ADDITION / ALTERATION
CIRCLE K

STORE # 2709831

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

A PROJECT FOR:
CIRCLE K

ABBREVIATIONS

& = AND
L = ANGLE
@ = AT
℄ = CENTERLINE
ø = DIAMETER OF ROUND
= POUND OR NUMBER
(E) = EXISTING
(R) = RELOCATED
(N) = NEW

A.B. = ANCHOR BOLT
A.F.F. = ABOVE FINISH FLOOR
AGGR. = AGGREGATE
AL. = ALUMINUM
APPROX. = APPROXIMATE
ARCH. = ARCHITECTURAL
ASPH. = ASPHALT

BD. = BOARD
BITUM. = BITUMINOUS
BLDG. = BUILDING
BLKG. = BLOCKING
BM. = BEAM
BOT. = BOTTOM
BW = BACK OF WALK

CAB. = CABINET
CEM. = CEMENT
CER. = CERAMIC
C.I. = CAST IRON
C.J. = CONTROL JOINT
CLG. = CEILING
CLR./CL. = CLEAR
COL. = COLUMN
CONC. = CONCRETE
CONSTR. = CONSTRUCTION
CONT. = CONTINUOUS
CTSK. = COUNTERSUNK
CNTR. = COUNTER
CTR. = CENTER

DEPT. = DEPARTMENT
DET. = DETAIL
DIA. = DIAMETER
DIM. = DIMENSION
DISP. = DISPENSER
DN. = DOWN
DR. = DOOR
D.S. = DOWNSPOUT
DWG. = DRAWING

E = EAST
EA. = EACH
EL. = ELEVATION
ELEC. = ELECTRICAL
EQ. = EQUAL
EXP. = EXPANSION
EXT. = EXTERIOR

F.F = FLOOR FINISH
FDN. = FOUNDATION
FG = FINISH GRADE
FIN. = FINISH
FL. = FLOOR
FLASH'G = FLASHING
FLUOR. = FLUORESCENT
F.O.C. = FACE OF CONCRETE
F.O.F. = FACE OF FINISH
F.O.P. = FACE OF PANEL
F.R.P. = FIBERGLASS REINFORCED PANEL
F.S. = FLOOR SINK
FT. = FOOT OR FEET
FTG. = FOOTING
FURR. = FURRING
FUT. = FUTURE

G.A. = GAUGE
GALV. = GALVANIZED
GL. = GLASS
GR. = GRADE
GB = GRADE BREAK
GSM = GALVANIZED SHEET METAL
GYP. = GYPSUM
GYP.BD. = GYPSUM BOARD

H.B. = HOSE BIBB
HDWE. = HARDWARE
H.M. = HOLLOW METAL
HORIZ. = HORIZONTAL
HR. = HOUR
HGT. = HEIGHT

IE = INVERT ELEVATION
I.D. = INSIDE DIAMETER
INSUL. = INSULATION
INT. = INTERIOR

JT. = JOINT

LAM. = LAMINATE
LAV. = LAVATORY
LIP = EDGE OF SWALE OR GUTTER

MAX. = MAXIMUM
MECH. = MECHANICAL
MEMB. = MEMBRANE
MFR. = MANUFACTURER
MIN. = MINIMUM
MISC. = MISCELLANEOUS
M.O. = MASONRY OPENING
MTD. = MOUNTED
MUL. = MULLION

N. = NORTH
N.I.C. = NOT IN CONTRACT
NO. OR # = NUMBER
NOM. = NOMINAL
N.T.S. = NOT TO SCALE

O.C. = ON CENTER
O.D. = OUTSIDE DIAMETER
OPNG. = OPENING
OPP. = OPPOSITE

PB = LEVEL PAVEMENT AT DISPENSER
PIT BOX
PL. = PLATE
P.LAM. = PLASTIC LAMINATE
PLYWD. = PLYWOOD
P.O.C. = POINT OF CURVATURE
P.O.S. = POINT OF SALE

R OR RAD. = RADIUS
R.D. = ROOF DRAIN
REF. = REFERENCE
REINF. = REINFORCED
REQ'D = REQUIRED
RM. = ROOM
R.O. = ROUGH OPENING
R.O.W. = RIGHT OF WAY

SCHED. = SCHEDULE
SECT. = SECTION
SHT. = SHEET
SIM. = SIMILAR
SPEC. = SPECIFICATION
SQ. = SQUARE
S.ST. = STAINLESS STEEL
STD. = STANDARD
STL. = STEEL
STOR. = STORAGE
STRL. = STRUCTURAL
SYM. = SYMMETRICAL

T.C. = TOP OF CURB
TG = TOP OF GRATE
T.& G. = TONGUE & GROOVE
THK. = THICK
TI = TOP OF ISLAND
T.O. = TOP OF
TOW = TOP OF WALL
TP = TOP OF PAVEMENT
TS = TOP OF SLAB
TW = TOP OF WALK
TYP. = TYPICAL

UNF. = UNFINISHED
U.O.N. = UNLESS OTHERWISE NOTED

VERT = VERTICAL
V.I.F. = VERIFY IN FIELD

W. = WEST
W/ = WITH
W.C. = WATER CLOSET
WD. = WOOD
W/O = WITHOUT
WP. = WATERPROOF
WSCT. = WAINSCOT
WT. = WEIGHT

SYMBOL LEGEND

ROOM NUMBER IDENTIFICATION — ROOM NAME / XXX
DOOR NUMBER IDENTIFICATION — 000
WINDOW NUMBER IDENTIFICATION — XX / XX
DETAIL MARK — # / Sheet
INTERIOR PARTITION TYPE — X
REVISION MARK — #
WALL SECTION — # / Sheet
ELEVATION INDICATOR
CEILING HEIGHT — X' X"
KEYED NOTE — X

PROJECT DATA

PROJECT ADDRESS: NWC I-75 & W. US HWY 90, LAKE CITY, FL 32055

PROJECT NAME: CIRCLE K CONVENIENCE STORE & FUEL PUMPS

PROJECT DESCRIPTION: PROPOSAL FOR ADDITION TO EXISTING STORE WITH ASSOCIATED FUEL SALES CONSISTING OF A 969 S.F. CONVENIENCE STORE AND A 4,608 S.F. DIESEL CANOPY WITH 7 FUEL PUMPS.

PARCEL NUMBER: 35-3S-16-02524-001, 35-3S-16-02524-102 & 35-3S-16-02524-111

PARCEL/SITE AREA: 3.46 AC. (150,717 S.F.)

EXISTING ZONING: AG & RR-1 (TO BE REZONED AS C-2)
GENERAL PLAN LAND USE DESIGNATION: LOW INTENSITY COMMERCIAL

MAX. BUILD. HEIGHT: 23'-10" PROVIDED (40' ALLOWED)

MAX. CANOPY HEIGHT: 20'-6" PROVIDED (55' ALLOWED)

GROSS C-STORE AREA (EXISTING = 5327 S.F. / ADDITION = 1,000 S.F.:	6,327 S.F.
GROSS FUEL CANOPY:	4,608 S.F.
TOTAL GROSS BUILDING AREA (C-STORE + FUEL CANOPY)	10,935 S.F.

GROSS LOT COVERAGE

C-STORE BLDG. AREA/SITE AREA=	6,327 S.F. / ±150,717 S.F. = 4.20 %	
ALLOWABLE AREA (BUILDING)		9,000 S.F. (COMPLIES)
ALLOWABLE AREA (FUEL CANOPY)		12,500 S.F. (COMPLIES)
CONSTRUCTION TYPE (BUILDING):	V-B	NON-SPRINKLERED
CONSTRUCTION TYPE (FUEL CANOPY):	II-B	NON-SPRINKLERED
OCCUPANCY:	M (MERCANTILE)	BUILDING + CANOPY
PARKING REQUIRED:	6,327 SF/350 = 19 PARKING STALLS (INCLUDING 2 REQ'D ACCESSIBLE STALLS)	
PARKING PROVIDED:	25 STALLS (INCLUDING 2 REQ'D ACCESSIBLE STALLS)	
BICYCLE PROVIDED:	1 BICYCLE RACKS PROVIDED	

CONVENIENCE STORE BUILDING AREA:

1. ACCESSORY STORAGE AREA, MECHANICAL EQUIPMENT ROOM:		
A. AREA OF BACKROOM & MANAGER (EXISTING TO REMAIN):	=	514 S.F.
B. AREA OF EQUIPMENT ROOM (EXISTING TO REMAIN):	=	161 S.F.
C. AREA OF WALK-IN COOLER, FREEZER, & COLD VAULT (EXISTING TO REMAIN):	=	848 S.F.
D. CASHIER & PREP AREA (EXISTING TO REMAIN):	=	557 S.F.
	=	2,080 S.F.
2. SALES AREA (EXISTING TO REMAIN):	=	2,379 S.F.
3. AUXILIARY AREAS (HALLWAY, RESTROOMS):		
A. EXISTING TO REMAIN:	=	462 S.F.
B. NEW ADDITION:	=	969 S.F.
TOTAL BUILDING AREA	=	5,890 S.F.

EXITING:

1. ACCESSORY STORAGE AREA, MECHANICAL EQUIPMENT ROOM:	2,080 S.F./300	=	7 OCC.
2. SALES AREA:	2,379 S.F./30	=	80 OCC.
3. AUXILIARY AREAS (HALLWAY, RESTROOMS)	1,431 S.F./60	=	24 OCC.
TOTAL OCCUPANT LOAD		=	111 OCCUPANTS
EXITS REQUIRED:			2
EXITS PROVIDED:			2
EGRESS WIDTH REQUIRED:			111 x 0.2 = 22.2"
EGRESS WIDTH PROVIDED:			34"x3 = 102"

CODES USED:
2020 FBC / 2018 IBC W/ AMENDMENTS
2020 FBCM/ 2018 IMC W/ AMENDMENTS
2020 FBCP / 2018 IPC W/ AMENDMENTS
2017 NEC
2020 FBC FG/ 2018 IFGC W/ AMENDMENTS
2020 FFPC/ 2018 IFC W/ AMENDMENTS / NFPA 101 LSC 2018 /NFPA 1 FC 2018
2020 FLORIDA ACCESSIBILITY CODE
2020 FBC EC/ 2018 IECC

PLUMBING FIXTURE COUNT: BASED ON FBC (TABLE 403.1+ IBC & TABLE A (50% MALE & 50% FEMALE)
111 OCCUPANTS = 56M & 55F

	WATERCLOSETS 1/500 = M & F		LAVATORIES 1/750 = M & F		URINAL	SERVICE SINK
	MALE	FEMALE	MALE	FEMALE	MALE	
REQUIRED	1	1	1	1	0	1
PROVIDED	3	4	3	4	4	1

VICINITY MAP



PROJECT TEAM

OWNER
CIRCLE K
2SW CEDAR ST. SUITE M
PENSACOLA, FL 32502
ATTN: CHRIS ROICK
E-MAIL: CROICK@CIRCLEK.COM
TEL: (904) 923-0024

ARCHITECT
RDC
11921 FREEDOM DRIVE #1110
RESTON, VA 20190
AOR: RALPH WATSON
ATTN: RASHMI MEHADIA
E-MAIL: rashmi.mehadia@rdcollaborative.com
TEL: (216) 233-6093

CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC
189 S. ORANGE AVE, SUITE 100
TALLAHASSEE, FL 32308
ATTN: JAROD C. STUBBS, P.E.
E-MAIL: jarod.stubbs@kimley-horn.com
TEL: (850) 999-4241

STRUCTURAL ENGINEER
JOHNSTON BURKHOLDER ASSOCIATES
930 CENTRAL STREET
KANSAS CITY, MO 64105
ATTN: JOSEPH N. FLANAGAN
E-MAIL: flanagan@jbaengr.com
TEL: (816) 214-4550

MECHANICAL/PLUMBING ENGINEER
BENCHMARK GROUP
1805 N. 2ND ST. SUITE 5274
ROGERS, AR 72756
ATTN: JASON M. SCATES P.E.
E-MAIL: jms@teamofchoice.com
TEL: (479) 636-5004

ELECTRICAL ENGINEER
BENCHMARK GROUP
1805 N. 2ND ST.
ROGERS, AR 72756
ATTN: RANDALL C. HAASE P.E.
E-MAIL: rch@teamofchoice.com
TEL: (479) 631-5566

FUEL CANOPY STRUCTURAL ENGINEER
McGEE CORPORATION
12701 EAST INDEPENDENCE BLVD
P.O. BOX 1375
MATTHEWS, NC 28106-1375
E-MAIL: tom.haggood@mcgeecorp.com
TEL: (704) 882-1500
ATTN: TOM HAGOOD

FUEL GAS ENGINEER
MDM SERVICES, INC.
1055 KATHLEEN ROAD
LAKELAND, FL 33805
ATTN: DAMIAN D. LESLIE, P.E.
TEL: (863) 646-9130

BUILDING ENVELOPE REQUIREMENTS

GENERAL (PRESCRIPTIVE) – C402.1.3 AND C402.4
CLIMATE ZONE 2A
ROOF INSULATION – R25ci; PROVIDED R25ci
EXTERIOR MASS WALL INSULATION – R5.7ci ; PROVIDED R5.7ci.
METAL FRAMED WALLS – R13 + R5ci
UNHEATED SLABS – NOT REQUIRED
U-FACTOR– STOREFRONT – U 0.5 PROVIDED U 0.27
ENTRANCE DOOR – U 0.83 PROVIDED U 0.27

FLORIDA PRODUCT APPROVALS/ NOA

CATEGORY	DESCRIPTION	MFR	MODEL #	FL #/ NOA #
STOREFRONT	ALUM. STOREFRONT L.M.I.	KAWNEER	TRIFAB 1T	FL14287.1
DOOR	SERVICE DOOR	CURRIES, DIV. OF AADG, INC.	747 SINGLE FLUSH DOOR	FL8394.7
ROOF	ROOFING SYSTEM	FIRESTONE	FIRESTONE ULTRAPLY TPO SINGLE PLY ROOF SYSTEM	FL10264.1

SOIL TREATMENT

CONTRACTOR TO PROVIDE AN EPA-REGISTERED TERMITICIDE COMPLYING WITH REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION, IN AN AQUEOUS SOLUTION FORMULATED TO PREVENT TERMITE INFESTATION. PROVIDE QUANTITY REQUIRED FOR APPLICATION AT THE LABEL VOLUME AND RATE FOR THE MAXIMUM TERMITICIDE CONCENTRATION ALLOWED FOR EACH SPECIFIC USE, ACCORDING TO PRODUCT'S EPA-REGISTERED LABEL.

DEFERRED SUBMITTALS

DEFERRED SUBMITTALS: (PER 2020 FBC)

DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WHO SHALL REVIEW THEM. G.C. WILL FORWARD DESIGN PROFESSIONAL'S APPROVED DEFERRED SUBMITTAL TO THE BUILDING OFFICIAL FOR APPROVAL PRIOR TO INSTALLATION. A NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING SHALL BE MADE ON THE DEFERRED SUBMITTAL. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

DEFERRED SUBMITTAL ITEMS:
SIGNAGE

CIRCLE K GENERAL NOTE

UNDER NO CIRCUMSTANCES WILL CIRCLE K ALLOW A CHANGE OF SUPERINTENDENTS DURING THE PROJECT(S).

GENERAL NOTES

1. COORDINATE ALL EQUIPMENT PLACEMENTS, SUPPORTS, AND CONNECTIONS WITH EQUIPMENT SUPPLIERS.
2. COMPLY WITH ALL LOCAL BUILDING CODES, ORDINANCES, AND CONSTRUCTION STANDARDS.
3. FOR COMPLETE MECHANICAL SYSTEM LOCATIONS AND SIZES OF SUPPLY, RETURN, AND DUCTWORK, SEE MECHANICAL PLANS.
4. FOR COMPLETE ELECTRICAL SYSTEM LOCATIONS AND SIZES OF LIGHTING, OUTLETS, PHONES, AND ELECTRICAL PANELS, SEE ELECTRICAL PLANS.
5. FOR COMPLETE PLUMBING LOCATIONS, SIZES, AND FIXTURE TYPES, SEE PLUMBING PLANS.
6. ALL NEW WALLS SHALL BE TAPED, TEXTURED, AND PAINTED PER OWNERS COLOR SELECTION / SPECIFICATIONS.
7. MANUALLY OPERATED EDGE OR SURFACE MOUNTED FLUSH BOLTS AND SURFACE BOLTS ARE PROHIBITED.
8. ONE SET OF STAMPED, APPROVED DRAWINGS MUST BE MAINTAINED ON-SITE AND MADE AVAILABLE TO CITY INSPECTORS ON DEMAND.
9. ALL WORK SHALL BE FURNISHED AND INSTALLED IN COMPLIANCE WITH APPLICABLE BUILDING CODES AND THE HIGHEST PROFESSIONAL WORKMANSHIP OF THE BUILDING TRADES PERFORMING UNDER THIS CONTRACT.
10. ALL REQUIRED CONTROLLED INSPECTIONS SHALL COMPLY WITH THE LOCAL BUILDING CODES.
11. ALL DIMENSIONS SHALL BE FIELD CHECKED, CHECKED IN SHOP, AND VERIFIED PRIOR TO THE PERFORMANCE OF ANY WORK, AND THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF AN DISCREPANCIES IN WRITING BEFORE PERFORMANCE OF THE WORK.
12. GENERAL CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES AND SHALL BE RESPONSIBLE FOR THE SCHEDULING OF THE WORK.
13. ELECTRICAL SYSTEMS SHALL BE INSTALLED PER N.E.C. AND IN ACCORDANCE WITH ALL APPLICABLE UTILITY COMPANY SPECIFICATIONS AND MUNICIPAL JURISDICTIONAL CODES.
14. ALL PLUMBING AND ELECTRICAL PIPING CONDUIT SHALL BE CONCEALED EXCEPT AS OTHERWISE SPECIFIED.
15. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL OF AN ENGINEER REGISTERED IN FLORIDA AND SUBMITTED TO THE ARCHITECT.
16. COORDINATION OF PLANS AND SPECIFICATIONS: THE GENERAL CONTRACTOR SHALL TAKE NO ADVANTAGE OF ANY APPARENT ERROR OR OMISSION. HE SHALL IMMEDIATELY NOTIFY THE ARCHITECT, THE ARCHITECT WILL THEN MAKE SUCH CORRECTIONS AND INTERPRETATIONS AS MAY BE DEEMED NECESSARY FOR FULFILLING THE INTENT OF THE PLANS AND SPECIFICATIONS.
17. PROVIDE METAL ACCESS DOORS TO DUCTS AND OTHER MECHANICAL/ELECTRICAL EQUIPMENT THROUGH SPACES, OR CEILINGS AS REQUIRED BY MECHANICAL/ELECTRICAL DRAWINGS AND THE APPLICABLE REQUIREMENTS OF THE BUILDING CODES (BUILDING, MECHANICAL, ELECTRICAL).
18. PROPER STANDARDS OF CONSTRUCTION SHALL BE USED AS RECOMMENDED AS ACCEPTABLE STANDARDS IN THE INDUSTRY FOR ALL CONSTRUCTION EVEN IF NOT SPECIFIED IN DETAIL.
19. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING WITH APPROPRIATE TRADES, DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.
20. PRIOR TO CONSTRUCTION, THE GENERAL CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR THE CORRECTNESS OF ALL DIMENSIONS.
21. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE LOCATE AND CONFIRM ALL UNDERGROUND/ OVERHEAD PLUMBING AND ELECTRICAL STUB UPS.
22. GENERAL CONTRACTOR TO CAULK AND SEAL ALL EXPANSION JOINTS AT ALL INTERIOR CONCRETE PRIOR TO FLOORING.
23. ALL EXPOSED UNFINISHED METAL AND WOOD SHALL BE PAINTED AS PER SPECIFICATION, PAINT TO MATCH ADJACENT COLOR.
24. GENERAL CONTRACTOR SHALL ENCLOSE, SEAL, AND COVER ALL PIPE, CONDUIT, DUCT, AND STRUCTURAL PENETRATIONS IN ALL WALLS.
25. UNLESS OTHERWISE NOTED, DIMENSIONS ARE TO THE FACE OF MASONRY, FACE OF CONC. AND THE FACE OF SHEATHING.
26. IN THE EVENT OF DISCREPANCIES BETWEEN ANY DRAWINGS AND/OR SPECIFICATIONS, THE MORE RESTRICTIVE CONDITION SHALL BE DEEMED AS THE CONTRACT REQUIREMENT, UNLESS OTHERWISE STATED.
27. GENERAL CONTRACTOR TO MAINTAIN ROAD CLEANLINESS DURING CONSTRUCTION.

GENERAL BIDDING NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION AND SUBMITTALS TO UTILITY COMPANIES FOR THIS PROJECT.
2. CONTRACTOR SHALL PROVIDE UNIT PRICING TO OWNER ON ALL PHONE, GAS, TELECOMMUNICATION, AND POWER COST FOR THIS PROJECT INCLUDING BUT NOT LIMITED TO TRENCHING, CONDUIT, LINE PULLS, CONNECTION, ETC.
3. CONTRACTOR SHALL BID THIS PROJECT COMPLETELY WITH NO EXCEPTIONS UNLESS INSTRUCTED BY OWNER. CONTRACTOR SHALL PROVIDE ALLOWANCES ON ANY ITEM THAT CAN NOT BE RESOLVED DURING THE BID PROCESS.
4. GENERAL CONTRACTOR SHALL FIELD VERIFY ALL UTILITY CONNECTIONS, EXISTING PLUMBING TAPS, ELECTRICAL PANEL LOCATIONS, GAS METERS AND MECHANICAL EQUIPMENT AGAINST THE PLANS AND REPORT ANY DISCREPANCIES DURING THE BID PROCESS
5. CONTRACTOR SHALL BE RESPONSIBLE FOR CLARIFICATION OF DOCUMENTS. SHOULD A BIDDER FIND DISCREPANCIES IN OR OMISSIONS FROM THE DRAWINGS OR DOCUMENTS, OR SHOULD HE BE IN DOUBT AS TO THEIR MEANING, HE SHALL NOTIFY THE ARCHITECT FIVE DAYS OR MORE BEFORE DATE SET TO RECEIVE BIDS, WHO WILL SEND, AFTER CONSIDERATION, IDENTICAL INSTRUCTIONS TO ALL BIDDERS. IN THE EVENT CLARIFICATION IS DEEMED NECESSARY, NEITHER OWNER NOR ARCHITECT WILL BE RESPONSIBLE FOR ORAL INSTRUCTIONS.
6. GENERAL CONTRACTOR SHALL VERIFY GOVERNING REQUIREMENTS PRIOR TO BID AND ALL REQUIREMENTS FOR A COMPLETE FIRE SPRINKLER SYSTEM ARE TO BE INCLUDED IN BID IF APPLICABLE.
7. THE ARCHITECT ASSUMES THE GENERAL CONTRACTOR HAS INCLUDED IN HIS BID/PRICING THE HIGHEST QUALITY AND GREATEST QUANTITY FOR THE PURPOSE OF RESOLVING ANY CONFLICTS IN THE CONSTRUCTION DOCUMENTS WHICH ARE IMPLIED OR UNDEFINED.
8. ALL BID NUMBERS SHOULD INCLUDE BREAKDOWN OF UNIT PRICE.
9. CONTRACTOR TO BASE BID ON PROVIDING 3 FIRE EXTINGUISHERS.

HEALTH DEPT. GENERAL NOTES TO GC

1. WALK-IN UNIT WALLS, CEILING, AND FLOOR/WALL JUNCTURES SHALL BE METAL OR EQUAL AND PROPERLY COVED.
2. FLASH, TRIM, OR CAULK SPACES BETWEEN WALK-IN UNIT AND ADJACENT WALLS.
3. WALK-IN UNITS OR OTHER LARGE EQUIPMENT/SURFACES WITH SPACES 30 INCHES OR LESS IN HEIGHT BETWEEN THE TOP SURFACES AND THE CEILING REQUIRE FLASHING OR CLOSING OFF IN A CLEAN, TIGHT VERMIN PROOF MANNER.
4. ALL WOOD SHELVING OR WOODWORK SHALL BE SANDED SMOOTH, FREE OF OPEN JOINTS AND SEALED OR PAINTED TO A SMOOTH, FINAL FINISH.
5. PROVIDE AN APPROVED SMOOTH, COVE BASE (3/8" RADIUS OR GREATER) AT WALL AND FLOOR JUNCTURES AND EQUIPMENT BASES THROUGHOUT THE ESTABLISHMENT.
6. PROVIDE AN ADDITIONAL WATER LINE AT THE MOP SINK/UTILITY AREA TO SUPPLY CHEMICAL DISPENSERS. DO NOT USE THE MOP SINK FAUCET. Y-VALVES AND DOWNSTREAM SHUT-OFF DEVICES ARE NOT PERMITTED ON SINK FAUCETS OR CHEMICAL DISPENSERS.
7. ALL CONSTRUCTION SHALL MEET CURRENT COUNTY HEALTH CODE REQUIREMENTS.

SHEET INDEX

LEGEND
● SHEET ISSUED
○ SHEET ISSUED FOR REFERENCE AND COORDINATION ONLY

	SHT.NO.	TITLE	DATE: 08/15/22 PERMIT & BID SET
GENERAL	G1.0	COVER SHEET AND PROJECT INFORMATION	●
SITE PLAN	SD1.3	SITE DETAILS	●
CIVIL	C0.0	COVER SHEET	●
	C1.0	GENERAL NOTES	●
	C1.1	GENERAL NOTES	●
	C2.0	STORMWATER POLLUTION PREVENTION PLAN	●
	C3.0	EXISTING CONDITIONS & DEMOLITION PLAN	●
	C3.1	EXISTING CONDITIONS & DEMOLITION PLAN	●
	C4.0	OVERALL SITE PLAN	●
	C4.1	SITE PLAN	●
	C4.2	INTERSECTION MODIFICATION PLAN	●
	C4.3	TRUCK TURNING MOVEMENTS	●
	C4.4	TRUCK TURNING MOVEMENTS	●
	C4.5	TRUCK TURNING MOVEMENTS	●
	C5.0	PAVING, GRADING AND DRAINAGE PLAN	●
	C6.0	UTILITY PLAN	●
	C7.0	GENERAL CONSTRUCTION DETAILS	●
	C7.1	GENERAL CONSTRUCTION DETAILS	●
	L1.00	LANDSCAPE PLAN	●
	L1.50	LANDSCAPE DETAILS	●
	L1.51	LANDSCAPE SPECIFICATIONS	●
	L2.00	SCHEMATIC IRRIGATION PLAN	●
	L2.50	IRRIGATION DETAILS	●
	L2.51	IRRIGATION NOTES	●
ARCHITECTURAL	A1.0	EGRESS ACCESSIBILITY FLOOR PLAN	●
	A1.1	ACCESSIBILITY STANDARD, NOTES & DETAILS	●
	AD1.2	DEMOLITION FLOOR PLAN	●
	A1.2	FLOOR PLAN & ROOM FINISH SCHEDULE	●
	A1.3	DIMENSIONED FLOOR PLAN, WALL TYPES AND ENLARGED RESTROOM	●
	A1.4	EQUIPMENT PLAN & LIST	●
	A1.6	REFLECTED CEILING PLAN	●
	A1.7	ROOF PLAN AND DETAILS	●
	A1.10	FLOOR TILE PLAN	●
	A2.1	EXTERIOR ELEVATIONS	●
	A3.1	INTERIOR ELEVATIONS	●
	A3.2	INTERIOR ELEVATIONS	●
	A4.0	BUILDING SECTIONS	●
	A5.1	WALL SECTIONS	●
	A5.2	WALL SECTIONS	●
	A6.0	ROOM KEY PLAN, DOOR/WINDOW SCHEDULE & TYPES AND NOTES	●
	A8.1	EXTERIOR ARCHITECTURAL DETAILS	●
	A8.2	EXTERIOR ARCHITECTURAL DETAILS	●
	A8.3	EXTERIOR ARCHITECTURAL DETAILS	●
	A9.1	INTERIOR ARCHITECTURAL DETAILS	●
	A9.2	INTERIOR ARCHITECTURAL DETAILS	●
	CA-4	DIESEL CANOPY PLANS & ELEVATIONS	●
STRUCTURAL	S0.1	GENERAL NOTES	●
	S0.2	DIAGRAMS AND SCHEDULES	●
	S0.3	TABLE OF SPECIAL INSPECTION	●
	S1.0	FOUNDATION & FRAMING PLANS	●
	S2.0	FOUNDATION DETAILS	●
	S2.1	FOUNDATION DETAILS	●
	S3.0	ROOF FRAMING DETAILS	●
	S4.0	EXTERIOR WALL DETAILS	●
MECHANICAL	M1.1	MECHANICAL FLOOR PLAN	●
	M1.1.1	MECHANICAL ROOF PLAN AND DETAILS	●
	M1.2	MECHANICAL DETAILS (1 OF 2)	●
	M1.2.3	MECHANICAL NOTES	●
	M1.3	MECHANICAL SPECIFICATIONS	●
PLUMBING	P1.1.1	PLUMBING FLOOR PLAN	●
	P1.2	PLUMBING SPECIFICATIONS	●
ELECTRICAL	E0.0	ELECTRICAL COVER SHEET AND LEGEND	●
	E0.1	ELECTRICAL SPECIFICATIONS	●
	E1.0	ELECTRICAL SITE PLAN	●
	E1.1	ELECTRICAL SITE PLAN DETAILS	●
	E2.0	ELECTRICAL FLOOR PLAN	●
	E5.0	ELECTRICAL LIGHTING PLAN	●
	E5.1	IECC COMPLIANCE REPORT	●
	E6.0	ELECTRICAL CALCULATIONS & SCHEMATICS	●
	E7.0	ELECTRICAL PANEL SCHEDULES	●
FUEL CANOPY	CS1	CANOPY FOUNDATION SECTION AND DETAILS	●
	CS2	CANOPY ROOF PLAN & DETAILS	●
	CS3	CANOPY MISC. DETAILS	●
FUEL PLAN	TK001	COVER SHEET	●
	TK002	GENERAL NOTES	●
	TK006	EQUIPMENT LIST	●
	TK007	EQUIPMENT LIST	●
	TK100	FUEL PIPING PLAN	●
	TK101	TANK & PIPING DETAILS	●
	TK102	SCHEMATIC WIRING, PIPING & DETAILS	●
	TK201	STANDARD TANKS	●
	TK301	TYPICAL UST PLAN AND SECTIONS	●
	TK500	TANK SUMP DETAILS	●
	TK501	TANK SUMP DETAILS	●
	TK502	TANK TOP HARDWARE DETAILS	●
	TK503.1	DISPENSER SUMP DETAILS	●
	TK504	FUEL SYSTEM DETAILS	●
	TK505	DISPENSER DETAILS (HI FLOW DIESEL)	●
	TK506	HSD DETAILS	●
	TK507	TANK TOP HARDWARE DETAILS	●
	TK508	HAZARD ZONES	●
	SE1.0	FUEL ISLAND ELECTRICAL PLAN	●
	GE1.0	FUEL SYSTEM DIAGRAMS	●

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AR100937
8/19/22
REGISTERED ARCHITECT

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RW
PROJECT MANAGER
RM
QUALITY CONTROL
RW
DRAWN BY
KR

PROJECT NAME
CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

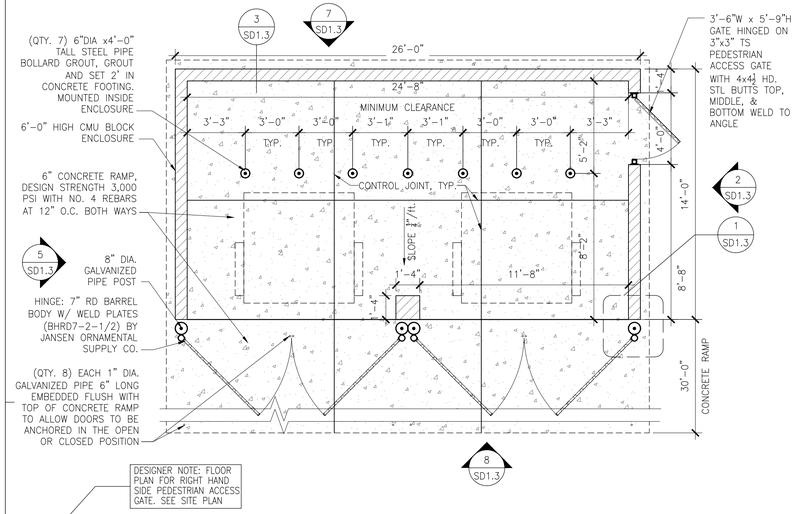
CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE
COVER SHEET AND PROJECT INFORMATION

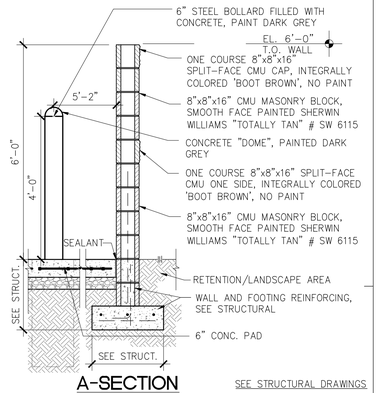
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G1.0

Drawing Name: G:\2022\22036_Circle K - Lake City, FL\Documentation\CAD_01 FL\Cover Sheet and Project Info.dwg Last Modified: Aug 24, 2022 - 8:40am Plotted on: Aug 24, 2022 - 8:40am by bridget.reynolds
4625 NATIONAL PROTOTYPE - R1



9 TRASH ENCLOSURE (PLAN)

1/4"=1'-0"

