2 HVAC FLOOR PLAN

#### ELECTRICAL

E-0.1 Electrical Legend, Symbols, and General Notes  
E-1.1 Electrical Power Plan  
E-2.1 -- Electrical Specifications

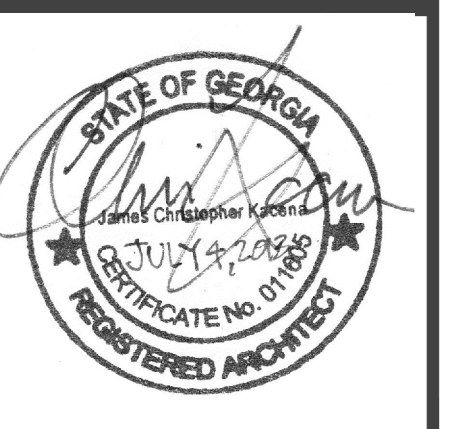
#### PLUMBING

P-1 PLUMBING NOTES  
P-2 PLUMBING PLANS



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SEAL



LOCATION

BROOK RUN DOG PARK  
RESTROOM FACILITY  
4770 NORTH PEACHTREE RD  
DUNWOODY, GA 30338

SHEET TITLE

COVER

DRAWN:  
CHECKED:  
SCALE: AS NOTED

DATE PRINTED

July 4, 2013

REV. DATE REMARKS

REV.	DATE	REMARKS

SHEET NUMBER

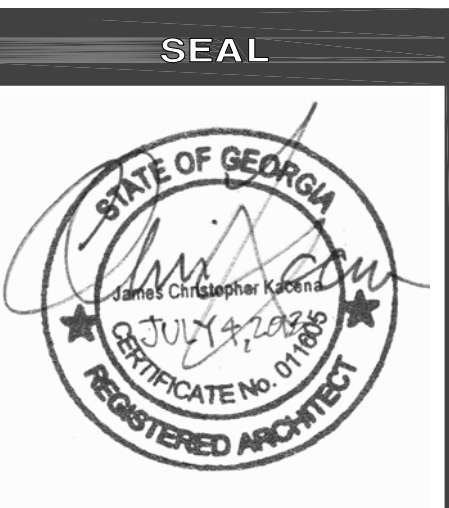
C

OF SHEETS

ISSUED FOR CONSTRUCTION







**LOCATION**

**BROOK RUN DOG PARK  
RESTROOM FACILITY**  
4770 NORTH PEACHTREE RD  
DUNWOODY, GA 30338

**SHEET TITLE**

**ELEVATIONS & DETAILS**

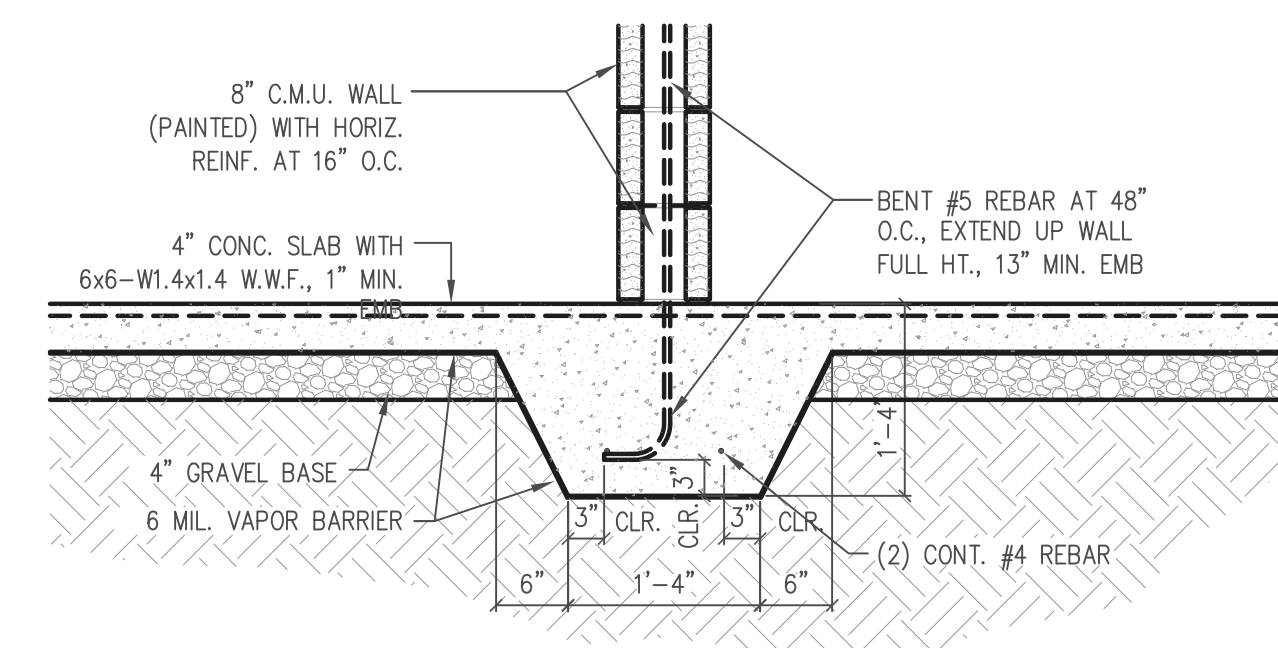
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**07.04.13**

REV.	DATE	REMARKS

**SHEET NUMBER**

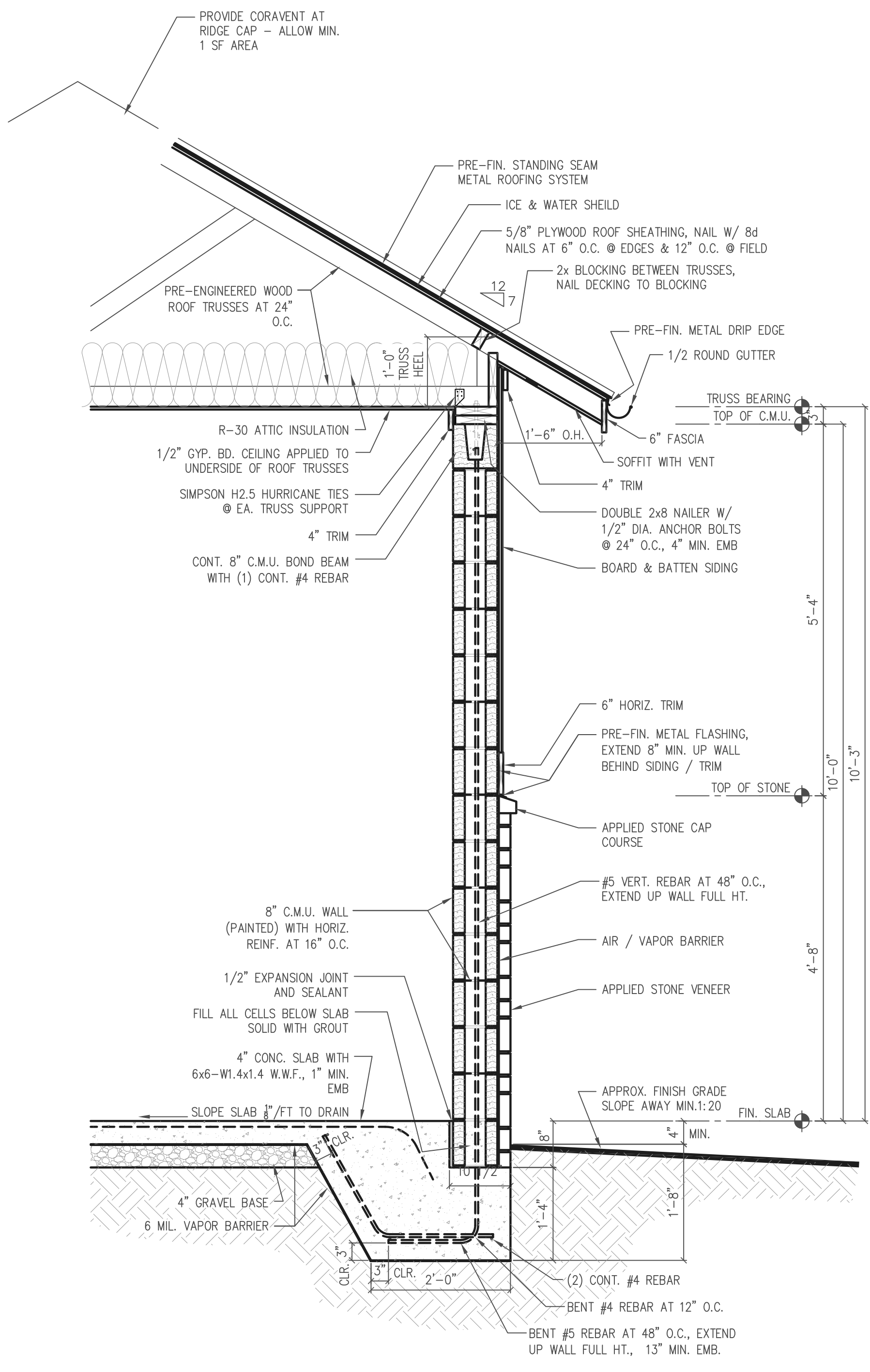
**A2.1**

OF SHEETS

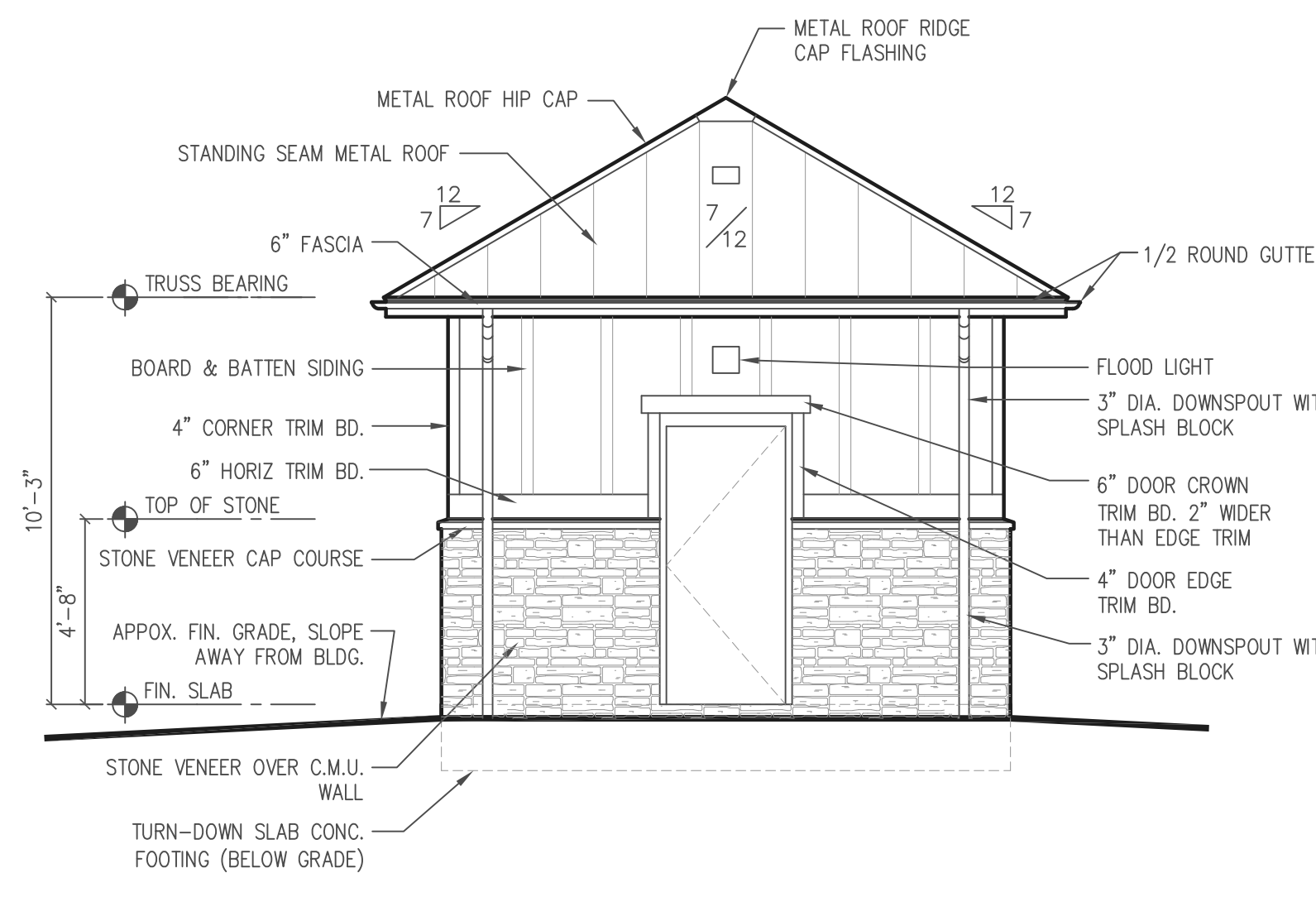


**5 THICKENED SLAB DETAIL**  
A2.1 3/4" = 1'-0"

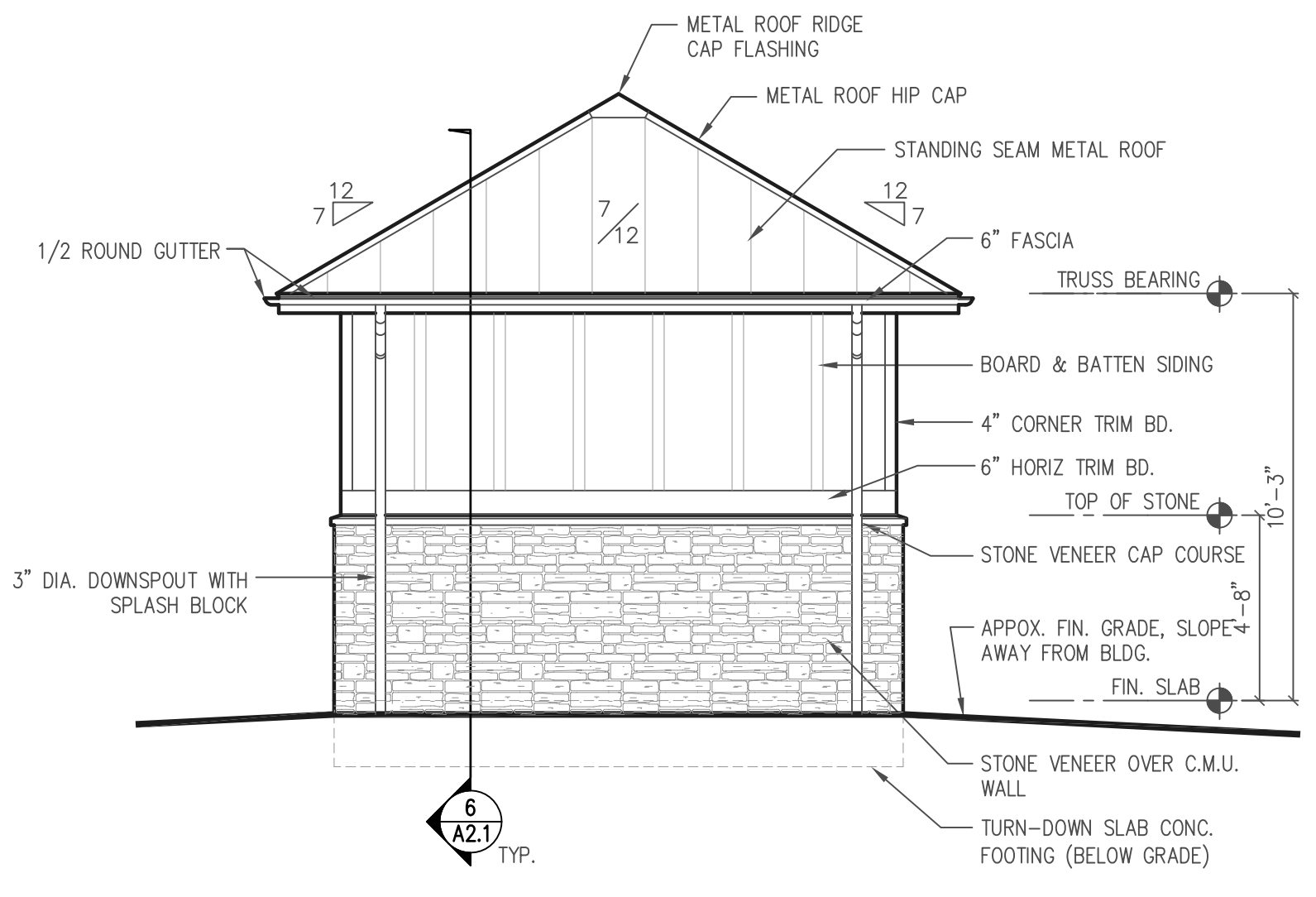
- ELEVATION NOTES**
- ALL SIDING TO BE FIBER CEMENT, HARDIE PLANK OR EQUAL. 3 1/2" BATTENS AT 24" O.C.
  - ALL FASCIA AND TRIM BOARDS TO BE FIBER CEMENT, HARDIE PLANK OR EQUAL IN NOMINAL SIZES INDICATED.
  - ALL SOFFITS TO BE FIBER CEMENT PANELS, HARDIE SOFFIT OR EQUAL WITH CONT. 2" WIDE SOFFIT VENT.