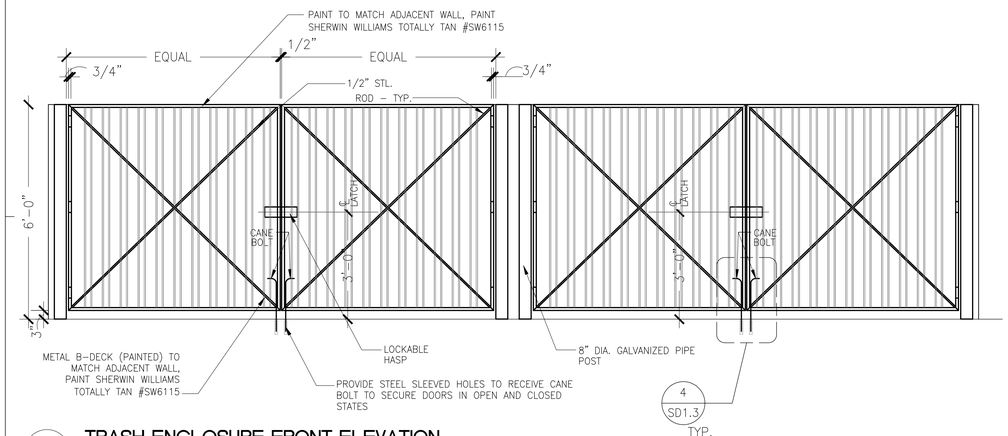


A-SECTION

SEE STRUCTURAL DRAWINGS

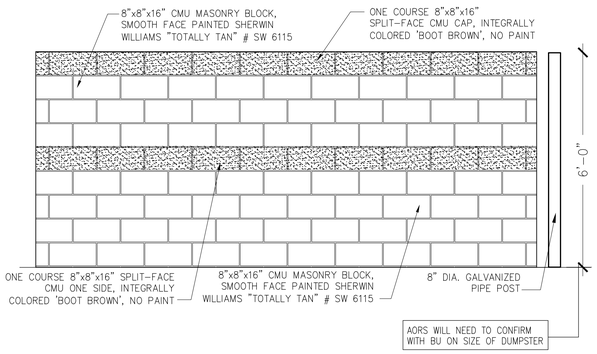
3 6'-0" TRASH ENCLOSURE

1/2"=1'-0"



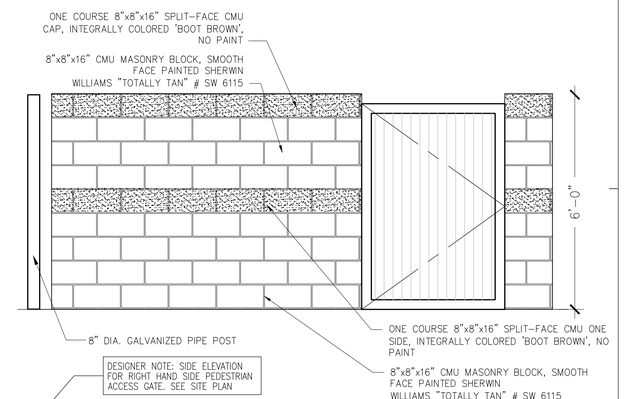
8 TRASH ENCLOSURE FRONT ELEVATION

1/2"=1'-0"



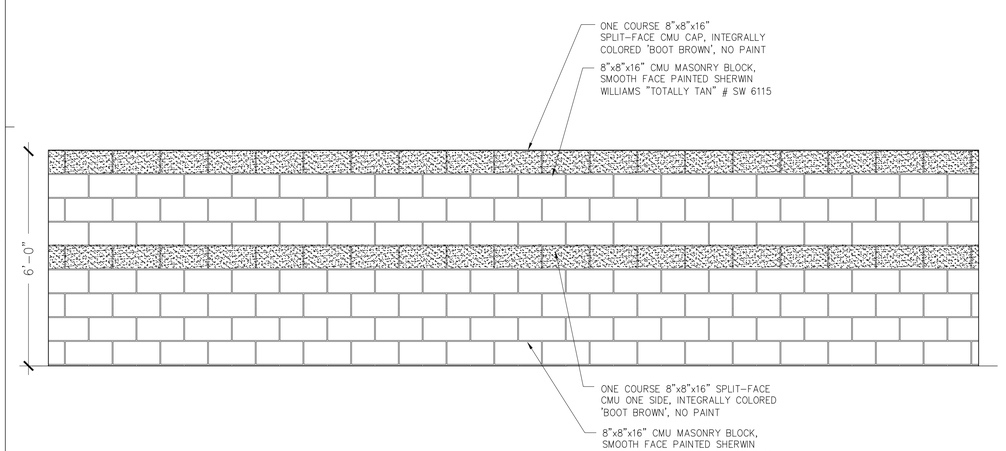
5 TRASH ENCLOSURE SIDE ELEVATION

1/2"=1'-0"



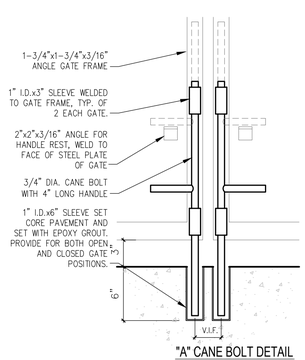
2 TRASH ENCLOSURE SIDE ELEVATION

1/2"=1'-0"

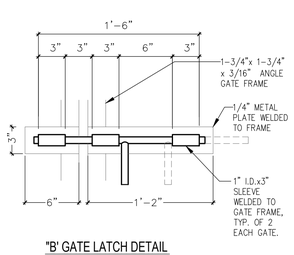


7 TRASH ENCLOSURE REAR ELEVATION

1/2"=1'-0"



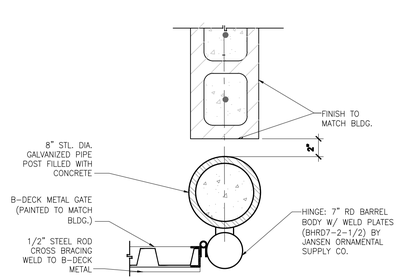
"A" CANE BOLT DETAIL



"B" GATE LATCH DETAIL

4 CANE BOLT DETAIL

1 1/2"=1'-0"



1 ENCLOSURE GATE HINGE

1 1/2"=1'-0"

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8.18.22
Ralph Watson

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RW

PROJECT MANAGER
RM

QUALITY CONTROL
RW

DRAWN BY
KR

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

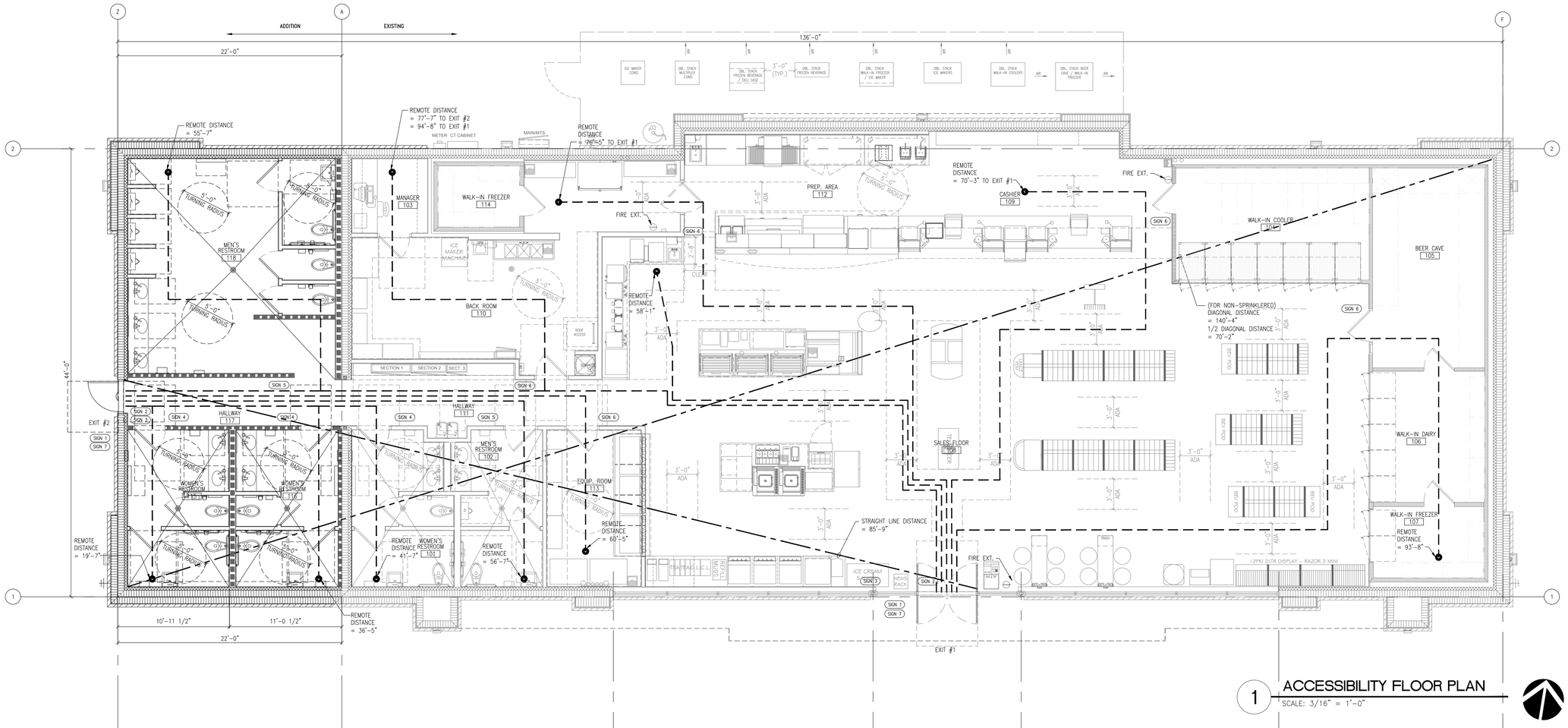
SITE DETAILS

SHEET NUMBER

SD1.3

4625 NATIONAL PROTOTYPE - R1

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1 ACCESSIBILITY FLOOR PLAN
SCALE: 3/16" = 1'-0"

EXIT REQUIREMENTS: (NUMBER AND ARRANGEMENT OF EXITS)

TRAVEL DISTANCE	COMMON PATH OF TRAVEL	
ALLOWABLE TRAVEL DISTANCE WITHOUT SPRINKLER	COMMON PATH PER 2014 FBC, 5TH EDITION TABLE 1014.3 OF TRAVEL DISTANCE WITHOUT SPRINKLER	ACTUAL COMMON PATH OF TRAVEL DISTANCE
200 FT PER 2014 FBC, 5TH EDITION TABLE 1016.2	75 FT 30 FT IN SALES AREA	30 FT.

MINIMUM NO. OF EXITS	ARRANGEMENT MEANS OF EGRESS:	
REQUIRED 2	REQUIRED DISTANCE BETWEEN EXIT DOORS WHERE TWO EXITS OR EXIT ACCESS DOORWAYS ARE REQUIRED FROM ANY PORTION OF THE EXIT ACCESS, THE EXIT DOORS OR EXIT ACCESS DOORWAYS SHALL BE PLACED A DISTANCE APART EQUAL TO NOT LESS THAN ONE-HALF OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE BUILDING OR AREA TO BE SERVED MEASURED IN A STRAIGHT LINE BETWEEN EXIT DOORS OR EXIT ACCESS DOORWAYS. INTERLOCKING OR SCISSOR STAIRS SHALL BE COUNTED AS ONE EXIT STAIRWAY PER SECTION 1015.2.1 - 2014 FBC, 5TH EDITION	ACTUAL STRAIGHT LINE DISTANCE BETWEEN EXITS EXIT #1 TO #2 = 85'-9"
PROVIDED 2		ACTUAL STRAIGHT LINE ACROSS PUBLIC AREA: DIAGONAL AT PUBLIC AREA = 140'-4" 1/2 DIAGONAL = 70'-2"

LIFE SAFETY DATA:

CONSTRUCTION TYPE: VB (NON SPRINKLERED)

OCCUPANY CLASSIFICATION: M (MERCHANTILE)

MAXIMUM ALLOWABLE AREA: 9000 SF

ACTUAL BUILDING AREA: 4,921 SF EXISTING + 969 S.F. ADDITION = 5890 S.F.

ACTUAL BUILDING HEIGHT: 23'-10"

SALES AREA 2,379 SF / 30 SF PER PERSON = 80

AUXILARY AREA 1,430 SF (462 S.F. EXISTING & 969 S.F. ADDITION) / 60 SF PER PERSON = 24

ACCESS STOR. MECH EQUP RM AREA 2,080 SF / 300 PER PERSON = 7

TOTAL CALCULATED OCCUPANCY: 111
EXITS REQUIRED: 1-500 = 2

EXISTS PROVIDED: 2

MAXIMUM ALLOWABLE TRAVEL DISTANCE: 200 FT.

ACTUAL MAXIMUM TRAVEL DISTANCE: 94 FT.

CONCLUSION =

= 85'-9" IS GREATER THAN 70'-2" (MEETS CODE FOR NON-SPRINKLERED BUILDING)

GENERAL NOTES

1. MEANS OF EGRESS SHALL BE ILLUMINATED WITH AT LEAST ONE-FOOT CANDLE AT THE FLOOR LEVEL (WALKING SURFACE). REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION

LEGEND

= ROUTE FROM THE REMOTEST ROOM OR SPACE TO NEAREST EXIT.

= DIAGONAL DISTANCE OF THE BUILDING OR AREA

= STRAIGHT LINE DISTANCE BETWEEN EXITS

= MOST REMOTE POINT WITHIN THIS AREA

= EXIT TACTILE SIGN

= ILLUMINATED EXIT SIGN

= EMERGENCY LIGHT

= 2X4 LAY-IN FIXTURE W/ EMERGENCY BALLAST

= FIRE EXTINGUISHERS SHALL BE LOCATED PER THE REQUIREMENTS OF NFPA10. THE SIZE SHALL BE A MINIMUM OF 2-A-10-BC (MIN. OF 2) AND INSTALLED AT 48" MAX. A.F.F.

ACCESSIBILITY SIGNS

SIGN 1 INTERNATIONAL SYMBOL OF ACCESSIBILITY

SIGN 2 "THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS" LETTER MIN. 1" HIGH. SIGN MOUNTED ABOVE DOOR.

SIGN 3 TACTILE EXIT SIGN SHALL COMPLY SECTION 703.3, ICC / ANSI A117.1 2009

SIGN 4 MEN RESTROOM

SIGN 5 WOMEN RESTROOM

SIGN 6 EMPLOYEES ONLY

SIGN 7 FIRE FIGHTER'S NOTICE/WARNING SIGN FOR LIGHT-FRAME CONSTRUCTION, PER FLORIDA STATUTE NO. 633.027

NOTES:

INSPECTOR MAY REQUIRE ADDITIONAL EXIT SIGNS AT THE TIME OF FINAL INSPECTION.

SIGNAGE COMPANY AND GC TO BOTH MAKE SURE ALL UTILITY LINES HAVE BEEN LOCATED PRIOR TO DIGGING FOOTING.

GC RESPONSIBLE TO CALL AND HAVE UTILITIES LOCATED.

SIGNAGE COMPANY RESPONSIBLE TO CONFIRM THIS HAS BEEN DONE.

ACCESSSIBILITY NOTES

1. ACCESS TO THESE FACILITIES SHALL BE PROVIDED AT PRIMARY ENTRANCES.
2. THE SLOPE OF PUBLIC WALKS SHALL NOT EXCEED MAX. - GROSS SLOPE 2%.
3. WALKING SURFACE SLOPING GREATER THAN 2% SHALL BE SLIP RESISTANT.
4. PROVIDE A 60"x60" MIN. LANDING ON STRIKE SIDE OF DOOR W/ 44" MIN. WIDTH IN DIRECTION OF TRAVEL.
5. WALKS SHALL EXTEND 24" TO THE SIDE OF THE STRIKE EDGE OF A DOOR OR GATE THAT SWINGS TOWARD THE WALK.
6. THE SLOPE OF RAMPS SHALL NOT EXCEED 1'-0" IN 15'-0" U.N.O.
7. RAMPS SHALL HAVE A NON-SLIP SURFACE.
8. RAMPS SHALL BE 48" WIDE MIN.
9. EVERY REQUIRED EXIT DOORWAY SHALL BE SIZED FOR A DOOR NOT LESS THAN 3 FT. WIDE BY NOT LESS THAN 6'-8" HIGH CAPABLE OF OPENING 90° AND MOUNTED SO THAT THE CLEAR WIDTH OF THE EXIT WAY IS 32" MIN.
10. THRESHOLD TO BE A MAX. 1/2" ABOVE ADJACENT FINISH FLOOR.
11. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 LBS.
12. THE BOTTOM 10" OF ALL DOORS EXCEPT AUTOMATIC AND SLIDING SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE.
13. PROVIDE LEVER TYPE HARDWARE, PANIC BARS, PUSH - PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE. (30" TO 44" A.F.F.)
14. EVERY EXIT DOOR SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT, FLUSH OR SURFACE BOLTS SHALL BE AUTOMATIC TYPE. LOCKABLE DOORS SHALL BE PROVIDED WITH A SIGN STATING "THESE DOORS TO REMAIN UNLOCKED DURING BUSINESS HOURS" IN MIN. 1" HIGH LETTERS.
15. EXIT SIGNS WHERE NOTED OR REQUIRED SHALL BE WORDED "EXIT" IN AND LETTERS HAVING THE PRINCIPAL STROKE OF NOT LESS THAN 3/4" WIDE AND 6" HIGH AND SHALL CONFORM TO ALL APPLICABLE CODES.
16. PROVIDE ILLUMINATED EXIT SIGNS AND EMERGENCY LIGHTING AT ALL EXIT CORRIDORS AS REQUIRED BY CODE. EMERGENCY LIGHTING SHALL PROVIDE ILLUMINATION OF ONE FOOT CANDLE AT FLOOR LEVEL.
17. DOORS TO ACCESSIBLE SANITARY FACILITIES SHALL BE IDENTIFIED BY 1/4" THICK GEOMETRIC SYMBOLS OF CONTRASTING COLOR, CENTERED ON THE DOOR AT A HEIGHT OF 60" AFF (12" EQUILATERAL TRIANGLE FOR MEN AND 12" DIAMETER CIRCLE FOR WOMEN). 12. POST INTERNATIONAL SYMBOL OF ACCESSIBILITY ON OR ADJACENT TO ALL ACCESSIBLE BUILDING ENTRANCES. LOCATION AS INDICATED BY OWNER.
18. THE MAXIMUM EFFORT REQUIRED TO OPERATE FIRE-RATED DOORS IS 15 LBS., EXIT DOORS IS 8.5 LBS. FOR EXTERIORS, AND 5 LBS. FOR INTERIOR DOORS.

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8.18.22

PROFESSIONAL IN CHARGE
RW

PROJECT MANAGER
RM

QUALITY CONTROL
RW

DRAWN BY
KR

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

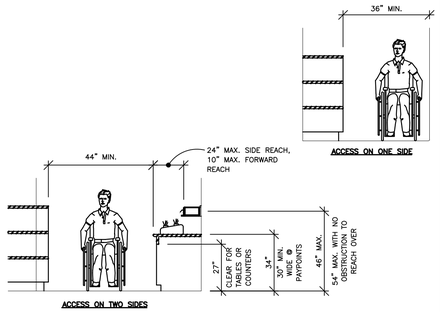
EGRESS/ ACCESSIBILITY FLOOR PLAN

SHEET NUMBER

A1.0

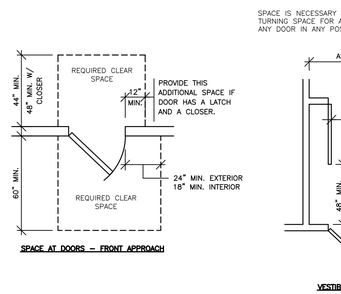
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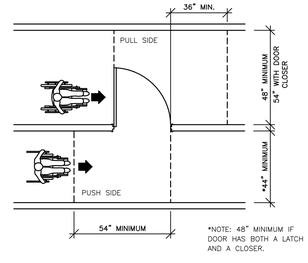
4625 NATIONAL PROTOTYPE - R1

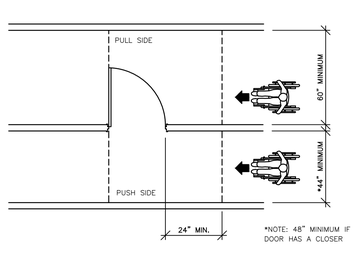


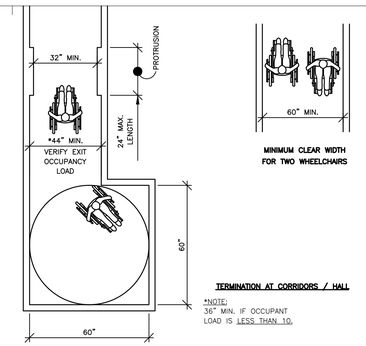
K1 AISLES

NO SCALE



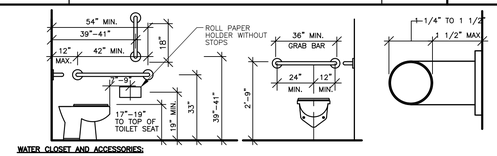


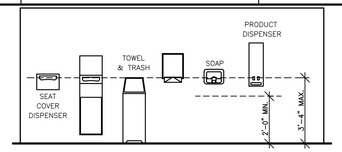




K3 DOOR OPENINGS AT CORRIDORS / HALLS

NO SCALE





WATER CLOSET AND ACCESSORIES:

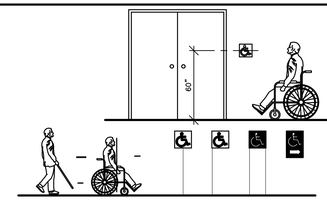
1. THE HEIGHT OF ACCESSIBLE WATER CLOSETS SHALL BE A MINIMUM OF 17" AND A MAXIMUM OF 19" MEASURED TO THE TOP OF A MAXIMUM 2" HIGH TOILET SEAT, EXCEPT THAT 3" SEATS SHALL BE PERMITTED ONLY IN ALTERATIONS WHERE THE EXISTING FIXTURE IS LESS THAN 15" HIGH.
2. THE CONTROLS FOR WATER CLOSET FLUSH VALVES SHALL BE MOUNTED ON THE WIDE SIDE OF THE TOILET AREAS. AUTOMATIC SPRING TO LIFTED POSITION SEATS ARE NOT ALLOWED.
3. THE FORCE REQUIRED TO ACTIVATE WATER CLOSET AND URINAL FLUSH VALVE CONTROLS, AND FAUCET AND OPERATING MECHANISM CONTROLS, SHALL BE NO GREATER THAN 5 LBF. ELECTRONIC OR AUTOMATIC FLUSHING CONTROLS ARE ACCEPTABLE AND PREFERABLE.
4. WHERE TOWEL, SANITARY NAPKINS, WASTE RECEPTACLES, DISPENSERS, OR OTHER EQUIPMENT AND CONTROLS ARE PROVIDED, PROVIDE AT LEAST ONE OF EACH TYPE SHALL BE ON AN ACCESSIBLE ROUTE, WITH ALL OPERABLE PARTS, INCLUDING COIN SLOTS, WITHIN 40" FROM THE FINISHED FLOOR.
5. THE TOILET TISSUE DISPENSERS SHALL BE LOCATED ON THE WALL WITHIN 12" OF THE FRONT EDGE OF THE TOILET SEAT, MOUNTED BELOW THE GRAB BAR AT A MINIMUM HEIGHT OF 19", AND 36" MAXIMUM TO THE FAR EDGE FROM THE REAR WALL. DISPENSERS THAT CONTROL DELIVERY OR THAT DOES NOT PERMIT CONTINUOUS PAPER FLOW SHALL NOT BE USED.

GRAB BARS:

1. THE REAR GRAB BARS SHALL BE 36" LONG MINIMUM AND EXTEND FROM THE CENTERLINE OF THE WATER CLOSET 12" MINIMUM ON ONE SIDE AND 24" MINIMUM ON THE OTHER SIDE. THE REAR GRAB BAR SHALL BE SECURELY ATTACHED AND CENTERED 33" ABOVE AND PARALLEL TO THE FLOOR, EXCEPT THAT WHERE A TANK–TYPE TOILET IS USED, WHICH OBSTRUCTS PLACEMENT AT 33", THE BAR MAY BE AS HIGH AS 36", WITH A 1–1/2" MINIMUM BETWEEN THE BAR AND TOP OF THE TANK.
2. THE DIAMETER OR WIDTH OF THE GRIPPING SURFACES OF A GRAB BAR SHALL BE 1–1/4" TO 1–1/2" NOMINAL, OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE. IF GRAB BARS ARE MOUNTED ADJACENT TO A WALL, THE SPACE BETWEEN THE WALL AND THE GRAB BARS SHALL BE 1–1/2".
3. THE STRUCTURAL STRENGTH OF THE GRAB BARS, FASTENERS, AND MOUNTING DEVICES SHALL MEET THE FOLLOWING SPECIFICATIONS:
   A) BENDING STRESS IN A GRAB BAR OR SEAT INDUCED BY THE MAXIMUM BENDING MOMENT FROM THE APPLICATION OF A 250–LB POINT LOAD SHALL BE LESS THAN THE ALLOWABLE STRESS FOR THE MATERIAL OF THE GRAB BAR OR SEAT.
   B) SHEAR STRESS INDUCED IN A GRAB BAR OR SEAT BY THE APPLICATION OF A 250–LB POINT LOAD SHALL BE LESS THAN THE ALLOWABLE SHEAR STRESS FOR THE MATERIAL OF THE GRAB BAR OR SEAT, AND ITS MOUNTING BRACKET OR OTHER SUPPORT IS CONSIDERED TO BE FULLY RESTRAINED, THEN DIRECT AND TORSIONAL SHEAR STRESS SHALL NOT EXCEED THE ALLOWABLE SHEAR STRESS.
   C) SHEAR FORCE INDUCED IN FASTENER OR MOUNTING DEVICES FROM THE APPLICATION OF A 250–LB POINT LOAD SHALL BE LESS THAN THE ALLOWABLE LATERAL LOAD OF EITHER THE FASTENER OR MOUNTING DEVICE OR THE SUPPORTING STRUCTURE, WHICHEVER HAS THE SMALLER ALLOWABLE LOAD.
   D) TENSILE FORCE INDUCED IN A FASTENER BY A DIRECT TENSION FORCE OF A 250–LB POINT LOAD, PLUS THE MAXIMUM MOMENT FROM THE APPLICATION OF A 250–LB POINT LOAD, SHALL BE LESS THAN THE ALLOWABLE WITHDRAWAL LOAD BETWEEN THE FASTENER AND SUPPORTING STRUCTURE.
   E) GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
4. THE GRAB BARS AND ANY WALL OR OTHER SURFACE ADJACENT TO IT SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EDGES SHALL HAVE A MINIMUM RADIUS OF 1/8"

D1 WATER CLOSET AND TOILET ACCESSORIES NOTES AND INFORMATION

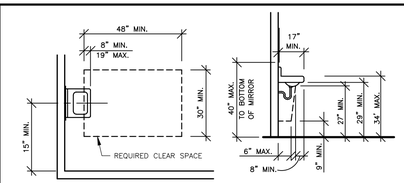
1/4" = 1'–0"



1. AT EVERY PRIMARY PUBLIC ENTRANCE AND AT EVERY MAJOR JUNCTION ALONG OR LEADING TO AN ACCESSIBLE ROUTE OF TRAVEL, THERE SHALL BE A SIGN DISPLAYING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. SIGNS SHALL INDICATE THE DIRECTION TO ACCESSIBLE BUILDING ENTRANCES AND FACILITIES.
2. WHEN A BUILDING CONTAINS AN ENTRANCE OTHER THAN THE MAIN ENTRANCE WHICH IS RAMPED OR LEVEL FOR USE BY DISABLED PERSONS, A SIGN SHOWING ITS LOCATION IS REQUIRED TO BE POSTED AT OR NEAR THE MAIN ENTRANCE.
3. PROVIDE SIGNS WITH INTERNATIONAL SYMBOL OF ACCESSIBILITY INDICATING LOCATION OF EACH ACCESSIBLE ENTRY. PROVIDE ADDITIONAL DIRECTIONAL SIGNS AS REQUIRED.
4. MAT CARPETING MUST BE SECURELY ANCHORED TO FLOOR OR RECESSED INTO DOOR LANDING.

G5 ENTRY AND DIRECTIONAL SIGNS

NO SCALE

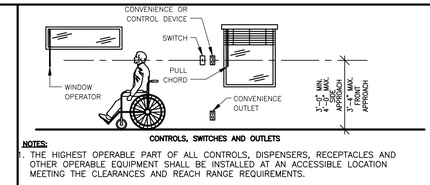


LAVATORY NOTES:

1. PROVIDE A CLEAR SPACE 30"x48" MIN. IN FRONT OF THE LAVATORY. THE CLEAR SPACE MAY EXTEND INTO KNEE AND TOE SPACE UNDER LAVATORY.
2. INSULATE OR CONFIGURE HOT WATER SUPPLY AND DRAIN PIPING UNDER LAVATORIES TO PREVENT CONTACT.
3. NO SHARP OR ABRASIVE ELEMENTS ARE ALLOWED UNDER LAVATORIES.
4. FAUCET CONTROLS AND OPERATING MECHANISMS ARE REQUIRED TO BE OPERABLE WITH ONE HAND AND CANNOT REQUIRE GRASPING, PINCHING, OR TWISTING OF WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS IS NOT TO EXCEED 5 LBF. LEVER OPERATED, PUSH TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGN.
5. SELF CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.

G7 LAVATORIES

NO SCALE



CONTROLS, SWITCHES AND OUTLETS

NOTES:

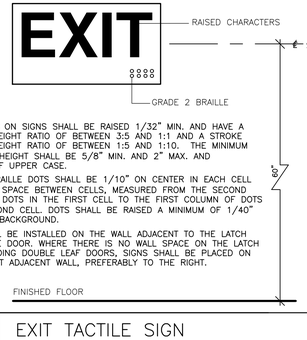
1. THE HIGHEST OPERABLE PART OF ALL CONTROLS, DISPENSERS, RECEPTACLES AND OTHER OPERABLE EQUIPMENT SHALL BE INSTALLED AT AN ACCESSIBLE LOCATION MEETING THE CLEARANCES AND REACH RANGE REQUIREMENTS.
2. CONTROLS AND SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHTING AND RECEPTACLE OUTLETS, APPLIANCES, OR COOLING, HEATING AND VENTILATING EQUIPMENT, SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX NOR LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE OUTLET BOX TO THE LEVEL OF THE FINISH FLOOR OR WORKING PLATFORM.
3. ELECTRICAL RECEPTACLE OUTLETS ON BRANCH CIRCUITS OF 30 AMPERES OR LESS AND COMMUNICATION SYSTEM RECEPTACLES SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING NOR LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING TO THE LEVEL OF THE FINISH FLOOR OR WORKING PLAT–FORM.
4. EXISTING BUILDING MUST MEET SAME REQUIREMENTS AS NEW CONSTRUCTION UNLESS AN UNREASONABLE HARDSHIP IS GRANTED BY THE ENFORCING AGENCY.

G13 CONTROLS AND OPERATING MECHANISMS

1/4" = 1'–0"

GENERAL NOTES

1. ACCESSIBILITY STANDARDS MAY VARY SLIGHTLY FROM THOSE SHOWN HERE ACCORDING TO THE REFERENCED STANDARDS OF THE APPLICABLE CODES, (ANSI A117.1 (U.B.C.)), THE YEAR OF THE CODE ADOPTED AT THE TIME OF THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY, THE LOCAL JURISDICTION REQUIREMENTS, THE CODE ITSELF AS STATED (TITLE 24 OF THE C.B.C., B.O.C.A. OR THE I.B.C.), THE REQUIREMENTS OF AN ADOPTED STATE LAW OR A PRECEDENT PREVIOUSLY SET FOR COMPLIANCE BY THE JUSTICE DEPARTMENT (A.D.A.).
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INFORM THE ARCHITECT AND/OR THE CIVIL ENGINEER OF ANY DISCREPANCIES, SUBTLE OR OTHERWISE, FROM WHAT IS SHOWN HERE AND THE APPLICABLE CODE/LAW/ORDINANCE.
3. THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AID FOR BUILDING AND CONSTRUCTION.



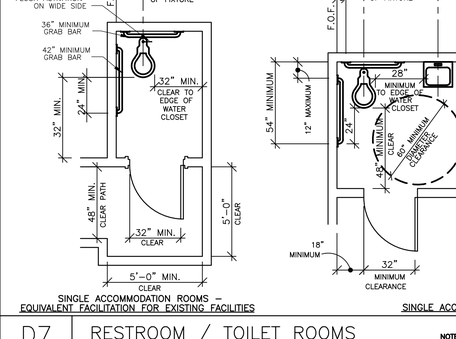
CHARACTERS ON SIGNS SHALL BE RAISED 1/32" MIN. AND HAVE A WIDTH TO HEIGHT RATIO OF BETWEEN 3:5 AND 1:1 AND A STROKE WIDTH TO HEIGHT RATIO OF BETWEEN 1:5 AND 1:10. THE MINIMUM CHARACTER HEIGHT SHALL BE 5/8" MIN. AND 2" MAX. AND SANS–SHERIF UPPER CASE.

GRADE 2 BRAILLE DOTS SHALL BE 1/10" ON CENTER IN EACH CELL WITH 2/10" SPACE BETWEEN CELLS, MEASURED FROM THE SECOND COLUMN OF DOTS IN THE FIRST CELL TO THE FIRST COLUMN OF DOTS IN THE SECOND CELL. DOTS SHALL BE RAISED A MINIMUM OF 1/40" ABOVE THE BACKGROUND.

SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH OUTSIDE THE DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE, INCLUDING DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLY TO THE RIGHT.

D5 EXIT TACTILE SIGN

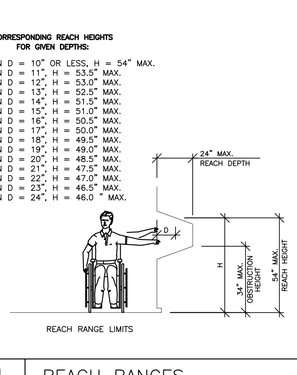
1 1/2"=1'–0"



D7 RESTROOM / TOILET ROOMS

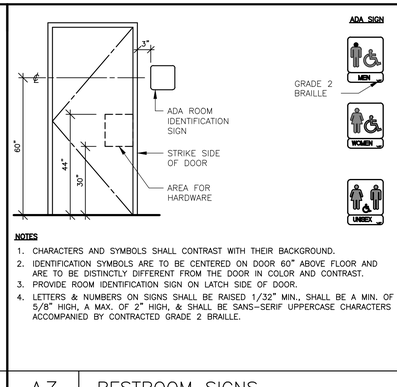
1/4" = 1'–0"

NOTE: SIDE TRANSFER MAY VARY DEPENDING ON STATE REQUIREMENTS.



A1 REACH RANGES

NO SCALE

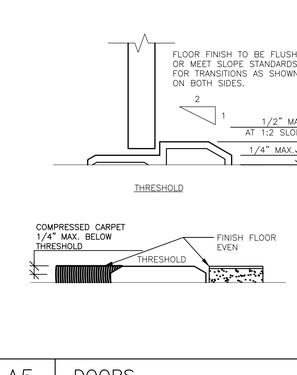


NOTES

1. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND.
2. IDENTIFICATION SYMBOLS ARE TO BE CENTERED ON DOOR 60" ABOVE FLOOR AND ARE TO BE DISTINCTLY DIFFERENT FROM THE DOOR IN COLOR AND CONTRAST.
3. PROVIDE ROOM IDENTIFICATION SIGN ON LATCH SIDE OF DOOR.
4. LETTERS & NUMBERS ON SIGNS SHALL BE RAISED 1/32" MIN., SHALL BE A MIN. OF 5/8" HIGH, A MAX. OF 2" HIGH, & SHALL BE SANS–SERIF UPPERCASE CHARACTERS ACCOMPANIED BY CONTRACTED GRADE 2 BRAILLE.

A3 RESTROOM SIGNS

NO SCALE



DOOR NOTES:

1. WHEN INSTALLED, DOORWAYS SHALL HAVE A MINIMUM CLEAR OPENING OF 32 INCHES WITH THE DOOR OPEN 90 DEGREES.
2. FOR HINGED DOORS, THE OPENING WIDTH SHALL BE MEASURED WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
3. WHERE A PAIR OF DOORS IS UTILIZED, AT LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32 INCHES WITH THE LEAF POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
4. THERE SHALL BE A LEVEL AND CLEAR FLOOR OR LANDING ON EACH SIDE OF A DOOR. THE LEVEL AREA SHALL HAVE A LENGTH IN THE DIRECTION OF DOOR SWING OF AT LEAST 60 INCHES AND THE LENGTH OPPOSITE THE DIRECTION OF THE DOOR SWING OF 48 INCHES AS MEASURED AT RIGHT ANGLES TO THE PLANE OF THE DOOR IN THE CLOSED POSITION. WHERE THE PLANE OF THE DOORWAY IS OFFSET OR LOCATED IN AN ALCOVE A DISTANCE MORE THAN 8 INCHES MEASURED FROM THE PLANE OF THE DOORWAY TO THE FACE OF THE WALL, THE DOOR SHALL BE PROVIDED WITH 60 INCHES MANEUVERING CLEARANCE FOR FRONT APPROACH.
5. THE WIDTH OF THE LEVEL AREA ON THE SIDE TO WHICH THE DOOR SWINGS SHALL EXTEND 24 INCHES PAST THE STRIKE EDGE OF THE DOOR FOR EXTERIOR DOORS AND 18 INCHES PAST THE STRIKE EDGE FOR INTERIOR DOORS. WHERE THE PLANE OF THE DOORWAY IS OFFSET 8 OR MORE INCHES FROM ANY OBSTRUCTION WITHIN 18 INCHES MEASURED LATERALLY ON THE LATCH SIDE, THE DOOR SHALL BE PROVIDED WITH MANEUVERING CLEARANCE FOR FRONT APPROACH.
6. PROVIDE CLEAR SPACE OF 12 INCHES PAST STRIKE EDGE OF THE DOOR ON THE OPPOSITE SIDE TO WHICH THE DOOR SWINGS IF THE DOOR IS EQUIPPED WITH BOTH A LATCH AND A CLOSER.
7. THE FLOOR OR LANDING SHALL NOT BE MORE THAN 1/2 INCH LOWER THAN THE THRESHOLD OF THE DOORWAY.
8. THE BOTTOM 10 INCHES OF ALL DOORS EXCEPT AUTOMATIC AND SLIDING SHALL HAVE A SMOOTH, UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. WHERE NARROW FRAME DOORS ARE USED, A 10 INCH HIGH SMOOTH PANEL SHALL BE INSTALLED ON THE PUSH SIDE OF THE DOOR WHICH WILL ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.

DOOR HARDWARE NOTES:

1. DOOR HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON DOORS REQUIRED TO BE ACCESSIBLE SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE. MANUALLY OPERATED BOLTS OR SURFACE BOLTS ARE NOT PERMITTED. THE UNLATCHING OF ANY DOOR OR LEAF SHALL NOT REQUIRE MORE THAN ONE OPERATION.
2. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH TRAVEL SHALL BE OPENABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, BY PANIC BARS, PUSH–PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE.
3. HAND–ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 30 INCHES AND 44 INCHES ABOVE THE FLOOR.
4. WHEN AN AUTOMATIC OR POWER ASSISTED DOOR OPERATOR IS UTILIZED TO OPERATE A PAIR OF DOORS, AT LEAST ONE OF THE DOORS SHALL BE CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32 INCHES WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION. AUTOMATIC DOORS SHALL COMPLY WITH BHMA A156.10 OR BHMA A156.19.

EFFORT TO OPERATE DOORS:

1. THE MAXIMUM FORCE REQUIRED TO PUSH OR PULL OPEN A DOOR SHALL COMPLY WITH THE FOLLOWING:
   A. PUSH OR PULL FORCE FOR A HINGED DOOR SHALL BE MEASURED PERPENDICULAR TO THE DOOR FACE AT THE DOOR OPENING HARDWARE OR 30 INCHES FROM THE HINGED SIDE, WHICHEVER IS FARTHER FROM THE HINGE.
   B. PUSH OR PULL FORCE FOR A SLIDING DOOR OR FOLDING DOOR SHALL BE MEASURED PARALLEL TO THE DOOR AT THE DOOR PULL OR LATCH.
   C. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS COMPLYING WITH SECTION 11339.2.3.2 MAY BE USED TO MEET THE MAXIMUM FORCE LIMITS:
      1) REQUIRED FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY, NOT TO EXCEED 15 LBF.
      2) OTHER THAN REQUIRED FIRE DOORS, INTERIOR DOORS SHALL HAVE A MAXIMUM OPENING FORCE OF 5 LBF.
      3) OTHER THAN REQUIRED FIRE DOORS, EXTERIOR DOORS SHALL HAVE A MAXIMUM OPENING FORCE OF 5 LBF.

A5 DOORS

NO SCALE

rdc.

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Ralph Watson

8.19.22

PROFESSIONAL IN CHARGE
RW

PROJECT MANAGER
RM

QUALITY CONTROL
RW

DRAWN BY
KR

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

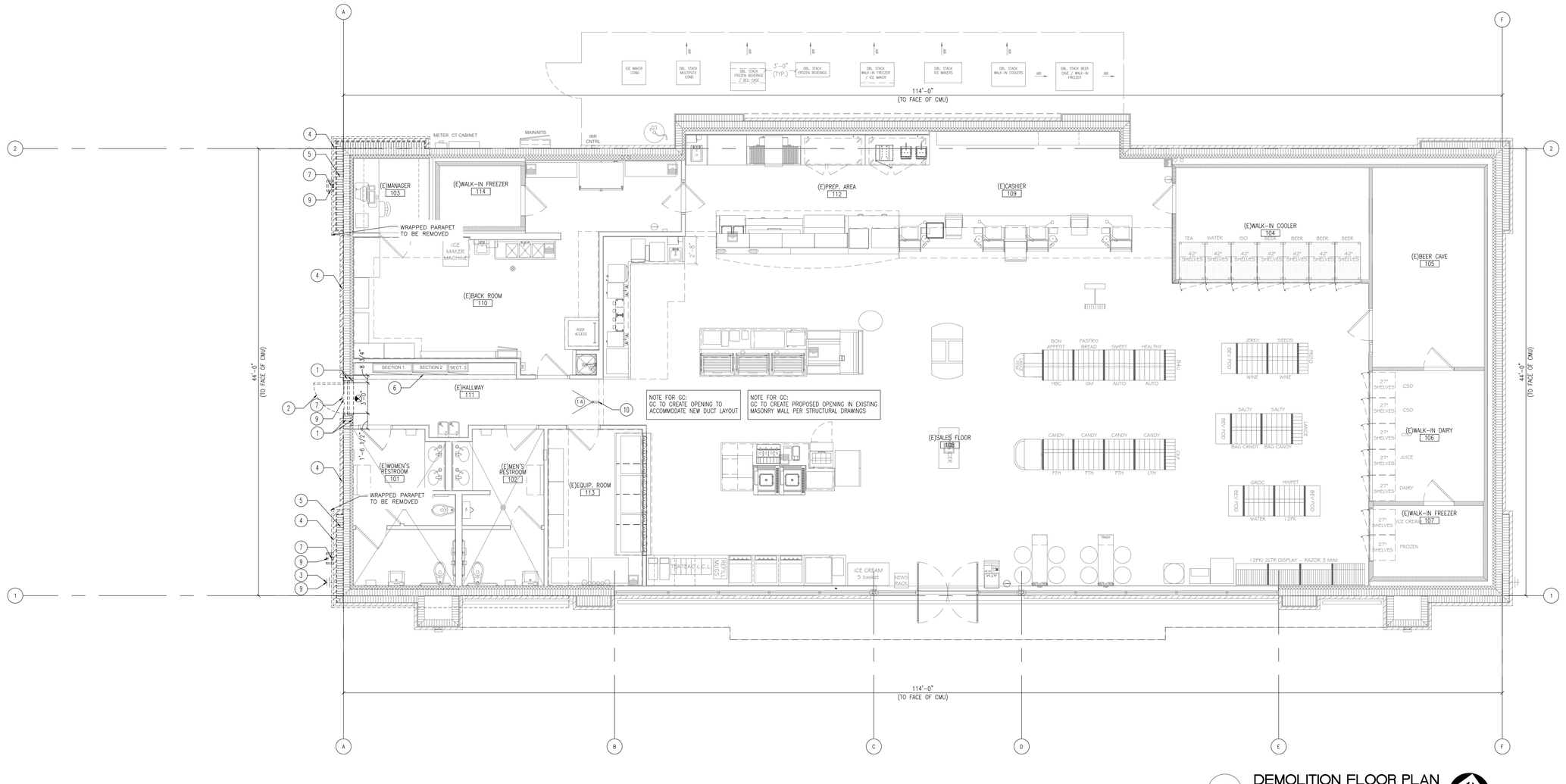
ACCESSIBILITY STANDARDS NOTES/DETAILS

SHEET NUMBER

A1.1

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4625 NATIONAL PROTOTYPE – R1



1 DEMOLITION FLOOR PLAN

SCALE: 3/16" = 1'-0"

KEY NOTES (X)

1. (E) WALL TO BE REMOVED
2. (E) STOREFRONT TO BE REMOVED. FIELD VERIFY DIMENSIONS AND COORDINATE ANY DISCREPANCIES WITH ARCHITECT.
3. (E) FOUNTAIN BIB TO BE RELOCATED, REFER TO MEP DRAWINGS FOR NEW LOCATION
4. (E) STONE VENEER TO BE REMOVED. PATCH WALL AS REQUIRED TO ALIGN AND MATCH EXISTING ADJACENT WALL FINISH
5. (E) CMU WALL TO BE REMOVED. PATCH WALL AS REQUIRED TO ALIGN AND MATCH EXISTING ADJACENT WALL FINISH
6. (E) ELECTRICAL PANELS TO REMAIN
7. (E) EXTERIOR LIGHT TO BE RELOCATED, REFER TO A1.2 FOR NEW LOCATION
8. REFER TO STRUCTURAL, MECHANICAL, ELECTRICAL AND PLUMBING FOR ADDITIONAL DEMOLITION SCOPE.
9. GENERAL CONTRACTOR TO COORDINATE WITH CIRCLE K CONSTRUCTION MANAGER FOR CONSTRUCTION SEQUENCING, ANY ITEMS TO REMAIN THAT WILL NEED TO BE STORED AND PROTECTED FOR FUTURE INSTALLATION.
10. EXIT SECURITY CAMERA TO BE RELOCATED IN PROPOSED LOCATION

LEGEND

EXISTING:

- 8" STD. CMU WALL W/ FOAM CORE INSULATION. SEE STRUCTURAL SHEETS
- 3 5/8" 20ga. METAL STUD AT 24" O.C. TO DECK WITH R-11 BATT INSULATION SEE SHEET A1.3 FOR WALL TYPES
- 6" 20ga. METAL STUD AT 24" O.C. SEE SHEET A1.3 FOR WALL TYPES
- 3 5/8" 20ga. METAL STUD AT 24" O.C. SEE SHEET A1.3 FOR WALL TYPES
- 3 5/8" 20ga. METAL STUD AT 24" O.C. TO DECK SEE SHEET A1.3 FOR WALL TYPES
- CMU WAINSCOT/STONE VENEER PILASTER
- PRE-MANUFACTURED FREEZER/COOLER WALL, EXISTING
- F.R.P. PANELING, EXISTING
- 3/4" PLYWOOD W/F.R.P. PANELING, EXISTING

DEMOLITION:

- 8" STD. CMU WALL W/ FOAM CORE INSULATION.
- 3 5/8" 20ga. METAL STUD AT 24" O.C. TO DECK WITH R-11 BATT INSULATION
- CMU WAINSCOT/STONE VENEER PILASTER

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9.19.22

PROFESSIONAL IN CHARGE
RW

PROJECT MANAGER
RM

QUALITY CONTROL
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DRAWN BY
KR

PROJECT NAME

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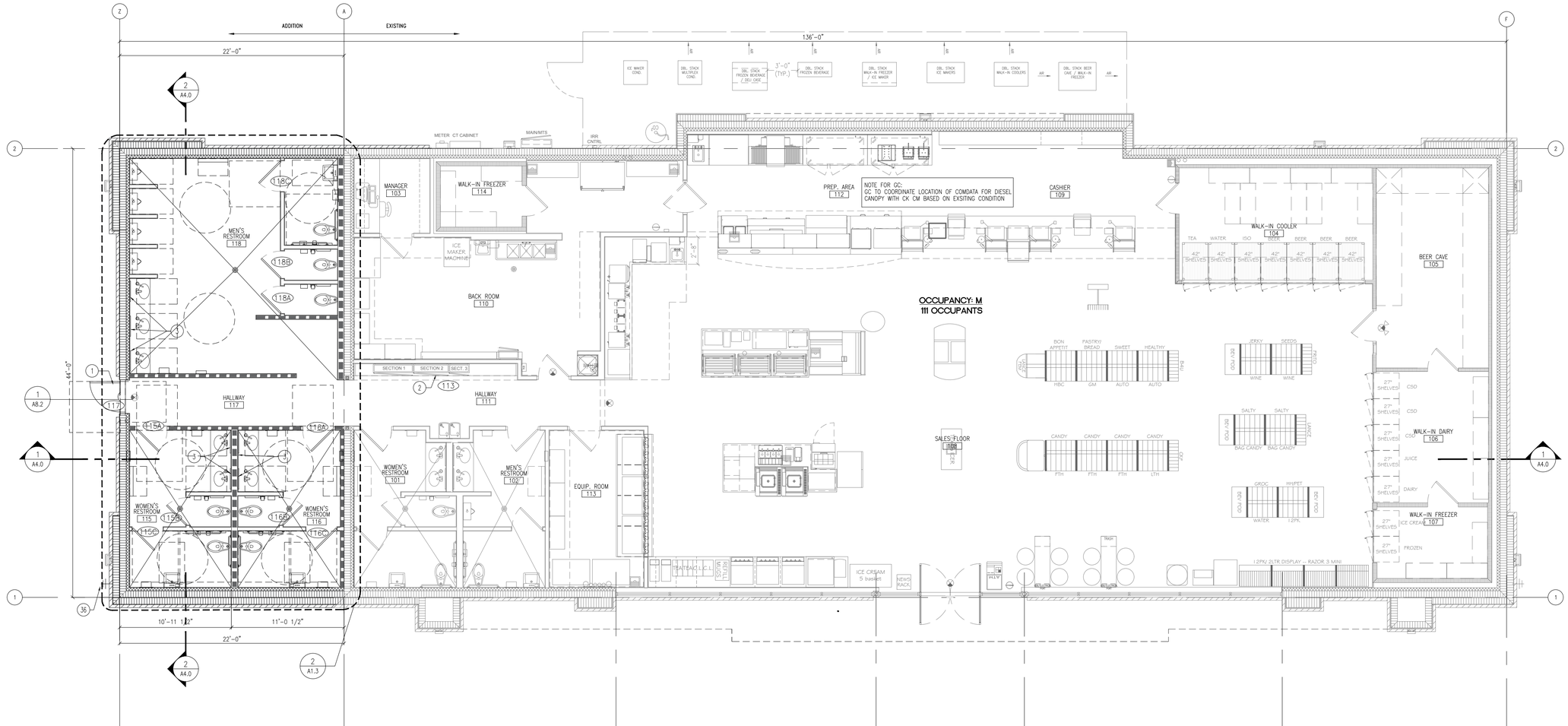
DEMOLITION FLOOR PLAN

SHEET NUMBER

AD1.2

Drawing Name: G:\2022\22036_Circle K - Lake City, FL\Documentation\ARCH\D-1_Demolition Floor Plan.dwg Last Modified: Aug 18, 2022 - 11:14am Plotted on: Aug 18, 2022 - 12:52pm by katelyn.reynolds

4625 NATIONAL PROTOTYPE - R1



1 FLOOR PLAN
SCALE: 3/16" = 1'-0"

INTERIOR FINISHES

MARK	DESCRIPTION
B3	PORCELAIN TILE: COTTO AMERICANO BLACK 6"x12" (SANITARY) GROUT: CHARCOAL BLACK
B4	6" HIGH PORCELAIN TILE: FLORIDA TILE 6"x12" 23835 GILD GROUT: #60 CHARCOAL SANDED W/ 1/8" WIDE JOINTS
C1	5/8" GYPSUM CEILING BOARD – PAINTED SW6105 (SHERWIN WILLIAMS)
C4	SUSPENDED 2'x4' T-BAR GRID WITH WASHABLE LAY-IN VINYL-CLAD SHEETROCK CEILING TILES
F2	PORCELAIN TILE: FLORIDA TILE – 12"X24" 23835 GILD GROUT: #60 CHARCOAL SANDED W/ 1/8" WIDE JOINTS
F3	PORCELAIN TILE: CROSSVILLE – 12"x12" COTTO AMERICANO BLACK GROUT: #60 CHARCOAL SANDED W/ 1/8" WIDE JOINTS
W1	5/8" GYPSUM WALL BOARD – PRIMED, READY FOR PAINT INTERIOR WALL – PAINTED SW6113 INTERACTIVE CREAM (SHERWIN WILLIAMS)
W3	WALL TILE: CROSSVILLE–COTTO AMERICANO BEIGE 12"X12" (11¾" X 11¾") GROUT: #10 ANTIQUE WHITE SANDED W/ 1/8" WIDE JOINTS. INSTALL WITH RONDEC IV/RO100ATG SCHLUTER OUTSIDE CORNERS
W4	PORCELAIN TILE: DAL–TILE TERRA ANTICA ORO TA01 12" X 12" GROUT: CHARCOAL BLACK. INSTALL WITH RONDEC IV/RO100ATG SCHLUTER OUTSIDE CORNERS

ROOM FINISH SCHEDULE

MARK	ROOM	FLOOR		BASE		INTERIOR WALLS												CEILING			NOTES:
	A-REAR / D-LEFT / RM. / B-RIGHT / C-FRONT					REAR				RIGHT				FRONT				LEFT			
NO.	REFERENCE ORIENTATION	F2 PORCELAIN TILE	F3 PORCELAIN TILE	B3 6" HIGH COVED PORCELAIN TILE	B4 6" HIGH x 12" PORCELAIN TILE	W1 5/8" GYPSUM WALL BOARD	W3 WALL TILE/GROUT	W4 WALL TILE/GROUT		W1 5/8" GYPSUM WALL BOARD	W3 WALL TILE/GROUT	W4 WALL TILE/GROUT		W1 5/8" GYPSUM WALL BOARD	W3 WALL TILE/GROUT	W4 WALL TILE/GROUT		W1 5/8" GYPSUM WALL BOARD	W3 WALL TILE/GROUT	W4 WALL TILE/GROUT	C1 5/8" GYP CLG BD – PAINTED	C4 SUSPENDED 2'x4' – 1/2" THICK (WASHABLE TILE)	
101	WOMEN'S																				EXISTING TO REMAIN
102	MEN'S																				EXISTING TO REMAIN
103	MANAGER																				EXISTING TO REMAIN
104	WALK–IN COOLER																				EXISTING TO REMAIN
105	BEER CAVE																				EXISTING TO REMAIN
106	WALK–IN DAIRY																				EXISTING TO REMAIN
107	WALK–IN FREEZER																				EXISTING TO REMAIN
108	SALES FLOOR																				EXISTING TO REMAIN
109	CASHIER																				EXISTING TO REMAIN
110	BACK ROOM																				EXISTING TO REMAIN
111	HALLWAY																				EXISTING TO REMAIN
112	PREP. AREA																				EXISTING TO REMAIN
113	EQUIP. ROOM																				EXISTING TO REMAIN
114	WALK–IN COOLER																				EXISTING TO REMAIN
115	WOMEN'S		X		X			X				X				X				X	SEE SHTS. A3.1 FOR MORE INFORMATION
116	WOMEN'S		X		X			X				X				X				X	SEE SHTS. A3.1 FOR MORE INFORMATION
117	HALLWAY	X				X	X		X	X			X	X			X	X			
118	MEN'S		X		X			X				X				X				X	SEE SHTS. A3.1 FOR MORE INFORMATION

LEGEND

ADDITION:

- 8" STD. CMU WALL W/ FOAM CORE INSULATION. SEE STRUCTURAL SHEETS
- 3 5/8" 20ga. METAL STUD AT 24" O.C. TO DECK WITH R–11 BATT INSULATION SEE SHEET A1.3 FOR WALL TYPES
- 6" 20ga. METAL STUD AT 24" O.C. SEE SHEET A1.3 FOR WALL TYPES
- 3 5/8" 20ga. METAL STUD AT 24" O.C. SEE SHEET A1.3 FOR WALL TYPES
- CMU WAINSCOT/STONE VENEER PILASTER
- (X) WINDOW TYPE: SEE WINDOWS SCHEDULE SHEET A6.0
- (X) DOOR TYPE: SEE DOOR SCHEDULE SHEET A6.0

EXISTING:

- 8" STD. CMU WALL W/ FOAM CORE INSULATION. SEE STRUCTURAL SHEETS
- 3 5/8" 20ga. METAL STUD AT 24" O.C. TO DECK WITH R–11 BATT INSULATION SEE SHEET A1.3 FOR WALL TYPES
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- CMU WAINSCOT/STONE VENEER PILASTER
- PRE–MANUFACTURED FREEZER/COOLER WALL, EXISTING
- F.R.P. PANELING, EXISTING
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DEMOLITION:

- 8" STD. CMU WALL W/ FOAM CORE INSULATION.
- 3 5/8" 20ga. METAL STUD AT 24" O.C. TO DECK WITH R–11 BATT INSULATION
- CMU WAINSCOT/STONE VENEER PILASTER

GENERAL NOTES

1. DIMENSIONS SHOWN ARE TO INTERIOR WALL FINISH, UNLESS OTHERWISE NOTED.
2. SEE SHEET A1.4 FOR EQUIPMENT
3. INSTALL FULL THICKNESS BATT INSULATION CONTINUOUS TO ROOF DECK IN ALL WALL SEPARATING REST ROOMS FROM ADJACENT CONVENIENCE STORE AREAS. INSULATION TO BE NON–COMBUSTIBLE, BEARING THE U.L. CLASSIFICATION MARKING
4. BRACE STUDS ABOVE CEILING AS REQUIRED TO PROVIDE RIGID WALLS THROUGHOUT, SEE STRUCTURAL DRAWINGS
5. GENERAL CONTRACTOR SHALL COORDINATE WITH THE EQUIPMENT AND DRYWALL INSTALLERS TO ENSURE THAT ALL ELECTRICAL WIRING, WATER LINES AND REFRIGERATION LINES HAVE BEEN INSTALLED PROPERLY ON ALL EQUIPMENT PRIOR TO THE HANGING OF ANY DRYWALL, SEE THE CIRCLE K PROJECT MANAGER FOR ANY EQUIPMENT LOCATION CLARIFICATIONS.
6. PROVIDE 5/8" MOISTURE–RESISTANT GYPSUM WALLBOARD THROUGHOUT WHERE REQUIRED.

KEY NOTES (X)

1. INSULATED METAL DOOR IN HOLLOW METAL FRAME, SEE DOOR SCHEDULES SHEET A6.0
2. LOCATION OF ELECTRICAL PANELS, SEE ELECTRICAL DRAWINGS FOR SPECIFIC INFORMATION
3. PROVIDE SIGN ABOVE HAND SINK "EMPLOYEE MUST WASH HANDS BEFORE RETURNING TO WORK".

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PROJECT MANAGER
RM

QUALITY CONTROL
RW

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KR

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

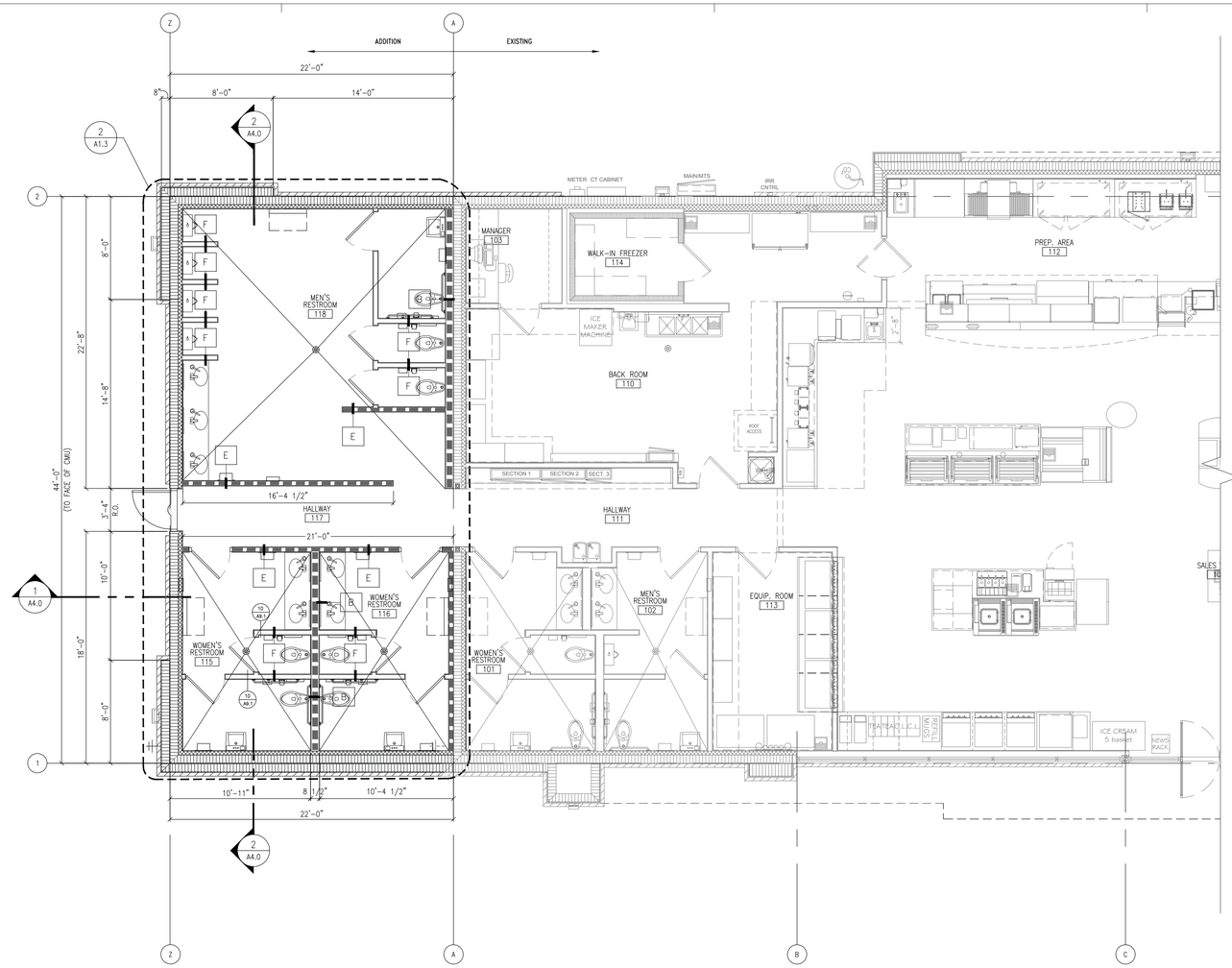
FLOOR PLAN AND ROOM FINISH SCHEDULE

SHEET NUMBER

A1.2

Drawing Name: G:\2022\22036_Circle K – Lake City, FL\Documentation\[A]R1.2_Floor Plan and Room Finish Schedule.dwg Last Modified: Aug 17, 2022 – 4:48pm Plotted on: Aug 18, 2022 – 12:52pm by kdelanynorris

4625 NATIONAL PROTOTYPE – R1



1 FINISH DIMENSION FLOOR PLAN

SCALE: 3/16" = 1'-0"

NOTES:
A. SEE ROOM FINISH SCHEDULE ON SHEET A1.2.
B. SEE EQUIPMENT SCHEDULE ON SHEET A1.4.
C. SEE DETAIL 5/A3.1 FOR RESTROOM WALL TILE PATTERN.
D. SEE SHEETS A3.1 AND A3.2 FOR RESTROOM ELEVATIONS AND DETAILS.

LEGEND

ADDITION:

- 8" STD. CMU WALL W/ FOAM CORE INSULATION. SEE STRUCTURAL SHEETS
- 3 5/8" 20ga. METAL STUD AT 24" O.C. TO DECK WITH R-11 BATT INSULATION SEE SHEET A1.3 FOR WALL TYPES
- 6" 20ga. METAL STUD AT 24" O.C. SEE SHEET A1.3 FOR WALL TYPES
- 3 5/8" 20ga. METAL STUD AT 24" O.C. SEE SHEET A1.3 FOR WALL TYPES
- CMU WAINSCOT/STONE VENEER PILASTER
- (X) WINDOW TYPE: SEE WINDOWS SCHEDULE SHEET A6.0
- (X) DOOR TYPE: SEE DOOR SCHEDULE SHEET A6.0

EXISTING:

- 8" STD. CMU WALL W/ FOAM CORE INSULATION. SEE STRUCTURAL SHEETS
- 3 5/8" 20ga. METAL STUD AT 24" O.C. TO DECK WITH R-11 BATT INSULATION SEE SHEET A1.3 FOR WALL TYPES
- 6" 20ga. METAL STUD AT 24" O.C. SEE SHEET A1.3 FOR WALL TYPES
- 3 5/8" 20ga. METAL STUD AT 24" O.C. SEE SHEET A1.3 FOR WALL TYPES
- 3 5/8" 20ga. METAL STUD AT 24" O.C. TO DECK SEE SHEET A1.3 FOR WALL TYPES
- CMU WAINSCOT/STONE VENEER PILASTER
- PRE-MANUFACTURED FREEZER/COOLER WALL, EXISTING
- F.R.P. PANELING, EXISTING
- 3/4" PLYWOOD W/F.R.P. PANELING, EXISTING

DEMOLITION:

- 8" STD. CMU WALL W/ FOAM CORE INSULATION.
- 3 5/8" 20ga. METAL STUD AT 24" O.C. TO DECK WITH R-11 BATT INSULATION
- CMU WAINSCOT/STONE VENEER PILASTER

WALL TYPES (X)

B. WALL TYPE, SEE 4/A9.1
E. WALL TYPE, SEE 8/A9.1
F. WALL TYPE, SEE 10/A9.1 & 11/A9.1

GENERAL NOTES

1. DIMENSIONS SHOWN ARE TO INTERIOR WALL FINISH, UNLESS OTHERWISE NOTED.
2. SEE SHEETS A1.4 AND A1.5 FOR EQUIPMENT.
3. COORDINATE ALL DIMENSIONS IN AREAS OF WALK-IN COOLERS WITH EQUIPMENT INSTALLERS.
4. INSTALL FULL THICKNESS BATT INSULATION CONTINUOUS TO ROOF DECK IN ALL WALL SEPARATING REST ROOMS FROM ADJACENT CONVENIENCE STORE AREAS. INSULATION TO BE NON-COMBUSTIBLE, BEARING THE U.L. CLASSIFICATION MARKING.
5. BRACE STUDS ABOVE CEILING AS REQUIRED TO PROVIDE RIGID WALLS THROUGHOUT, SEE STRUCTURAL DRAWINGS.
6. ALL CABINETS IN FAST-FOOD AREA, INCLUDING COFFEE BAR AND SALES COUNTER, TO HAVE SOLID TOP WITH METAL SIDES PAINTED AND KICK PLATE BASE PAINTED "BLACK".
7. USE FDA APPROVED FOOD GRADE CLEAR CAULKING BETWEEN COUNTERTOPS AND WALLS AND WHERE REQUIRED PER LOCAL AND COUNTY HEALTH DEPARTMENT REQUIREMENTS.
8. GENERAL CONTRACTOR SHALL COORDINATE WITH THE EQUIPMENT AND DRYWALL INSTALLERS TO ENSURE THAT ALL ELECTRICAL WIRING, WATER LINES AND REFRIGERATION LINES HAVE BEEN INSTALLED PROPERLY ON ALL EQUIPMENT PRIOR TO THE HANGING OF ANY DRYWALL, SEE THE CIRCLE K PROJECT MANAGER FOR ANY EQUIPMENT LOCATION CLARIFICATIONS.
9. ALL INSULATION SHALL NOT BE EXPOSED TO VIEW FROM INSIDE SALES FLOOR AREA.
10. PROVIDE 5/8" MOISTURE-RESISTANT GYPSUM WALLBOARD THROUGHOUT WHERE REQUIRED.
11. SEE SHEET A1.2 FOR ROOM FINISH SCHEDULE.
12. SEE SHEETS A3.1, A3.2, AND A3.3 FOR INTERIOR ELEVATIONS.