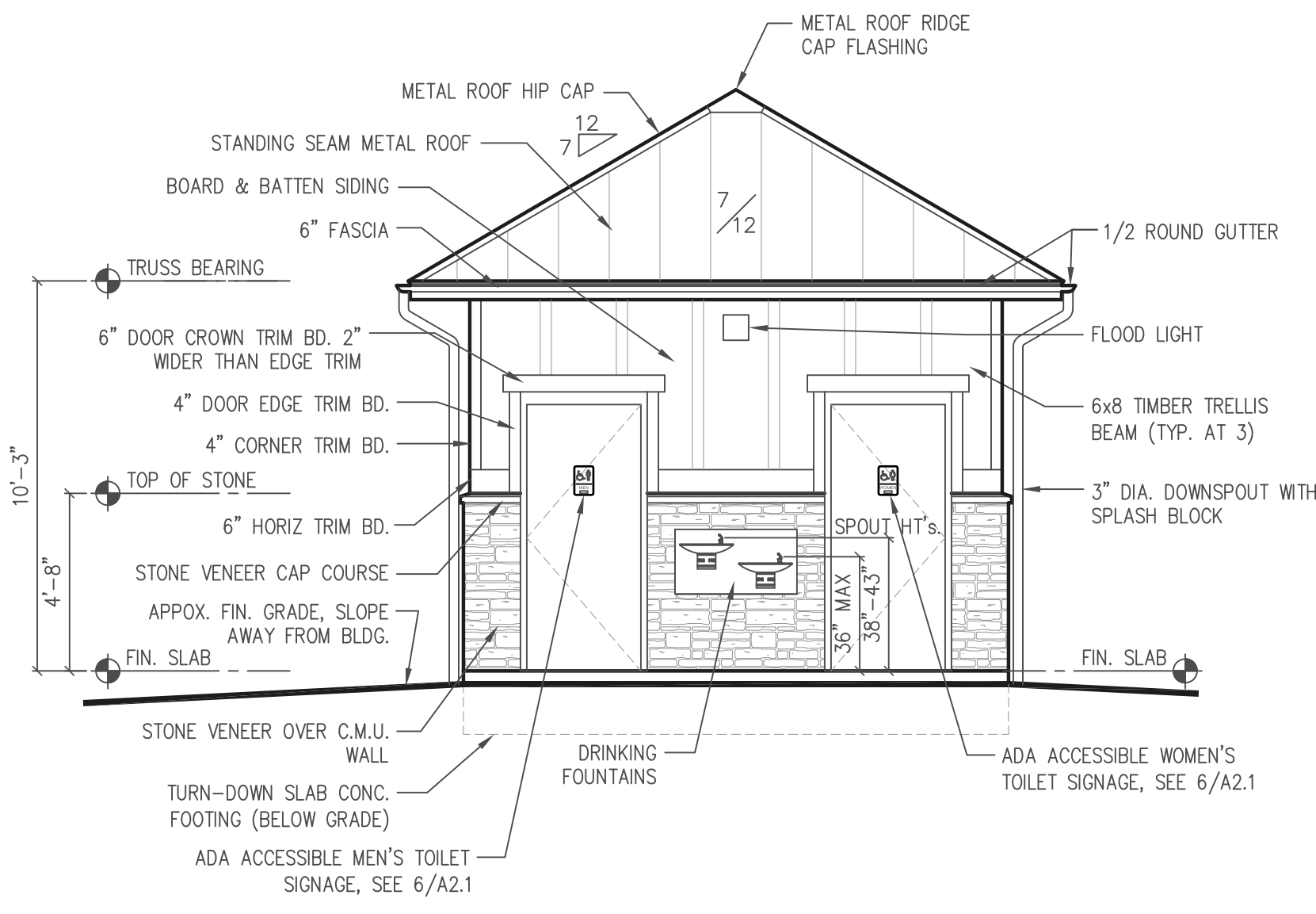
**6 TYPICAL WALL SECTION**  
A2.1 3/4" = 1'-0"



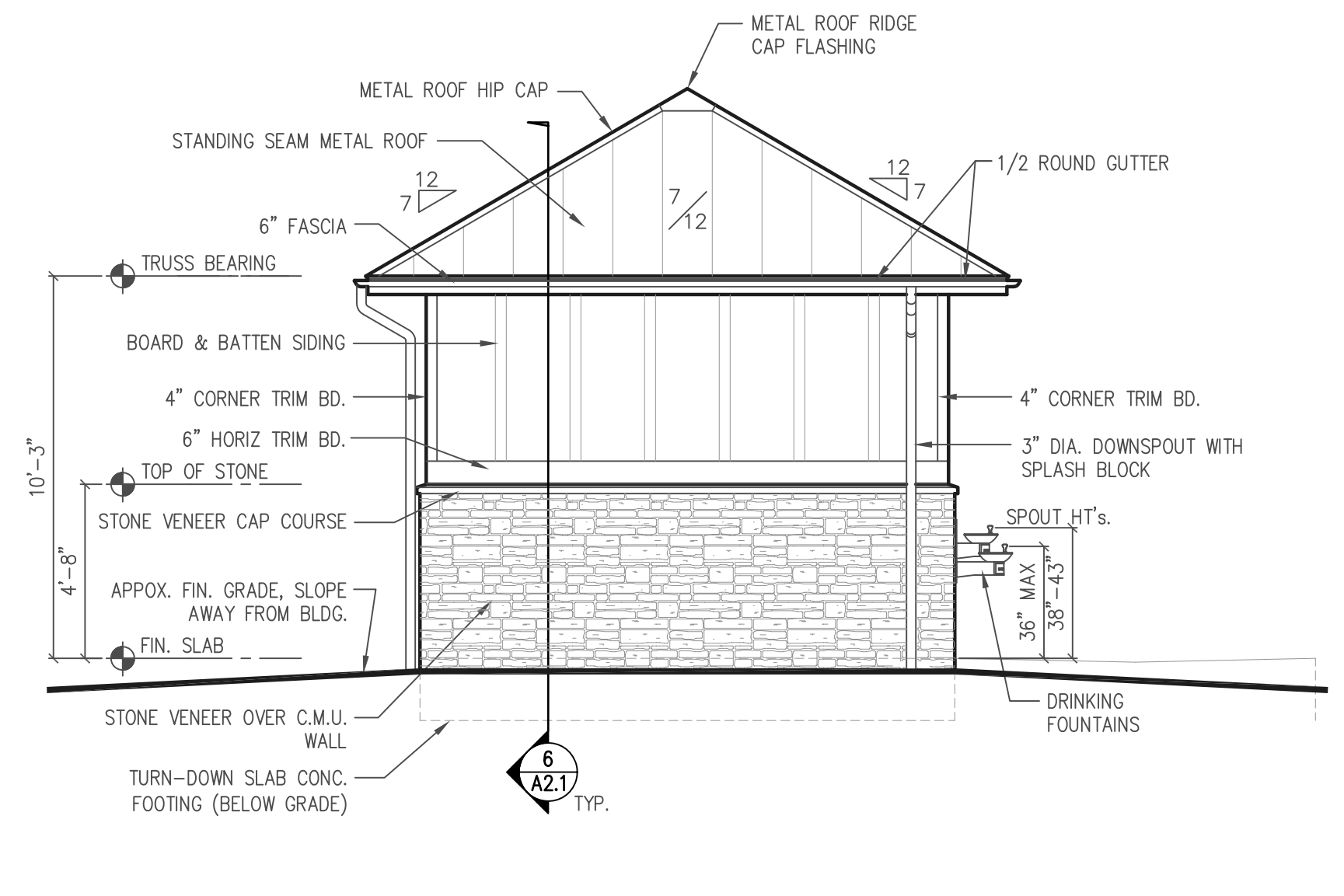
**4 SIDE ELEVATION (UTILITY)**  
A2.1 1/4" = 1'-0"



**3 BACK ELEVATION**  
A2.1 1/4" = 1'-0"



**2 SIDE ELEVATION**  
A2.1 1/4" = 1'-0"



**1 FRONT ELEVATION**  
A2.1 1/4" = 1'-0"



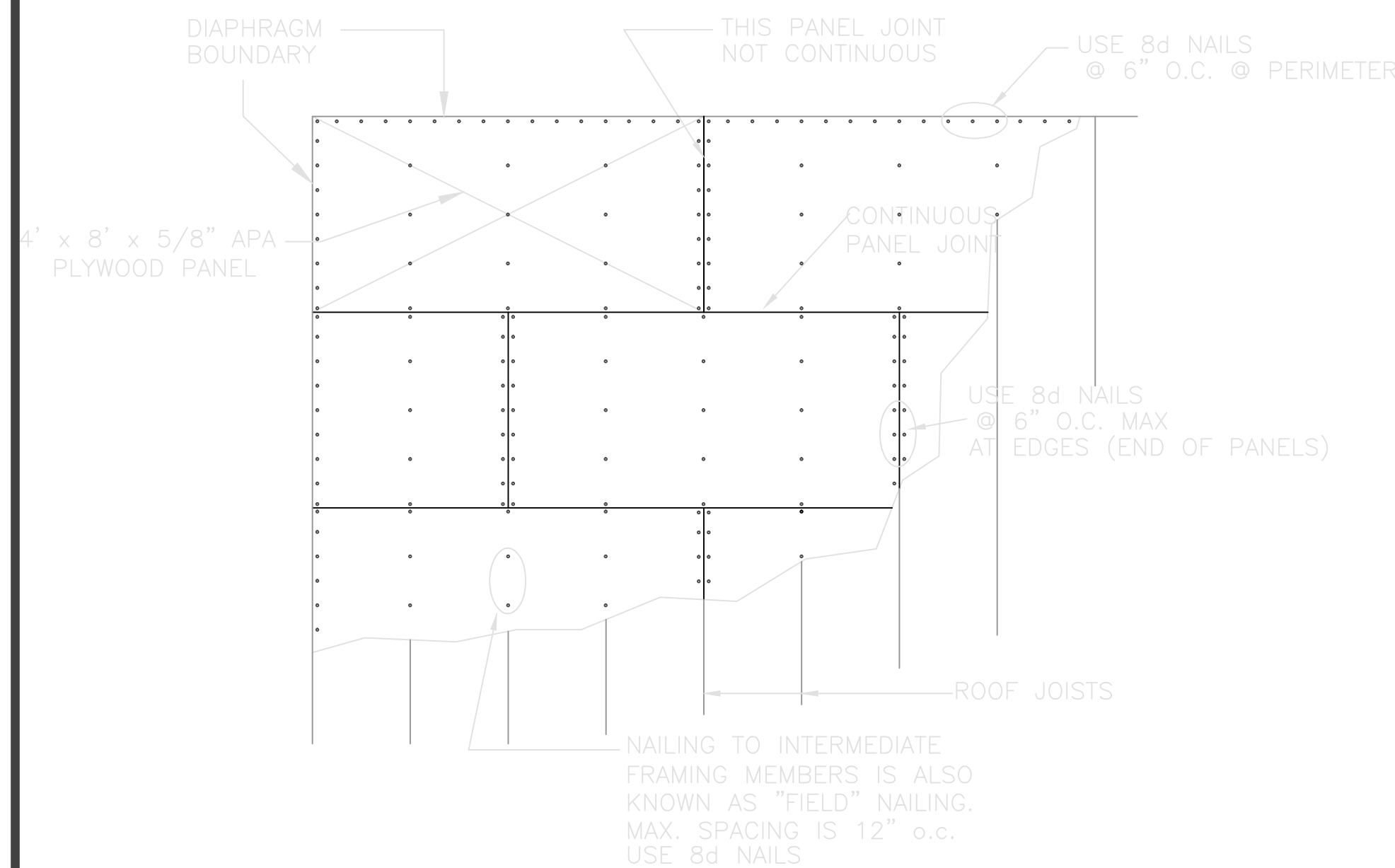
**ROOF FRAMING NOTES:**

1. ROOF DECK TO BE 5/8" APA PLYWOOD SHEATHING FASTEN w/ 8d NAILS @ 6" O.C. AT EDGES AND 8d NAILS @ 12" O.C. IN THE FIELD.
2. U.N.O. ALL ROOF JOISTS HAVE SIMPSON H2.5 HURRICANE TIES AT SUPPORT LOCATIONS.
3. U.N.O. ROOF FRAMING IS NOT DESIGNED TO ACCOMMODATE CONCENTRATED LOADS DUE TO MECHANICAL EQUIPMENT.
4. TRUSS LAYOUT AND PROFILES BY TRUSS MANUFACTURER.
5. ALL EXTERIOR WALLS ARE LOAD BEARING.
- 6.
7. U.N.O. ALL PRE-MANUFACTURED WOOD TRUSSES ARE @ 24" O.C. MAX.
8. ALL TRUSSES ARE PRE-MANUFACTURED WOOD TRUSSES WITH GIVEN SLOPES UNLESS NOTED OTHERWISE.

ROOF LOADS:	
ROOFING MATERIAL:	3 PSF
SELFWEIGHT:	4 PSF
CEILING & LIGHTS:	3 PSF
TOTAL DEAD LOAD:	10 PSF
TOTAL LIVE LOAD:	20 PSF
NET UPLIFT DUE TO WIND ON JOIST:	9 PSF

**FOUNDATION NOTES:**

1. SLAB ON GRADE SHALL BE 4" THICK CONCRETE (f'c = 3000 PSI) WITH (1) LAYER OF 6x6-W1.4xW1.4 W.W.F. 1" FROM TOP OF SLAB OVER 10 MIL. VAPOR RETARDER ON 4" MIN. GRANULAR BASE. ALL SLOPES TO DRAIN SHALL BE ACCOMMODATED BY SLOPING BOTTOM AND TOP OF SLAB AT THE SAME RATE.
2. ALL ELEVATIONS REFERENCE FROM FINISHED FLOOR ELEVATION OF 0'-0"
3. ALL EXTERIOR TOP OF FOOTINGS SHALL BE -1'-6" BELOW FINISH FLOOR MIN. UNO.
4. 2000 PSF SOIL CAPACITY SHALL BE FIELD VERIFIED
5. ALL FOOTINGS TO REST ON UNDISTURBED SOIL.



**PARTIAL ROOF/FLOOR PLAN  
NAILING PATTERN AT DIAPHRAGM  
NOT TO SCALE**

**GENERAL NOTES (CONT.):**

**VERIFICATION AND SPECIAL INSPECTION**

1. THE PROJECT OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PERFORM INSPECTIONS AND TESTING DURING CONSTRUCTION FOR THE TYPES OF WORK INDICATED BY 2009 IBC CHAPTER 17. SUBMIT DOCUMENTATION THAT SUMMARIZES THE QUALIFICATIONS AND CREDENTIALS OF EACH SPECIAL INSPECTOR AND DEMONSTRATES COMPETENCE FOR THE BUILDING INSPECTOR FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
2. APPROVED SPECIAL INSPECTORS SHALL FURNISH INSPECTION AND TESTING REPORTS TO THE OWNER, ARCHITECT, BUILDING OFFICIAL AND STRUCTURAL ENGINEER OF RECORD WHICH INDICATES THE WORK INSPECTED WAS DONE IN CONFORMANCE WITH APPROVED CONSTRUCTION DOCUMENTS. REPORTS WHICH DOCUMENT THE RESULTS OF THE SPECIAL INSPECTIONS SHALL BE SUBMITTED PERIODICALLY AT A FREQUENCY APPROVED BY THE BUILDING OFFICIAL PRIOR TO CONSTRUCTION. A FINAL REPORT DOCUMENTING ALL THE WORK HAS BEEN PERFORMED IN COMPLIANCE WITH THE CONTRACT DOCUMENTS SHALL BE SUBMITTED AT THE END OF THE PROJECT.
3. SEE SECTION 1704 OF THE 2009 IBC FOR FULL CRITERIA AND EXCEPTIONS FOR INSPECTION REQUIREMENTS.
4. DEFINITIONS:  
**PERIODIC SPECIAL INSPECTION** - THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK.  
**CONTINUOUS SPECIAL INSPECTION** - A FULL-TIME OBSERVATION OF WORK REQUIRING CONTINUOUS JOBSITE PRESENCE WHEN AND WHERE THE WORK IS BEING PERFORMED.
5. STRUCTURAL OBSERVATIONS, IN ADDITION TO SPECIAL INSPECTIONS, MAY BE REQUIRED PER IBC SECTION 1709.