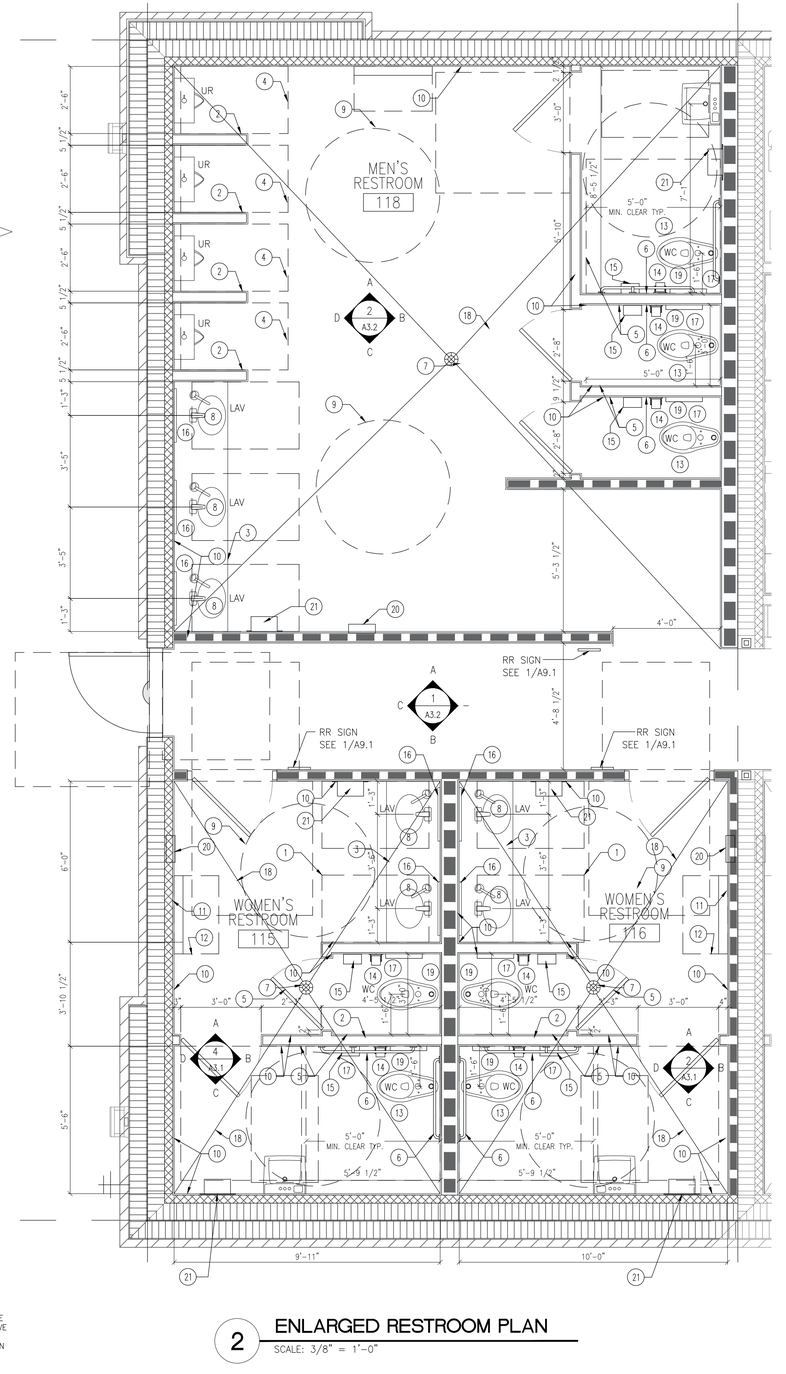
RESTROOM KEY NOTES (X)

1. 30X48 ADA ACCESSIBLE SPACE AT LAV.
2. PARTITION
3. COUNTER - SEE INTERIOR ELEVS PLANS
4. 30X48 ADA ACCESSIBLE SPACE AT URINAL
5. CONVENIENCE HOOKS
6. GRAB BAR 1-1/4" - 1-1/2" DIAMETER, PROVIDE ADEQUATE BLOCKING
7. FLOOR DRAIN, SEE PLUMBING DWGS.
8. INSULATED WATER AND DRAIN PIPES
9. 60" DIA. MIN. CLEAR FOR WHEELCHAIR
10. CERAMIC TILE WALLS
11. INSTALL BLOCKING FOR CHANGING TABLE
12. CHANGING TABLE TO BE INSTALLED BY G.C.
13. TOILET FLUSH VALVES TO BE ON THE WIDE SIDE OF STALL
14. TOILET PAPER DISPENSER
15. SANITARY NAPKIN DISPOSAL
16. MIRROR
17. SOLID BLOCKING AT WALL FOR ALL MOUNTED EQUIPMENT
18. FLOOR SHALL SLOPE TO DRAIN
19. TOILET SEAT COVER DISPENSER
20. TRASH RECEPTACLE
21. HAND DRYER

RESTROOM SIGN NOTE:

SIGNS DENOTING THE RESTROOMS SHALL INCLUDE LETTERS AND NUMERALS THAT ARE RAISED 1/32", UPPER CASE, SANS SERIF OR SIMPLE SANS SERIF AND SHALL BE ACCOMPANIED WITH GRADE 2 BRAILLE.

MOUNTING HEIGHTS FOR THE SIGNS DENOTING THE RESTROOMS SHALL BE BE LOCATED 48 INCHES MINIMUM ABOVE THE FINISH FLOOR, MEASURED FROM THE BASELINE OF THE LOWEST TACTILE CHARACTER AND 60 INCHES MAXIMUM ABOVE THE FINISH FLOOR MEASURED FROM THE BASELINE OF THE HIGHEST TACTILE CHARACTER. MOUNTING LOCATION FOR THE SIGN SHALL BE SO THAT A PERSON MAY APPROACH WITHIN 3 INCHES OF THE SIGN WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF THE DOOR.



2 ENLARGED RESTROOM PLAN

SCALE: 3/8" = 1'-0"

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Ralph Watson
Ralph Watson (Aug 18, 2022 13:52 EDT)
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Aug 18, 2022 13:52 EDT
E2E-DS-09-55-14-00707

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QUALITY CONTROL
RW

DRAWN BY
KR

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

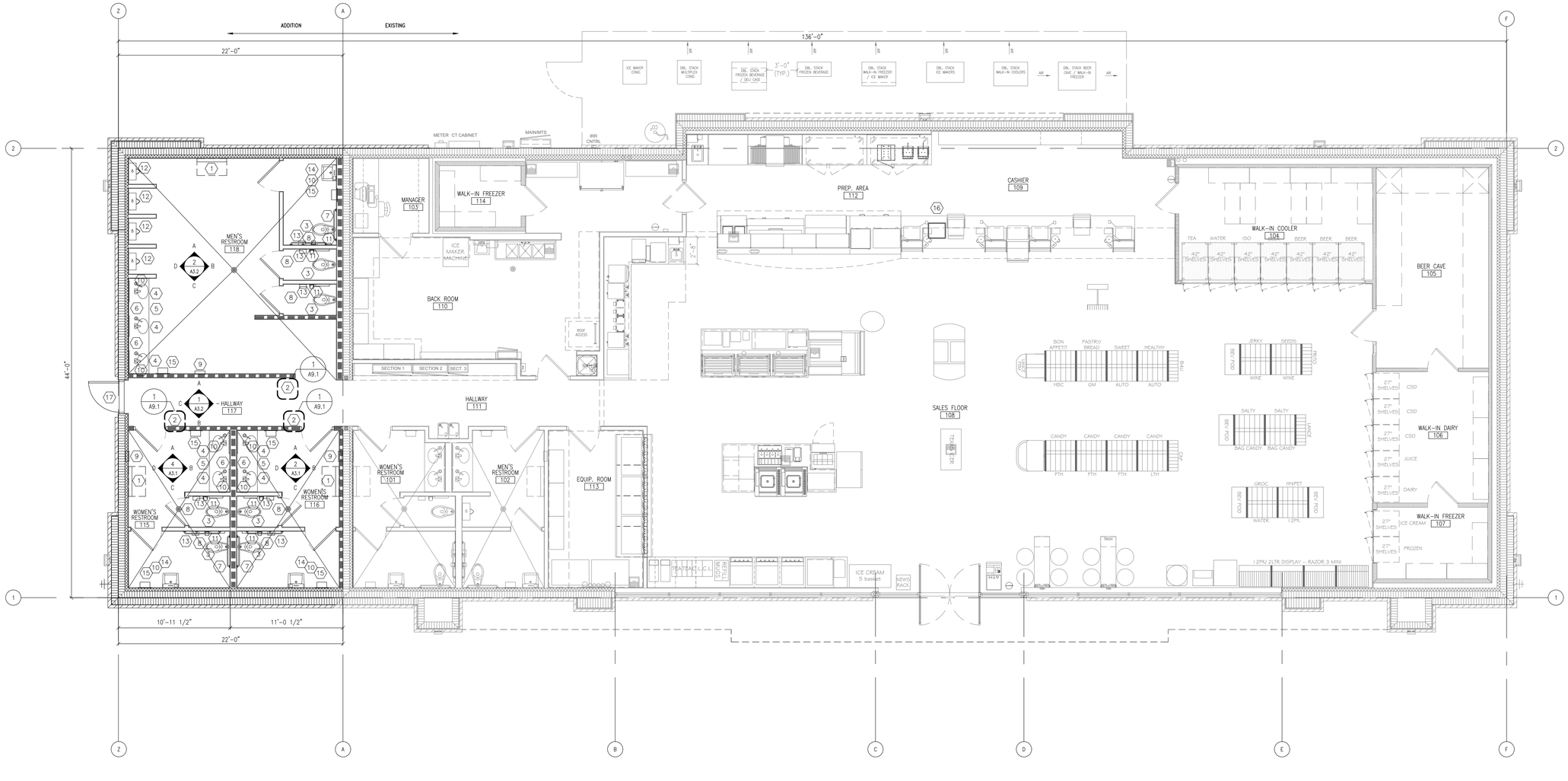
FINISH DIMENSION FLOOR PLAN, WALL TYPES AND ENLARGED RESTROOM

SHEET NUMBER

A1.3

Drawing Name: G:\2022\22036_Circle K - Lake City, FL\Documentation\CAD\A1.3_Finish Dimension Floor Plan.dwg Last Modified: Aug 18, 2022 - 1:52pm Plotted on: Aug 18, 2022 - 1:52pm by kellyreynolds

4625 NATIONAL PROTOTYPE - R1



EQUIPMENT LIST

No.	ITEM	PART NO. / DESCRIP.	SUPPLIER	QTY	PURCHASED BY	INSTALLED BY	UTILITY REQUIREMENTS	DIMENSIONS/SPECIFICATIONS/NOTES
1	CHANGING TABLE	KB110-SSWM	KOALA KARE	3	GENERAL CONTRACTOR	GENERAL CONTRACTOR	NOT APPLICABLE	PROVIDE ADEQUATE BACKING
2	RESTROOM SIGNS	ADA SQUARE MEN/WOMEN SIGNS	COUCH PHILLIPI	2 WOMEN'S 1 MEN'S	GENERAL CONTRACTOR	GENERAL CONTRACTOR	NOT APPLICABLE	SEE DET. 1/A9.1 FOR SIGNAGE
3	WATER CLOSET	2234.015 2305.100	AMERICAN STANDARD	7	GENERAL CONTRACTOR	GENERAL CONTRACTOR	1.6 GALLONS PER FLUSH	SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION
4	LAVATORY	0476.028	AMERICAN STANDARD	7	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION
5	FLOATING COUNTER TOP	SAHARA	CORIAN	3	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	INSTALLED WITH HAMMAM HIDDEN VANITY SUPPORT BRACKETS 39834,(MIN. OF 4) MFG BY FEDERAL BRACE OR EQUAL
6	MIRROR	B-290 2436	BOBRICK	10	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	PROVIDE ADEQUATE BACKING
7	GRAB BAR	B-5806	BOBRICK	3-18" (VERT.) 3-36"(HORIZ.) 3-42" (HORIZ.)	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	1-1/4" – 1-1/2" DIAMETER, PROVIDE ADEQUATE BACKING
8	TOILET PAPER DISPENSER	B-2890	–	7	CIRCLE K	GENERAL CONTRACTOR	–	PROVIDE ADEQUATE BACKING
9	RECESSED TRASH RECEPTACLE	B-43644	BOBRICK	3	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	PROVIDE ADEQUATE BACKING
10	SOAP DISPENSER	B-4112	–	9	CIRCLE K	GENERAL CONTRACTOR	–	PROVIDE ADEQUATE BACKING
11	TOILET SEAT COVER DISPENSER	B-4221	–	7	CIRCLE K	GENERAL CONTRACTOR	–	PROVIDE ADEQUATE BACKING
12	URINAL	K-5016-ET	KOHLER	4	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION
13	SANITARY NAPKIN DISPOSAL	B-270	BOBRICK	7	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	PROVIDE ADEQUATE BACKING
14	HANDICAP LAVATORY	0321026-020	AMERICAN STANDARD	3	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION
15	SS HAND DRYER W/ WALL GAURD	XL-SB 220V W/ 89S	XLERATOR	4	CIRCLE K	GENERAL CONTRACTOR	ELECTRICAL REQUIREMENTS BY GC.	G.C. TO PROVIDE REQUIRED ELECTRICAL
16	COMDATA UNIT	SMARTDESQ	CIRCLE K	1	CIRCLE K	VENDOR	ELECTRICAL REQUIREMENTS BY GC.	G.C. TO PROVIDE REQUIRED ELECTRICAL
17	CO2 SIGNS	–	–	1	GENERAL CONTRACTOR	GENERAL CONTRACTOR	–	SEE DET. 2/A9.1 FOR SIGNAGE

1 EQUIPMENT PLAN
SCALE: 3/16" = 1'-0"

GENERAL NOTES

1. EQUIPMENT SYMBOL (x)
2. VERIFY EQUIPMENT LAYOUT WITH CIRCLE K
3. SEE SHEETS A3.1 AND A3.2 FOR INTERIOR ELEVATIONS.

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Reason: I am the author of this document
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PROJECT NAME
CIRCLE K STORES INC.

LAKE CITY
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LAKE CITY, FL 32055

CIRCLE K STORES INC.

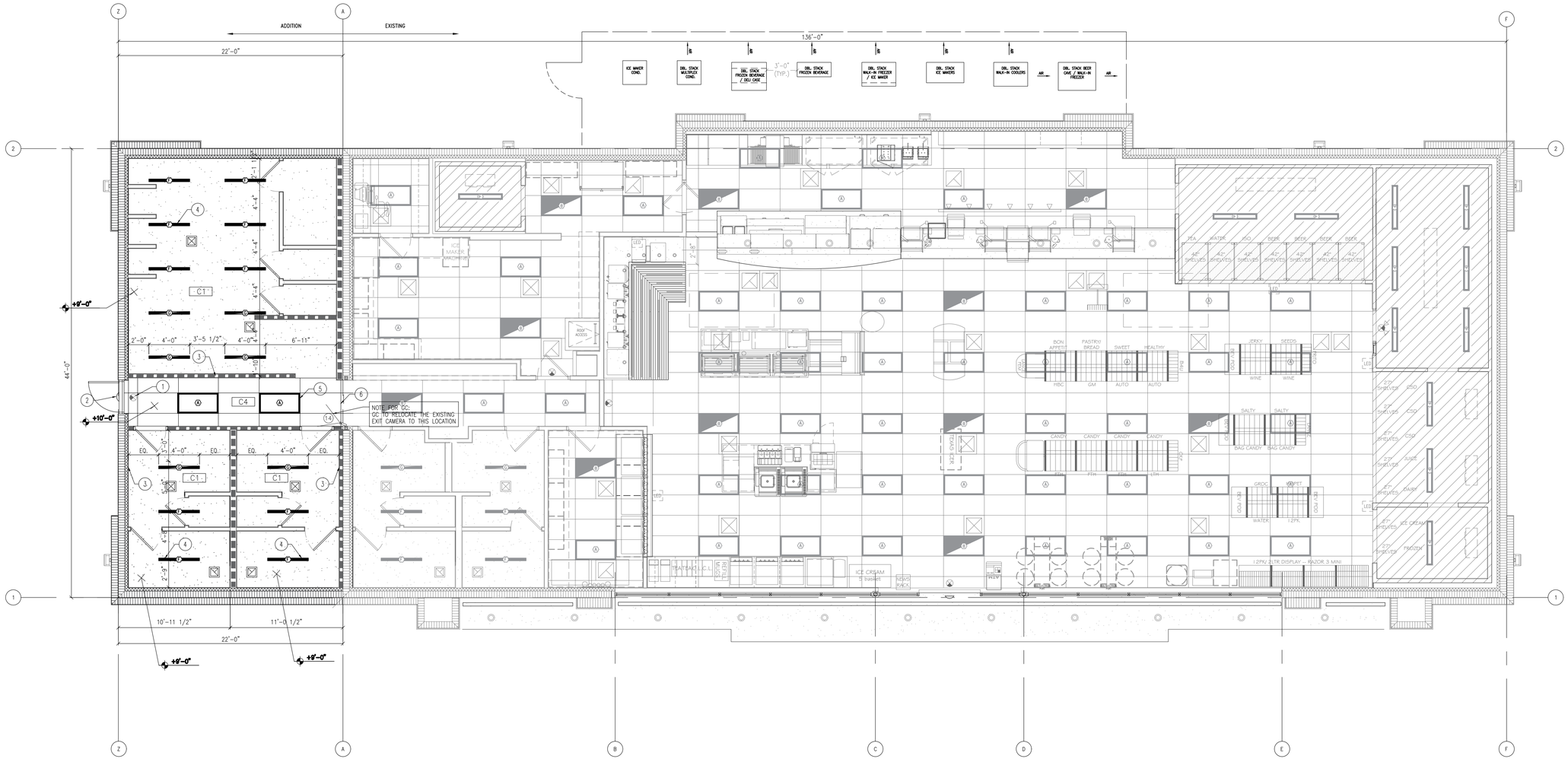
PROJECT NUMBER
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SHEET TITLE
EQUIPMENT PLAN & LIST

SHEET NUMBER
A1.4

Drawing Name: G:\2022\22036_Circle K - Lake City, FL\Documentation\CAD\A1.4_Equipment Plan.dwg Last Modified: Aug 15, 2022 - 10:33am Plotted on: Aug 15, 2022 - 12:43pm by ashleymyrands

4625 NATIONAL PROTOTYPE - R1



1 REFLECTED CEILING PLAN

SCALE: 3/16" = 1'-0"

KEY NOTES

1. ILLUMINATED EMERGENCY EXIT SIGN. SEE ELECTRICAL
2. EXTERIOR LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS AND EXTERIOR ELEVATIONS
3. EMERGENCY BATTERY BACKUP LIGHT. SEE ELECTRICAL.
4. RECESSED LIGHT, SEE ELECT.
5. LED LENS, SEE ELECT.
6. GC TO ALIGN THE NEW CEILING GRID WITH EXISTING ONE

LEGEND

EXISTING:

- SUSPENDED GRID, REFER TO ROOM FINISH SCHEDULE SHEET A1.2
- 5/8" GYP. BD. CLNG.
- 2 x 4 LED LIGHT FIXTURE (PARABOLIC)
- 2 x 4 N.L. & EMERG. LED LIGHT FIXTURE
- MOISTURE PROOF FIXTURE SUPPLIED BY COOLER MFR.
- RECESSED OR SUSPENDED CAN LIGHT FIXTURE
- EXTERIOR WALL MOUNT LIGHT FIXTURE
- ILLUM. EXIT SIGN
- EMERGENCY BATTERY BACKUP LIGHT FIXTURE
- SUPPLY AIR DIFFUSER
- EXHAUST FAN
- CEILING ELECT. OUTLET
- LED TRANSFORMER FOR INTERIOR SIGNAGE ABOVE CEILING
- CAMERA LOCATION
- TRACK LIGHT

ADDITION:

- C4 — CEILING TYPE
- +X–X" — CEILING HEIGHT
- SUSPENDED GRID, REFER TO ROOM FINISH SCHEDULE SHEET A1.2
- 5/8" GYP. BD. CLNG.
- 2 x 4 LED LIGHT FIXTURE (PARABOLIC)
- MOISTURE PROOF FIXTURE SUPPLIED BY COOLER MFR.
- EXTERIOR WALL MOUNT LIGHT FIXTURE
- ILLUM. EXIT SIGN
- SUPPLY AIR DIFFUSER
- EXHAUST FAN
- CAMERA LOCATION

GENERAL NOTES

1. SECURITY SYSTEM DESIGNED AND PROVIDED BY CIRCLE K
2. (X) INDICATES APPROXIMATE CAMERA LOCATIONS
3. FINAL CAMERA LOCATIONS TO BE DETERMINED BY CIRCLE K
4. CIRCLE K TO VERIFY EXISTING SECURITY CAMERAS LOCATIONS AND SUPPLEMENT FOR PROPOSED ADDITION.
5. SEE FINISH SCHEDULE ON SHEET A1.2 FOR FINISHES
6. DIMENSIONS FOR LIGHT FIXTURE LOCATIONS ARE TO CENTERLINE OF FIXTURE UNLESS OTHERWISE NOTED.

CEILING TYPES

C1	5/8" GYP. CEILING BOARD – PAINTED
C2	5/8" GYP. CEILING BOARD – PRIMED
C3	FACTORY FINISH
C4	ARMSTRONG FF–1729 ACOUSTICAL 24"X48"X5/8" LAY–IN TILE. COLOR: PRE–FINISHED WHITE SUPPLIED AND INSTALLED BY G.C. "T" BAR GRID SUPPLIED AND INSTALLED BY G.C. TO MATCH LAY–IN TILE.
C5	ARMSTRONG, NON–PERFORATED VINYL, FIRE GUARD #870, 24"X48"X5/8" SQUARE EDGE LAY–IN FIRE GUARD WITH WHITE ALUMINUM GRID. COLOR: WHITE. SUPPLIED BY G.C. INSTALLED BY G.C.

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Ralph Watson
AR100937
Ralph Watson
08/15/22

PROFESSIONAL IN CHARGE
RW

PROJECT MANAGER
RM

QUALITY CONTROL
RW

DRAWN BY
KR

PROJECT NAME

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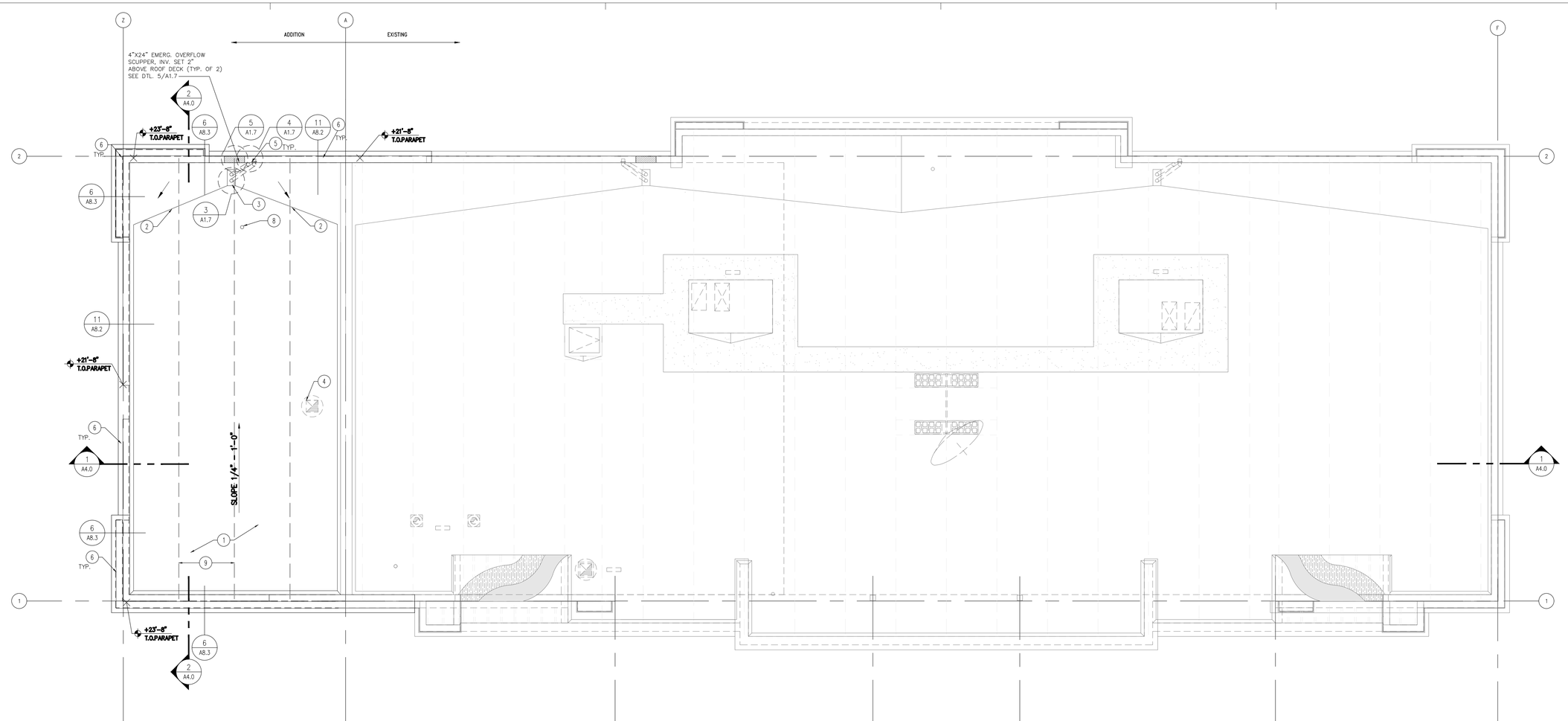
REFLECTED CEILING PLAN

SHEET NUMBER

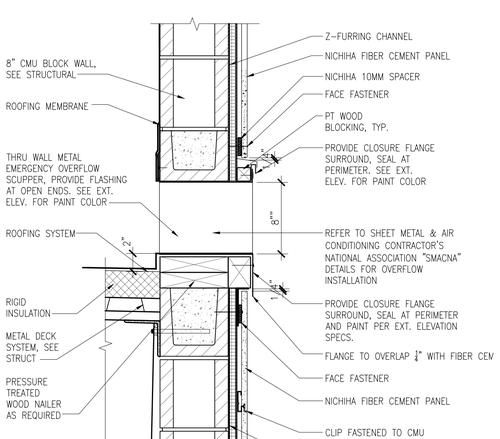
A1.6

Drawing Name: G:\2022\22036_Circle K – Lake City, FL\Documents\Cad\A1.6_Reflected Ceiling Plan.dwg Last Modified: Aug 17, 2022 – 4:40pm Plotted on: Aug 18, 2022 – 12:45pm by ashley.reynolds

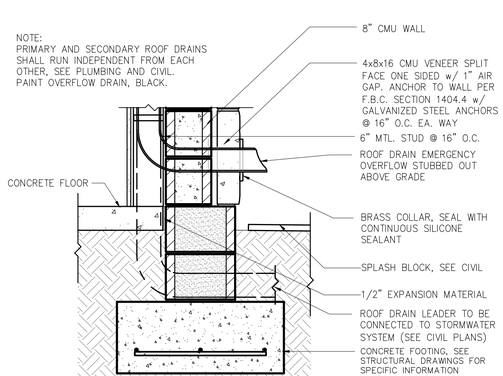
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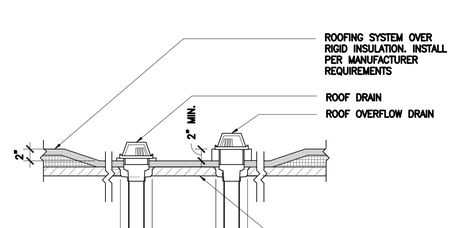
1 ROOF PLAN
SCALE: 3/16" = 1'-0"



5 OVERFLOW SCUPPER DETAIL
SCALE: 1 1/2" = 1'-0"



4 ROOF DRAIN LEADER
1"=1'-0"



3 ROOF AND OVERFLOW DRAIN
1"=1'-0"

KEY NOTES (X)

1. 80 MIL TPO ROOFING SYSTEM OVER RIGID INSULATION. WALKWAYS AS REQUIRED BY ROOFING MANUFACTURER. ROOF SYSTEM TO BE FLOOD TESTED AFTER INSTALLATION TO ENSURE NO LEAKS.
2. TAPERED INSULATION DRAINAGE CRICKET, MINIMUM SLOPE 1/4" PER. FOOT. SEE DETAIL 5 THIS SHEET & 3/A8.1
3. COMBINATION ROOF DRAIN / OVERFLOW DRAIN. SEE DETAIL 3/A1.7 & 4/A.17
4. EXHAUST FAN UNITS, REFER TO MECHANICAL DRAWINGS FOR ALL ROOF SPECIFICATIONS.
5. EMERGENCY OVERFLOW ROOF DRAIN TAIL PIECE. EXTEND 4" BEYOND FINISH SURFACE. SEE DETAIL 4/A1.7.
6. PARAPET CORNICE, SEE EXTERIOR ELEVATIONS AND DETAIL 11/A8.2
7. CONDUIT, REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ALL ROOF SPECIFICATIONS.
8. VTR LOCATION, REFER TO PLUMBING DRAWINGS FOR ALL ROOF SPECIFICATIONS.
9. STEEL WIDE FLANGE BEAMS, REFER TO STRUCTURAL DRAWINGS FOR ALL ROOF SPECIFICATIONS.

GENERAL NOTES

1. SEE DETAIL 5/A8.1 FOR FLASHING AT PIPE PENETRATIONS.
2. SEE BUILDING ELEVATIONS FOR PARAPET HEIGHTS.
3. IF POLYISO CAN NOT BE PROCURED, CONTRACTOR MAY USE ONE OF THE FOLLOWING SOLUTIONS:
   - EPS: MOST COST EFFECTIVE SOLUTION; HOWEVER, ADDITIONAL MATERIAL IS REQUIRED DUE TO LOWER R-VALUE OF 3.6-4.2 PER INCH COMPARED TO 6-6.5 PER INCH.
   - XPS: EXTRUDED POLYSTYRENE, GRADED BETWEEN EPS AND POLYISO.
4. CM TO VERIFY METHOD OF ATTACHMENT GC WILL USE AND COORDINATE WITH MFR TO ENSURE WARRANTY IS NOT AFFECTED:
   - PROVIDE COVER BOARD AS REQUIRED BY TPO-MFR REQUIREMENTS FOR FULLY ADHERED SYSTEM AS THE PREFERRED INSTALLATION METHOD.
   - PROVIDE COVER BOARD AS REQUIRED BY TPO-MFR REQUIREMENTS FOR MECHANICALLY FASTENED SYSTEM AS AN ALTERNATE.

SINGLE PLY ROOFING SPECIFICATION

SINGLE PLY ROOFING SPECIFICATION
FIRESTONE
TPO-60MIL (THERMOPLASTIC POLYOLEFIN MEMBRANE) FULLY ADHERED TPO WHITE ASTM D6878
CLASSIFICATION: UL CLASS: A FM CLASS: 1
-45 PSF DESIGN
MAX. SLOPE 1"
DECK: NON-COMBUSTIBLES
INSULATION: POLYISOCYANURATE INSULATION BOARD ASTM C1289 LTTR = R-15. INSTALLED IN TWO LAYERS WITH STAGGERED JOINTS

TAPERED INSULATION: FACTORY TAPERED BOARDS FABRICATED TO PRODUCE SLOPE OF 1/4" PER FOOT. SLOPE TOWARDS DRAIN.

CRICKETS: PROVIDE CRICKETS TAPERED. EDGE STRIPS WHERE INDICATED.

AUXILIARY MATERIALS
SHEET FLASHING: SAME SHEET AS FIELD SHEET

BONDING ADHESIVE: MANUFACTURERS STANDARD BONDING ADHESIVE

METAL TERMINATION BARS: PRE-DRILLED STAINLESS STEEL OR ALUMINUM BARS

FASTENERS: FACTORY-COATED STEEL FASTENERS AND METAL PLATES MEETING CORROSION-RESISTANCE PROVISIONS OF FMG 4470

MISCELLANEOUS: PROVIDE POURABLE SEALER, PREFORMED CONES, PREFORMED INSIDE AND OUTSIDE CORNER FLASHING, T-JOINT COVERS, TERMINATION REGLETS, AND COVER STRIPS.

WALK-WAY PADS: FACTORY FORMED, NON-POUROUS, HEAVY-DUTY SLIP RESISTANT PADS OR ROLLS ACCEPTABLE TO MEMBRANE ROOFING SYSTEM MANUFACTURER.

ROOF ASSEMBLY SHALL BE INSTALLED PER MANUFACTURER RECOMMENDATIONS.

PROVIDE PATCH OVER ALL 'T'-LAP JOINTS IN THE ROOF.

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8.18.22
Ralph Watson
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Date: 2022.08.29 08:50:35-04'00'

PROFESSIONAL IN CHARGE
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RM

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LAKE CITY, FL 32055

CIRCLE K STORES INC.

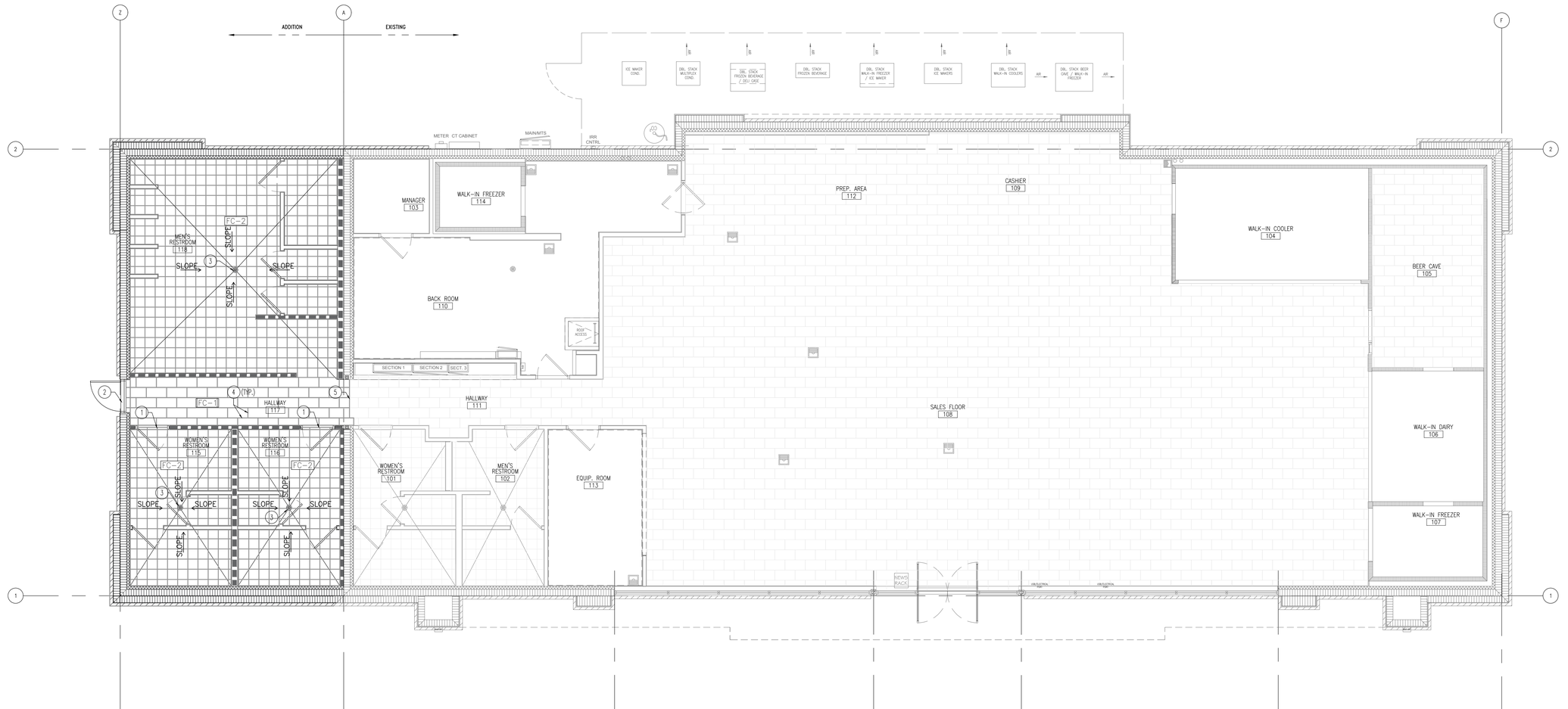
PROJECT NUMBER
22036

SHEET TITLE
ROOF PLAN AND DETAILS

SHEET NUMBER
A1.7

Drawing Name: G:\2022\22036_Circle K - Lake City, FL\Documentation\CAD\A1.7_Roof Plan and Details.dwg Last Modified: Aug 18, 2022 - 11:33am Plotted on: Aug 18, 2022 - 1:05pm by kelsey.reynolds

4625 NATIONAL PROTOTYPE - R1



1 FLOOR TILE PLAN
SCALE: 3/16" = 1'-0"

GENERAL NOTES:

A. TRANSITIONS FROM ONE ROOM TO ANOTHER SHALL BE DONE UNDER CENTER OF DOORS WHERE POSSIBLE.

KEYED NOTES:

1. START POINT OF FULL TILE.
2. THRESHOLD AT EXTERIOR DOORS TO BE HALF-SADDLE, ABUTTING FLOOR TILE, AND THRESHOLD TO COMPLY WITH LOCAL ACCESSIBILITY REQUIREMENTS.
3. FLOOR DRAINS, REFER TO PLUMBING SHEETS.
4. GROUT LINES TO BE 1/8" WIDE
5. GC TO ALIGN NEW GROUT LINE WITH EXISTING

FLOOR FINISH:

FC-1 FLORIDA TILE - 12"X24" 23835 GILD
SUPPLIED BY CIRCLE K - INSTALLED BY GC
TILE IN SALES, BEER CAVE, STORAGE AREA AND WALK-IN FREEZER.
TILE IS TO BE SLIP RESISTANCE AT STORAGE AREA.

GROUT BY G.C.: CHARCOAL #60 - BY CUSTOM BUILDING PRODUCTS (800.272.8766). GROUT LINES SHALL BE 1/8" WIDE

FC-2 CROSSVILLE - 12"x12" COTTO AMERICANO BLACK W/ MATCHING 6x12 SANITARY COVE BASE
SUPPLIED BY CIRCLE K - INSTALLED BY GC

GROUT BY G.C.: # 60 CHARCOAL SANDED - BY CUSTOM BUILDING PRODUCTS (800.272.8766). GROUT LINES SHALL BE 1/8" WIDE

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STATE OF FLORIDA · RALPH WATSON · AR100937 · REGISTERED ARCHITECT
Digitally signed by Ralph Watson
Date: 2022.08.15 09:48:46-04'00'

PROFESSIONAL IN CHARGE
RW

PROJECT MANAGER
RM

QUALITY CONTROL
RW

DRAWN BY
KR

PROJECT NAME
CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

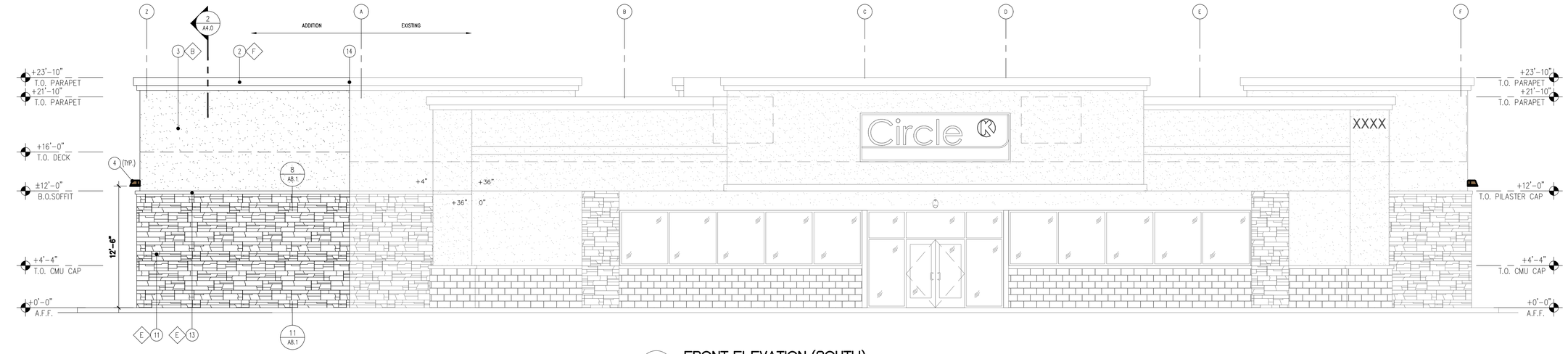
PROJECT NUMBER
22036

SHEET TITLE
FLOOR TILE PLAN

SHEET NUMBER
A1.10

Drawing Name: 03.22022.22036_Circle K - Lake City, FL\Documentation\CAD\A1.10_Floor tile plan.dwg Last Modified: Aug 15, 2022 - 1:43pm Plotted on: Aug 15, 2022 - 1:43pm by kcrosby-rpeeds

4625 NATIONAL PROTOTYPE - R1



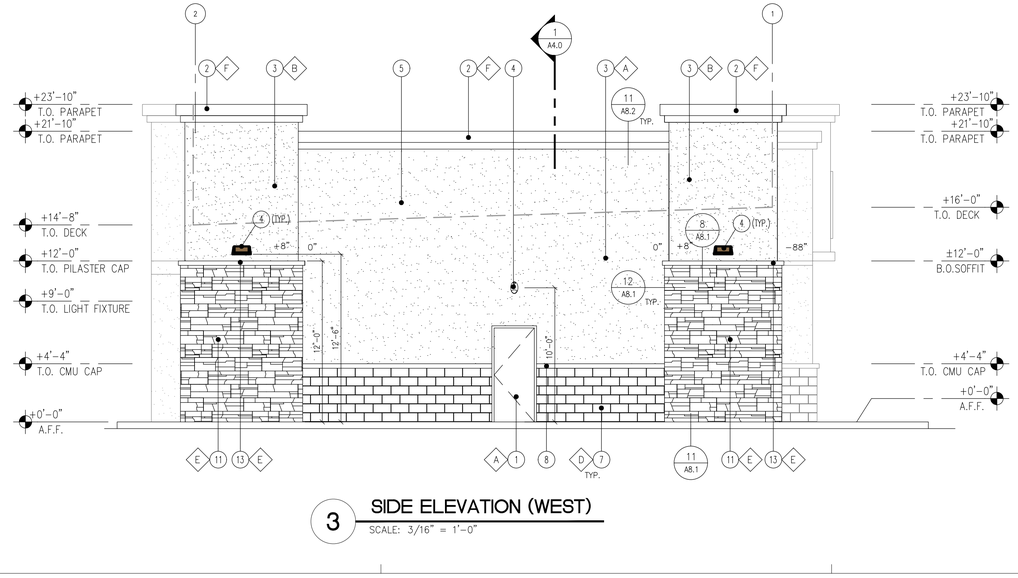
1 FRONT ELEVATION (SOUTH)

SCALE: 3/16" = 1'-0"



2 BACK ELEVATION (NORTH)

SCALE: 3/16" = 1'-0"



3 SIDE ELEVATION (WEST)

SCALE: 3/16" = 1'-0"

KEY NOTES (X)

1. SERVICE DOOR, PAINT TO MATCH SURROUNDING WALL
2. FIRESTONE ANCHORGARD FASCIA
3. STUCCO SYSTEM WITH ACRYLIC FINISH, APPLIED PER MFG. SPECS. MIN. ⅜" DIRECT APPLIED OVER CMU & MIN. ⅞" W/ WIRE LATH OVER METAL STUDS.
4. WALL MOUNTED LIGHT FIXTURE. SEE ELECTRICAL PLAN
5. ROOF LINE AND HVAC UNITS
6. ROOF DRAIN EMERGENCY OVERFLOW TO DISCHARGE ABOVE GRADE
7. 4x8x16 CMU VENEER, SPLIT FACE, GROUTED TO MATCH CMU COLOR
8. 4x4x8 SOLID CMU CAP INSTALL PER MFR. SPECS.
9. STUCCO SCORE LINE WITH FRY REGLET. SEE DETAILS 7/A8.1
10. PARAPET WALL BEYOND
11. STONE VENEER, INSTALL PER MFR. SPECS. INSTALL GROUTED. GROUT TO MATCH STONE COLOR
12. OVERFLOW ROOF SCUPPER. SEE DETAIL 5/A1.7
13. STONE VENEER CAP, INSTALL PER MFR. SPECS
14. CONTROL JOINT

FINISH SCHEDULE (X)

- A – *SHERWIN WILLIAMS #SW 6095 – TOASTY
- B – *SHERWIN WILLIAMS #SW 6115 – TOTALLY TAN
- C – *SHERWIN WILLIAMS HI-SOLIDS POLYURETHANE – SAFETY RED – CIRCLE K RED
- D – A1 BLOCK SPLITFACE CMU OR EQUAL – "S-104"
- E – CULTURED STONE CSV 20006 – CHARDONNAY COUNTRY LEDGESTONE BY OWENS CORNING/BORAL
- F – *SHERWIN WILLIAMS #SW 6090 – JAVA

*USE SHERWIN WILLIAMS MANUFACTURER ONLY.

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STATE OF FLORIDA · RALPH WATSON · AR100937 · REGISTERED ARCHITECT · 8/15/22

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RW

PROJECT MANAGER
RM

QUALITY CONTROL
RW

DRAWN BY
KR

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

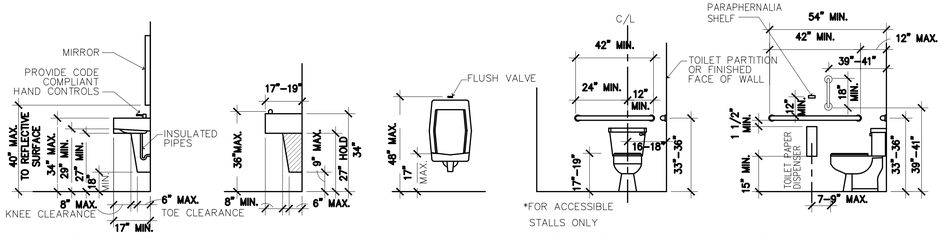
EXTERIOR ELEVATIONS

SHEET NUMBER

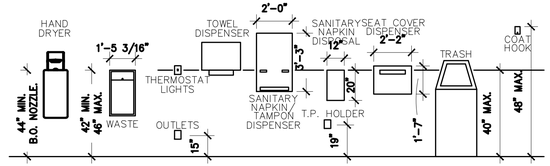
A2.1

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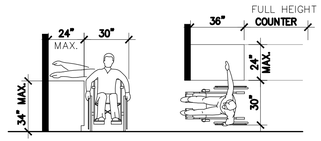
4625 NATIONAL PROTOTYPE – R1



LAVATORY CLEARANCES | DRINKING FOUNTAINS | URINAL ELEVATION | TOILET ELEVATION – FRONT | TOILET ELEVATION – SIDE



MISC. FIXTURES



SALES AND SERVICE COUNTERS FBCA 904.4

NOTE:
FBCA, 5th EDITION SPECIFIES ACCESSIBLE COUNTER HEIGHTS UP TO 34" (902.3).

1 FIXTURE MOUNTING DETAILS

SCALE: N.T.S.

GENERAL NOTES

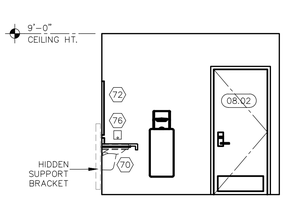
1. SEE SHEET A1.5 FOR EQUIPMENT SCHEDULE. (X)
2. CLEAR ACCESS A MIN. OF 44" IN WIDTH THROUGHOUT SANITARY FACILITY TO REACH THE HANDICAPPED COMPARTMENT. (48" CLEAR @ HINGE SIDE APPROACH TO COMPARTMENT).
3. A CLEAR SPACE OF SUFFICIENT SIZE TO INSCRIBE A 60" DIA.. CIRCLE WITHIN THE SANITARY FACILITY ROOM AT A HEIGHT OF 27" A.F.F. DOORS OTHER THAN THE TOILET COMPARTMENT DOOR MAY NOT ENCROACH MORE THAN 12".

HANDICAPPED COMPARTMENT DOOR:

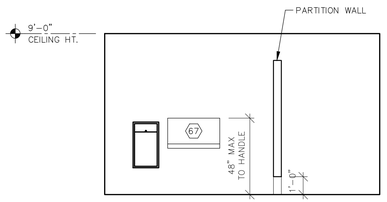
1. EQUIPPED WITH AN AUTOMATIC CLOSING DEVICE (3 SECOND MINIMUM SWEEP TIME FROM OPEN POSITION OF 70 DEGREES TO A POINT 3" FROM THE LATCH).
2. CLEAR OPENING WIDTH OF 32" IF LOCATED AT THE END. 34" IF LOCATED AT SIDE OF COMPARTMENT.
3. COMPARTMENT DOOR PROVIDES MINIMUM 9" CLEARANCE FOR TOE CLEARANCE FOOTRESTS UNDERNEATH DOOR.
4. INSIDE AND OUTSIDE OF THE COMPARTMENT DOOR IS EQUIPPED WITH A LOOP OR U-SHAPED HANDLE IMMEDIATELY BELOW THE LATCH. THE LATCH IS A FLIP-OVER STYLE, SLIDING, OR OTHER HARDWARE NOT REQUIRING TIGHT GRASPING OR TWISTING.
5. OPENING HARDWARE IS CENTERED BETWEEN 30" AND 44" ABOVE FINISH FLOOR.

INTERIOR COMPARTMENT:

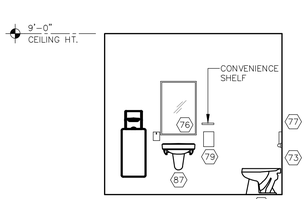
1. FLUSH VALVE IS ON WIDE SIDE OF TOILET AREA.
2. MAXIMUM HEIGHT FROM FLOOR TO FLUSH VALVE TO COMPLY SECTION 308 (ICC/ANSI 117.1).
3. 5 lb. MAXIMUM FORCE TO OPERATE VALVE.
4. SEE TOILET ACCESSORY MOUNTING HEIGHTS DETAIL FOR HEIGHTS OF GRAB BARS AND ACCESSORIES.
5. VERTICAL GRAB BARS REQUIRED AT ALL ACCESSIBLE TOILETS.
6. A PARAPHERNALIA SHELF, SHALL BE PROVIDED AT ALL ACCESSIBLE TOILETS. IT SHALL BE LOCATED ADJACENT TO OR INTEGRAL WITH THE TOILET PAPER DISPENSER . THE SELF SHALL BE LOCATED A MINIMUM OF 15 INCHES ABOVE THE FINISH FLOOR WITH A MINIMUM CLEARANCE OF 6 INCHES BELOW THE GRAB BAR. IT SHALL BE A MINIMUM 8 INCHES WIDE A MINIMUM 5 INCHES DEEP. IF ADJACENT TO THE TOILET PAPER DISPENSER , IT SHALL BE LOCATED ON THE SIDE OF THE DISPENSER CLOSET TO THE TOILET.
7. PROVIDE 30X48 ADA ACCESSIBLE SPACE AT LAV.
8. PROVIDE 30X48 ADA ACCESSIBLE SPACE AT URINAL
9. INSULATE WATER AND DRAIN PIPES
10. INSTALL BACKING FOR CHANGING TABLE
11. CHANGING TABLE TO BE INSTALLED BY G.C.
12. NOT USED
13. PROVIDE SOLID BLOCKING AT WALL FOR SHELVING



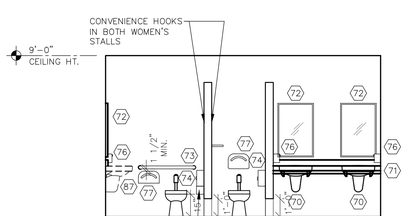
ELEVATION A
(FRONT ELEVATION)



ELEVATION B
(RIGHT ELEVATION)



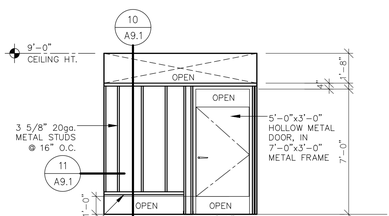
ELEVATION C
(REAR ELEVATION)

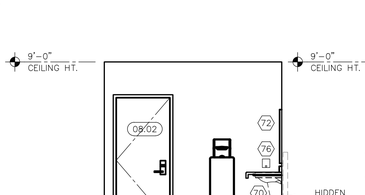


ELEVATION D
(LEFT ELEVATION)

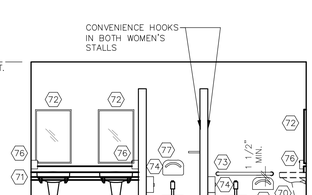
2 ELEVATIONS AT WOMEN'S RESTROOM (116)

SCALE: 1/4" = 1'–0"

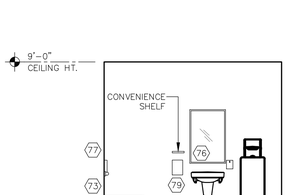




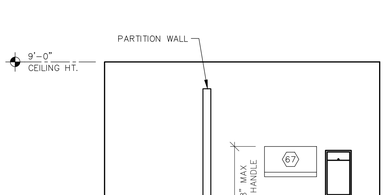
ELEVATION A
(FRONT ELEVATION)



ELEVATION B
(RIGHT ELEVATION)



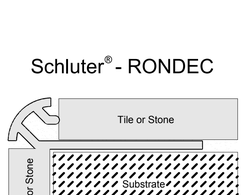
ELEVATION C
(REAR ELEVATION)



ELEVATION D
(LEFT ELEVATION)

4 ELEVATIONS AT WOMEN'S RESTROOM (115)

SCALE: 1/4" = 1'–0"



Scale: N.T.S.

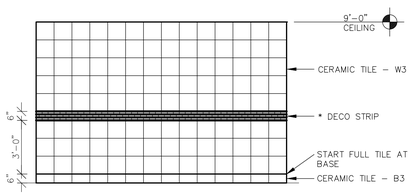
NOTE:
ALL TILED WALLS SHALL UTILIZE A SCHLUTER RONDEC-E FINISH STRIP TO FINISH ALL OUTSIDE TILED CORNERS

TILE FINISH DETAIL

SCALE: NONE OUTSIDE CORNER

3 RESTROOM PARTITION WALL FRAMING

SCALE: 1/4" = 1'–0"



NOTE:
THIS IS A GENERIC WALL ELEVATION FOR TILE PATTERN ONLY.

* DECO STRIP: CROSSVILLE GLASS BLOX 2"X4" STAGGERED "BLACK MAGIC GLASS" SUPPLIED BY CIRCLE K – INSTALLED BY G.C.

NOTE: IT IS SOLD IN 12X12 SHEETS. THE SHEET CONTAINS 6 ROWS OF GLASS. THE BAND IS TO BE TWO ROWS WIDE.

GROUT BY G.C.: CUSTOM BUILDING PRODUCTS #60 CHARCOAL NON-SANDED (800.272.8766). SUPPLIED AND APPLIED BY G.C.

5 RESTROOM WALL TILE PATTERN

SCALE: 1/4" = 1'–0"

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Ralph Watson 8.18.22

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PROJECT MANAGER
RM

QUALITY CONTROL
RW

DRAWN BY
KR

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
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CIRCLE K STORES INC.

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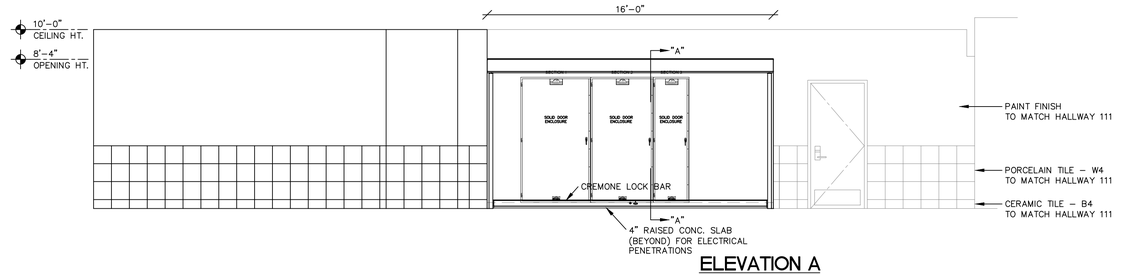
INTERIOR ELEVATIONS

SHEET NUMBER

A3.1

4625 NATIONAL PROTOTYPE – R1

Drawing Name: 01.22022.22036_Circle K – Lake City, FL\Documents\Arch\A3.1_Interior Elevations.dwg Last Modified: Aug 18, 2022 - 10:45am Modified by: ralphw.reynolds



ELEVATION A
(FRONT ELEVATION)

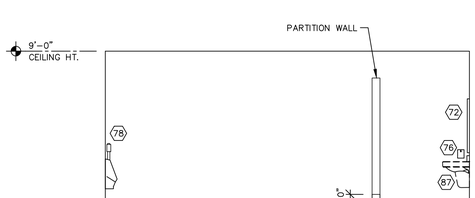


ELEVATION B
(REAR ELEVATION)

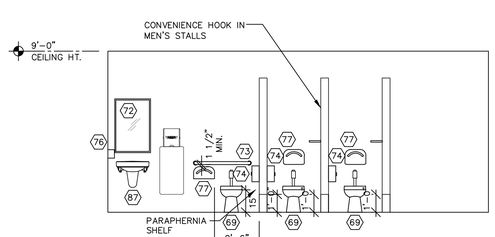
ELEVATION C
(LEFT ELEVATION)

1 ELEVATIONS AT HALLWAY (117)

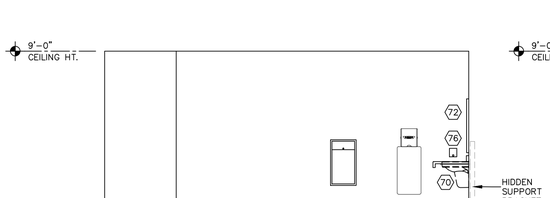
SCALE: 1/4" = 1'-0"



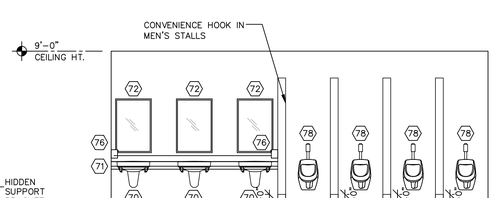
ELEVATION A
(FRONT ELEVATION)



ELEVATION B
(RIGHT ELEVATION)



ELEVATION C
(REAR ELEVATION)



ELEVATION D
(LEFT ELEVATION)

2 ELEVATIONS AT MEN'S RESTROOM (118)

SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. SEE SHEET A1.5 FOR EQUIPMENT SCHEDULE. (X)
2. CLEAR ACCESS A MIN. OF 44" IN WIDTH THROUGHOUT SANITARY FACILITY TO REACH THE HANDICAPPED COMPARTMENT. (48" CLEAR @ HINGE SIDE APPROACH TO COMPARTMENT).
3. A CLEAR SPACE OF SUFFICIENT SIZE TO INSCRIBE A 60" DIA.. CIRCLE WITHIN THE SANITARY FACILITY ROOM AT A HEIGHT OF 27" A.F.F. DOORS OTHER THAN THE TOILET COMPARTMENT DOOR MAY NOT ENCROACH MORE THAN 12".

HANDICAPPED COMPARTMENT DOOR:

1. EQUIPPED WITH AN AUTOMATIC CLOSING DEVICE (3 SECOND MINIMUM SWEEP TIME FROM OPEN POSITION OF 70 DEGREES TO A POINT 3" FROM THE LATCH).
2. CLEAR OPENING WIDTH OF 32" IF LOCATED AT THE END. 34" IF LOCATED AT SIDE OF COMPARTMENT.
3. COMPARTMENT DOOR PROVIDES MINIMUM 9" CLEARANCE FOR TOE CLEARANCE FOOTRESTS UNDERNEATH DOOR.
4. INSIDE AND OUTSIDE OF THE COMPARTMENT DOOR IS EQUIPPED WITH A LOOP OR U-SHAPED HANDLE IMMEDIATELY BELOW THE LATCH. THE LATCH IS A FLIP-OVER STYLE, SLIDING, OR OTHER HARDWARE NOT REQUIRING TIGHT GRASPING OR TWISTING.
5. OPENING HARDWARE IS CENTERED BETWEEN 30" AND 44" ABOVE FINISH FLOOR.

INTERIOR COMPARTMENT:

1. FLUSH VALVE IS ON WIDE SIDE OF TOILET AREA.
2. MAXIMUM HEIGHT FROM FLOOR TO FLUSH VALVE TO COMPLY SECTION 308 (ICC/ANSI 117.1).
3. 5 lb. MAXIMUM FORCE TO OPERATE VALVE.
4. SEE TOILET ACCESSORY MOUNTING HEIGHTS DETAIL FOR HEIGHTS OF GRAB BARS AND ACCESSORIES.
5. VERTICAL GRAB BARS REQUIRED AT ALL ACCESSIBLE TOILETS.
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7. PROVIDE 30X48 ADA ACCESSIBLE SPACE AT LAV.
8. PROVIDE 30X48 ADA ACCESSIBLE SPACE AT URINAL
9. INSULATE WATER AND DRAIN PIPES
10. INSTALL BACKING FOR CHANGING TABLE
11. CHANGING TABLE TO BE INSTALLED BY G.C.
12. NOT USED
13. PROVIDE SOLID BLOCKING AT WALL FOR SHELVING

rdc.

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8.18.22
Ralph Watson
Digitally signed by Ralph Watson
DN: cn=Ralph Watson, o=RDC Collaborative, email=rwatson@rdcollaborative.com, c=US
Reason: I am the author of this document
Location: your signing location here
2022.08.18 09:48:54-04'00'

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RW
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RM
QUALITY CONTROL
RW
DRAWN BY
KR

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

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LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

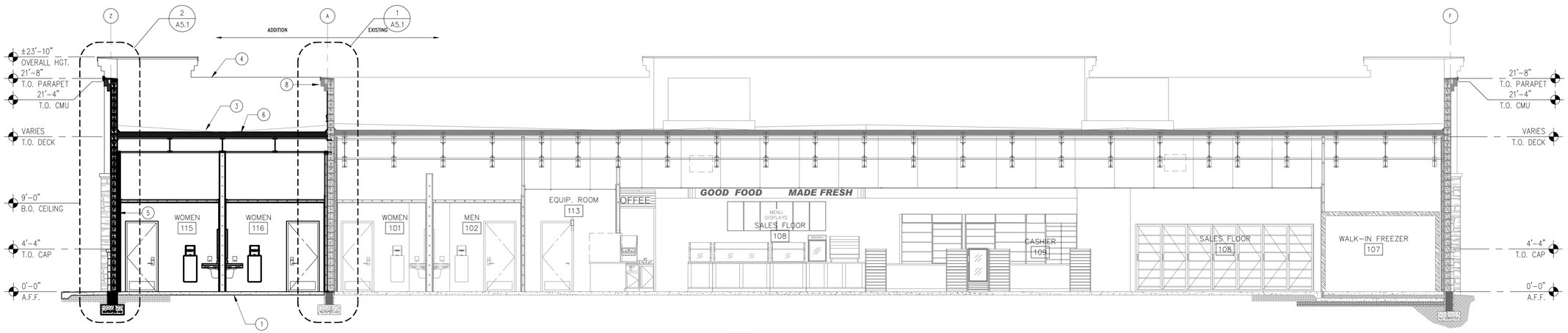
INTERIOR ELEVATIONS

SHEET NUMBER

A3.2

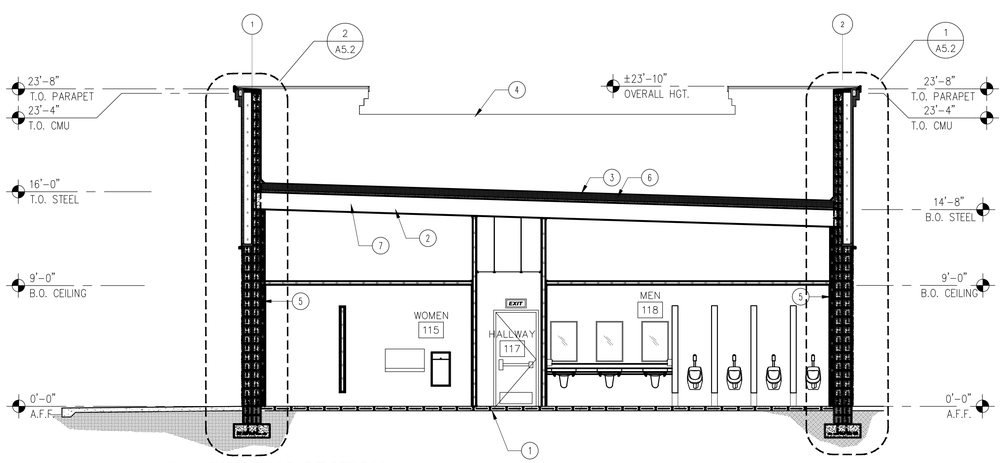
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4625 NATIONAL PROTOTYPE – R1



1 BUILDING SECTION

SCALE: 3/16" = 1'-0"



2 BUILDING SECTION

SCALE: 3/16" = 1'-0"

KEY NOTES (X)

1. CONCRETE SLAB, SEE STRUCTURAL FOR REINFORCING.
2. ROOF BEAMS, SEE STRUCTURAL DRAWINGS FOR SPECIFIC INFORMATION.
3. ROOFING SYSTEM RIGID INSULATION. WALKWAYS AS REQUIRED BY ROOFING MANUFACTURER. ROOF SYSTEM TO BE FLOOD TESTED AFTER INSTALLATION TO ENSURE NO LEAKS.
4. PARAPET BEYOND
5. R-11 BATT INSULATION
6. R-38 RIGID INSULATION
7. ALL DUCT WORK TO GO BETWEEN/THROUGH BEAMS – SEE MECH
8. WRAPPED PARAPET & FINISH TO BE REMOVED.