**TABLE 1704.7: REQUIRED VERIFICATION AND INSPECTION OF SOILS**

VERIFICATION & INSPECTION TASK	FREQUENCY-CONTINUOUS OR PERIODIC	AGENT
1. VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	PERIODIC	2
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	PERIODIC	2
3. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIAL	PERIODIC	2
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL	CONTINUOUS	2
5. PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	PERIODIC	2

**NOTES FOR SCHEDULE**

1. THE INSPECTION AND TESTING AGENT(S) SHALL BE ENGAGED BY THE OWNER OR THE OWNER'S AGENT AND NOT BY THE CONTRACTOR OR SUBCONTRACTOR WHOSE WORK IS TO BE INSPECTED. ANY CONFLICT OF INTEREST MUST BE DISCLOSED TO THE BUILDING OFFICIAL PRIOR TO COMMENCING WORK. THE QUALIFICATIONS OF THE SPECIAL INSPECTOR(S) AND/OR MATERIALS/TESTING AGENT MAY BE SUBJECT TO THE APPROVAL OF THE BUILDING OFFICIAL AND/OR DESIGN PROFESSIONAL.
- LEGEND:  
 1: SPECIAL INSPECTOR/DESIGN PROFESSIONAL  
 2: MATERIALS/TESTING AGENT

**TABLE 1704.3: REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION**

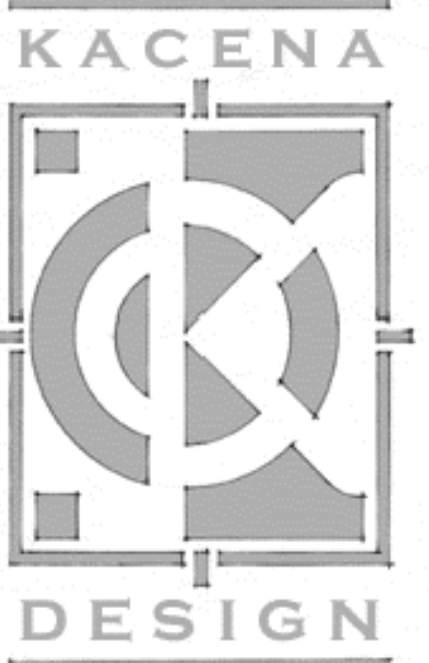
INSPECTION TASK	FREQUENCY-CONTINUOUS OR PERIODIC	AGENT	REFERENCE STANDARD	IBC REFERENCE
1. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS: A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED	PERIODIC	1	APPLICABLE ASTM MATERIAL SPEC RSCS (2004)	/
2. INSPECTION OF HIGH STRENGTH BOLTING: A. BEARING TYPE BOLTING ELEMENTS B. SLIP-CRITICAL CONNECTIONS	PERIODIC CONTINUOUS	1 OR 2	RSCS (2004)	1704.3.3
3. MATERIAL VERIFICATION OF STRUCTURAL STEEL: A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED	YES YES	1 1	ASTM A6 OR ASTM 568 ASTM A6 OR ASTM 568	1708.4
4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS: A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED	YES YES	1 1	AISC 360, SECT. A3.5 AISC 360, SECTION M	/
5. VERIFY FABRICATION/QUALITY CONTROL AT FABRICATION PLANT	YES	1	AISC 360, SECTION M	1704.2
6. INSPECTION OF WELDING A. STRUCTURAL STEEL 1. COMPLETE AND PARTIAL PENETRATION GROOVE WELDS 2. MULTI-PASS FILLET WELDS 3. SINGLE PASS FILLET WELDS > 5/16" 4. SINGLE PASS FILLET WELDS < 5/16" 5. FLOOR AND ROOF DECK WELDS AND SCREWS 6. COLD FORMED STEEL FRAMING MEMBERS 7. STAIR AND RAILING SYSTEMS 8. WELDED SHEAR STUDS	CONTINUOUS CONTINUOUS CONTINUOUS PERIODIC PERIODIC PERIODIC PERIODIC	2 2 2 2 2 2 2	AWS D1.1 AWS D1.3 AWS D1.3	1704.3.1
7. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS* A. DETAILS SUCH AS BRACING AND STIFFENING B. MEMBER LOCATIONS C. APPLICATION OF JOINT DETAILS AT EACH CONNECTION  * NOTE: ADDITIONAL INSPECTION MAY BE REQUIRED FOR THE SEISMIC FORCE RESISTING SYSTEM AS PER IBC 1707	PERIODIC	1	/	1704.3.2

**TABLE 1704.4: REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION**

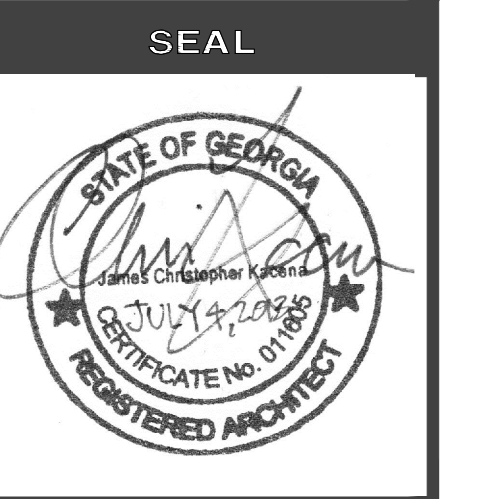
INSPECTION TASK	FREQUENCY-CONTINUOUS OR PERIODIC	AGENT	REFERENCE STANDARD	IBC REFERENCE
1. INSPECTION OF REINFORCING STEEL AND PLACEMENT	PERIODIC	1	ACI 318: 3.5, 7.1 - 7.7	1903.5, 1907.1, 1907.7, 1914.4
2. INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE	PERIODIC	1	/	1911.5
3. VERIFYING USE OF REQUIRED DESIGN MIX	PERIODIC	1	ACI 318: CH. 4, 5.2-5.4	1904, 1905.2-1905.4
4. SAMPLING FRESH CONCRETE AND PERFORMING SLUMP/AIR CONTENT AND DETERMINING THE TEMPERATURE OF FRESH CONCRETE AT THE TIME OF MAKING SPECIMENS FOR STRENGTH TESTS	CONTINUOUS	2	ASTM C172 ASTM C31 ACI 318: 5.6, 5.8	1905.6, 1914.10
5. INSPECTION OF CONCRETE FOR PROPER APPLICATION TECHNIQUES	CONTINUOUS	1	ACI 318: 5.9, 5.10	1905.9, 1905.10
6. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	PERIODIC	1 AND 2	ACI 318: 5.11-5.13	1905.11, 1905.13
7. ERECTION OF PRECAST CONCRETE MEMBERS	PERIODIC	1	ACI 318: CHPT 16	/
8. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POSTTENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	PERIODIC	2	ACI 318: 6.2	/
9. INSPECT FORM WORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	PERIODIC	1	ACI 318: 6.1.1	/

**TABLE 1704.5.1: LEVEL 1 SPECIAL INSPECTION - MASONRY**

INSPECTION TASK	FREQUENCY-CONTINUOUS OR PERIODIC	AGENT	ACI 530 ASCE 5 TMS 402	ACI 530.1 ASCE 5 TMS 602	IBC REFERENCE
1. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE: A. PREPARATION OF SITE PREPARED MORTAR B. CONSTRUCTION OF MORTAR JOINTS C. LOCATION OF REINFORCEMENT AND CONNECTORS	PERIODIC PERIODIC PERIODIC	2 1 AND 2 1	/	ART. 2.6A ART. 3.3B ART. 3.4, 3.6A	/
2. THE INSPECTION PROGRAM SHALL VERIFY: A. SIZE AND LOCATION OF STRUCTURAL ELEMENTS B. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION C. SPECIFIED SIZE, GRADE AND TYPE OF REINFORCING, LAP SPLICE REQUIREMENTS D. WELDING OF REINFORCING BARS E. PROTECTION OF MASONRY DURING COLD WEATHER (TEMP BELOW 40F) OR HOT WEATHER (TEMP ABOVE 90F)	PERIODIC PERIODIC PERIODIC CONTINUOUS PERIODIC	1 1 1 2 1 AND 2	SEC. 1.2.2(a) 2.1.4, 3.1.6 SEC. 1.13 SEC. 2.1.10, 7.2, SEC. 3.3.3.4(a)	ART. 3.3G ART. 2.4, 3.4 ART. 1.8C, 1.8D	SEC 2107 SEC 2104.3, 2104.4
3. PRIOR TO GROUTING, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE: A. GROUT SPACE IS CLEAN B. PLACEMENT OF REINFORCEMENT AND CONNECTORS C. PROPORTIONS OF SITE-PREPARED GROUT D. CONSTRUCTION OF MORTAR JOINTS	PERIODIC PERIODIC PERIODIC PERIODIC	2 2 2 1 AND 2	SEC. 1.13	ART. 3.2D ART. 3.4 ART. 2.6B ART. 3.3B	/
4. GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENT PROVISIONS	CONTINUOUS	2	/	ART. 3.5	/
5. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED	CONTINUOUS	2	/	ART. 1.4	SEC. 2105.3, 2105.2.2
6. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED	PERIODIC	1	/	ART. 1.5	/
7. REVIEW CERTIFICATES OF COMPLIANCE USED IN MASONRY CONSTRUCTION	PERIODIC	1	/	/	SEC. 1708.1.3
8. VERIFICATION OF f'm AND f_m PRIOR TO CONSTRUCTION	PERIODIC	2	/	/	SEC. 1708.1.3



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**STRUCTURAL NOTES**

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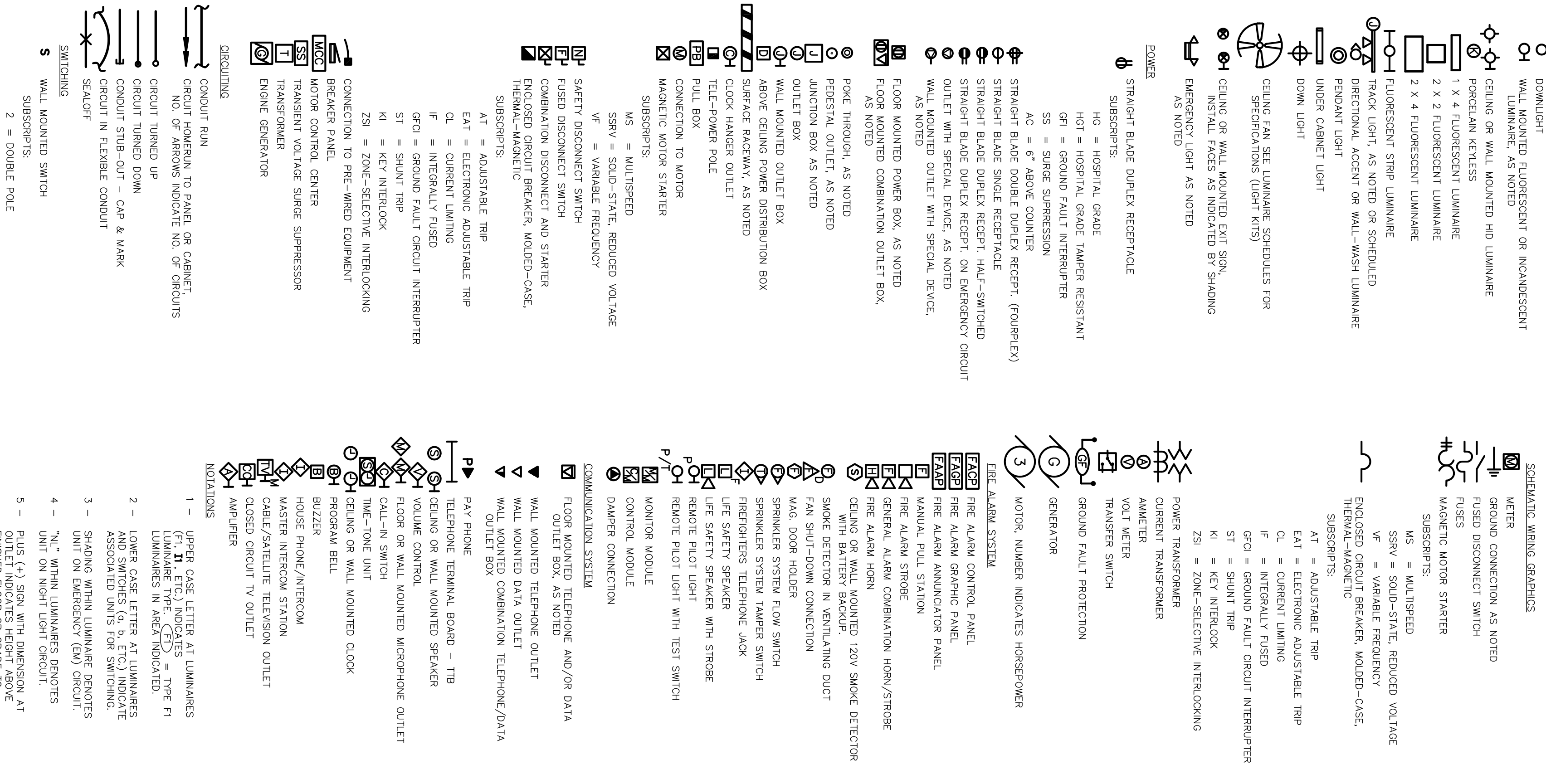
REV. DATE REMARKS

**SHEET NUMBER**  
**S-1**  
 OF SHEETS



**ELECTRICAL LEGEND**

NOTE: ALL SYMBOLS SHOWN ON LEGEND ARE NOT NECESSARILY USED.



**CornerStone**  
**D E S I G N**

*Electrical & Mechanical Engineering Consultants*

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Lithium, Georgia 30047  
(770)\* 717-0040  
(770)\* 381-6844 (fax)

**ABBREVIATIONS**

NOTE: ALL ABBREVIATIONS SHOWN ARE NOT NECESSARILY USED.

AC	— ABOVE COUNTER
AC	— ABOVE FINISHED CEILING
AFI	— ABOVE FINISHED FLOOR
AG	— ABOVE GROUND
AL	— ABOVE INTERTRAP AND CURBENT
AL	— ALUMINUM
BF	— BELOW FINISHED GRADE
CB	— CIRCUIT BREAKER
CR	— CORROSION RESISTANT
CT	— CURRENT TRANSFORMER
CU	— COPPER
ELR	— END OF LINE RESISTOR
EM	— EMERGENCY
ES	— ELECTRICAL STOP
ETW	— ELAPSED TIME METER
EW	— ELECTRIC WATER COOLER
F.A.	— FULL LOAD AMPS
FNR	— FULL VOLTAGE NON-REVERSING
FPE	— FURNISHED WITH EQUIPMENT
GFI	— GROUND FAULT INTERRUPTER
GA	— GALVANIZED RIGID CONDUIT
HQA	— HAND-OFF-AUTOMATIC
IC	— ISOLATED GROUND
LC	— LIGHTING CONTRACTOR
LOP	— LOCAL-OFF-REWOTE
LS	— LEVEL SWITCH
MCA	— MAIN CIRCUIT AMPS
MGB	— MAIN CIRCUIT BREAKER
MCC	— MOTOR CONTROL CENTER
MCCB	— MOLDED CASE CIRCUIT BREAKER
MC	— MOTOR CIRCUIT PROTECTION
MC	— MOTOR CONTROL
NC	— NORMALLY CLOSED
NC	— NOT IN CONTRACT
NL	— NIGHT LIGHT
NO	— NORMALLY OPEN
OC	— OVER CURRENT
OL	— OVERLOAD
PT	— POTENTIAL TRANSFORMER
RNR	— REDUCED VOLTAGE, NON-REVERSING
SR	— SAFE OR STOP/RUN
SR	— SAFE OR STOP/RUN
TB	— TELEPHONE TERMINAL BOARD
UC	— UNDERGROUND
VFD	— VARIABLE FREQUENCY DRIVE
WP	— WEATHERPROOF
XPR	— TRANSFORMER
XP	— EXPLOSION PROOF
ZS	— LIMIT OR POSITION SWITCH

THESE DRAWINGS ARE DIAGRAMMATIC - REFER TO THE ELECTRICAL CODES FOR THE MINIMUM AND MAXIMUM BRANCH CIRCUITING CONVENTION - #12 AWG PER PHASE AND NEUTRAL (WHERE REQUIRED) AND 20 AMPERE CIRCUIT BREAKERS ARE TO BE USED FOR ALL BRANCH QUANTITY AND SIZE SWITCH CONDUCTORS, AS REQUIRED TO MAKE SYSTEM OPERATIONAL.

THESE "E" SHEETS PERTAIN TO THE BUILDING / STRUCTURE INTERIORS. SEE SITE ELECTRICAL PLANS BY OTHERS FOR SITE ELECTRICAL.

**GENERAL NOTES (FOR ALL ELECTRICAL SHEETS)**

- COORDINATE LOCATION OF LUMINAIRES WITH ARCHITECTURAL REFLECTED CEILING PLANS.
- PLANS DO NOT INDICATE ALL OF THE USE UTILITY LINES, RE: CONDUIT, PIPING, AIR CONDITIONING, GAS, ETC. THE CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL EXISTING UNDERGROUND UTILITY LINES OF ALL TRADES PRIOR TO ANY SITE WORK.
- PROVIDE (1) 3/4" C. WITH PULL WIRE FROM EACH TELEPHONE, DATA, OR COMMUNICATION OUTLET SHOWN, TO ABOVE ACCESSIBLE CEILING, AND CAP, WHERE CEILING IS INACCESSIBLE, ROUTE CONDUIT TO FIELD DEMARK.
- COORDINATE EXACT EQUIPMENT LOCATIONS WITH OWNER PRIOR TO ROUGH-IN.
- COORDINATE LOCATION OF ALL OUTLETS WITH ARCHITECTURAL ELEVATIONS, OWNER SHIP DRAWINGS AND EQUIPMENT INSTALLATION DRAWINGS.
- COORDINATE LOCATION OF MECHANICAL EQUIPMENT WITH MECHANICAL PLANS AND MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
- ANY ITEMS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR.
- ALL 120V BRANCH CIRCUITS SHALL BE 3-WIRE (PHASE-NEUTRAL-GROUND).
- CONTRACTOR SHALL NOT ROUTE ANY CONDUIT WITHIN STRUCTURAL OR TOPPING SLABS OF FLOORS UNLESS NOTED TO DO SO.
- ALL 120V, 1Ø GENERAL PURPOSE RECEPTACLES SHALL BE GFCI TYPE.
- REFER TO ARCHITECTURAL PLANS, ELEVATIONS AND DIAGRAMS FOR LOCATIONS OF FLOOR DEVICES AND WALL DEVICES. LOCATION WILL INDICATE VERTICAL AND/OR HORIZONTAL MOUNTING, IF DEVICES ARE NOT NOTED OTHERWISE THEY SHALL BE MOUNTED LONG AND VERTICAL, AT 48" TO CENTER.
- INFORMATION ON THE DRAWINGS HAS BEEN ASCERTAINED FROM INFORMATION PROVIDED BY THE ARCHITECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SITE PRIOR TO BID, AND FAMILIARIZE HIMSELF WITH THE EXTENT OF REMOVAL WORK REQUIRED. NO EXTRAS WILL BE ALLOWED FOR ALTERATIONS OR A FORESEEABLE NATURE REQUIRED TO ACHIEVE THE BID RESULT AS INDICATED BY CONTRACT DOCUMENTS.
- ALL NEW WIRING SHALL BE CONCEALED IN NEW WALLS OR ABOVE CEILINGS. SURFACE MOUNTED CONDUIT SHALL NOT BE USED IN ANY FINISHED AREAS.
- PROVIDE GFI PROTECTED OUTLETS AS REQUIRED BY NEC AND AFC FAULT PROTECTION AS REQUIRED BY NEC.
- AT THE TIME OF DESIGN, INFORMATION ON SHORT CIRCUIT / FAULT CURRENTS WAS PROVIDED BY THE ARCHITECT. THE CONTRACTOR SHALL VERIFY THE SHORT CIRCUIT / FAULT CURRENT VALUES. PROVIDE EQUIPMENT SUITABLE FOR THESE VALUES. MINIMUM AFC RATING TO BE 22KAC.
- COORDINATE WITH UTILITY CONTRACTOR FOR SERVICE TO EACH BUILDING/STRUCTURE. PROVIDE ALL COMPONENTS NECESSARY FOR SERVICE. SERVICE CONDUITS AND CONDUIT ARE TO BE MOUNTED ON RISER BRACKETS BUT MUST BE COORDINATED WITH UTILITY CONTRACTOR.
- VERIFY PROPER LIGHT FIXTURE TRIM WITH CEILING INSTALLATION. PROVIDE GRID TRIM FOR LATIN CEILING AND FLANGE FOR 01P OR WOOD CEILINGS.
- PROVIDE POWER TO ALL AUXILIARY MECHANICAL DEVICES SUCH AS LOWV, DAMPERS, PUMPS, THERMOSTATS, ETC. PROVIDE CONDUIT AND CONDUCTORS AS REQUIRED.
- IF NOT NOTED, PROVIDE (6/2)(4/20) 3/4"Ø FOR ALL 02P AND BRANCH CIRCUITS. PROVIDE ADDITIONAL #12 CONDUCTOR FOR 20A SHARED BRANCH CIRCUITS. CONDUCTORS AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.