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STATE OF FLORIDA
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AR100937
8.18.22
REGISTERED ARCHITECT

PROFESSIONAL IN CHARGE
RW

PROJECT MANAGER
RM

QUALITY CONTROL
RW

DRAWN BY
KR

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

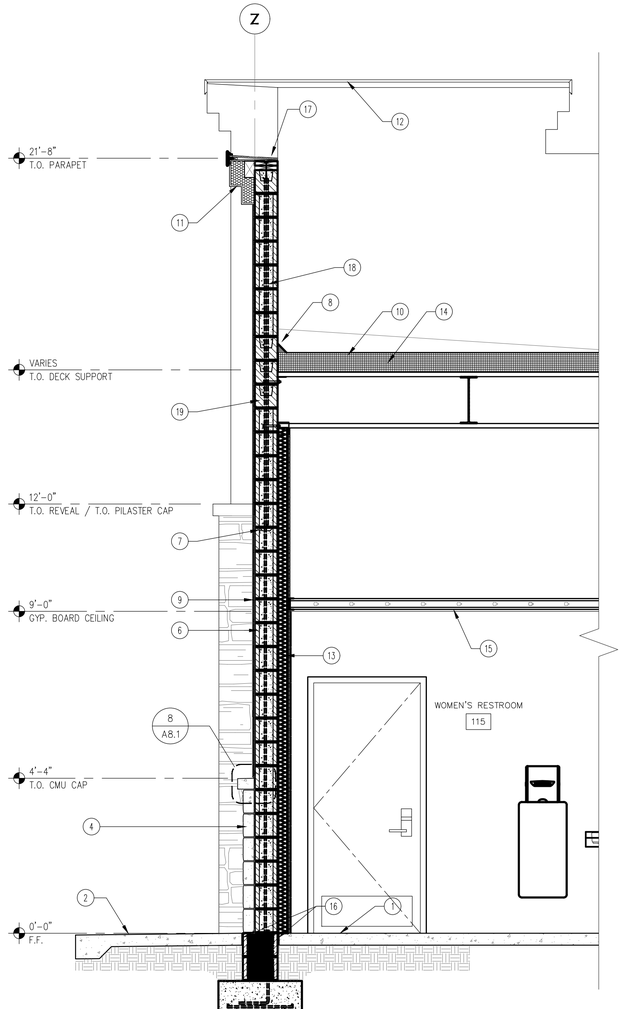
BUILDING SECTIONS

SHEET NUMBER

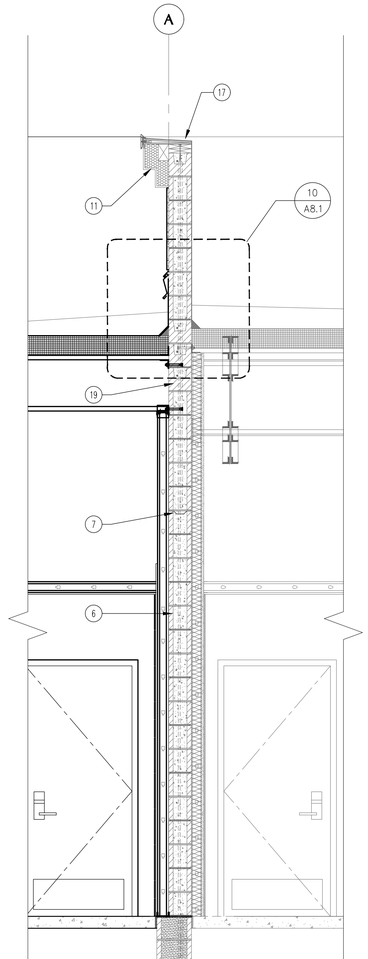
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4625 NATIONAL PROTOTYPE – R1

Drawing Name: G:\2022\22036_Circle K – Lake City, FL\Documentation\CAD\A4.0_Building Sections.dwg Last Modified: Aug 18, 2022 – 10:54am Plotted on: Aug 18, 2022 – 11:26pm by kelleymyrolls



2 WALL SECTION
SCALE: 1/2" = 1'-0"



1 WALL SECTION
SCALE: 1/2" = 1'-0"

KEY NOTES (X)

1. 4" CONC. SLAB, SEE STRUCTURAL, SEE FINISH SCHEDULE FOR FINISH SHEET A1.2
2. CONCRETE WALK, BROOM FINISH., SEE SITE PLAN/CIVIL PLANS
3. CONCRETE FOOTING, SEE STRUCTURAL DRAWINGS FOR SPECIFIC INFORMATION
4. 4X8X16 CMU VENEER, ANCHOR TO WALL PER FBC SECTION 14004.4 WITH GALVANIZED STEEL ANCHORS AT 16" O.C. EACH WAY.
5. STEEL BAR JOIST, SEE STRUCTURAL DRAWINGS FOR SPECIFIC INFORMATION.
6. 8" CMU WALL, SEE STRUCTURAL
7. CAVITY CAP @ 48" O.C. @ PARAPET REINFORCING
8. 4" CONTINUOS CANT. STRIP
9. STUCCO SYSTEM PER ESR-1607 WITH ACRYLIC FINISH
10. ROOFING SYSTEM. WALKWAYS AS REQUIRED BY ROOFING MANUFACTURER. ROOF SYSTEM TO BE FLOOD TESTED AFTER INSTALLATION TO ENSURE NO LEAKS
11. STUCCO OVER MOLDING SECURED TO PARAPET, SEE DETAIL 11/A8.2
12. PARAPET BEYOND
13. 5/8" GYP. BD. OVER 3 5/8" MTL. STUDS @ 16" O.C. W/ R-11 BATT INSULATION
14. R-38 RIGID INSULATION
15. GYPSUM BOARD CEILING
16. 1/2" EXPANSION JOINT MATERIAL
17. GALV. METAL COPING OVER 1/2" PLYWOOD
18. PARAPET REINFORCING W/ #5 REBAR @ 48" O.C. IN CONC.FILLED CELLS TO 5' BELOW DECK SUPPORT
19. CONCRETE BOND BEAM, SEE STRUCTURAL
20. GALV. METAL COPING OVER 1/2" PLYWOOD
21. STEEL BEARING PLATE, SEE STRUCTURAL
22. CONCRETE BOND BEAM, SEE STRUCTURAL

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STATE OF FLORIDA
RALPH WATSON
AR100937
REGISTERED ARCHITECT
8.18.22
Ralph Watson
Digitally signed by Ralph Watson
DN: cn=Ralph Watson, o=rdcollaborative.com, ou=Ralph, email=RWatson@RDC-32233, INC., c=US
2022.08.18 09:46:23-04'00'

PROFESSIONAL IN CHARGE
RW

PROJECT MANAGER
RM

QUALITY CONTROL
RW

DRAWN BY
KR

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

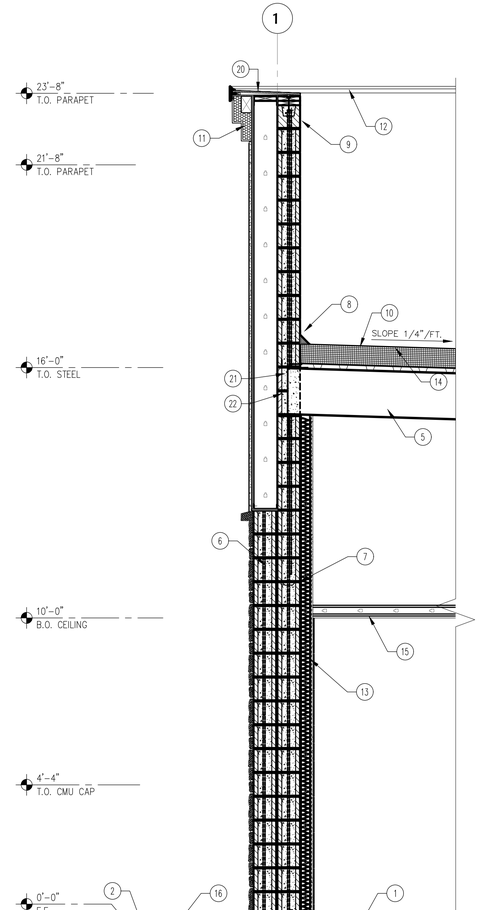
WALL SECTIONS

SHEET NUMBER

A5.1

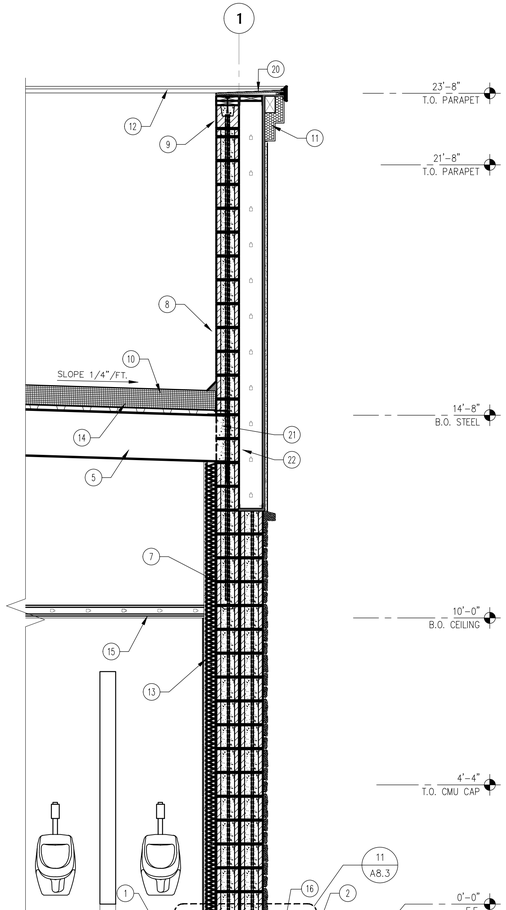
Drawing Name: G:\2022\22036_Circle K - Lake City, FL\Documentation\CAD\A5_Wall Sections.dwg Last Modified: Aug 18, 2022 - 3:57pm Plotted on: Aug 18, 2022 - 12:26pm by kshelby-reynolds

4625 NATIONAL PROTOTYPE - R1



2 WALL SECTION

SCALE: 1/2" = 1'-0"



1 WALL SECTION

SCALE: 1/2" = 1'-0"

KEY NOTES (X)

1. 4" CONC. SLAB, SEE STRUCTURAL, SEE FINISH SCHEDULE FOR FINISH SHEET A1.2
2. CONCRETE WALK, BROOM FINISH., SEE SITE PLAN/CIVIL PLANS
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18. PARAPET REINFORCING W/ #5 REBAR @ 48" O.C. IN CONC.FILLED CELLS TO 5' BELOW DECK SUPPORT
19. CONCRETE BOND BEAM, SEE STRUCTURAL
20. GALV. METAL COPING OVER 1/2" PLYWOOD
21. STEEL BEARING PLATE, SEE STRUCTURAL
22. CONCRETE BOND BEAM, SEE STRUCTURAL

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Ralph Watson
rwatson@rdcollaborative.com,
Reston, VA 20190,
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RM

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RW

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KR

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

WALL SECTIONS

SHEET NUMBER

A5.2

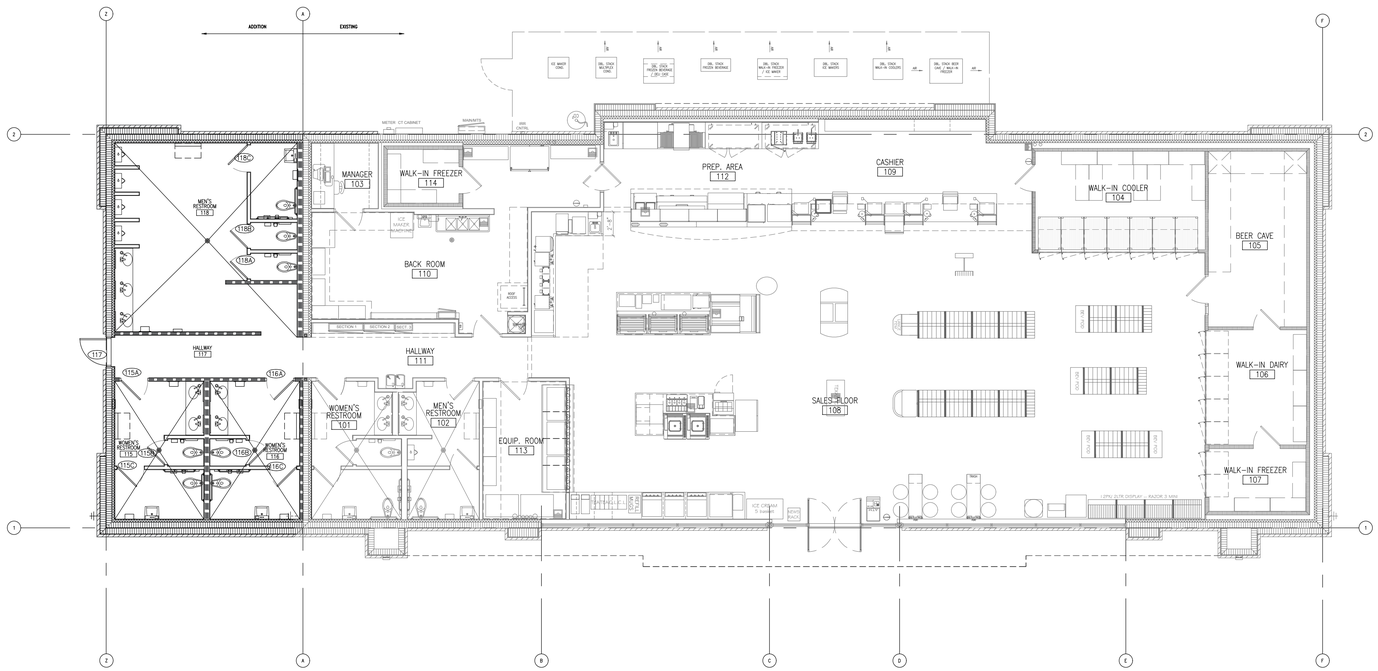
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4625 NATIONAL PROTOTYPE - R1

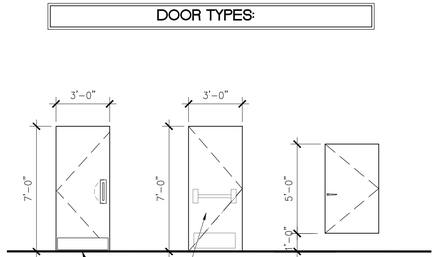
DOOR SCHEDULE

MARK	ROOM NO.	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	DOOR SIZE THKN.	TYPE	MATERIAL	FINISH	FRAME MATERIAL	FRAME FINISH	FRAME TYPE	HDW. SET NO.	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	REMARKS
115A	RESTROOM DOOR	3'-0"	7'-0"	–	1	H.M.	PAINT	H.M.	PAINT	B	4	1/A9.2	1/A9.2	4/A9.2	ADA SIGNAGE BY G.C., SEE DTL 1/A9.1
115B	RESTROOM PART.	2'-4"	5'-0"	–	3	H.M.	PAINT	H.M.	PAINT	C	5	–	1/A9.2	–	
115C	RESTROOM PART.	3'-0"	5'-0"	–	3	H.M.	PAINT	H.M.	PAINT	C	5	–	1/A9.2	–	
116A	RESTROOM DOOR	3'-0"	7'-0"	–	1	H.M.	PAINT	H.M.	PAINT	B	4	1/A9.2	1/A9.2	4/A9.2	ADA SIGNAGE BY G.C., SEE DTL 1/A9.1
116B	RESTROOM PART.	3'-0"	5'-0"	–	3	H.M.	PAINT	H.M.	PAINT	C	5	–	1/A9.2	–	
116C	RESTROOM PART.	3'-0"	5'-0"	–	3	H.M.	PAINT	H.M.	PAINT	C	5	–	1/A9.2	–	
117	HALLWAY	3'-0"	7'-0"	–	2	INSUL. MTL.	PAINT	H.M.	PAINT	A	3	2/A8.2	2/A8.2	1/A8.2	–
118A	RESTROOM PART.	3'-0"	5'-0"	–	3	H.M.	PAINT	H.M.	PAINT	C	5	–	1/A9.2	–	
118B	RESTROOM PART.	3'-0"	5'-0"	–	3	H.M.	PAINT	H.M.	PAINT	C	5	–	1/A9.2	–	
118C	RESTROOM PART.	3'-0"	5'-0"	–	3	H.M.	PAINT	H.M.	PAINT	C	5	–	1/A9.2	–	

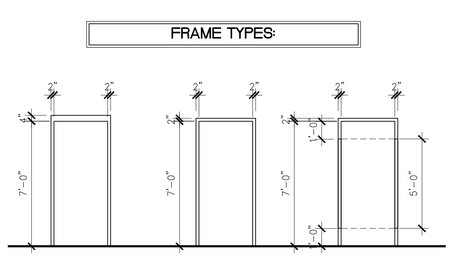
DOOR / WINDOWS/ ROOM KEY PLAN



DOOR TYPES:



FRAME TYPES:



HARDWARE SCHEDULE

SET No. 1
6 – DOUBLE ACTUATING RECESSED HINGES
2 – PULL TYPE HANDLES (8" LONG x 4" DEEP)
2 – CYLINDER 985 x 9899 FALCON
1 – PLASTIC SIGN: "THESE DOORS TO REMAIN UNLOCKED DURING BUSINESS HOURS.
BALANCE OF HARDWARE BY STORE FRONT SUPPLIER.
– DOUBLE SWING

SET No. 2
3 – HINGES BY PRE–HUNG DOOR SUPPLIER.
1 – PRIVACY SET S300HG x 2–3/8" BS FALCON.
1 – KEYED LOCK
1 – WALL STOP 4275 BALDWIN
1 – 12" KICKPLATE
1 – CLOSER P1208–SBL/SNB
1 – 16 GA WELDED HOLLOW METAL FRAME PROVIDE JAMB REINFORCEMENT AT EACH HINGE
(VERIFY WITH CIRCLE K PRIOR TO INSTALLATION)

SET No. 3
3 – HINGES 1279 4 1/2"x4 1/2" x NRP HAGER
1 – ALARM PANIC, SAFEGARD 70 x 313 ALARM LOCK.
1 – RIM CYLINDER 951 FALCON
1 – LIMIT CHAIN 15F2C
1 – THRESHOLD 170A PEMKO
1 – DOOR SWEEP 307AV PEMKO
1 – WEATHERSTRIP 292 DV PEMKO
2 – PULL HANDLES PEMKO
1 – CLOSER P1208–SBL/SNB
1 – 12" KICKPLATE
1 – **16 GA. HOLLOW METAL WELDED FRAME, GRIND EDGES SMOOTH. PROVIDE JAMB REINFORCEMENT AT EACH HINGE. HOLLOW METAL FRAME TO BE FILLED W/ GROUT**
NOT ALLOWED ANY DEAD BOLTS, MUST BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

SET No. 4
3 – 4 1/2" X 4 1/2" N.R.P FBB179
1 – PULL PLATE HAGER MODEL # H33E
1 – PUSH PLATE HAGER MODEL # 110S
1 – OVERHEAD DOOR CLOSER MODEL 1461T
1 – DOOR STOP MODEL # 255S
2 – KICKPLATES MODEL # 190S
1 – 16 GA WELDED HOLLOW METAL FRAME PROVIDE JAMB REINFORCEMENT AT EACH HINGE

SET No. 5
3 – HINGES BY PRE–HUNG DOOR SUPPLIER. (BRUSHED ALUM.)
1 – PRIVACY LOCKSET W301 QUANTUM (FALCON) 626
1 – PURSE HOOK

SET No. 6
3 – HINGES BY PRE–HUNG DOOR SUPPLIER.
1 – KEYED LOCK SET
1 – WALL STOP 4275 BALDWIN
1 – 12" KICKPLATE
1 – CLOSER P1208–SBL/SNB
1 – 16 GA WELDED HOLLOW METAL FRAME PROVIDE JAMB REINFORCEMENT AT EACH HINGE

SET No. 7
OVERHEAD DOOR MODEL# ALLURE SHUTTER 653 BETWEEN JAMB MOUNTED MANUAL PUSH W/ CREMONE LOCK BAR
INSTALL PER MFR'S SPECIFICATION
COLOR: STD. SILVER
CONTACT: (800) 929–3667
WEBSITE: www.overheaddoor.com

SET No. 8
ELIASON DOOR MODEL# PE–500 WITH ELIASON FLUSH HOLLOW METAL FRAME, IMPACT PLATES AND MOLDED SPRING BUMPERS.
INSTALL PER MFR'S SPECIFICATION
COLOR: BLACK
CONTACT: (800) 828–3655
WEBSITE: www.eliasoncorp.com

HARDWARE NOTES

1. ALL EXITS TO BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE.
2. MANUALLY OPERATED EDGE OR SURFACE MOUNTED FLUSH BOLTS AND SURFACE BOLTS ARE PROHIBITED.
3. ALL DOOR HARDWARE IS TO BE DISABLED ACCESSIBLE.

DOOR SIGNAGE NOTES:

1. LETTERS AND NUMBERS ON SIGNS SHALL HAVE A WIDTH TO HEIGHT RATIO BETWEEN 3:5 AND 1:1 AND STROKE WIDTH TO HEIGHT RATIO BETWEEN 1:5 AND 1:10.
2. CHARACTERS AND NUMBERS ON SIGNS SHALL BE SIZED ACCORDING TO THE VIEWING DISTANCE FROM WHICH THEY ARE TO BE READ. THE MINIMUM HEIGHT IS MEASURED USING AN UPPER CASE X. LOWER CASE CHARACTERS ARE PERMITTED (3" MIN.)
3. LETTERS AND NUMERALS SHALL BE RAISED 1/32 IN. UPPER CASE, SANS SERIF OR SIMPLE TYPE AND SHALL BE ACCOMPANIED WITH GRADE 2 BRAILLE. RAISED CHARACTERS SHALL BE AT LEAST 5/8" (16mm) HIGH, BUT NO HIGHER THAN 2 IN. (50mm). PICTOGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERVAL DESCRIPTIONS PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION OF THE PICTOGRAM SHALL BE 6 IN. (152mm) MINIMUM IN HEIGHT.
4. THE CHARACTERS AND BACKGROUND OF SIGNS SHALL BE EGGSHELL MATTE OR OTHER NON GLARE FINISH. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.
5. WHERE PERMANENT IDENTIFICATION IS PROVIDED FOR ROOMS AND SPACES, SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE TO THE LATCH SIDE OF THE DOOR, INCLUDING AT DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL. MOUNTING HEIGHT SHALL BE 48" MINIMUM MEASURED FROM THE BASELINE OF THE LOWEST TACTILE CHARACTER OR 60" MAXIMUM MEASURED FROM THE BASELINE OF THE HIGHEST TACTILE CHARACTER. MOUNTING LOCATION FOR SUCH SIGNAGE SHALL BE SO THAT A PERSON MAY APPROACH WITHIN 3 IN (76mm) OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR.

ACCESSIBILITY NOTES:

1. ACCESS TO THESE FACILITIES SHALL BE PROVIDED AT PRIMARY ENTRANCES.
2. PROVIDE A 60"x60" MIN. LANDING ON STRIKE SIDE OF DOOR W/ 44" MIN. WIDTH IN DIRECTION OF TRAVEL.
3. EVERY REQUIRED EXIT DOORWAY SHALL BE SIZED FOR A DOOR NOT LESS THAN 3 FT. WIDE BY NOT LESS THAN 6'–8" HIGH CAPABLE OF OPENING 90°, SO THAT THE CLEAR WIDTH OF THE EXITWAY IS 32" MIN. THRESHOLD TO BE A MAX. 1/4" ABOVE ADJACENT FINISH FLOOR.
4. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 LBS.
5. THE BOTTOM 12" OF ALL DOORS EXCEPT AUTOMATIC AND SLIDING SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE.
6. PROVIDE LEVER TYPE HARDWARE, PANIC BARS, PUSH – PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE. (30" TO 44" A.F.F.)

rdc.

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PROFESSIONAL SEAL

STATE OF FLORIDA · RALPH WATSON · AR100937 · REGISTERED ARCHITECT

Ralph Watson
2022.08.15 09:43:52 -04'00'

PROFESSIONAL IN CHARGE
RW

PROJECT MANAGER
RM

QUALITY CONTROL
RW

DRAWN BY
KR

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

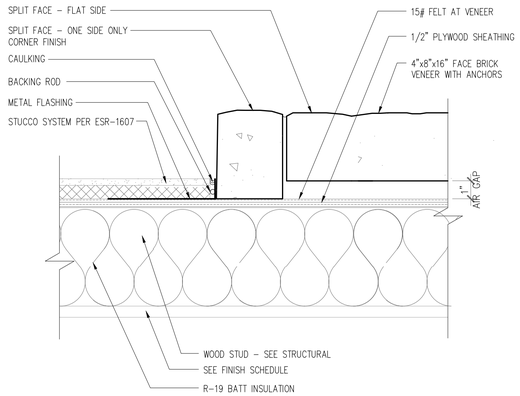
ROOM KEY PLAN, DOOR/ WINDOW SCHEDULE & TYPES, AND NOTES

SHEET NUMBER

A6.0

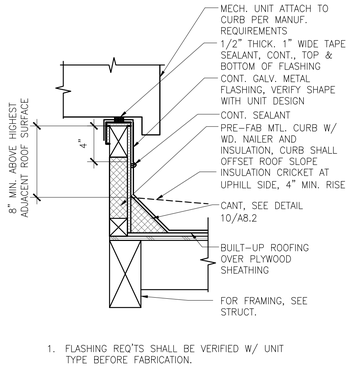
4625 NATIONAL PROTOTYPE – R1

Drawing Name: G:\2022\22036_Circle K – Lake City, FL\Documentation\ARCHAS_Door and Window Types Sheets.dwg Last Modified: Aug 15, 2022 – 10:06am Plotted on: Aug 15, 2022 – 12:58pm by shelby.reynolds



12 TRANSITION - SPLIT FACE TO STUCCO (PLAN)

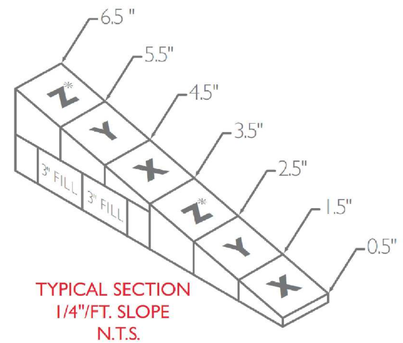
3"=1'-0"



1. FLASHING REQ'TS SHALL BE VERIFIED W/ UNIT TYPE BEFORE FABRICATION.

9 ROOF CURB DETAIL

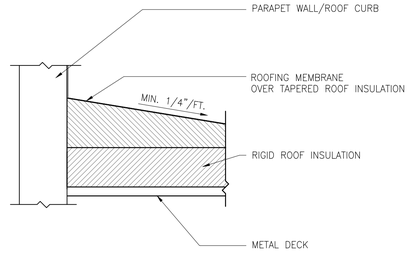
1 1/2"=1'-0"



TYPICAL SECTION
1/4"/FT. SLOPE
N.T.S.

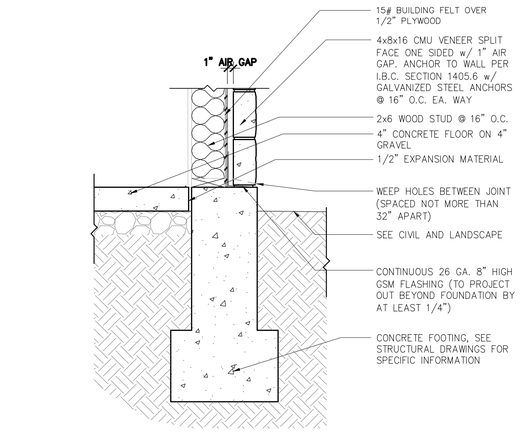
6 TAPERED INSULATION DETAIL

N.T.S. USED TO CONSTRUCT ROOF CRICKETS



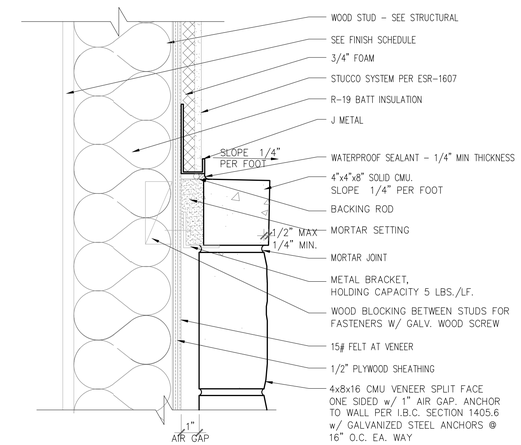
3 CRICKET DETAIL

1"=1'-0"



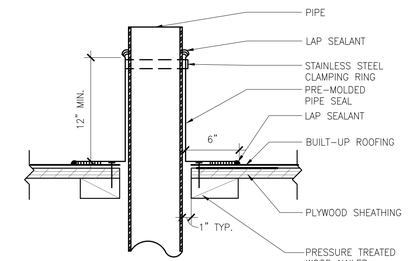
11 EXTERIOR WALL SECTION

1"=1'-0"



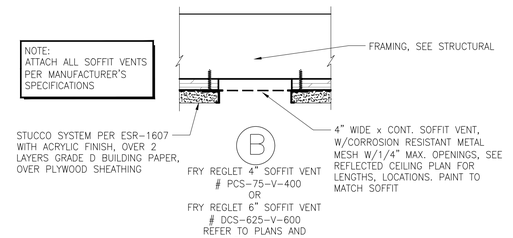
8 TRANSITION - BLOCK VENEER TO STUCCO

3"=1'-0" EXTRACT FROM DETAIL 8/A8.1



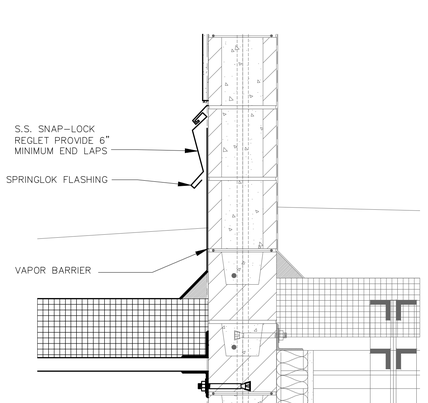
5 SMALL PIPE PENETRATION

1-1/2"=1'-0"



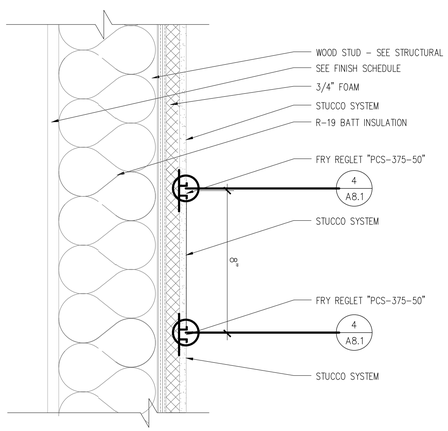
2 4" SOFFIT VENT

3"=1'-0"



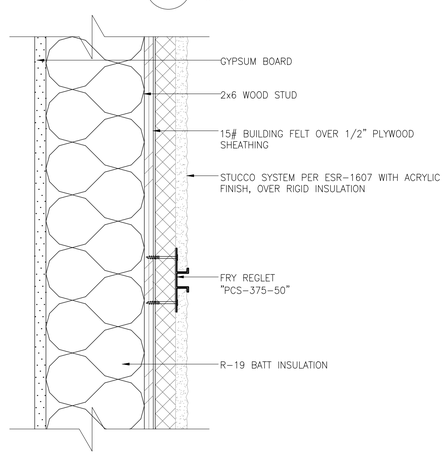
10 NOT USED

N.T.S.



7a STUCCO BAND DETAIL

3"=1'-0" 7b



4a STUCCO EXPANSION JOINT

3"=1'-0" 4b

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STATE OF FLORIDA · RALPH WATSON · REGISTERED ARCHITECT · AR100937

PROFESSIONAL IN CHARGE
RW

PROJECT MANAGER
RM

QUALITY CONTROL
RW

DRAWN BY
KR

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

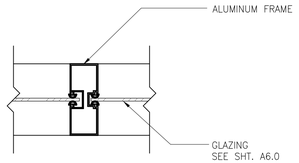
EXTERIOR ARCHITECTURAL DETAILS

SHEET NUMBER

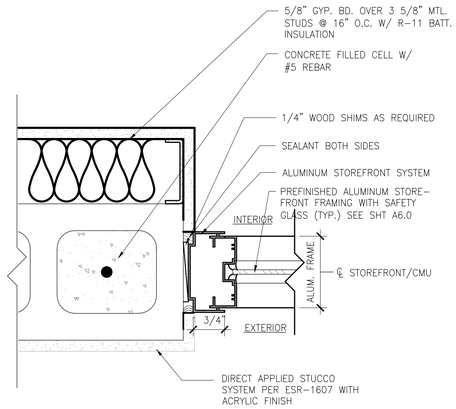
A8.1

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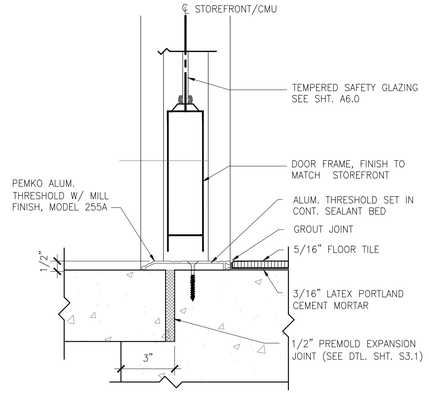
4625 NATIONAL PROTOTYPE - R1



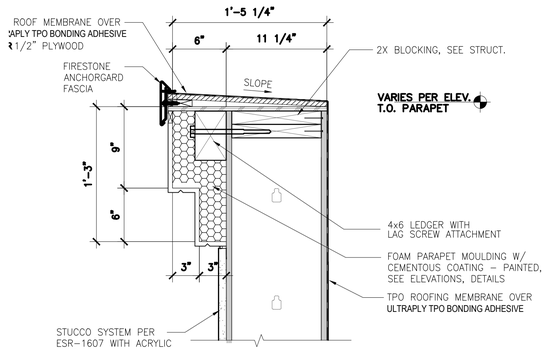
9 INTERMEDIATE MULLION
3"=1'-0"



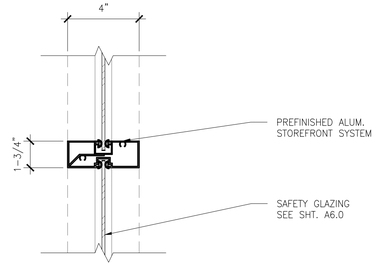
6 ALUMINUM WINDOW JAMB (HEAD SIM.)
3"=1'-0"



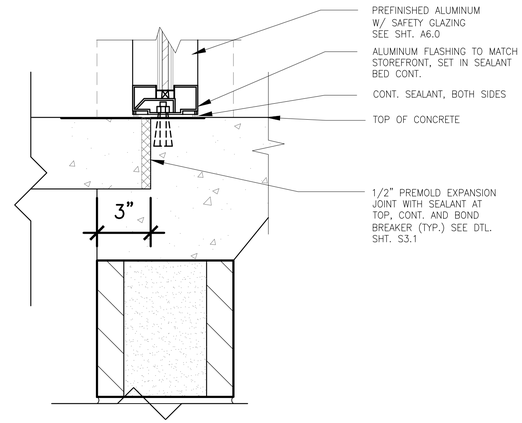
3 THRESHOLD AT STOREFRONT DOOR
3" = 1'-0"



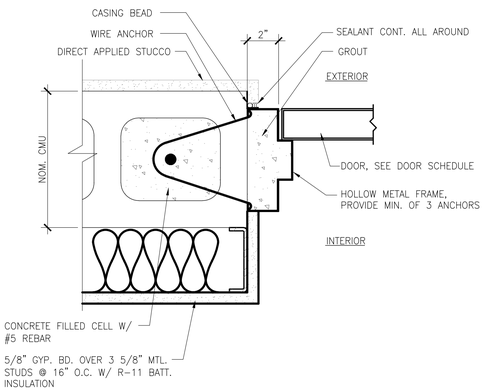
11 FOAM PARAPET
1 1/2" - 1'-0"



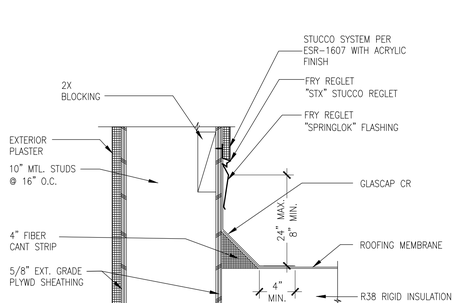
8 HORIZONTAL MULLION
3"=1'-0"



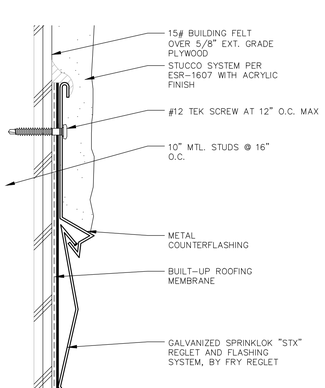
5 STOREFRONT WINDOW SILL AT SLAB
3" =1'-0"



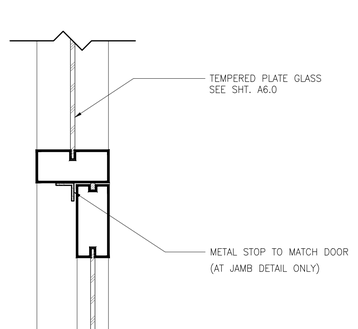
2 JAMB AT H.M. DOOR (HEAD SIM.)
3"=1'-0"



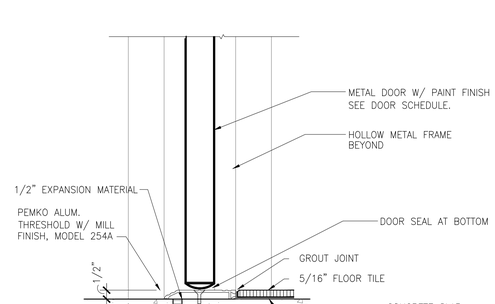
10 CANT STRIP DETAIL
1 1/2"=1'-0"
SIMILAR DETAIL @ CMU PARAPET WALL



7 SINGLE-PLY ROOFING AT STUCCO
6"=1'-0"
SIMILAR DETAIL AT CMU PARAPET WALL



4 HEAD AT STOREFRONT (JAMB SIM.)
3"=1'-0"



1 THRESHOLD AT EXTERIOR DOOR
3"=1'-0"

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STATE OF FLORIDA · RALPH WATSON · AR100937 · REGISTERED ARCHITECT
8.18.22
Ralph Watson
Ralph Watson rw@rdcollaborative.com RDC INCORPORATED, 11921 Freedom Drive, Suite 1110, Reston, VA 20190 t: 703.668.0086 f: 703.668.0087 2022.08.29 09:41:56-04'00'

PROFESSIONAL IN CHARGE
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PROJECT MANAGER
RM

QUALITY CONTROL
RW

DRAWN BY
KR

PROJECT NAME
CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

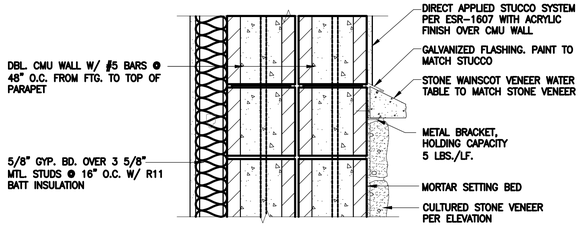
PROJECT NUMBER
22036

SHEET TITLE
EXTERIOR ARCHITECTURAL DETAILS

SHEET NUMBER
A8.2

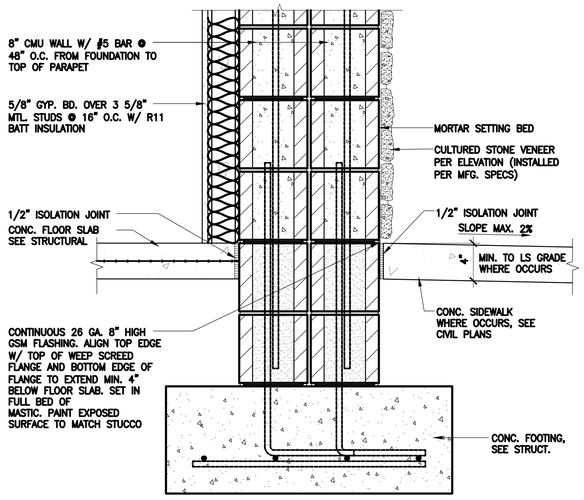
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4625 NATIONAL PROTOTYPE - R1



12 STONE VENEER WAINSCOT DETAIL

1 1/2" = 1'-0"



11 STONE VENEER SILL DETAIL

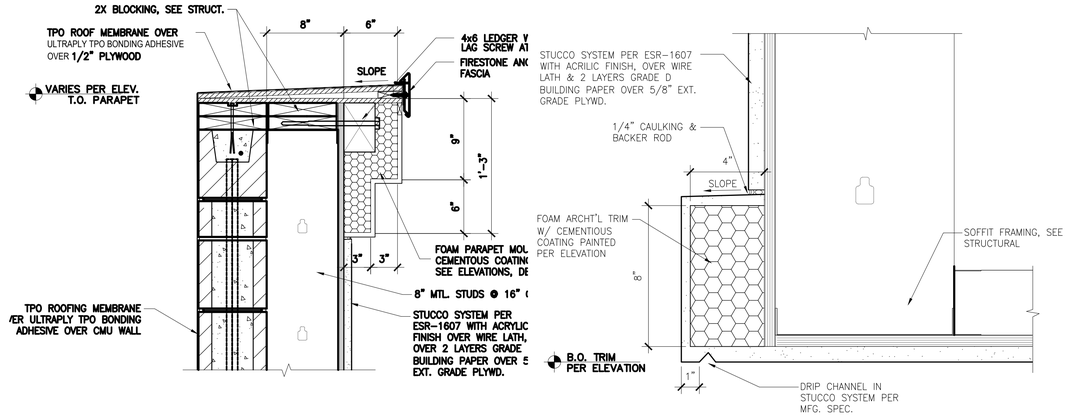
1 1/2" = 1'-0"

10 NOT USED

N.T.S.

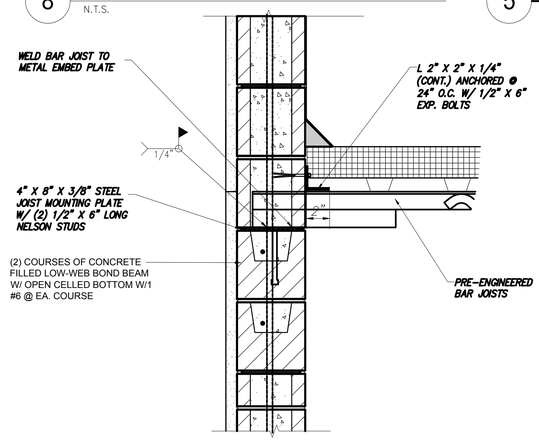
9 NOT USED

N.T.S.



8 NOT USED

N.T.S.

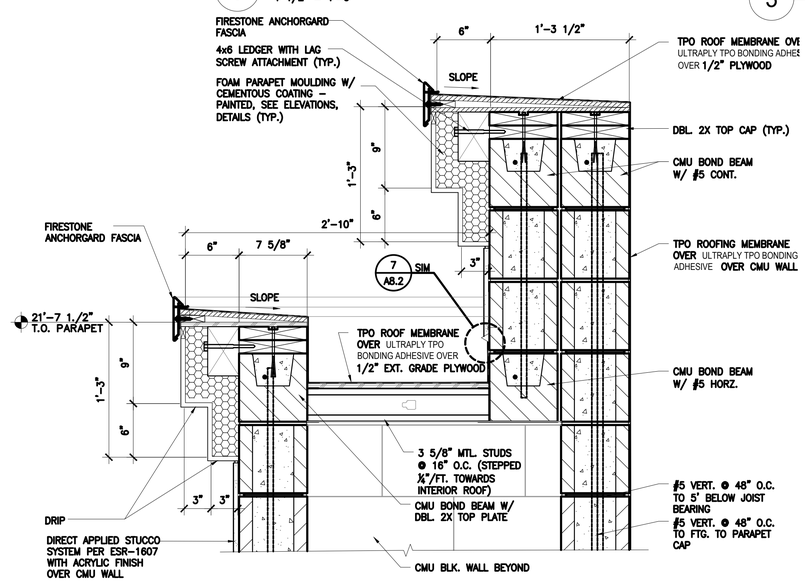


7 TYP. JOIST @ CMU CONNECTION DETAIL

1" = 1'-0"

6 FOAM PARAPET

1 1/2" = 1'-0"

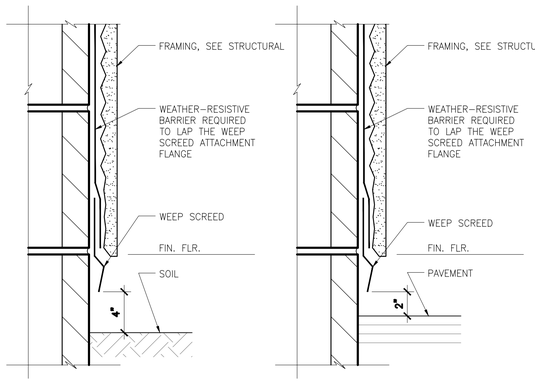


5 FOAM PARAPET

1 1/2" = 1'-0"

4 WEEP SCREED

3"=1'-0"



3 TRIM / DRIP SCREED DETAIL

3"=1'-0"

2 NOT USED

N.T.S.

1 NOT USED

N.T.S.

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8.18.22
Ralph Watson

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RW

PROJECT MANAGER
RM

QUALITY CONTROL
RW

DRAWN BY
KR

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

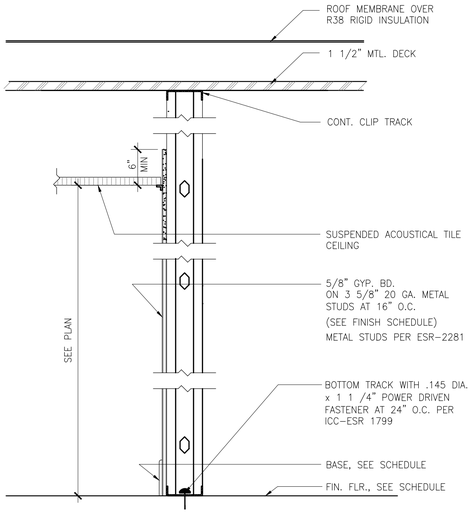
EXTERIOR ARCHITECTURAL DETAILS

SHEET NUMBER

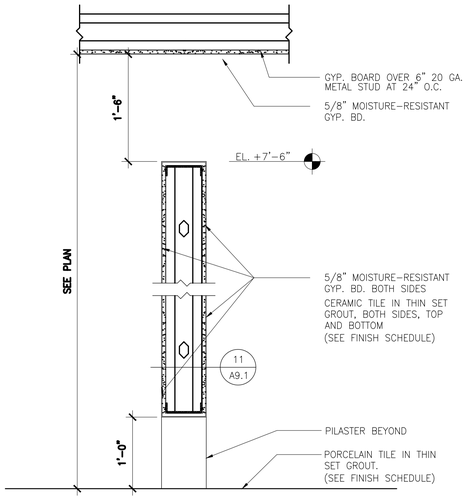
A8.3

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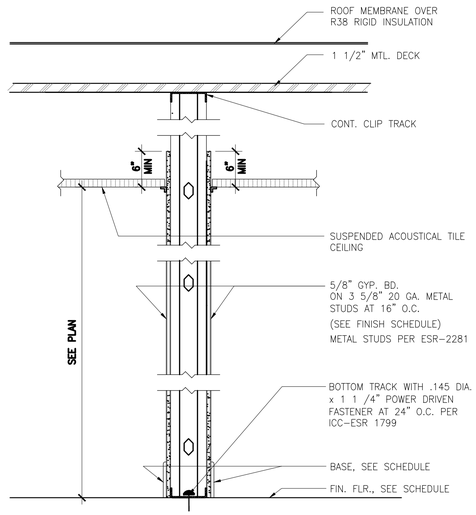
4625 NATIONAL PROTOTYPE – R1



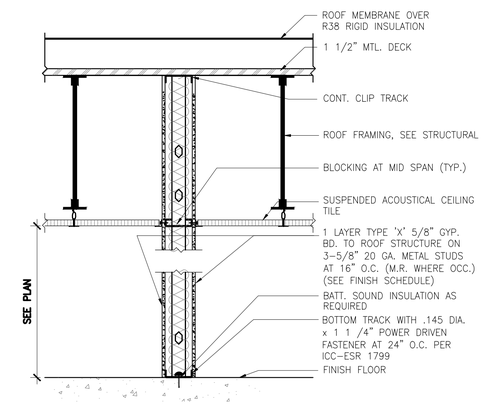
12 SECTION AT WALL TYPE C
1"=1'-0"



10 SECTION AT WALL - TYPE F (PARTITION WALL)
1"=1'-0"



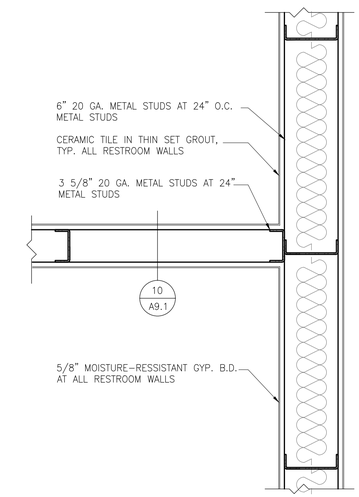
6 SECTION AT WALL - TYPE D
1"=1'-0"



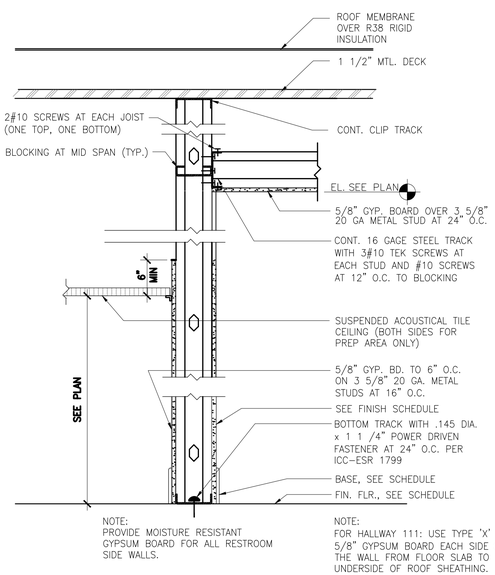
3 DEMISING WALL - TYPE A
3/4"=1'-0"

5 TYP. CLIP TRACK (DEFELCTION TRACK) DETAIL
NTS

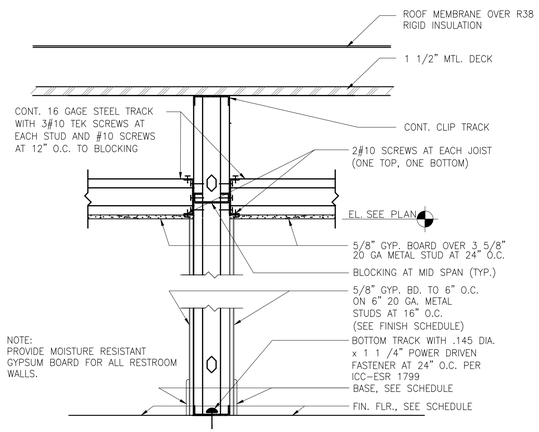
2 CO2 SIGNS
1-1/2"=1'-0"



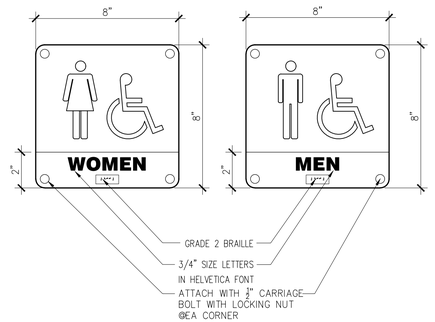
11 RESTROOM PARTITION WALL (PLAN VIEW)
1 1/2"=1'-0"



8 SECTION AT WALL - TYPE 'E'
1"=1'-0"



4 SECTION AT WALL - TYPE B
1"=1'-0"



1 RESTROOMS SIGNS
3"=1'-0"

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STATE OF FLORIDA
RALPH WATSON
AR100937
8.18.22
Ralph Watson
REGISTERED ARCHITECT

PROFESSIONAL IN CHARGE
RW
PROJECT MANAGER
RM
QUALITY CONTROL
RW
DRAWN BY
KR

PROJECT NAME
CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

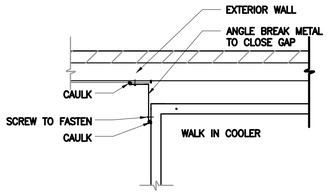
PROJECT NUMBER
22036

SHEET TITLE
INTERIOR ARCHITECTURAL DETAILS

SHEET NUMBER
A9.1

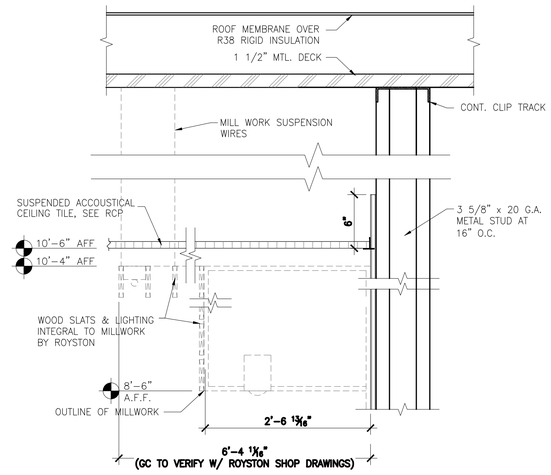
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4625 NATIONAL PROTOTYPE - R1



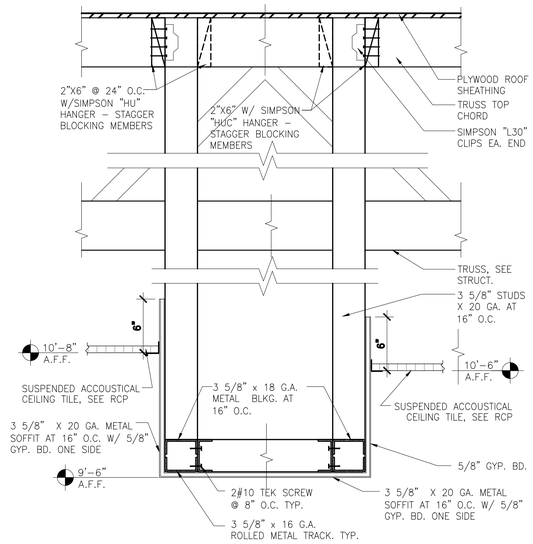
12 BREAK METAL AT COOLER

N.T.S.



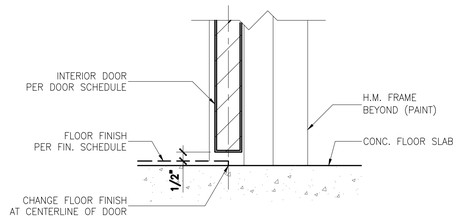
9 SOFFIT DETAIL @ COFFEE AREA

1 1/2"=1'-0"



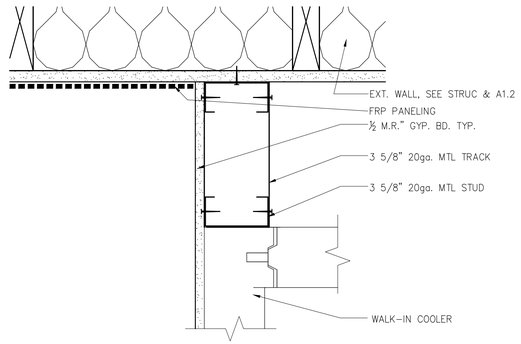
8 SOFFIT DETAIL @ CHECK OUT AREA

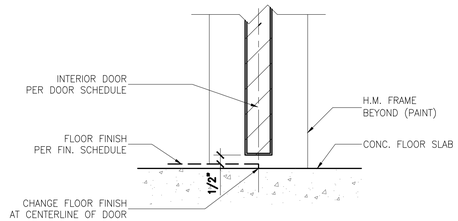
1 1/2"=1'-0"



4 INTERIOR DOOR THRESHOLD

3"=1'-0"

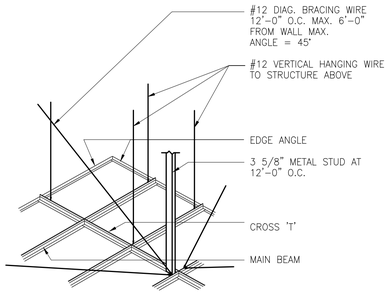




(DOUBLE SWING)

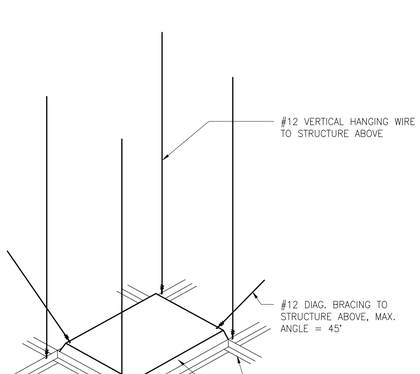
3 INTERIOR DOOR THRESHOLD

3"=1'-0"



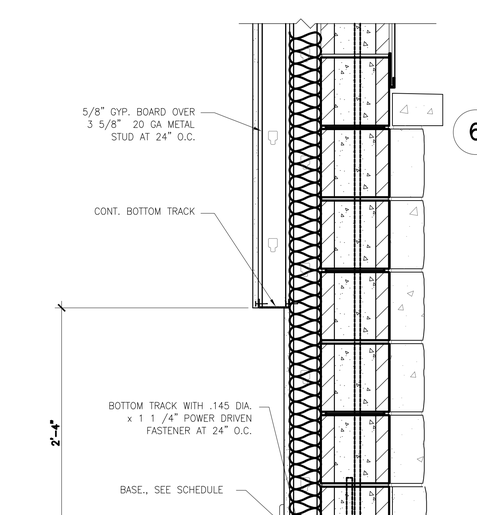
11 SUSPENDED CEILING DETAIL

N.T.S.



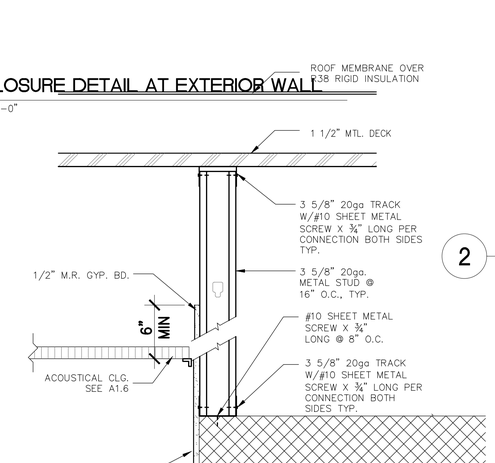
10 LIGHT FIXTURE SUPPORT

N.T.S.



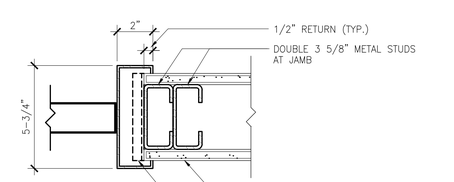
7 DBL. WALL @ PREP AREA

1 1/2"=1'-0"



6 CLOSURE DETAIL AT EXTERIOR WALL

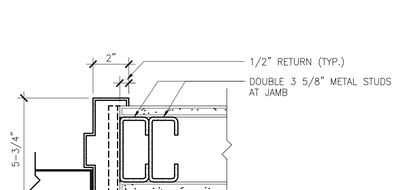
3"=1'-0"



(DOUBLE SWING)

2 INTERIOR DOOR JAMB (HEAD SIM.)

3"=1'-0"



5 VALANCE AT WALK-IN EQUIPMENT

1 1/2"=1'-0"

1 INTERIOR DOOR JAMB (HEAD SIM.)

3"=1'-0"

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REVISION

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BID SET	08/15/22

PROFESSIONAL SEAL

STATE OF FLORIDA · RALPH WATSON · AR100937 · REGISTERED ARCHITECT

Ralph Watson
8.18.22
Ralph Watson
Digitally signed by Ralph Watson
DN: cn=Ralph Watson, o=RDC, ou=RDC-5111, inc., email=rwatson@rdcollaborative.com, c=US
Date: 2022.08.29 09:38:01 -04'00'

PROFESSIONAL IN CHARGE
RW

PROJECT MANAGER
RM

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RW

DRAWN BY
KR

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

INTERIOR ARCHITECTURAL DETAILS

SHEET NUMBER

A9.2

Drawing Name: G:\2022\22036_Circle K – Lake City, FL\2Documents\CAD\A3_Interior Architectural Details.dwg Last Modified: Aug 29, 2022 – 11:29am Plotted on: Aug 18, 2022 – 1:09pm by kelleyrhoads

4625 NATIONAL PROTOTYPE – R1

GENERAL NOTES

1. GENERAL:
   A. APPLICABLE STRUCTURAL CODE: FLORIDA BUILDING CODE - 2020 EDITION. IN CONJUNCTION WITH ASCE 7-16 AND LOCAL AMENDMENTS.
   B. THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. EXCEPT WHERE NOTED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. THE STRUCTURAL ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS).
   C. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE REFERENCED EDITION AND/OR ADDENDA. ANY ENGINEERING DESIGN, PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF A REGISTERED ENGINEER RECOGNIZED BY THE BUILDING CODE JURISDICTION OF THIS PROJECT.
   D. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPENCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN.
   E. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH CIVIL, ARCHITECTURAL, MECHANICAL, PLUMBING, FIRE SPRINKLER, AND ELECTRICAL DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL REQUIREMENTS INTO THE SHOP DRAWINGS AND CONSTRUCTION.
   F. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
   G. CONNECTIONS OF ALL ITEMS SUPPORTED BY THE STRUCTURE ARE THE RESPONSIBILITY OF THE DISCIPLINES WHO ARE MAKING THESE ATTACHMENTS. THESE ATTACHMENTS SHALL BE DESIGNED TO RESIST ALL GRAVITY, WIND, WIND UPLIFT, THERMAL LOADS, ETC.
   H. WHERE A DETAIL, TYPICAL DETAIL, SECTION, TYPICAL SECTION OR A NOTE IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
   I. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS & FIELD CONDITIONS. BUILDING DIMENSIONS AND ELEVATIONS, WHERE SHOWN, WERE PROVIDED BY THE ARCHITECT AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND COORDINATE ALL DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK. ANY DISCREPANCIES SHALL BE RESOLVED THROUGH THE ARCHITECT. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL ITEMS WITH THE APPROPRIATE TRADE DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.
   J. ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC. DOES NOT RELIEVE THE CONTRACTOR FROM MEETING THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN ENGINEER'S WRITTEN APPROVAL FOR THE SPECIFIC DEVIATION.
   K. UNLESS NOTED, SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS FOR REVIEW. DESIGN DRAWINGS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS. SHOP DRAWINGS WILL NOT BE REVIEWED UNLESS THEY WERE CHECKED, BEAR THE INITIAL OF THE CHECKER AND ARE STAMPED "APPROVED" BY THE GENERAL CONTRACTOR.
   L. ALL REQUIRED TESTING REPORTS SHALL BE AVAILABLE AT THE JOB SITE.
   M. NO SUPPORT PROVISIONS HAVE BEEN MADE FOR EQUIPMENT OVER 300 POUNDS OR PIPES OVER 4" DIAMETER EXCEPT AS SHOWN. UNLESS NOTED, EQUIPMENT SHALL BE SUPPORTED BY TWO (2) BEAMS OR JOISTS WHERE EACH SUPPORTS HALF OF THE EQUIPMENT WEIGHT. ANY ADDITIONAL REQUIREMENTS SHOULD BE APPROVED BY THE ENGINEER. EQUIPMENT AND PIPES SHALL BE BRACED LATERALLY BY THE INSTALLER TO RESIST SEISMIC FORCES.
   N. EQUIPMENT WEIGHTS SHOWN ON THE STRUCTURAL DRAWINGS ARE MAXIMUM OPERATING WEIGHTS INCLUDING CURBS AND MISCELLANEOUS ITEMS. THE CONTRACTOR SHALL VERIFY AND BRING TO THE ATTENTION OF THE ENGINEER ANY DEVIATIONS.
   O. WHERE ROOF DRAINS ARE USED FOR ROOF DRAINAGE, AN EMERGENCY DRAINAGE SYSTEM SHALL BE PROVIDED TO MINIMIZE WATER ACCUMULATION (REF ARCHITECTURAL DRAWINGS).
   P. JOHNSTON BURKHOLDER ASSOCIATES, LLC, ITS EMPLOYEES, AND REPRESENTATIVES SHALL NOT BE RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS AND METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH CONSTRUCTION; NOR WILL THEY BE RESPONSIBLE FOR ANY FAILURE BY THE CONTRACTOR TO PERFORM OR COMPLETE CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. JOBSITE VISITS BY JOHNSTON BURKHOLDER ASSOCIATES, LLC SHALL NOT CONSTITUTE APPROVAL, AWARENESS OR LIABILITY FOR ANY HAZARDOUS CONDITIONS.

2. DESIGN CRITERIA:
   A. DEAD LOADS
      - REF FRAMING PLAN
   B. LIVE LOADS
      - 20 PSF
   C. RISK CATEGORY = II
   D. SNOW LOADS
      1. GROUND SNOW LOAD = 0 PSF
      2. FLAT-ROOF SNOW LOAD = 0 PSF
      3. SNOW EXPOSURE FACTOR, Ce = 1.0
      4. THERMAL FACTOR, Ct = 1.0 (MAIN BUILDING)
      5. SNOW LOAD IMPORTANCE FACTOR, I = 1.0
      6. ALL APPLICABLE EFFECTS DUE TO SNOW DRIFTING
   E. WIND LOADS
      1. CODE MINIMUM ULTIMATE WIND SPEED = 118 MPH
      2. DESIGN ULTIMATE WIND SPEED = 118 MPH
      3. WIND LOAD IMPORTANCE FACTOR = 1.0
      4. WIND EXPOSURE CATEGORY = C FOR MAIN WIND FORCE-RESISTING SYSTEM
      5. WIND EXPOSURE CATEGORY = C FOR COMPONENTS AND CLADDING
   F. SEISMIC LOADS
      1. SEISMIC IMPORTANCE FACTOR, I = 1.0
      2. MAPPED SPECTRAL RESPONSE ACCELERATIONS
      - Ss = 0.085
      - S1 = 0.050
      3. SITE CLASS = D
      4. DESIGN SPECTRAL RESPONSE PARAMETERS
      - Sds = 0.091
      - Sd1 = 0.081
      5. SEISMIC DESIGN CATEGORY = B
      6. BASIC SEISMIC-FORCE-RESISTING SYSTEM = INTERMEDIATE MASONRY SHEAR WALLS
      7. DESIGN BASE SHEAR, V = Cs*W
      8. SEISMIC RESPONSE COEFFICIENT, Cs = 0.026
      9. RESPONSE MODIFICATION FACTOR, R = 3.5
      10. ANALYSIS PROCEDURE USED: EQUIVALENT LATERAL FORCE ANALYSIS
   G. DESIGN LOAD COMBINATIONS (ASD)
      1. D
      2. D + (Lr OR S)
      3. D + (0.6W OR 0.7E)
      4. D + 0.75(Lr OR S) + 0.75(0.6W OR 0.7E)
      5. 0.6D + 0.6W
      6. 0.6D + 0.7E
      STRESS INCREASES: INCREASES IN ALLOWABLE STRESSES SPECIFIED IN THE APPROPRIATE MATERIAL CHAPTER OR THE REFERENCED STANDARDS SHALL NOT BE USED WITH THE LOAD COMBINATIONS, EXCEPT THAT A DURATION OF LOAD INCREASE SHALL BE PERMITTED IN ACCORDANCE WITH CHAPTER 23.

3. SHALLOW FOUNDATIONS AND BUILDING PAD:
   A. THE FOUNDATION HAS BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT PREPARED BY UNIVERSAL ENGINEERING SCIENCES, DATED OCTOBER 8, 2021.
   B. CONTINUOUS FOOTINGS AND SPREAD FOOTINGS SHALL BEAR ON SOIL CAPABLE OF SUSTAINING A NET ALLOWABLE BEARING PRESSURE OF 2500 PSF AT A DEPTH OF 12 INCHES.
   C. MAXIMUM TOTAL FOUNDATION AND SLAB SETTLEMENT 1" AND DIFFERENTIAL SETTLEMENT 1/2" OVER A DISTANCE OF 50 FEET. MINIMUM SUBGRADE MODULUS 100 PCI. PARAMETERS SHALL BE VERIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPORT ADVERSE CONDITIONS.
   D. CONTRACTOR TO PREPARE SUBGRADE FOR BUILDING PAD AND PAVING AREAS PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. THE SITE SHALL BE PREPARED UNIFORMLY IN ACCORDANCE WITH CIVIL DRAWINGS.
   E. WHERE FILL IS REQUIRED IT SHALL BE PLACED IN ACCORDANCE WITH RECOMMENDATIONS AND UNDER THE OBSERVATION OF A QUALIFIED GEOTECHNICAL ENGINEER.
   F. ALL EXCAVATIONS AND BUILDING PADS SHALL BE OBSERVED BY A QUALIFIED GEOTECHNICAL ENGINEER TO VERIFY THE DESIGN CRITERIA AND REPORT ADVERSE CONDITIONS. (GEOTECHNICAL ENGINEER TO BE HIRED AND PAID BY THE OWNER) CERTIFICATION OF EXCAVATION SHALL BE PROVIDED TO BUILDING OFFICIAL. IN CASE OF CONFLICT BETWEEN THE GEOTECHNICAL REPORT, SPECIFICATIONS AND DRAWINGS, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
   G. FOOTING ELEVATIONS GIVEN ARE FOR PURPOSE OF CONTRACT AND SHALL BE ADJUSTED (LOWERED) AT TIME OF EXCAVATION TO MEET SOIL CONDITIONS. ENGINEER SHOULD BE CONSULTED.
   H. GRANULAR BASE BELOW SLAB-ON-GRADE AND SPREAD FOOTINGS SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE RECOMMENDATIONS AND UNDER THE OBSERVATION OF A QUALIFIED GEOTECHNICAL ENGINEER.
   I. BACKFILL AGAINST WALLS SHALL BE DEPOSITED EVENLY AGAINST BOTH SIDES OF THE WALLS UNTIL THE LOWER GRADE IS REACHED.
   J. THE CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ARCHITECT THE LOCATION OF EXISTING UTILITIES AND PROCEED WITH THE WORK ONLY AFTER WRITTEN APPROVAL FROM THE ARCHITECT.
   K. EXCAVATIONS FOR CONTINUOUS FOOTINGS SHALL BE MADE TRUE TO LINE AND GRADE. THE SIDES OF THE FOOTINGS SHALL BE FORMED, EXCEPT WHERE SOIL CONDITIONS ARE SUCH THAT THE SIDES OF THE EXCAVATION STAND FIRM AND SQUARE. EXCAVATIONS SHALL BE MADE TO FIRM, CLEAN BEARING SOIL.
   L. EXCAVATIONS FOR FOOTINGS AND FOUNDATIONS, WHICH ARE TO SERVE AS FORMS, SHALL BE THOROUGHLY WET PRIOR TO PLACING CONCRETE.