**BROOK RUN DOG PARK  
RESTROOM FACILITY**  
4770 NORTH PEACHTREE RD  
DUNWOODY, GA 30338



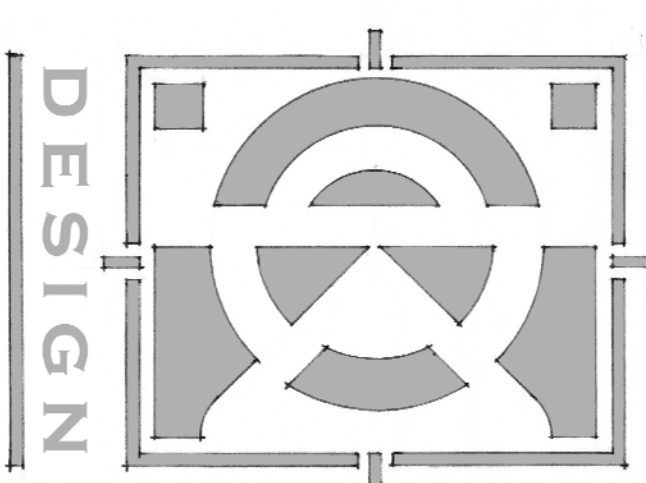
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**SHEET TITLE**  
ELECTRICAL  
LEGEND AND  
GENERAL NOTES

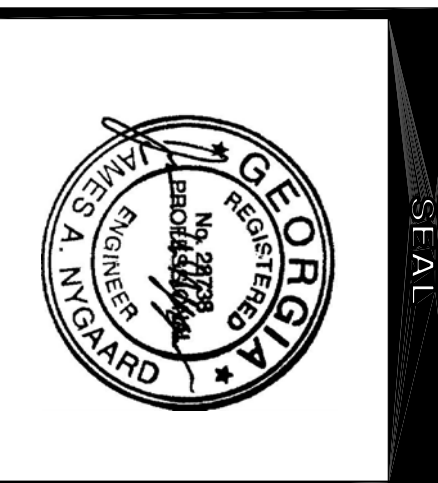
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REV.	DATE	REMARKS

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E0.1  
OF 3 SHEETS



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LOCATION

**BROOK RUN DOG PARK  
 RESTROOM FACILITY**  
 4770 NORTH PEACHTREE RD  
 DUNWOODY, GA 30338

**SHEET TITLE**  
 ELECTRICAL  
 FLOOR PLAN  
 AND SCHEDULES

**DATE PRINTED**  
 7/4/2013

REV. DATE REMARKS

**SHEET NUMBER**  
 E1.1

OF 3 SHEETS

**LUMINAIRE SCHEDULE**

TYPE	LAMPS	DESCRIPTION	VOLT	MOUNTING	MANUFACTURER, CAT. NUMBER	REMARKS
F1	2	F32/T8	120	SURFACE	DAY-BRITE: V2-W-A-T-2-32-LUNV-1T	1.
CFT	1	42W	120	SURFACE	NITE BRITES: WP6-42C-G-12-LP	2.

NOTES:  
 1. VERIFY MODEL NUMBERS AND FIXTURE TYPES WITH ARCHITECTURAL AND OWNER.  
 2. PROVIDE PHOTOCELL TO CONTROL CANOPY LIGHTING.

**GENERAL NOTES**

- ALL FLUORESCENT FIXTURES SHALL HAVE ELECTRONIC BALLASTS WITH 20% OR LESS TOTAL HARMONIC DISTORTION.
- CONTRACTOR TO PROVIDE ALL REQUIRED HARDWARES, BRACKETS, LAMPS, TUBES, ETC. FOR A COMPLETE INSTALLATION.
- ALL LIGHTING FIXTURES SHALL BE PERMANENTLY ATTACHED TO THE CEILING PER N.E.C. 410-16(C).
- CONTRACTOR TO INSTALL ALL LIGHTING FIXTURES AND DEVICES INCLUDING ANY OWNER-FURNISHED FIXTURES.
- ALL FIXTURE BALLASTS SHALL BE UL LISTED.

**MECHANICAL EQUIPMENT SCHEDULE (THIS SHEET)**

KEY	DESCRIPTION	LOAD	VOLT-Ø	FEEDER	C.B.	O.C. PROTECTION	REMARKS
EH-1	ELECTRIC HEATERS	3.0 KW	240-1	(2# 1/2" ØG) 3/4" C	*	SOZP	1.
WH-1	WATER HEATER	3.0 KW	240-1	(2# 3/4" ØG) 3/4" C	*	SOZP	2.

NOTES:  
 \* SEE PANELBOARD SCHEDULES FOR CIRCUIT BREAKER SIZE.  
 1. DISCONNECT SHALL BE NON-FUSED.  
 2. VERIFY WITH MANUFACTURER IF DISCONNECT IS NEEDED OR IF UNIT HAS INTERGRAL DISCONNECT.

100 AMP MAIN BREAKER (GROUND BUS)		120 / 240 VOLT 1 PHASE LUGS ONLY NEUTRAL		3 WIRE SERVICE MOUNTING: SURFACE FLUSH	
DESCRIPTION	L	R	M	L	R
Lighting	325			1	2
Exterior lighting	200			3	4
Receptacle	540			5	6
Pavilion	500			7	8
EH-1	360			9	10
EH-1	1500			11	12
EH-2	1500			13	14
EH-2	1500			15	16
EH-2	1500			17	18
EH-2	1500			19	20
WH-1	1500			21	22
Lighting	360			23	24
Space				25	26
Space				27	28
Space				29	30
Space				31	32
Space				33	34
Space				35	36
Space				37	38
Space				39	40
Space				41	42
TOTAL	1385			0	0

CONNECTED	D.F.	DEMAND	CONNECTED	TOTAL
1.4	1.25	1.7	15.2 KVA	15.2 KVA
RECEPT. (FIRST TO KW)	1.6	1.00	DESIGN DEMAND	24.0 KVA
MOTORS	0.0	0.50	SPARE	8.4 KVA
LARGEST MOTOR	0.2	1.25	CONNECTED	
APPLIANCES	0.0	0.0	L1	8.1 KVA
EQUIPMENT	0.0	1.00	L2	
TRANSFORMER	0.0	1.00		
OTHER	0.0	0.0		
TOTAL	15.2	0.00		
LOAD	63.4	15.6		
DESIGN	100	65.1		
SPARE		34.9		

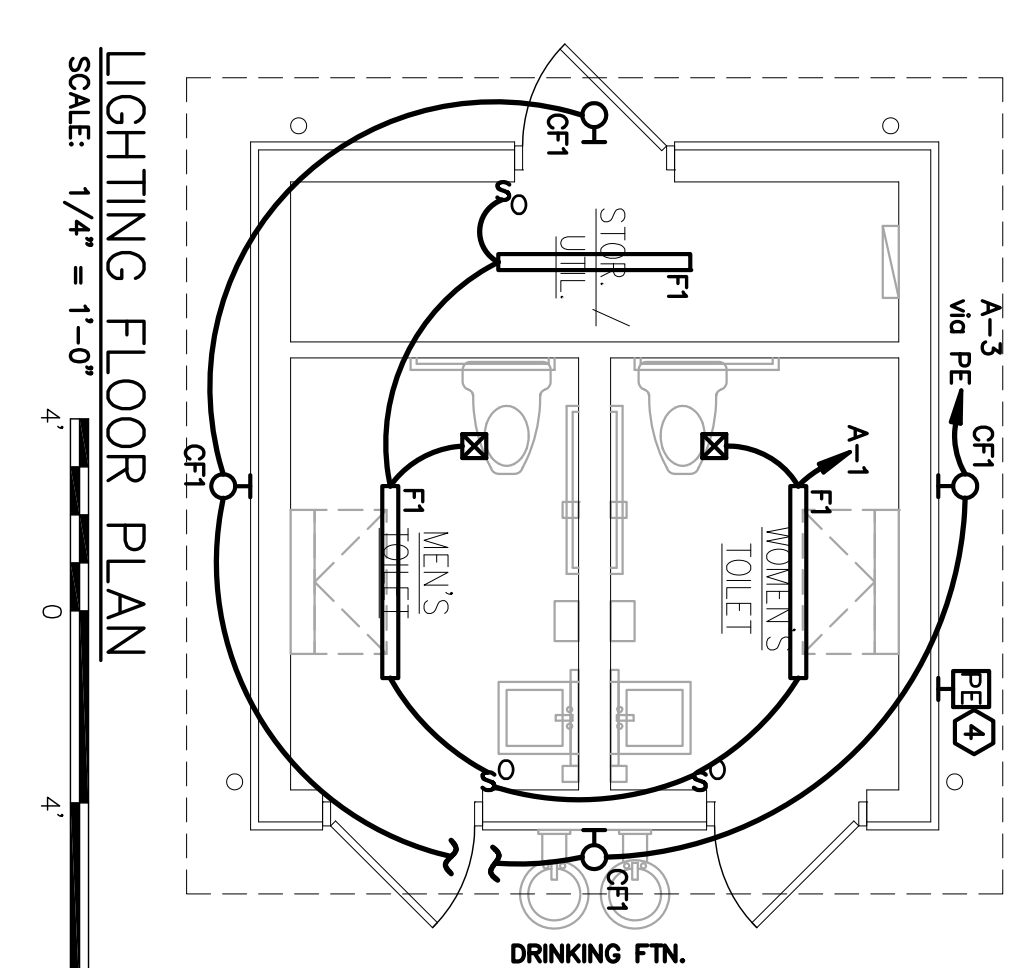
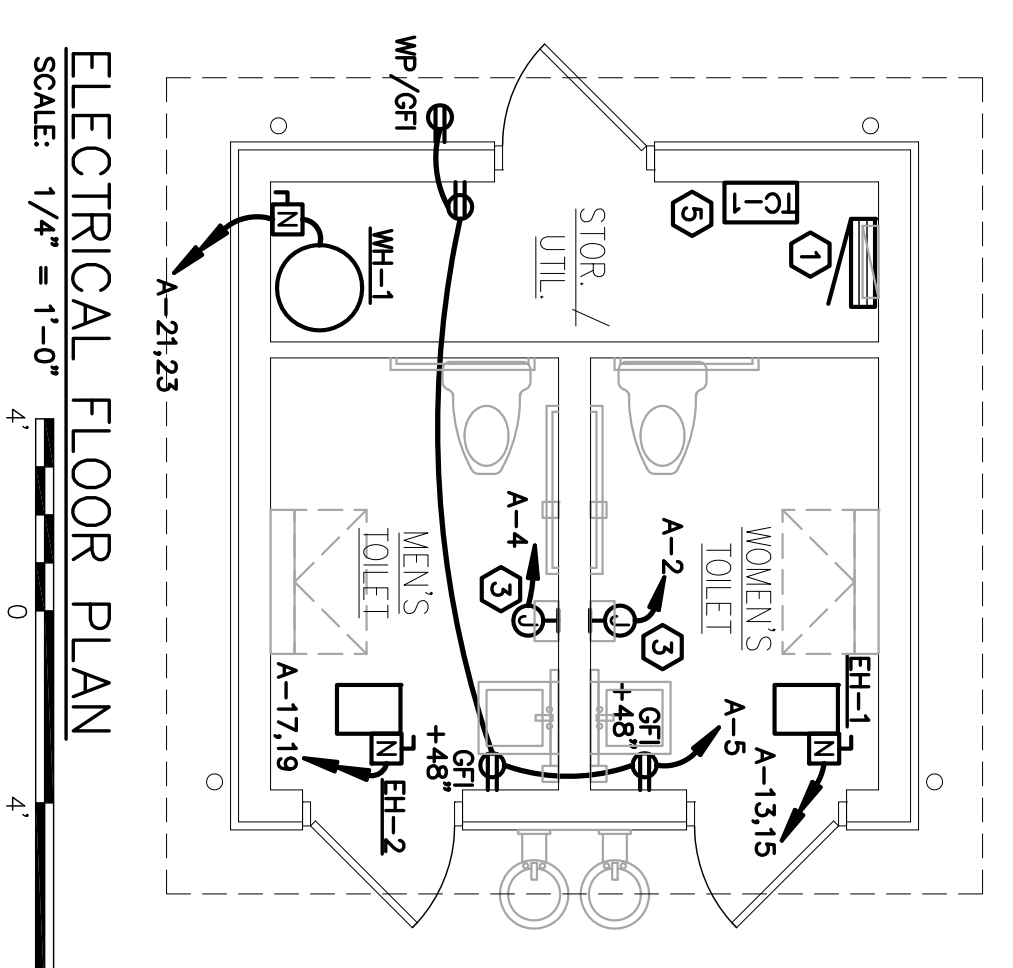
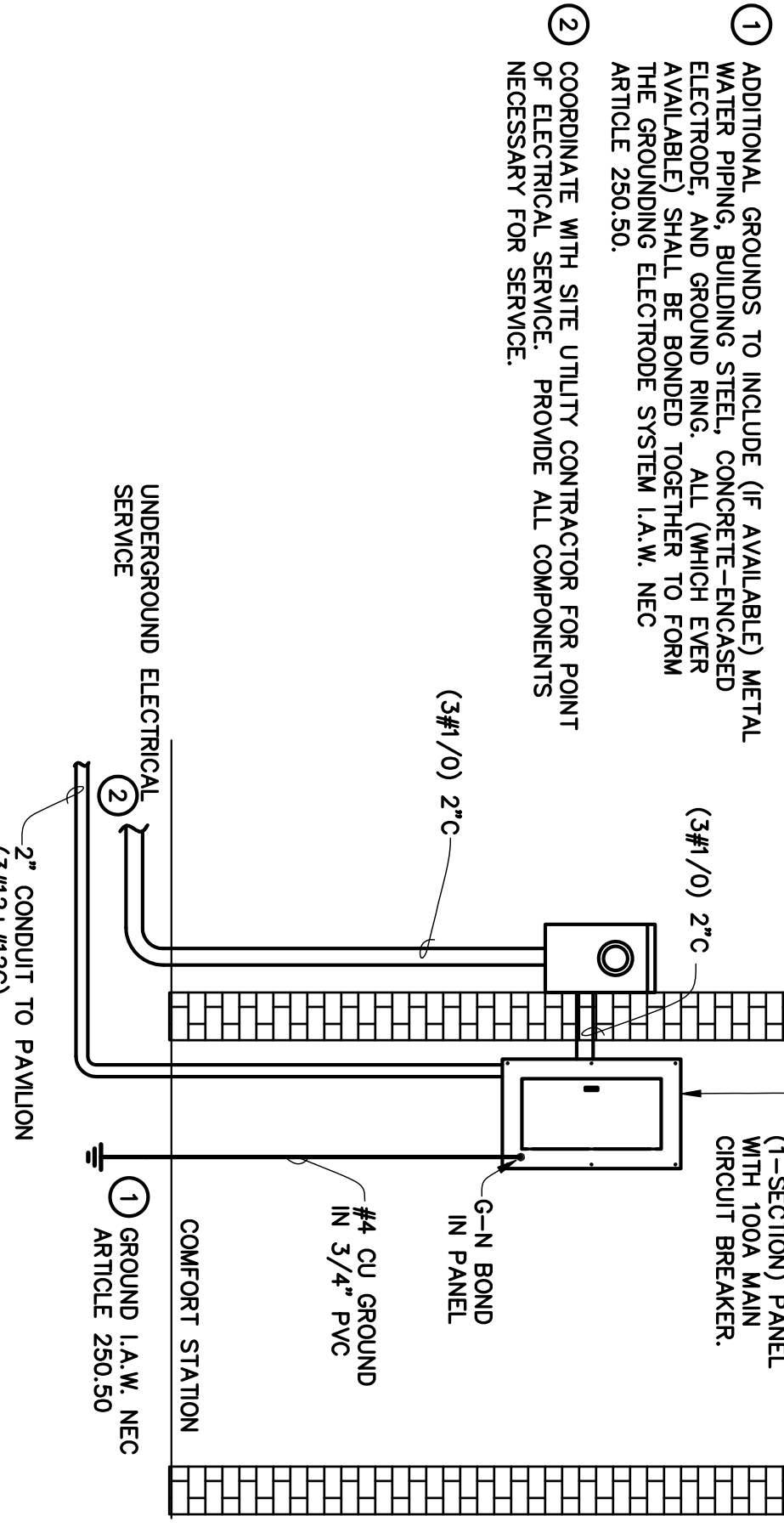
ALL CIRCUIT BREAKERS ARE 20 AMP, 1 POLE UNLESS NOTED OTHERWISE

NOTES:  
 L = LIGHTING R = RECEPTACLE M = MOTOR T = TRANSFORMER  
 S = SUBFEED E = EQUIPMENT A = APPLIANCE O = OTHER SP = SPACE  
 SPR = SPARE

**ELECTRICAL AND LIGHTING PLAN NOTES THIS SHEET:**

- PROPOSED LOCATION OF NEW PANEL, 'A'. SEE ELECTRICAL RISER DIAGRAM, THIS SHEET AND PANELBOARD SCHEDULE THIS SHEET. VERIFY EXACT LOCATION OF NEW PANEL WITH ARCHITECT AND BUILDING OWNER PRIOR TO ROUGH-IN. MAINTAIN ALL CLEARANCES AS PER NATIONAL ELECTRIC CODE.
- CIRCUIT EMERGENCY LIGHTS AND EXIT SIGNS AHEAD OF LOCAL SWITCHING FOR CONTINUOUS OPERATION. CIRCUIT WITH SAME CIRCUIT AS GENERAL LIGHTING CIRCUIT IN SAME AREA AS PER N.E.C.
- ELECTRIC HAND DRYER. COORDINATE EXACT LOCATIONS WITH OWNER. PROVIDE (2# 10-#10G) 3/4" C, TORK 2100 SERIES OUTDOOR PHOTOCELL WITH B-BRACKET FOR WALL MOUNTING. MOUNT AT 9' A.F.F. CONNECT TO CONTROL ALL OUTDOOR LIGHT FIXTURES. POINTED IN A NORTHERLY DIRECTION FREE OF ANY OBSTRUCTIONS.
- TIME CLOCK LOCATION. REFER TO SHEET SE-03 FOR DETAILS.

**ELECTRICAL RISER DIAGRAM**





ELECTRICAL SPECIFICATIONS  
SECTION 16000

PART 1 GENERAL

- 1.1 CODES AND REQUIREMENTS  
A. All electrical work shall comply with the requirements of the applicable edition of the National Electrical Code, Local Building Code and as specified herein whichever is more strict.
- B. The contractor shall comply with the requirements of the General Conditions, Supplemental General Conditions of the project specifications, Contract Documents, and any base building specifications and building criteria included in this project.
- C. Visit the premises before submitting bid as no extras will be allowed for lack of knowledge of existing conditions.
- D. Drawings are diagrammatic in nature. Take all dimensions from Architectural drawings, certified equipment drawings, and from the structure itself before fabricating any work.
- E. The drawings indicate the location, type and sizes of various utilities within the site where known. Any relocation or remodeling required must be approved by the Architect before proceeding. All utilities such as electric and gas shall be clearly marked with the proper color and depth. Do not pay for any changes associated with connecting those utilities. Pay for all permits, fees, inspections etc.
- F. Good workmanship and appearance are considered equal to proper operation.
- G. Provide all core drilling, channeling, cutting, trenching and backfill as required for installation of electrical equipment. Seal holes, fireproofing where necessary, and refinish all repair work to original condition where damaged by electrical work.
- H. Make provisions for safe delivery and secure storage of all materials.
- I. Provide the Architect with a complete set of plans and specifications corrected to as-built conditions at the completion of the job.
- 1.2 WARRANTY  
The electrical contractor shall provide for the owner a one-year (from the date of final acceptance) warranty of all electrical equipment and systems provided under this contract except for incandescent or fluorescent lamps. All defective equipment or materials which appear during the warranty period shall be replaced or repaired by the electrical contractor in a timely fashion.

PART 2 PRODUCTS

- 2.1 EQUIPMENT  
A. The contractor shall provide all equipment, accessories necessary whether specifically stated or not to make the required electrical systems complete and operational.
- B. All equipment provided shall be new except as otherwise stated on the drawings. All equipment provided shall be U.L. listed when such standards exist for the type of equipment furnished and acceptable for installation by the Local Building Authority.
- 2.2 CONDUCTORS  
A. Minimum size #12 AWG except for control circuits which may be #14 or signal circuits which shall be as indicated. All conductors shall be copper. Increase conductor size as necessary to limit branch circuit voltage drop to 3% and feeder voltage drop to 2%.
- B. Splices for #8 and smaller conductors – wire or wing nuts.
- C. Feeders and other wiring No. 4 AWG and larger, type THWN.
- D. Other wiring No. 6 and smaller, type THWN.
- E. Wiring in high temperature areas shall be rated 105° C and be a type accepted by local code.
- F. Color Coding: Wiring for control systems to be installed in conjunction with mechanical and miscellaneous equipment shall be color coded in accordance with the wiring diagrams furnished with the equipment. Branch circuit wiring, including circuits to motors, and all feeders shall be coded by line or phase as follows:  
Wire No. 2 AWG and smaller shall be factory color coded. Wire No. 1 AWG and larger may be color coded by field painting or color taping of six inch (6") length of exposed ends.
- |                         |                                 |
|-------------------------|---------------------------------|
| 120/208 Volts           | 277/480 Volts                   |
| A = Black               | A = Brown                       |
| B = Blue                | B = Orange                      |
| C = Red                 | C = Yellow                      |
| Neutral = White         | Neutral = Grey                  |
| Ground = Green          | Ground = Green w/yellow stripes |
| Switch Travelers = Pink | Switch Travelers = Purple       |

2.3 OUTLETS

- A. 4" square or octagonal, zinc coated sheet steel boxes.
- B. Provide 3/8" no-bolt fixture studs.
- C. Provide covers set to come flush with finish walls.

2.4 DEVICES

- A. All devices colors shall be selected by architect.  
1. Specification grade receptacles, Hubbell 5262-\*.  
2. A.C. quiet operating type switches equal to Hubbell, rated 20A, 277V.
- B. Device plates shall be nylon, color to match devices.
- C. Mount devices in accordance with the following schedule except where otherwise noted on the drawings:  
1. Convenience Receptacles – Long Axis Vertical 16" A.F.F.\*  
2. Light Switches – Latch Side of Door 40" A.F.F.  
3. Telephone Outlets 16" A.F.F.\*  
\* Except in areas with counters, baseboard heaters or in areas of block or brick construction.
- 2.5 LIGHTING FIXTURES  
A. Provide all new lighting fixtures complete with lamps, ballasts, reflectors, plaster frames, louvers, stem hangers, etc., and as described on the drawings.  
B. All ballasts shall be internally protected by use of two internal temperature-sensitive, non-resetting protectors, equal to GE, West-Miser, Class "P".  
C. Exit lights shall conform with local code requirements.
- D. Mount all outlets at position and height to clear ducts, etc.
- E. Acrylic lenses shall be 100% virgin materials and 0.125 inch thick minimum unpenetrated thickness shall be 0.035 inch.

2.6 BRANCH CIRCUIT PANELBOARDS

- A. Provide dead-front circuit breaker type panels with the size and number of branches indicated. Breakers shall be thermal magnetic type employing quick-make and quick-break mechanisms for manual operation as well as automatic operation. Automatic tripping shall be indicated by the breaker handle assuming a distinctive position from the manual "on" and "off". Multiple breakers shall have a common trip. The handles will not be permitted.
- B. Panelboards having branch circuit breaker sizes 15 to 100 amperes shall be:  
1. General Electric "AQ" for operation on 120/208V, systems.  
2. General Electric "AE" for operation on 277/480V, systems.
- C. Panelboards may contain two (2) subfeed breakers having a rating in excess of 100 amperes, but less than 225 amperes.
- D. Panelboards having more than two (2) branch circuit breakers rated in excess of 100 amperes shall be General Electric "CCB".
- E. All spaces shall be fully equipped.
- F. Panelboards shall have a grounding lug for the equipment grounding system.
- G. Circuit breakers shall have a minimum interrupting capacity as follows:  
120/208 volts: 22,000 amperes.  
In high temperature areas shall be selected to provide a series rating of 100,000 amperes with downstream circuit breakers.
- H. Panelboards shall be a minimum twenty inches (20") wide (box).
- I. All buses shall be copper.
- J. The above panelboard designations are General Electric; however provide any of the following equipment, or as accepted:  
120/208V 277/480VSD—distribution type  
Cutler Hammer GMB WEB MP-40  
General Electric GED-7, GED-7, GED-6  
LITE model conduit (RMC) and intermediate metal conduit (IMC)  
Square-D, NOOB, NEMB 1-line  
Westinghouse WEB WEHB GCP

2.7 SAFETY AND DISCONNECT SWITCHES

- Provide enclosed, fusible or non-fusible safety switches where indicated and herein specified. Safety switches shall bear the UL label and each enclosure shall be the NEMA type suitable for the surrounding area and conditions (Ex, Nema 1 – Indoor, Nema 3R – Outdoor). Switches shall be minimum heavy duty, horsepower rated, and shall have quick-make and quick-break mechanisms. Switches used on motor circuits shall have adequate horsepower ratings for the motors served.
1. Safety switches employed as motor disconnect devices for two (2) or more loads shall be of the fusible type for rejection type fuses.
2. Heavy duty industrial type safety switches shall be used for 480 volt application and shall be horsepower rated with quick-make, quick-break mechanisms and interlocked covers.
3. Switches shall be as manufactured by Cutler-Hammer, General Electric, Square-D, Westinghouse, or as accepted, and all switches provided shall be by the same manufacturer.
- 2.8 FUSES  
A. Fuses shall be as manufactured by Busmann unless noted otherwise on the drawings.

B. Fuses for application at under 600 volts, and rated at 600 amps or less, shall be as follows:  
1. For all fuses in the main service, equipment, except for motor circuits, provide current limiting, 200,000 rms amperes symmetrical interrupting capacity, rejection type, Busmann Limitron or as accepted.  
2. For all other fuses, provide rejection type with 200,000 rms amperes symmetrical interrupting capacity, Busmann Fusestron, or as accepted.

2.9 DRY TYPE TRANSFORMERS (IF APPLICABLE)

- A. ACCEPTABLE MANUFACTURERS  
1. Square D  
2. GE – Type QL  
3. Cutler-Hammer – CX6  
4. Alternate manufacturers may be acceptable when submitted according to Division 0 or Division 1.
- B. Dry Type Transformers: ANSI/NEMA ST 20; factory-assembled, oil cooled dry type transformers; ratings as shown on the Drawings.
- C. Insulation system and overage winding temperature rise for rated KVA as follows:
- | Rating   | Class | Rise (degree C) |
|----------|-------|-----------------|
| 1 – 15   | 185   | 115             |
| 16 – 500 | 220   | 115             |
- D. Case temperature shall not exceed 35 degrees C rise above ambient at its warmest point.
- E. Winding Tops, full capacity taps on primary winding.  
Winding Tops, transformers less than 15 KVA: Two 5% below rated voltage, full capacity taps on primary winding.
- F. Winding Tops, Transformers 15 KVA and Larger: ANSI/NEMA ST 20.
- G. Sound Level: ANSI/NEMA ST 20.
- H. Basic Impulse Level: 10 KV for transformers less than 300 KVA, 30 KV for transformers 300 KVA and larger.
- I. Ground core and coil assembly to enclosure by means of a visible flexible copper grounding strip.
- J. Mounting: Transformers 75 KVA and less shall be suitable for wall, floor or trapeze mounting; transformers larger than 75 KVA shall be suitable for floor or trapeze mounting.
- K. Coil Conductors: Continuous winding with termination's brazed or welded.
- L. Enclosure: ANSI/NEMA ST 20; Type 1 for indoor application, Type 3R for outdoor or wet location application. Provide lifting eyes or brackets.
- M. Isolate core and coil from enclosure using vibration-absorbing mounts.
- N. Nameplates: Include transformer connection data and overload capacity based on rated allowable temperature rise.

PART 3 EXECUTION

- 3.1 CONDUIT/RACEWAYS  
A. All conductors shall be enclosed by conduit sized in accordance with Table 3C of the National Electrical Code. Minimum 1/2" except for factory furnished lighting fixture flexible conduit may be 3/8". Follow the following schedule unless otherwise specified in the drawings. Exception: 1. Rigid metal conduit (RMC) and intermediate metal conduit (IMC) shall be utilized for above and below grade applications in accordance with articles 344 AND 342 of the National Electrical Code. All couplings shall be threaded.  
2. Rigid nonmetallic conduit (PVC) Schedule 40 shall be permitted for below grade or concrete cast in place applications above grade. All above transitions to above grade or stud-out of floor slab shall be asphalt coated rigid conduit. Provide equipment grounding conductor for all runs of rigid nonmetallic conduit.  
3. Electrical metallic tubing (EMT) shall be utilized for all dry above grade or above floor applications in accordance with article 358 of the National Electrical Code. Couplings shall be steel compression type made up wrench-tight.  
4. Flexible metal conduit shall be utilized for all connections to vibrating equipment such as motors (minimum of 2'-0" – maximum of 6'-0"), connection to dry-in type light fixtures or in remodel areas specifically noted for "fishing" in existing walls or non-accessible ceilings.  
5. Surface metallic raceways shall be used only in areas specifically noted and of size and type specified on the drawings.
- B. All exposed conduit (including conduit installed in ceiling plenums) shall be routed parallel or perpendicular with the building walls. Support conduit as required by the National Electrical Code.

C. Provide expansion type fittings for all conduits which cross expansion joints.

3.2 GROUNDING

1. Service equipment, conduit systems, supports, cabinets, equipment, transformers, fixtures, the grounded circuit conductor, etc., shall be properly grounded in accordance with the latest issue of the National Electrical Code. Provide all bonding jumpers and wire, grounding busbars, clamps, etc., as required for complete grounding. Grounding electrodes shall be provided. Ground connections shall have clean contact surfaces, tinned and sweated while bolting. Install all ground conductors in conduit. Make readily accessible connections to a continuous, metallic, underground cold water piping system at the point where it enters the building. If this is not practicable, connect to a cold water pipe and provide a meter jumper. Make connections to the water pipe that grounds the conduit enclosing the conductor as well as the conductor. Bond the service equipment to a separate grounding electrode per Code requirements.

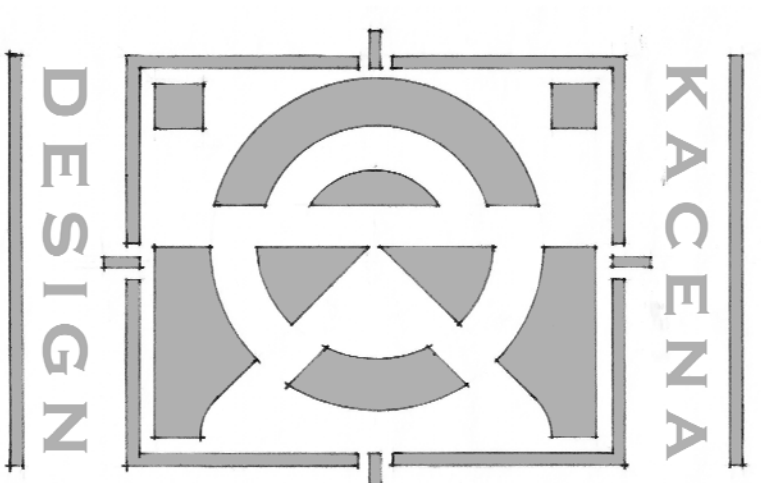
3.3 PANELBOARDS

1. Install panelboards with the top of the trim six-feet, three-inches (6'-3") from the finished floor.  
2. Field check all panelboard loading and reconnect circuits as required to provide balanced phase and line loads.

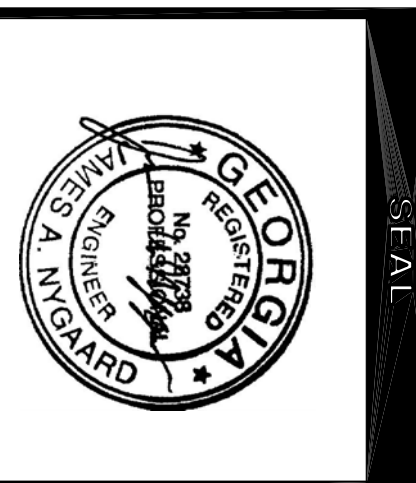
3.4 MECHANICAL EQUIPMENT WIRING AND CONNECTIONS

1. Mechanical equipment motors and controls furnished with mechanical equipment.  
2. Provide feeder circuits to mechanical equipment and make all connections.  
3. Provide safety switches and/or thermal overload switches as required.  
4. Provide all power (line voltage) wiring for mechanical equipment and make all connections except for temperature control equipment, which will be wired by mechanical contractor.  
5. Furnish, set in place, and wire, except as indicated, all heating, ventilating, air conditioning, plumbing, fire protection, motors and controls in accordance with the following schedule. Carefully coordinate with work performed under the Mechanical Division of these specifications.  
a) Header units in all motor starters shall be sized for approximately one hundred fifteen percent (115%) of full load motor current. Check and coordinate all thermal protective devices with the equipment they protect.  
b) Provide for each motor, one-half (1/2) horsepower and below, a horsepower rated disconnect switch and thermal overload protection unless integrally provided with the motor. Thermal overload switches for single phase motors shall be Allen-Bradley Bulletin 600 or acceptable. 275 motor units for approximately one hundred fifteen percent (115%) of full load motor current.  
c) Miscellaneous equipment: Where outlets are indicated for miscellaneous equipment, requiring electric power or control, provide wire, conduit, etc., and make all connections, unless otherwise indicated. Refer to the Mechanical Specifications and Plans covering sprinkler systems, motor interlocks, switching, etc. Provide wiring, conduit, outlets and provide final electrical connections to all equipment.
- 3.6 DRY TYPE TRANSFORMER INSTALLATION  
1. Set transformer pumps and level, on 4 in. high concrete base. Set transformer pad mounted units, on stud assemblies for wall or ceiling mounted units.  
2. Use flexible conduit 2 ft. minimum length, for connections to transformer case. Make conduit connections to side panel of enclosure.  
3. Mount transformers on vibration isolation pads suitable for isolating the transformer noise from the building structure.  
4. Provide seismic restraints.  
5. Install nameplate.
- 3.7 TELEPHONE SYSTEM  
A. Provide conduits and outlets as indicated. Provide #14 AWG pull wire for all empty conduit.
- B. Outlets shall consist of 4" square box with bushed opening in plate. Plates shall match other plates.
- 3.8 SPECIAL SYSTEMS  
1. Provide all special systems as specified on the drawings including equipment and accessories to be installed complete including installation. All special systems shall be installed and connected in accordance with the manufacturer's specifications. Provide instructional demonstration for the owner prior to final acceptance.

END OF SECTION



2944 RIDGEL OAK COURT  
ATLANTA, GA 30328  
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LOCATION

# BROOK RUN DOG PARK RESTROOM FACILITY

4770 NORTH PEACHTREE RD  
DUNWOODY, GA 30338

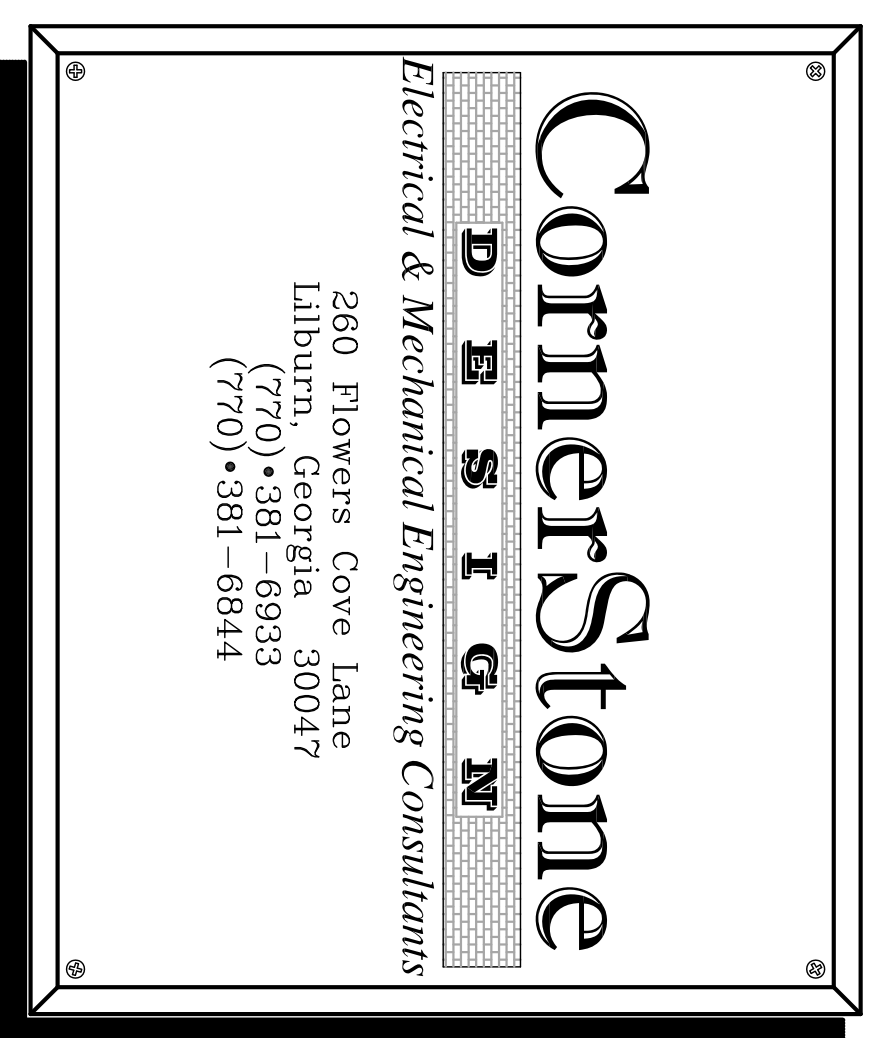
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ELECTRICAL SPECIFICATIONS		
DRAWN:	RLO	
CHECKED:	BGD	
SCALE:	AS NOTED	
DATE PRINTED:	7/4/2013	
REV.	DATE	REMARKS



**GENERAL NOTES:**

1. DRAWINGS ARE DIAGRAMATIC IN NATURE AND MAY NOT SHOW ALL STRUCTURAL MEMBERS, ARCHITECTURAL ELEMENTS, LIGHTING LAYOUTS, OR ALL OFFSETS, FITTINGS, AND OTHER ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND ACCESSORIES REQUIRED FOR THE INSTALLATION OF A COMPLETE WORKING SYSTEM TO THE SATISFACTION OF THE OWNER.
2. MECHANICAL SYSTEM INFORMATION SHOWN OR NOTED AS EXISTING ARE BASED ON LIMITED INFORMATION AND MAY NOT BE COMPLETELY ACCURATE. CONTRACTOR IS REQUIRED TO VERIFY ALL EXISTING INFORMATION PRIOR TO BEGINNING ANY WORK. NOTIFY OWNER AND ARCHITECT IF SIGNIFICANT DISCREPANCIES ARE NOTED IN THE EXISTING SYSTEMS THAT NECESSITATE ADDITIONAL WORK TO COMPLETE THE NEW INSTALLATION.
3. COORDINATE THE MECHANICAL WORK WITH THE WORK OF OTHER TRADES AND EXISTING CONDITIONS.
4. COMPLY WITH ALL LOCAL CODES AND ORDINANCES.
5. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO START OF WORK AND INFORM ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
6. CONNECT NEW DUCTWORK AND PIPING TO PACKAGED HVAC UNITS IN LOCATIONS SHOWN AND IN ACCORDANCE WITH UNIT MANUFACTURER'S INSTALLATION INSTRUCTIONS. LOCATE UNIT DUCTWORK TO INSURE ADEQUATE SERVICE CLEARANCES AND UNIMPAIRED FLOW OF AIR THROUGH THE SYSTEMS IN ACCORDANCE WITH CODE REQUIREMENTS.
7. INSTALL ELECTRONIC SPACE CONTROL THERMOSTATS FURNISHED WITH HVAC UNITS IN LOCATION SHOWN AND CONNECT TO HVAC UNIT CONTROLS. VERIFY THAT THERMOSTAT SELECTION IS COMPATIBLE WITH THE BASE BUILDING CONTROL SYSTEM. THERMOSTAT SELECTION IS COMPATIBLE WITH THE THERMOSTAT SHALL INCLUDE 7-DAY PROGRAMMABLE SETPOINT SCHEDULE. INTEGRAL THERMOSTATS SHALL BE UTILIZED WHERE NOTED AND ADJUSTED TO SETPOINTS AS REQUIRED.
8. INSTALL NEW DUCTWORK AS SHOWN. ALL SHEET METAL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE MECHANICAL TRADE CONSTRUCTION STANDARDS. DUCTWORK SHALL BE FABRICATED IN ACCORDANCE WITH REQUIREMENTS OF THE 1 IN. WG PRESSURE CLASSIFICATION. ALL EXPOSED DUCTWORK SHALL BE ROUND SPIRAL DUCTWORK.
9. ALL OUTSIDE AIR DUCTWORK AND ALL DUCTWORK INSTALLED ABOVE INSULATED CEILING SHALL BE INSULATED WITH 2" NOMINAL FIBERGLASS DUCTWORK INSULATION. UNLESS OTHERWISE NOTED, INSULATION SHALL BE FINISHED WITH A MINIMUM OF 2" THICK FIBERGLASS DUCT INSULATION AND FINISHED WITH A VAPORPROOF MASTIC COATING SUITABLE FOR AN EXPOSED DUCTWORK INSTALLATION, OR ACCEPTABLE EQUIVALENT. INSTALLATION SHALL BE COMPLETE FOR ALL DUCTWORK SYSTEMS UNLESS SPECIFICALLY EXCLUDED. INSULATION INSTALLATION SHALL BE IN VAPOR BARRIER CONDITION. ALL JOINTS, FITTINGS OR PATCHES EXIST IN THE FINISHED PRODUCT.
10. SPACE ABOVE CEILINGS AND INSIDE MECHANICAL ROOMS MAY BE USED FOR RETURN AIR PLenums. ALL MATERIALS INSTALLED IN AIR PLenums SHALL BE NON-FLAMMABLE. ALL MATERIALS SHALL BE LISTED IN UL DIRECTORY AND SHALL BE IN ACCORDANCE WITH ASTM E84.
11. UNLESS NOTED OTHERWISE, ALL NEW FLEXIBLE DUCT CONNECTORS TO SUPPLY AIR DIFFUSERS SHALL BE SIZED IN ACCORDANCE WITH THE FOLLOWING TABLE:  

CEILING RANGE	FLEXIBLE DUCT DIAMETER
0-80	6"
81-165	8"
166-300	10"
301-500	12"
12. AFTER COMPLETION OF NEW MECHANICAL SYSTEMS INSTALLATION, ADJUST ALL AIR FLOW CONTROLS TO THE DESIGN FLOW RATES. ADJUST AND BALANCE ALL AIR OUTLET DEVICES TO CFM VALUES SHOWN WITHOUT CREATING OBJECTIONABLE NOISE OR DRAFTS. PRIOR TO FINAL PROJECT CLOSE-OUT, SUBMIT FOUR COPIES OF FINAL TEST AND BALANCE REPORT TO ARCHITECT AND ENGINEER FOR RECORD.



**MECHANICAL ABBREVIATIONS**

AD	ACCESS DOOR	FLEX	FLEXIBLE	PRV	PRESSURE REDUCING VALVE
ADJ	ADJUSTABLE	FLR	FLOOR	PSIA	POUNDS PER SQ. IN. ABSOLUTE
AF	ABOVE FINISHED FLOOR	FP	FAN POWERED	PSIG	POUNDS PER SQ. IN. GAUGE
AHU	AIR HANDLING UNIT	FSD	FIRE/SMOKE DETECTOR	RA	RETURN AIR
ARCH	ARCHITECT	FT	FEET	RAG	RETURN AIR GRILLE
BTH	BRITISH THERMAL UNIT / HOUR	Gal	GALLONS	RAR	RETURN AIR RESISTER
CC	COOLING COIL	GR	GRILLE	REFG	REFRIGERANT
CC	CONDENSER COIL	HD	HEAD	RH	RELATIVE HUMIDITY
CD	CONDENSATE DRAIN	HP	HORSEPOWER	RL	REFRIGERANT LIQUID
CFM	CUBIC FEET PER MINUTE	HR	HOUR	RLM	REGULATIONS PER MINUTE
CHW	CHILLED WATER	HRS	HOT WATER RETURN	RS	REFRIGERANT SUCTION
CHWP	CHILLED WATER PUMP	HWS	HOT WATER SUPPLY	RU	ROOMTOP UNIT
CHR	CHILLED WATER RETURN	HP	HEAT PUMP INDOOR UNIT	SA	SUPPLY AIR
CHS	CHILLED WATER SUPPLY	IN	INCHES	SF	SUPPLY FAN
CG	CEILING	IRH	INFRARED HEATER	SG	SUPPLY GRILLE
CO	CLEANOUT	KEF	KITCHEN EXHAUST FAN	SP	STATIC PRESSURE (IN. W.G.)
COMP	COMPRESSOR	KSF	KITCHEN SUPPLY FAN	SQ	SQUARE
CONN	CONCRETE	KW	KILOWATT	SR	SUPPLY REGISTER
CONC	CONCRETE	LEV	LEAVING AIR TEMPERATURE	SS	STAINLESS STEEL
CONT	CONTINUATION	LES	LEAKS	STRUCT	STRUCTURAL
CU	CONDENSING UNIT	LF	LINEAR FEET	TRANS	TRANSITION
CWP	CONDENSER WATER PUMP	LWT	LEAVING WATER TEMPERATURE	TSTAT	THERMOSTAT
CR	CONDENSER WATER RETURN	MAX	MAXIMUM	TPP	TYPICAL
CWS	CONDENSER WATER SUPPLY	MWH	1000 BTU/HOUR	UC	UNDERCUT
D	DRAIN	MIN	MINIMUM	UH	UNIT HEATER
DB	DOOR GRILLE	MND	MOUNTED	UNO	UNLESS NOTED OTHERWISE
DB	DOOR GRILLE	N/A	NOT APPLICABLE	VAV	VARIABLE AIR VOLUME
DA	DIAMETER	NC	NOSE CRITERIA	VB	VACUUM BREAKER
DFT	DIFFRUSER	N.C.	NORMALLY CLOSED	VD	VOLUME DAMPER
DN	DOWN	N.O.	NORMALLY OPEN	VEL	VELOCITY
DWGS	DRAWINGS	NO.	NUMBER OR DESIGNATION	W	WATTS
EA	EACH	NOM	NOMINAL	W/	WITH
EAT	ENTERING AIR TEMPERATURE	NSH	NET POSITIVE SUCTION HEAD	WB	WET BULB
EF	EXHAUST FAN	OA	OUTDOOR AIR	WC	WATER COLUMN
EG	EXHAUST GRILLE	OB	OPPOSED BLADE DAMPER	WG	WATER GAUGE
ENG	ENGINEER	OC	ON CENTER	-F-	DEGREES FAHRENHEIT
ER	EXHAUST REGISTER	OHF	HEAT PUMP OUTDOOR UNIT	%	PERCENT
ESP	EXTERNAL STATIC PRESSURE	OPNG	OPENING		
EMT	ENTERING WATER TEMPERATURE	PH, Ø	ELECTRICAL PHASE		
FU	FAN COIL UNIT	PIU	POWERED INDUCTION UNIT		
FD	FIRE DAMPER				
FUR	FURNACE				

**MECHANICAL LEGEND**

NOTE: ALL SYMBOLS SHOWN ON LEGEND ARE NOT NECESSARILY USED

**MECHANICAL LEGEND**

NOTE: ALL SYMBOLS SHOWN ON LEGEND ARE NOT NECESSARILY USED

**PIPING**

- CWS - COOLING WATER SUPPLY
- CHW - COOLING WATER RETURN
- D - DRAIN PIPE
- CA - COMPRESSED AIR PIPE

**VALVES & SPECIALTIES**

- FLOW INDICATOR
- SHUT-OFF VALVE
- GLOBE VALVE
- CHECK VALVE
- FLOW CONTROL VALVE W/ CHECK
- PLUG OR BALANCING SHUT-OFF VALVE
- DRAIN VALVE W/ HOSE END
- STRAINER W/ BLOW-OFF VALVE
- TEMPERATURE CONTROL VALVE, 3-WAY
- AIR VENT
- PRESSURE - TEMP. TAP
- PRESSURE GAUGE W/ PIG TAIL & COCK
- THERMOMETER
- PIPE UNION

**MISCELLANEOUS**

- POINT OF DUCT CONNECTION NEW TO EXISTING
- POINT OF PIPE CONNECTION NEW TO EXISTING

**PLUMBING**

- DOMESTIC COLD WATER
- DOMESTIC HOT WATER
- PLUMBING VENT PIPE
- SANITARY WASTE PIPE
- SANITARY WASTE PIPE
- BUILDING SANITARY SEWER PIPE
- ST - STORM DRAIN/ BUILDING STORM SEWER PIPE
- OST - OVERFLOW STORM DRAIN PIPE
- VAC - VACUUM PIPE
- CA - COMPRESSED AIR PIPE
- I - HORIZONTAL CLEANOUT
- ⊥ - VERTICAL CLEANOUT

**MISC.**

- 8" - ROUND DUCT (Ø DIAMETER)
- 24/12 - RECTANGULAR DUCT (24" WIDE BY 12" DEEP)
- EXISTING DUCTWORK
- EXISTING EQUIPMENT
- SECTION THROUGH EXHAUST DUCTWORK
- SECTION THROUGH SUPPLY DUCTWORK
- DUCT ELBOW (WITH TURNING VANES)
- DUCT TE (WITH DIVIDER AND TURNING VANES)
- ROUND ELECTRONIC CONTROL DAMPER
- AIRFLOW - SUPPLY
- AIRFLOW - RETURN, EXHAUST OR TRANSFER
- FLEXIBLE CONNECTION
- MOTOR OPERATED DAMPER
- FIRE SUPPRESSION DAMPER
- FIRE DAMPER AND ACCESS DOOR
- MANUAL VOLUME DAMPER
- SPLITTER DAMPER
- THERMOSTAT
- DIFFRUSER AND GRILLE DESIGNATION (DIFFRUSER A, 200 CFM)

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 Expires 12/31/2015

**LOCATION**

**BROOK RUN DOG PARK RESTROOM FACILITY**

4770 NORTH PEACHTREE RD  
 DUNWOODY, GA 30338

**SHEET TITLE**  
 MECHANICAL LEGEND AND GENERAL NOTES

**DATE PRINTED**  
 7/4/2013

**DRAWN:** RLO  
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OF 2 SHEETS



### FAN SCHEDULE

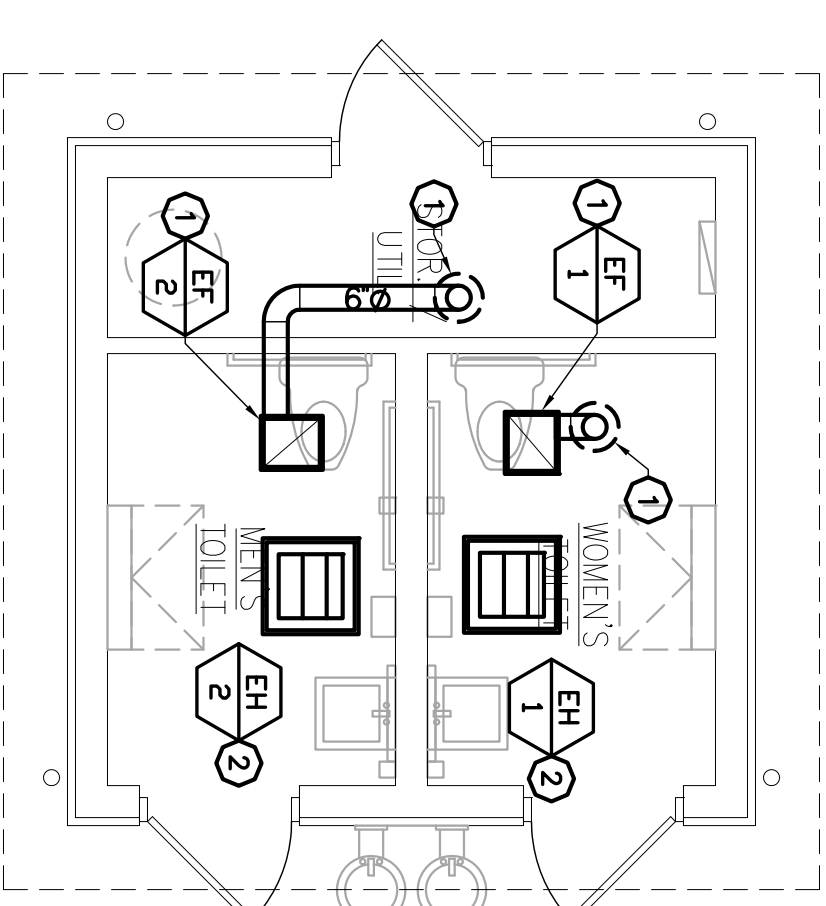
ITEM	TYPE	SERVICE	CFM	ESP IN WC	DRIVE TYPE	SONES	RPM	HP	VOLT/Ø	MANUFACTURER AND MODEL NUMBER	NOTES
EF-1	CEILING EXHAUST	WOMEN'S TOILET ROOM	90	0.25	DIRECT	3.0	1100	98W	115/1	COOK GEMINI GC-144	1, 2, 3
EF-2	CEILING EXHAUST	MEN'S TOILET ROOM	90	0.25	DIRECT	3.0	1100	98W	115/1	COOK GEMINI GC-144	1, 2, 3

**NOTES:**  
 1. PROVIDE UNIT WITH BACKDRAFT DAMPER AND HANGING ISOLATOR KIT  
 2. PROVIDE UNIT WITH ROOF CAP OR OTHER APPROVED DISCHARGE HOOD  
 3. CONTROL FAN FROM WALL SWITCH

### ELECTRIC HEATER SCHEDULE

ITEM	TYPE	KW	CFM	VOLT/Ø	MANUFACTURER AND MODEL NUMBER	NOTES
EH-1	CEILING-MOUNTED HIR	3	425	240/1	MARKEL H3483-TA1S	1
EH-2	CEILING-MOUNTED HIR	3	425	240/1	MARKEL H3483-TA1S	1

**NOTES:**  
 1. PROVIDE UNIT WITH THERMOSTAT, TRANSFORMER AND DISCONNECT SWITCH



**MECHANICAL FLOOR PLAN**  
 SCALE: 1/4" = 1'-0"

**KEY NOTES**

- ① INSTALL CEILING-MOUNTED, RECESSED EXHAUST FAN IN RESTROOM WITH 6" DISCHARGE UP THROUGH ATTIC SPACE TO ROOF DISCHARGE CAP - COORDINATE ROOF CAP INSTALLATION WITH BUILDING CONSTRUCTION DETAILS AND PROVIDE ROOF FLASHING AND SEALANT AS REQUIRED FOR A WEATHERPROOF INSTALLATION.
- ② INSTALL NEW ELECTRIC CEILING HEATER RECESSED INTO ATTIC AND FLUSH WITH CEILING. COORDINATE WITH BUILDING CONSTRUCTION DETAILS AND CEILING INSTALLATION OR AS OTHERWISE DIRECTED BY ARCHITECT.

**SHEET TITLE**

**MECHANICAL FLOOR PLAN AND SCHEDULES**

**DRAWN:** RLO  
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**SCALE:** AS NOTED

**DATE PRINTED:** 7/4/2013

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OF 2 SHEETS

**BROOK RUN DOG PARK RESTROOM FACILITY**

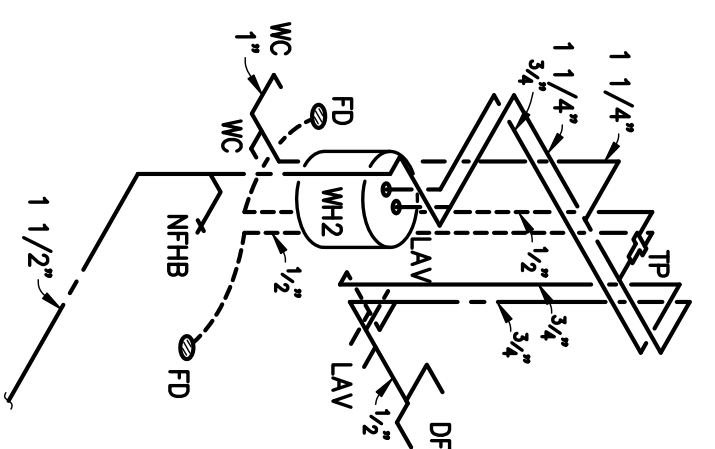
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 DUNWOODY, GA 30338

**LOCATION**

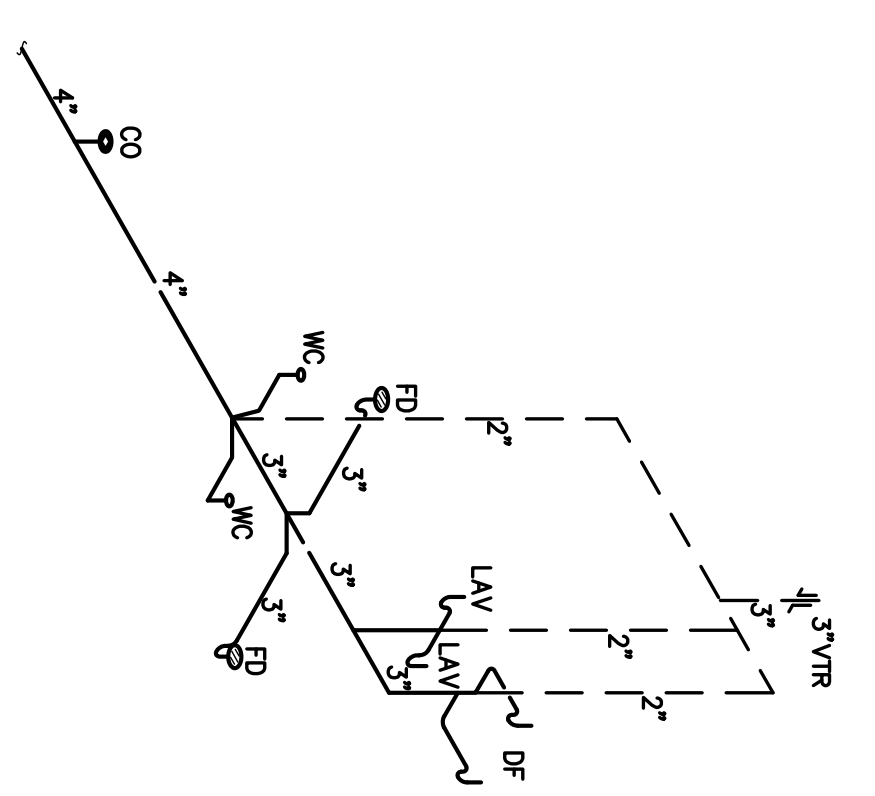
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1 PLUMBING SUPPLY RISER DIAGRAM  
PO.1 SCALE: NO SCALE



2 WASTE AND VENT RISER DIAGRAM  
PO.1 SCALE: NO SCALE

GENERAL NOTES:

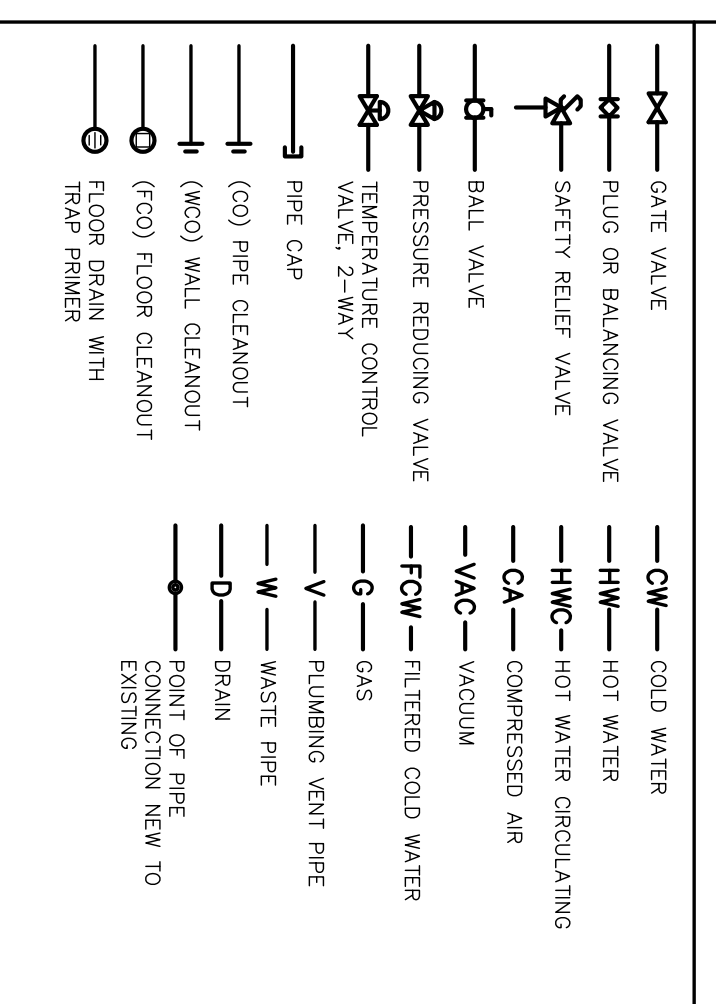
1. PLUMBING CONTRACTOR SHALL FIELD COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL POWER REQUIREMENTS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO SUBMITTING THEIR BID. NO ADDITIONAL COMPENSATION WILL BE MADE FOR ANY EXTRAS DUE TO CONTRACTOR'S FAILURE TO VISIT THE JOB SITE AND/OR PREDETERMINE. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER FOR RESOLUTION.
3. CONTRACTOR TO VERIFY LOCATIONS OF ALL UTILITIES ON SITE.
4. CONTRACTOR IS TO PROVIDE COMPLETE CONNECTIONS TO OWNER FINISHED EQUIPMENT.
5. CONTRACTOR TO COORDINATE THE LOCATION OF ALL CEILING DEVICES WITH REFLECTED CEILING PLAN AND STRUCTURE PRIOR TO BEGINNING WORK.
6. PLUMBING DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS. TAKE ALL DIMENSIONS FROM ARCHITECTURAL DRAWINGS, CERTIFIED EQUIPMENT DRAWINGS AND VERIFY THE SPACE REQUIREMENTS COORDINATING WITH OTHER TRADES, AND INSTALL THE SYSTEMS IN THE SPACE PROVIDED WITHOUT EXTRA CHARGES TO THE OWNER.
7. THE OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM HIS WORK.
8. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE STATE CODES, LOCAL CODES AND OWNER'S STANDARDS INDICATED BY THE CONSTRUCTION DOCUMENTS.

FIXTURE UNIT SCHEDULE

FIXTURE TYPE	MINIMUM CONNECTION SIZE			REMARKS	NOTES
	CW	HW	W		
WATER CLOSET (ADA)	1"	-	4"	18" SEAT HEIGHT	1
LAVATORY (ADA)	1/2"	1/2"	1-1/4"	-	1, 2, 3
DRINKING FOUNTAIN	1/2"	-	1-1/4"	-	1, 2, 3

- NOTES:
1. ALL MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH A.D.A. REQUIREMENTS.
  2. SEE ARCHITECTURAL DRAWINGS FOR HEIGHT OF COUNTERTOP.
  3. MAXIMUM HOT WATER SUPPLY TEMP.=110°F.

PLUMBING LEGEND



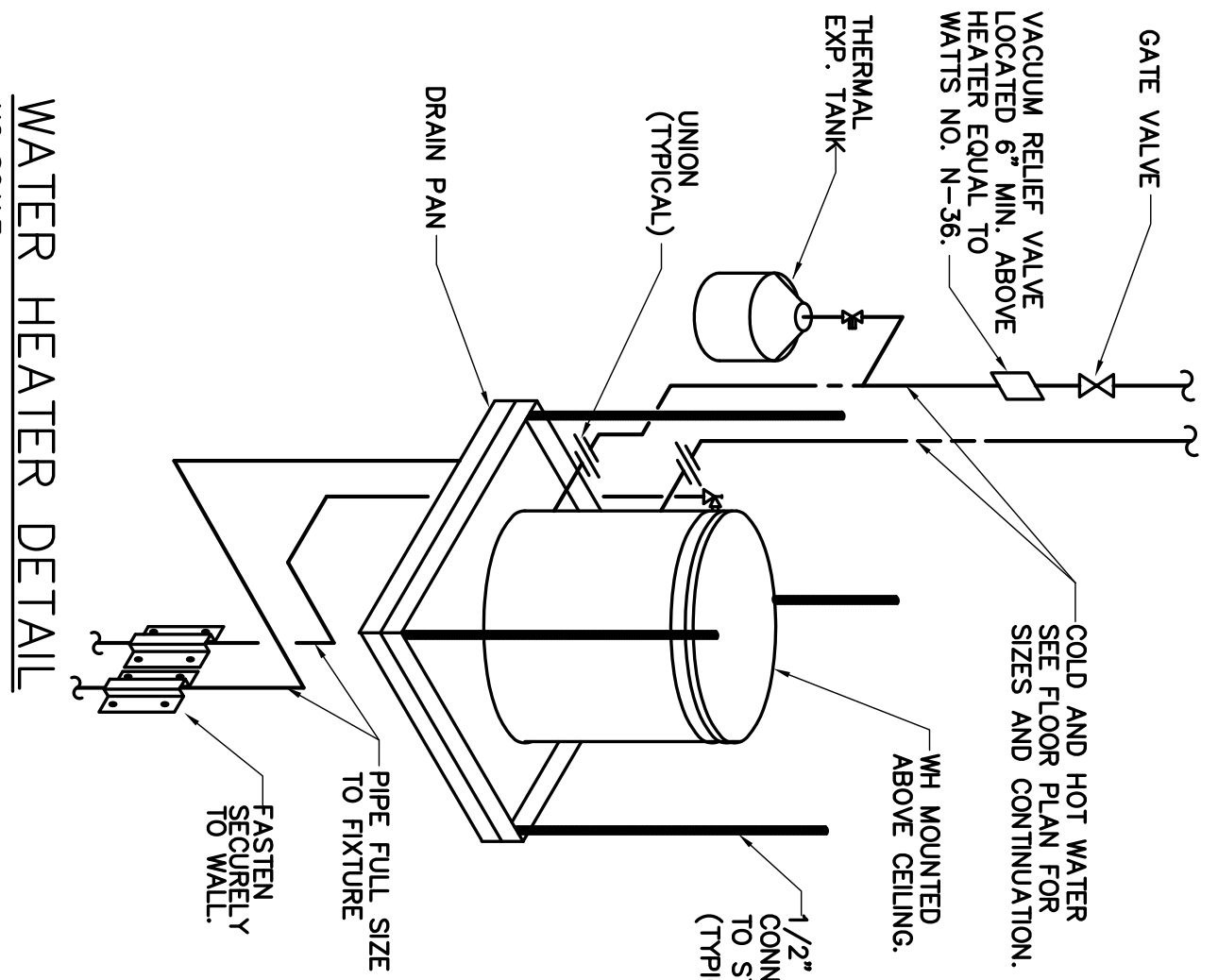
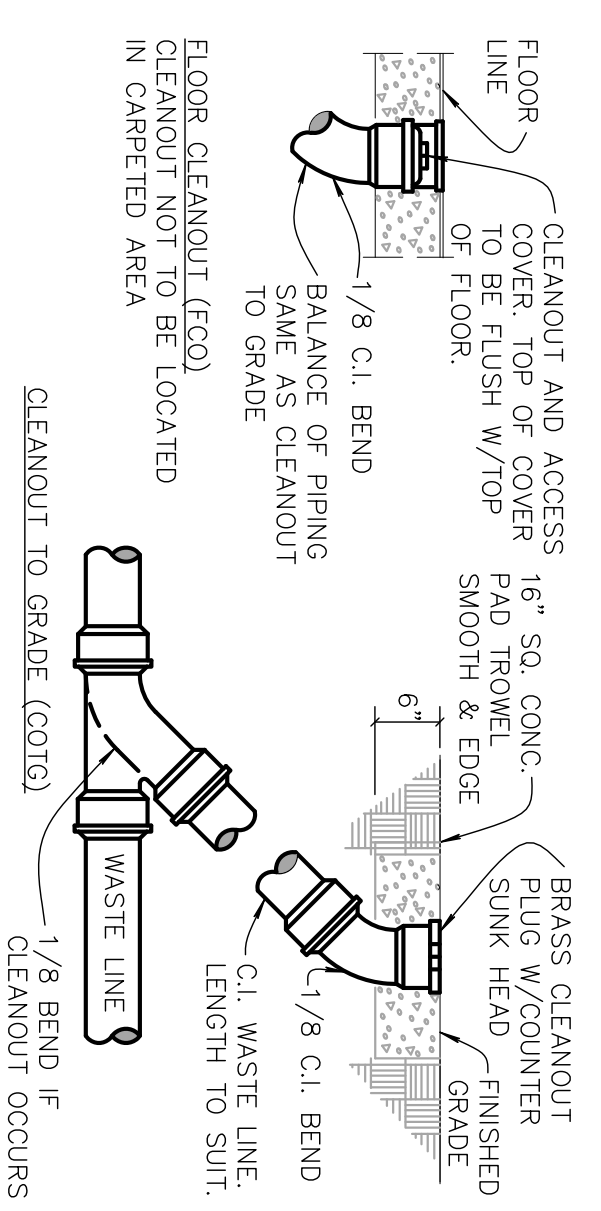
ABBREVIATIONS

A/C	COND.	CONC.
ABOVE CEILING	COND.	CONCRETE
ABOVE FINISH FLOOR	CW	COLD WATER
AREA DRAIN	DF	DRAIN PIPE
BELOW FLOOR	NG	NATURAL GAS
BELOW GRADE	SN	SANITARY DRAINAGE PIPE
BELOW SLAB	CV	GATE VALVE
BY	VS	VENT STACK

PLUMBING SPECIFICATIONS:

- 1.01 WATER PIPING
1. NON-BURIED LINES TYPE "L" COPPER WATER TUBE, WROUGHT COPPER FITTINGS AND 90-4 (TM/SILVER) OR CANNFIELD 100% WATERSAFE (SILVER-TIN COPPER) SOLDER.
  2. VALVES AND SPECIALTIES  
GATE VALVES: BRONZE CLASS 125, 200 LB. W.O.G.  
BALL VALVES: BRONZE FULL PORT, 400 LB. W.O.G.  
GLOBE VALVES: BRONZE CLASS 125, 200 LB. W.O.G.  
SWING CHECK VALVES: BRONZE CLASS 125, 200 LB. W.O.G.  
CORNUST INSULATED A DIELECTRIC UNION AT ALL POINTS OF INSULATION.  
NON-FERROUS MATERIAL IS CONNECTED TO NON-FERROUS MATERIAL.  
250 LB. SEMI-STEEL OR CAST IRON "Y" TRPE W/STAINLESS STEEL SCREEN.  
PRESSURE TEMP. TAPS: UNIVERSAL CONTROL CORPORATION #45-PT-1-N-SSCO BNO-500 1/2 NPT, NORBEL CORE.
- 1.02 WASTE AND VENT PIPING (INSIDE BUILDING)
1. WASTE LINES ABOVE GROUND, STD. WT. C.I. SOIL PIPE AND FITTINGS OR HUBLESS, C.I. SOIL PIPE AND FITTINGS. UP THRU 2-1/2" MAY BE STD. WT.G. GALV. STEEL PIPE W/BLACK, C.I. DRAINAGE FITTINGS.
  2. VENT LINES ABOVE GROUND, STD. WT. C.I. SOIL PIPE AND FITTINGS. HUBLESS C.I. SOIL PIPE AND FITTINGS UP THRU 150" SHALL BE STD. WT. GALV. STEEL PIPE AND FITTINGS. IRON FITTINGS FOR LINES 1-1/2" AND OVER, FOR LINES 1-1/4" AND LESS, BLACK, C.I. 125 LB. SWP FITTINGS.
  3. ALL WASTE AND VENT PIPING ABOVE GRADE MAY BE DWV COPPER PIPE AND FITTINGS USING SOLDER SPECIFIED ABOVE FOR WATER PIPING.
  4. WASTE AND VENT PIPING MAY BE PVC DWV PIPE WITH SOLVENT WELD DWV FITTINGS IF ACCEPTABLE TO THE PLUMBING INSPECTION AUTHORITY. PROVIDE WRITTEN CONFIRMATION OF LOCAL AUTHORITY ACCEPTANCE PRIOR TO INSTALLING NEW WORK. PVC PIPING INSTALLATION SHALL BE PERFORMED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S REQUIREMENTS FOR COUPLING PREPARATION AND INSTALLATION CONDITIONS.
- 1.03 FIXTURES AND EQUIPMENT
1. INSTALL FIXTURES AND/OR ROUGH-IN ACCORDING TO THE SPECIFICATIONS.
  2. SECURE FIXTURES TO WALLS AND FLOOR OR COUNTERTOPS IN ACCORDANCE WITH MANUFACTURER'S ROUGH-IN AND SETTING REQUIREMENTS AND FORM A RIGID INSTALLATION.
  3. ALL PIPE AT THE FIXTURES WHICH MAY BE EXPOSED TO VIEW SHALL BE BRASS CHROME FINISH, FINISHED WITH CHROME ESCUTCHEONS WHERE THEY PROJECT FROM WALLS AND FLOORS.
  4. STOP VALVES SHALL BE FURNISHED AND INSTALLED AT ALL FIXTURES, FOR ALL EQUIPMENT AND AT ROUGH-IN LOCATIONS.
- 1.04 SPECIALTY SCHEDULE
- A. DIELECTRIC UNIONS OR COUPLINGS AND FLANGES UNION RATED FOR 250 PSI WITH GALVANIZED OR PLATED STEEL, THREADED AND, COPPER SOLDER END AND IMPERVIOUS ISOLATION GASKET APPROVED FOR USE ON GAS LINES. COUPLINGS APPROVED FOR USE ON GAS LINES AND ABLE TO WITHSTAND HYDROSTATIC TEST PRESSURES OF 1000 PSI AT 250°F WITH AN INERT, NONCONDUCTIVE LAMINATE MATERIAL AND THREADED TO NPS STANDARDS. FLANGES TO BE COMPLETE WITH INSULATED BOLT SHEAVES, WASHERS AND GASKETS.

CLEANOUT DETAILS



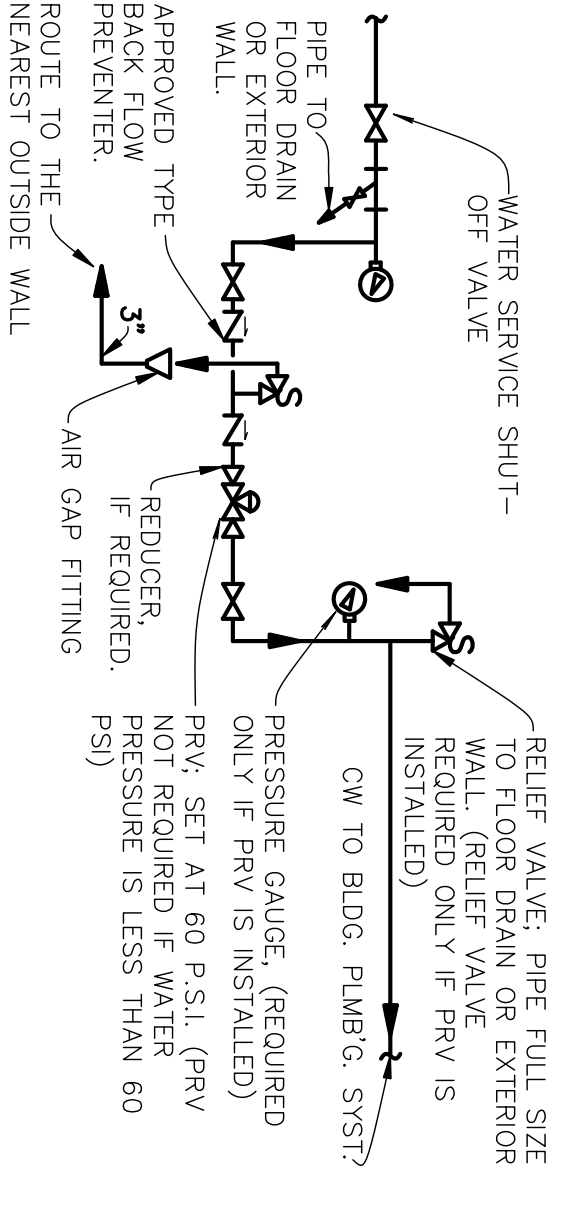
WATER HEATER DETAIL  
NO SCALE

WATER HEATER SCHEDULE

TAG	MAKE	MODEL	TYPE	CAPACITY (GALLONS)	MIN. RECOVERY (GPH@100°F)	ELECTRIC VOLT. PH.	POWER KW	DIA.	HEIGHT	NOTES
WH1	A.O. SMITH	DEL-10	ELECTRIC	10	12	240	1	3	18"	1, 2, 3

- NOTES:
1. A.O. SMITH OR APPROVED EQUAL.
  2. ELECTRICAL CHARACTERISTICS TO BE COORDINATED WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING.
  3. HOT WATER THERMOSTAT SETPOINT @ 105°F.

WATER SERVICE ENTRANCE DETAIL



WATER SERVICE ENTRANCE DETAIL  
NO SCALE

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PLUMBING DETAILS AND SCHEDULES

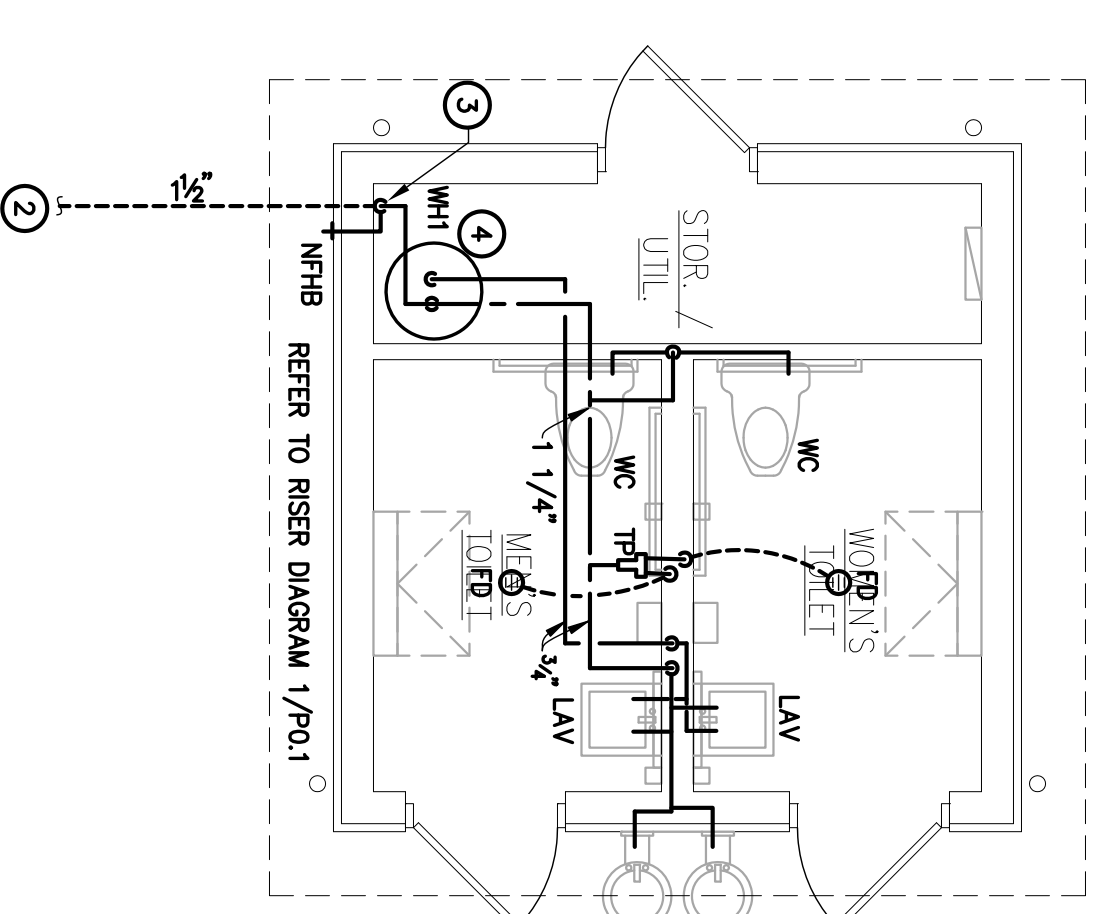
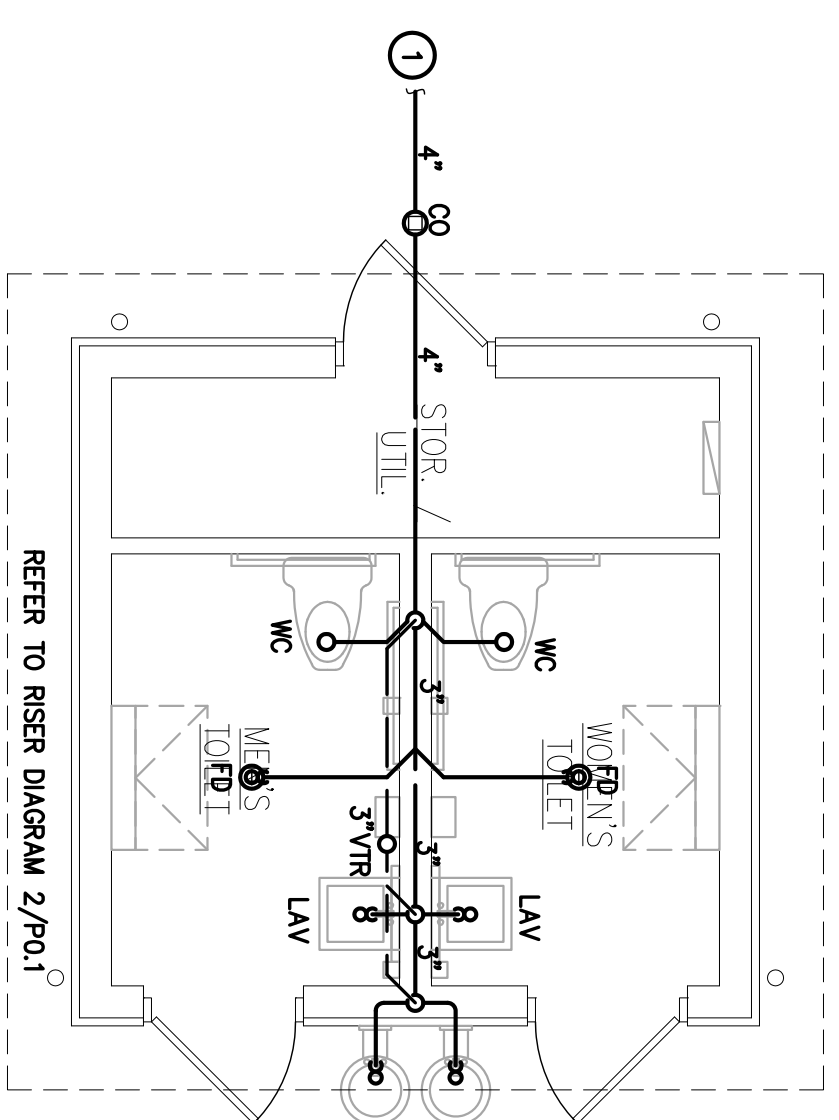
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**KEY NOTES:**

- ① COORDINATE FINAL SANITARY DRAIN LINE INVERT ELEVATIONS WITH CIVIL SITE PLANS.
- ② COORDINATE WATER SERVICE LINE WITH CIVIL SITE PLANS.
- ③ CONTRACTOR TO PROVIDE SHUT-OFF VALVE, PRESSURE REDUCING VALVE AND RPZ BACKFLOW PREVENTER AS REQUIRED.
- ④ WATER HEATER LOCATED IN UTILITY ROOM, CONTRACTOR TO VERIFY PLUMBING REQUIREMENTS.

**GENERAL NOTES:**

- 1. PROVIDE SHUT-OFF VALVES ABOVE ACCESSIBLE CEILING SPACE ON ALL BRANCH LINES AND PRIOR TO DROPS BELOW FLOOR, TYPICAL.
- 2. REFER TO OTHER DRAWINGS FOR DETAILED EQUIPMENT CONNECTIONS, FIXTURE SCHEDULE, ETC.
- 3. ALL FIXTURES SHOWN SHALL BE FURNISHED UNDER THIS CONTRACT, UNLESS SPECIFICALLY NOTED OTHERWISE.
- 4. PROVIDE TRAP PRIMERS ON FLOOR DRAINS AS REQUIRED BY CODE.
- 5. COORDINATE LOCATIONS OF FIXTURES, FLOOR DRAINS, AND CLEANOUTS WITH ARCHITECTURAL FLOOR PLAN.

SHEET TITLE  
**PLUMBING  
FLOOR  
PLANS**

DRAWN: RLO  
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