4. CONCRETE:
   A. CONCRETE SHALL CONFORM WITH ACI BUILDING CODE (ACI-318) AND SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH, AND DENSITY, AND WATER/CEMENT IN ACCORDANCE WITH THE FOLLOWING:

LOCATION	STRENGTH, PSI	DENSITY, PCF	MAX W/C RATIO
INTERIOR SLABS	3000	145	0.50
FOUNDATIONS	3000	145	0.50
ALL OTHER CONCRETE (UNO)	3000	145	0.50

   NOTE: DESIGN BASED ON 2,500 PSI CONCRETE
   B. UNLESS NOTED, CEMENT SHALL CONFORM TO ASTM C150, TYPE I OR II. AGGREGATES SHALL BE NORMAL WEIGHT CONFORMING TO ASTM C33. ADMIXTURES CONTAINING CHLORIDES SHALL NOT BE USED.
   C. CONCRETE EXPOSED TO WEATHER (I.E., EXPOSED EXTERIOR SLABS, CONCRETE WALLS, RETAINING WALLS, ETC.) SHALL BE AIR-ENTRAINED IN ACCORDANCE WITH ACI 318-14 REQUIREMENTS.
   D. UNLESS NOTED, MAXIMUM SLUMP FOR CONCRETE SHALL BE 4 INCHES (PLUS OR MINUS ONE INCH) AT POINT OF PLACEMENT. WHERE APPROVED BY THE ENGINEER OF RECORD, LARGER SLUMP IS PERMITTED WITH THE ADDITION OF HIGH RANGE WATER REDUCING ADMIXTURE.
   E. CONCRETE CURING SHALL COMPLY WITH ACI 308. CURING PROCESS SHALL START IMMEDIATELY FOLLOWING INITIAL SET. CONCRETE SHALL BE MAINTAINED IN MOIST CONDITION FOR AT LEAST 7 DAYS AFTER PLACEMENT UNLESS CODE PROVISIONS ARE FOLLOWED.
   F. HOT WEATHER CONCRETING: SPECIAL PRECAUTIONS RECOMMENDED BY ACI 305 SHALL BE TAKEN WHEN THE AMBIENT TEMPERATURE IS ABOVE 80 DEGREES FAHRENHEIT OR WHEN MAXIMUM RATE OF EVAPORATION IN THE CONCRETE EXCEEDS 0.2 LB/SF/HR. THIS RATE IS AFFECTED BY AIR TEMPERATURE, RELATIVE HUMIDITY, CONCRETE TEMPERATURE AND WIND VELOCITY (REF ACI 305). AFTER FINISHING CONCRETE, USE LIGHT FOG SPRAY UNTIL CURING COMPOUND IS USED, OR WET CURING METHOD IS IMPLEMENTED.
   G. COLD WEATHER CONCRETING: WHEN, FOR MORE THAN THREE (3) CONSECUTIVE DAYS, THE MEAN DAILY TEMPERATURE DROPS BELOW 40 DEGREES FAHRENHEIT, SPECIAL MATERIALS AND PROCEDURES SHALL BE PROVIDED DURING PLACING AND CURING OF CONCRETE PER ACI 306.

5. REINFORCING STEEL:
   A. REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60 (U.N.) AND GRADE 40 FOR #3 AND SMALLER BARS. GRADE 60 REINFORCING MAY NOT BE RE-BENT OR FIELD BENT WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
   B. WELDED WIRE REINFORCING SHALL CONFORM TO ASTM A-185, MINIMUM LAP SHALL BE 8" U.N.O.
   C. REINFORCING THAT IS WELDED SHALL BE WELDABLE TYPE, ASTM A-706.
   D. NO TACK WELDING OF REINFORCING IN THE FIELD WILL BE PERMITTED.
   E. ALL DETAILING, FABRICATION AND PLACING OR REINFORCING BARS, UNLESS OTHERWISE NOTED, SHALL CONFORM TO ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" AND THE LATEST ACI "MANUAL OF STANDARD PRACTICE FOR DETAIL REINFORCED CONCRETE STRUCTURES".
   F. MINIMUM LAP SPLICE AND TENSION DEVELOPMENT DIMENSION TABLE BASED ON 3000 PSI NORMAL WEIGHT CONCRETE, Fy = 60 KSI, NON-COATED BARS, LAP CLASS B, WITH 3" MIN CLR:

BAR	TOP BAR SPLICE	DEVELOPMENT	BAR	OTHER BAR SPLICE	DEVELOPMENT
#3	21"	16"	#3	16"	12"
#4	23"	18"	#4	18"	14"
#5	28"	22"	#5	22"	17"
#6	34"	26"	#6	26"	20"
#7	49"	38"	#7	38"	29"

   WHEN LAPPING TWO DIFFERENT SIZE BARS, USE THE LAP DIMENSION OF THE SMALLER BAR OR THE ANCHORAGE DIMENSION OF THE LARGER BAR. USE WHICHEVER DIMENSION IS LARGER.
   G. MINIMUM CONCRETE COVER FOR REINFORCING
   CONCRETE REINFORCING SHALL BE PLACED PER THE TOLERANCES OF ACI 117 AND ACI 318

LOCATION	MINIMUM COVER
FOOTINGS, GRADE BEAMS AND SLABS	
CAST AGAINST & PERMANENTLY EXPOSED TO EARTH	3"
SLABS ON GRADE	1/3 SLAB THICKNESS FROM TOP OF SLAB
INTERIOR SLABS AND STAIRS	1"
EXTERIOR SLABS AND STAIRS #5 AND SMALLER	1 1/2"
EXTERIOR SLABS AND STAIRS #6 AND LARGER	2"
WALLS INTERIOR FACE	1"
WALLS INTERIOR FACE #5 AND SMALLER	1 1/2"
WALLS INTERIOR FACE #6 AND LARGER	2"

   *VERIFY W/ ENVIRONMENTAL CONDITIONS PER ACI 318, CHAPTER 19.

6. SLABS:
   A. MAXIMUM SLUMP WITHOUT A PLASTICIZER AT POINT OF PLACEMENT SHALL BE 5 INCHES. MIX DESIGNS SHALL TAKE CARE TO PROVIDE THE LARGEST POSSIBLE SIZE OF COARSE AGGREGATE WHILE MAINTAINING CONCRETE WORKABILITY. NOMINAL MAXIMUM AGGREGATE SIZE SHALL NOT BE LESS THAN 3/4 INCH NOR MORE THAN 1/3 THE DEPTH OF THE SLAB.
   B. FOR INTERIOR SLABS ON GRADE, PROVIDE CONCRETE WITH AN ULTIMATE SHRINKAGE LES THAN 0.05% AT 28 DAYS. LABORATORY TEST RESULTS SHALL BE SUBMITTED INDICATING THAT THE CONCRETE SLAB ON GRADE MIX DESIGN (OR COMPARABLE) MEETS THE ULTIMATE SHRINKAGE REQUIREMENTS. SHRINKAGE VALUES FOR CONCRETE SPECIMENS SHALL BE TESTED PER ASTM C157 AND THE PROCEDURES IN ACI 209R TO PREDICT THE ULTIMATE DRYING SHRINKAGE.
   C. CONCRETE SHALL BE MIXED, PLACED, FINISHED AND CURED PER REFERENCED EDITION OF ACI 302.1 FOR THE APPROPRIATE FLOOR CLASS TYPE. CURING COMPOUND SHALL BE COMPATIBLE WITH ARCHITECTURAL FLOOR FINISH. SLABS SHALL BE PLACED ON A FLAT, SMOOTH, FIRM, COMPACTED SUBGRADE.
   D. FOR SUBGRADE AND SUBBASE PREPARATION, SEE GEOTECHNICAL REPORT AND SPECIFICATIONS.
   E. IMMEDIATELY PRIOR TO POURING EACH SLAB, A QUALIFIED GEOTECHNICAL ENGINEER (TO BE PAID BY OWNER) SHALL INSPECT THE PAD AND PROVIDE A CERTIFICATE STATING THAT THE PAD MEETS THE PROJECT DESIGN REQUIREMENTS. IF WEATHER CONDITIONS CHANGE, RE-CERTIFICATION WILL BE REQUIRED.
   F. SLAB-ON-GRADE REINFORCING SHALL BE SUPPORTED ON CHAIRS 2" BELOW TOP OF SLAB WITH SAND PLATES OR PRECAST CONCRETE SUPPORTS (PRECAST CONCRETE SUPPORTS SHOULD BE AT LEAST 4" SQUARE AT THE BASE W/MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI) OF SUFFICIENT HEIGHT TO INSURE THAT REINFORCING IS AT THE PROPER HEIGHT WITH MAXIMUM SPACING OF 3'-0" EACH WAY FOR WELDED WIRE FABRIC. PLACEMENT OF REINFORCING USING THE PULL- UP METHOD IS NOT PERMITTED.
   G. VAPOR BARRIER, IF NOT SPECIFIED BY ARCHITECTURAL SPECIFICATION OR SOILS REPORT SHALL CONSIST OF A MINIMUM 15 MIL ASTM E1745 CLASS A MATERIAL LAPPED A MINIMUM OF 6" AND TAPED PER MANUFACTURER RECOMMENDATIONS. THE BARRIER SHALL BE PLACED ON TOP OF A SMOOTH AND COMPACTED SUBGRADE SURFACE. THE FLOOR SLAB SHALL BE PLACED OVER A 4" LAYER OF COMPACTED AGGREGATE BASE COURSE ON TOP OF THE VAPOR BARRIER. ANY DAMAGE TO VAPOR BARRIER SHALL BE REPAIRED PRIOR TO AGGREGATE COURSE PLACEMENT. CARE SHALL BE TAKEN TO KEEP MOISTURE AWAY FROM THE COMPACTED SUBBASE. SUBGRADE MUST BE ALLOWED TO DRY AFTER RAINS PRIOR TO SLAB PLACEMENT. FLOOD CURING IS NOT ALLOWED. SAND IS NOT AN ALTERNATIVE FOR THE SUB-BASE COURSE.
   H. WHERE POSSIBLE, PLACE CONSTRUCTION JOINTS AT COLUMN LINES. MAXIMUM POUR WIDTH OF SLAB-ON-GRADE SHALL BE ONE COLUMN BAY AND THREE (3) COLUMN BAYS IN THE OTHER DIRECTION. UNLESS NOTED, ALLOW MINIMUM 48 HOURS BETWEEN ADJACENT POURS.
   I. UNLESS NOTED, FLOOR CONTRACTION JOINTS FOR SLAB-ON-GRADE SHALL BE SPACED EQUALLY. CONTRACTION JOINTS SPACING SHALL BE REDUCED AT HOT AND/OR DRY CLIMATE. SAW CUT SLAB (1/8" WIDE X SLAB THICKNESS/4 U.N.O.) AS SOON AS THE SURFACE IS FIRM ENOUGH SO THAT IT WILL NOT BE DAMAGED BY THE BLADE. JOINT FILLER SHALL BE PLACED IN CLEAN JOINTS, OVERFILLED AND SHAVED FLUSH. THE OPTIMUM TIME TO CUT THE SLAB WILL BE THE CONTRACTOR'S RESPONSIBILITY. SLABS WITH CRACKS AND/OR SLAB WHICH EXHIBIT "SLAB CURLING" WILL NOT BE ACCEPTED. SLAB REPLACEMENT SHALL BE AT OPTION OF THE OWNER AT CONTRACTOR'S EXPENSE.
   J. REF ARCHITECTURAL AND CIVIL DRAWINGS FOR SIDEWALKS, EXTERIOR SLABS, INTERIOR SLABS, SLAB DEPRESSIONS, AND ELEVATIONS.
   K. SLAB-ON-GRADE CONTRACTION OF OPENINGS, CUT OUTS AND PENETRATIONS SHALL BE REINFORCED WITH 2-#4 (3'-0" LONG).
   L. AT SLAB-ON-GRADE, SEAL COLUMN BOX-OUTS, CONSTRUCTION JOINTS AND CONTRACTION JOINTS TO PREVENT WATER PENETRATION UNDER SLAB DURING & AFTER CONSTRUCTION TO PREVENT SOILS FROM EXPANDING.
   M. PIPES, DUCTS, CONDUITS, ETC. SHALL NOT BE PLACED IN SLABS UNLESS APPROVED BY THE STRUCTURAL ENGINEER (PLACE A MINIMUM 4" BELOW SLAB).
   N. THE GENERAL CONTRACTOR, INCLUDING SUB CONTRACTORS AND SUPPLIERS SHALL NOT DRIVE OR PARK HEAVY EQUIPMENT ON THE CONCRETE SLAB. ANY DAMAGE TO SLAB DUE TO HEAVY EQUIPMENT SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
   O. COMBUSTION HEATERS SHALL NOT BE USED DURING CONCRETE PLACEMENT UNLESS PRECAUTIONS ARE TAKEN TO PREVENT EXPOSURE OF THE CONCRETE TO EXHAUST GASES.
   P. REF ARCH SPECIFICATIONS FOR ALL FLOOR SLAB FINISHES.
   Q. PROVIDE NEW TROWEL BLADES FOR CONCRETE FINISHING OF FLOOR SLABS.

7. STRUCTURAL STEEL:
   A. CONFORM TO AISC MANUAL OF STEEL CONSTRUCTION, 15TH EDITION.
   B. MATERIALS:
      ASTM A36, FY=36 KSI UNLESS NOTED.
      ASTM A992, FY=50 KSI FOR WIDE FLANGE MEMBER UN AND WHERE NOTED ON THE DRAWINGS. ANY REINFORCING OF MEMBER MUST BE WITH FY=50 KSI STEEL.
      ASTM A500, GRADE B, FY=46 KSI FOR SQUARE AND RECTANGULAR HSS.
      ASTM A53, TYPE S, GRADE B, FY=36 KSI FOR PIPES.
      ASTM A325 FOR HIGH STRENGTH BOLTS.
      ASTM A307, GRADE A, FOR HOOKED ANCHOR BOLTS.
      ASTM A36 FOR THREADED ROD ANCHORS.
      ASTM F1554 GR.36 FOR THREADED ROD ANCHORS NOTED IN COLUMN SCHEDULE
      ASTM A108 & A.W.S D1.1 FOR SHEAR STUDS.
   C. THE CONNECTIONS FOR ANY PORTION OF THE STRUCTURE NOT INDICATED ON THE DRAWINGS SHALL BE DESIGNED BY THE FABRICATOR. STANDARD CONNECTIONS SHALL BE USED WHERE POSSIBLE. ALL SHOP CONNECTIONS SHALL BE WELDED OR HIGH STRENGTH BOLTED. FIELD CONNECTIONS SHALL BE HIGH STRENGTH BOLTED WHERE POSSIBLE. UNLESS NOTED, USE 3/4" DIAMETER ASTM A-325N BOLTS INSTALLED IN ACCORDANCE WITH AISC. ALL SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY THE FABRICATOR'S ENGINEER WITH THE ENGINEERS SEAL FOR THE STATE WHERE THE STRUCTURE IS LOCATED. ENGINEER'S SEAL MAY BE QUALIFIED "FOR DESIGN OF CONNECTIONS ONLY."
   D. STEEL MEMBERS SUPPORTING STEEL DECK AT THE PERIMETER OF THE BUILDING SHALL BE CONTINUOUS.
   E. STRUCTURAL STEEL WITHOUT FIRE PROOFING SHALL RECEIVE ONE (1) SHOP COAT OF GRAY RUST INHIBITIVE PRIMER. ALL FIRE PROOFED STRUCTURAL STEEL DOES NOT RECEIVE SHOP COAT. REF ARCH FOR FIRE PROOFING REQUIREMENTS. STEEL SHALL BE GALVANIZED WHERE NOTED ON STRUCTURAL OR ARCHITECTURAL PLANS.
   F. NON-SHRINK GROUT UNDER BASE PLATES AND BEARING PLATES SHALL BE SIKAGROUT 212 AS MANUFACTURED BY SIKA CORPORATION OR SET GROUT BY MASTER BUILDERS WITH A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI AT 28 DAYS.
   G. STEEL COLUMNS AND BASE PLATES SHALL HAVE MINIMUM 3" CONCRETE COVER PROTECTION.
   H. FOR ALL EXPOSED STRUCTURAL HSS CONNECTIONS, THERE SHALL BE NO MORE THAN A 1/8" GAP BETWEEN THE MEMBERS. ALL EXPOSED ENDS OF HSS MEMBERS SHALL BE CAPPED WITH A 1/4" STEEL PLATE WITH GROUND SMOOTH WELDS.
   I. AFTER WELDS HAVE BEEN INSPECTED, APPLY EXTERIOR QUALITY PAINT TO CONNECTIONS.

8. NOT USED.

9. WELDING:
   A. ALL STRUCTURAL STEEL WELDING SHALL CONFORM TO AMERICAN WELDING SOCIETY STANDARD D1.1, LATEST EDITION.
   B. REINFORCING STEEL WELDING SHALL CONFORM TO AWS D1.4. REINFORCING SHALL CONFORM TO ASTM A-706.
   C. ALL STRUCTURAL STEEL AND REINFORCING STEEL WELDING ELECTRODES SHALL CONFORM TO AWS A5.1 OR A5.5 E-70XX.
   D. FIELD WELDING SHALL BE SHOWN ON ERECTION DRAWINGS.
   E. ALL FIELD PARTIAL AND FULL PENETRATION WELDS SHALL BE INSPECTED AND TESTED BY A TESTING AGENCY TO BE PAID BY THE CONTRACTOR.
   F. ALL EXPOSED WELDED CONNECTIONS SHALL BE GROUND SMOOTH AND SUBJECT TO ARCHITECT APPROVAL. THE CONTRACTOR SHALL SUBMIT WRITTEN PROCEDURE AND DETAILS TO THE ARCHITECT FOR REVIEW PRIOR TO COMMENCING THE WORK.
   G. PAINT ALL WELDS WITH RUST INHIBITIVE PAINT.
   H. PROOF OF WELDER CERTIFICATION SHALL BE AVAILABLE AT THE JOB SITE DURING TIMES OF INSPECTION.

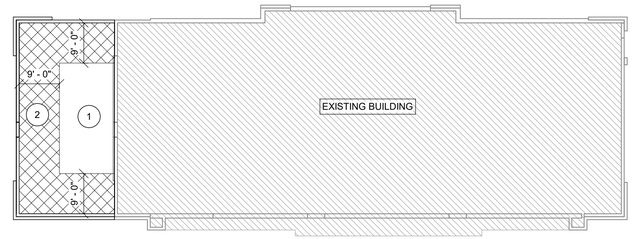
10. STEEL ROOF DECK (U.N.):
   A. STEEL ROOF DECK SHALL CONFORM TO STEEL DECK INSTITUTE DESIGN MANUAL, LATEST EDITION, AND BE APPROVED BY FACTORY MUTUAL, LATEST EDITION.
   B. UNLESS NOTED, ROOF DECK MENTIONED ON DRAWINGS SHALL BE 36" WIDE, 1-1/2" DEEP WIDE RIB GALVANIZED,(REF ROOF PLAN FOR GAGE) MINIMUM YIELD STRENGTH 33,000 PSI.
   C. STEEL ROOF DECK AND CONNECTORS SHALL CONFORM TO FACTORY MUTUAL PUBLICATION I-28, CLASS I-120 WINDSTORM RESISTANCE. INSTALLATION SHALL BE BY AN OSHA CERTIFIED OPERATOR IN INITIAL FASTENING UNDER THE SUPERVISION OF THE MANUFACTURER'S REPRESENTATIVE.
      STEEL ROOF DECK SHALL BE ATTACHED AS FOLLOWS:
      1. AT SUPPORTS: 5/8" DIAMETER PUDDLE WELDS.
      2. AT SIDE LAPS: BUILDEX TRAXX #10-16 STANDARD HEX WASHER HEAD SCREWS.
   D. SPACING OF CONNECTIONS SHALL BE AS FOLLOWS UNLESS NOTED:
      1. INTERIOR STEEL SUPPORTS: REF SCHEDULE, 12" O.C. MAXIMUM (SIDE LAPS MUST BE CONNECTED AT EACH SUPPORT).
      2. INTERIOR STEEL SUPPORTS AT 12'-0" U.N. EDGE STRIP AROUND THE PERIMETER WALL: 6" MAXIMUM.
      3. INTERIOR STEEL SUPPORTS AT CORNERS: TWO (2) ATTACHMENTS (ONE AT EACH SIDE OF WEB OF STEEL SUPPORT) AT 6" O.C. MAXIMUM.
      4. AT LEDGER AT THE PERIMETER OF THE BUILDING: 6" O.C. MAXIMUM - UNLESS NOTED, AND TWO (2) ATTACHMENTS AT 6" O.C. AT CORNERS.
      5. SIDE LAPS: REF SCHEDULE.
      6. SPACING OF CONNECTORS TO FRAMED OPENING SHALL BE SAME AS FOR INTERIOR STEEL SUPPORT.
   E. MINIMUM END DISTANCE TO CONNECTOR SHALL BE 1". MINIMUM END LAP SHALL BE 2".
   F. DECK SHALL BE PLACED AT THE PERIMETER WITH A COMPLETE RIB BEARING ON THE STEEL SUPPORT.
   G. MINIMUM FINAL ROOF SLOPE SHALL BE 1/4 INCH PER 1 FOOT. WHERE SLOPE IS NOT ACHIEVED BY STEEL STRUCTURE, CREATE IT WITH INSULATION ABOVE THE DECK. (REF ARCHITECTURAL DRAWINGS).
   H. WHERE ROOF SURFACE WARPS DUE TO ROOF SLOPE OR ANGLE FRAMING AT OPENING, ADD ADDITIONAL SPLICES AS REQUIRED TO ACHIEVE PROPER BEARING ON THE SUPPORT WITHOUT FORCING THE DECK TO BEAR ON THE SUPPORT.
   I. AFTER DECK INSTALLATION, THE WELDS SHALL BE PAINTED WITH RUST INHIBITIVE PAINTED.
   J. NO SUPPORT OF CONCENTRATED LOADS BY METAL DECK IS ALLOWED WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER.

11. POST-INSTALLED ANCHORING SYSTEM:
   A. UNLESS NOTED, ALL ANCHORS IN CONCRETE (AND GROUTED MASONRY WALLS) SHALL BE CARBON STEEL HILTI KWIK HUS-EZ SCREW ANCHORS PER ICC ESR-3056 OR APPROVED ICC EQUIVALENT.
   B. WHERE NOTED OUT ON THE DRAWINGS, USE HILTI HIT HY-100 THREADED ROD ADHESIVE ANCHORING SYSTEM (ICC ESR-3574) OR APPROVED ICC EQUIVALENT. UNLESS NOTED, ANCHOR EMBEDMENT SHALL BE AS FOLLOWS: 3/8" DIA. - 3 3/8", 1/2" DIA. - 4 1/2", 5/8" DIA. - 5 5/8", 3/4" DIA. - 6 3/4".
   C. UNLESS NOTED, ANCHOR SPACING (AS) AND ANCHOR EDGE DISTANCE (ED) SHALL BE AS PUBLISHED BY THE MOST CURRENT APPROVED HILTI REPORT IN ORDER TO DEVELOP MAXIMUM WORKING LOAD.
   D. MASONRY WALLS RECEIVING ANCHORS SHALL BE GROUTED AND SHALL HAVE ATTAINED ADEQUATE STRENGTH PRIOR TO ANCHORING. PROVIDE MINIMUM EDGE DISTANCE THAT IS REQUIRED TO DEVELOP THE MAXIMUM WORKING LOAD PUBLISHED BY HILTI REPORT.
   E. ALL ANCHORS SHALL BE INSTALLED AS PER MANUFACTURER'S INSTRUCTIONS AND UNDER MANUFACTURER'S S

DECK ZONE	3/4" VISIBILE DIAMETER PUDDLE WELDS TO STL SUPPORTS (36" WIDE DECK PATTERN)	#10 SIDELAP SCREWS BETWEEN STL SUPPORTS	FACTORED DECK SHEAR CAPACITY
1	36/7	7	719 PLF

NOTES:
1. THE CONTRACTOR SHALL PROPERLY INSTALL SIDELAPS SCREWS PER MANUFACTURER'S SPECIFICATIONS SO THE SCREWS DEVELOP SHEAR AS LISTED IN STEEL DECK INSTITUTE DESIGN MANUAL.
2. REF GENERAL NOTES FOR WELD AND SCREW SIZES AND WELDS AT PERIMETER DECK LEDGER ANGLE.
3. REF GENERAL NOTES ON S0.1 FOR WELD PAINTING REQUIREMENTS.

ROOF DIAPHRAGM CONNECTION DIAGRAM & SCHEDULE | 2
NTS



COMPONENT AND CLADDING WIND PRESSURE DIAGRAM - ROOF



COMPONENT AND CLADDING WIND PRESSURE DIAGRAM - WALLS

ROOF	C&C ZONE	EFFECTIVE WIND AREA (SF)	POSITIVE PRESSURE (PSF)	NEGATIVE PRESSURE (PSF)
	1	10	+10.0	-29.1
		20	+10.0	-27.2
		50	+10.0	-24.7
		100	+10.0	-22.8
	2	10	+16.7	-38.4
		20	+16.0	-36.0
		50	+15.0	-32.7
		100	+14.3	-30.2
	3	10	NOT USED	
		20	NOT USED	
		50	NOT USED	
		100	NOT USED	

WALLS	C&C ZONE	EFFECTIVE WIND AREA (SF)	POSITIVE PRESSURE (PSF)	NEGATIVE PRESSURE (PSF)
	4	10	+16.7	-18.1
		20	+16.0	-17.4
		50	+15.0	-16.4
		100	+14.3	-15.7
	5	10	+16.7	-22.3
		20	+16.0	-20.8
		50	+15.0	-18.9
		100	+14.3	-17.4
	6	10	+54.0	-36.5
		20	+50.5	-34.0
		50	+45.9	-30.8
		100	+42.4	-28.4

NOTES:
1. THE VALUES PROVIDED HEREIN ARE ALLOWABLE STRESS DESIGN LOADS AND ARE INTENDED FOR SERVICEABILITY LIMITS. THESE VALUES DO NOT REFLECT THE ULTIMATE LOADING THAT MAY BE EXPERIENCED BY THE BUILDING.
2. THE ROOFING SYSTEM SHALL BE BASED ON EN EFFECTIVE WIND AREA OF 10 SF.

COMPONENT AND CLADDING WIND PRESSURE SCHEDULE (118 MPH)

COMPONENTS & CLADDING WIND PRESSURE | 1
NTS

ABBREVIATIONS

AB	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
AFF	ABOVE FINISHED FLOOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ARCH	ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
BFF	BELOW FINISHED FLOOR
BL	BLOCK LINTEL
BM	BEAM
BO	BOTTOM OF
BOS	BOTTOM OF STEEL
BRG	BEARING
CJ	CONTRACTION JOINT
CL	CENTER LINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
COND	CONDENSER UNIT
CONST	CONSTRUCTION
CONT	CONTINUOUS
DBA	DEFORMED BAR ANCHOR
DIA	DIAMETER
EF	EXHAUST FAN
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
EQ	EQUAL
EW	EACH WAY
FDN	FOUNDATION
FF	FINISHED FLOOR
FS	FAR SIDE
FTG	FOOTING
FV	FIELD VERIFY
GA	GAUGE
GC	GENERAL CONTRACTOR
GYP	GYPSUM BOARD
H	HEIGHT
HORIZ	HORIZONTAL
HSA	HEADED STUD ANCHOR
HSS	HOLLOW STRUCTURAL SHAPE
INFO	INFORMATION
ISO	ISOLATION
JBE	JOIST BEARING ELEVATION
JST	JOIST
JT	JOINT
KSI	KIPS PER SQUARE INCH
L	LENGTH
LB	POUNDS
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANOUS
MO	MASONRY OPENING
MTL	METAL
NIC	NOT IN CONTRACT
NO	NUMBER
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OPPOSITE HAND
OSL	OUTSTANDING LEG
PAF	POWER ACTUATED FASTENER
PC	PRECAST
PCF	POUNDS PER CUBIC FOOT
PL	PLATE
PLF	POUNDS PER LINEAR FOOT
PLUMB	PLUMBING
PMEJ	PREMOLDED EXPANSION JOINT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
QTY	QUANITY
RCU	REFRIGERATION CONDENSING UNIT
REF	REFER TO
REINF	REINFORCING
REQD	REQUIRED
REV	REVERSE
RLL	ROOF LIVE LOAD
RO	ROUGH OPENING
ROT	ROTATE
RTU	ROOF TOP UNIT
SCHED	SCHEDULE
SDI	STEEL DECK INSTITUTE
SIM	SIMILAR
SJI	STEEL JOIST INSTITUTE
SPCS	SPACES
SPECS	SPECIFICATIONS
STRUC	STRUCTURAL
T&B	TOP AND BOTTOM
THK	THICKNESS
TL	TOTAL LOAD
TO	TOP OF
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOGB	TOP OF GRADE BEAM
TOS	TOP OF STEEL
TOW	TOP OF WALL
TRANS	TRANSVERSE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W	WIDTH
WP	WORK POINT
WWR	WELDED WIRE REINFORCEMENT

LEGEND

ROOF TOP UNIT (RTU)

FX FOOTING MARK; REF SCHED

CMU CONTROL JOINT

rdc.

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JBA PROJECT #22201

REVISIONS

△ ISSUE	DATE
PERMIT SET	08/15/22
BID SET	08/15/22

PROFESSIONAL SEAL

BART J. HARVERSON LICENSE No. 75746 STATE OF FLORIDA PROFESSIONAL ENGINEER

08/12/22

PROFESSIONAL IN CHARGE
BJH

PROJECT MANAGER
SMK

QUALITY CONTROL
JNF

DRAWN BY
SMK

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY, FL

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

DIAGRAMS AND SCHEDULES

SHEET NUMBER

S0.2

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STRUCTURAL SPECIAL INSPECTIONS

STEEL CONSTRUCTION (AISC 360-16)

VERIFICATION AND INSPECTION	FREQUENCY (QA)	REFERENCED STANDARD
1. PRIOR TO THE START OF WELDING, THE FOLLOWING INSPECTION TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. WELDER QUALIFICATION RECORDS AND CONTINUITY RECORDS	PERIODIC	AISC 360, TABLE N5.4-1
B. WELDING PROCEDURE SPECIFICATIONS (WPS) IS AVAILABLE	CONTINUOUS	AISC 360, TABLE N5.4-1
C. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES IS AVAILABLE	CONTINUOUS	AISC 360, TABLE N5.4-1
D. MATERIAL IDENTIFICATION (TYPE/GRADE)	PERIODIC	AISC 360, TABLE N5.4-1
E. WELDER IDENTIFICATION SYSTEM	PERIODIC	AISC 360, TABLE N5.4-1
F. FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY)	PERIODIC	AISC 360, TABLE N5.4-1
G. FIT-UP OF CJP WELDS OF HSS T-, Y-, AND K-JOINTS WITHOUT BACKING (INCLUDING JOINT GEOMETRY)	PERIODIC	AISC 360, TABLE N5.4-1
H. CONFIGURATION AND FINISH OF ACCESS HOLES	PERIODIC	AISC 360, TABLE N5.4-1
I. FIT-UP OF FILLET WELDS	PERIODIC	AISC 360, TABLE N5.4-1
2. DURING STEEL WELDING, THE FOLLOWING INSPECTION TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. CONTROL AND HANDLING OF WELDING CONSUMABLES	PERIODIC	AISC 360, TABLE N5.4-2
B. NO WELDING OVER CRACKED TACK WELDS	PERIODIC	AISC 360, TABLE N5.4-2
C. ENVIRONMENTAL CONDITIONS	PERIODIC	AISC 360, TABLE N5.4-2
D. WPS FOLLOWED	PERIODIC	AISC 360, TABLE N5.4-2
E. WELDING TECHNIQUES	PERIODIC	AISC 360, TABLE N5.4-2
F. PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	CONTINUOUS	AISC 360, TABLE N5.4-2
3. AFTER STEEL WELDING, THE FOLLOWING INSPECTION TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. WELDS CLEANED	PERIODIC	AISC 360, TABLE N5.4-3
B. SIZE, LENGTH AND LOCATION OF WELDS	CONTINUOUS	AISC 360, TABLE N5.4-3
C. WELDS MEET VISUAL ACCEPTANCE CRITERIA	CONTINUOUS	AISC 360, TABLE N5.4-3
D. ARC STRIKES	CONTINUOUS	AISC 360, TABLE N5.4-3
E. k-AREA	CONTINUOUS	AISC 360, TABLE N5.4-3
F. WELD ACCESS HOLES IN ROLLED HEAVY SHAPES AND BUILT-UP HEAVY SHAPES	CONTINUOUS	AISC 360, TABLE N5.4-3
G. BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	CONTINUOUS	AISC 360, TABLE N5.4-3
H. REPAIR ACTIVITIES	CONTINUOUS	AISC 360, TABLE N5.4-3
I. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	CONTINUOUS	AISC 360, TABLE N5.4-3
J. NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE APPROVAL OF THE EOR	PERIODIC	AISC 360, TABLE N5.4-3
4. PRIOR TO STEEL BOLTING, THE FOLLOWING INSPECTION TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. MANUFACTURERS' CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	CONTINUOUS	AISC 360, TABLE N5.6-1
B. FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	PERIODIC	AISC 360, TABLE N5.6-1
C. CORRECT FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)	PERIODIC	AISC 360, TABLE N5.6-1
D. CORRECT BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	PERIODIC	AISC 360, TABLE N5.6-1
E. CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	PERIODIC	AISC 360, TABLE N5.6-1
F. PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	PERIODIC	AISC 360, TABLE N5.6-1
G. PROTECTED STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS	PERIODIC	AISC 360, TABLE N5.6-1
5. DURING STEEL BOLTING, THE FOLLOWING INSPECTION TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED	PERIODIC	AISC 360, TABLE N5.6-2
B. JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION	PERIODIC	AISC 360, TABLE N5.6-2
C. FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	PERIODIC	AISC 360, TABLE N5.6-2
D. FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	PERIODIC	AISC 360, TABLE N5.6-2
6. AFTER STEEL BOLTING, THE FOLLOWING INSPECTION TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	CONTINUOUS	AISC 360, TABLE N5.6-3
7. OTHER STEEL INSPECTION TASKS:		
A. INSPECT PLACEMENT OF ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL IN ACCORDANCE WITH SECTION 1705.3 OR 1705.4.	-	IBC 1705.3, 1705.4
B. INSPECT THE ERECTED STEEL FRAMING INCLUDING BRACES, STIFFENERS, MEMBER LOCATIONS, AND THE CORRECT APPLICATION OF JOINT DETAILS TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE CONSTRUCTION DOCUMENTS	PERIODIC	AISC 360, Sec N.8
REFER TO CHAPTER N OF THE AISC 360 SPECIFICATIONS FOR ADDITIONAL INFORMATION AND DESCRIPTIONS.		

INSPECTION OF FABRICATOR(S):

1. WHERE FABRICATION OF STEEL STRUCTURAL, LOAD-BEARING, OR LATERAL LOAD RESISTING MEMBERS OR ASSEMBLIES IS BEING CONDUCTED ON THE PREMISES OF A FABRICATOR'S SHOP, SPECIAL INSPECTION OF THE FABRICATED ITEMS SHALL BE PERFORMED DURING FABRICATION, EXCEPT WHERE THE FABRICATOR HAS BEEN APPROVED TO PERFORM WORK WITHOUT SPECIAL INSPECTIONS.
   - A. SPECIAL INSPECTIONS DURING FABRICATION ARE NOT REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION.
   - B. UPON COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO OWNER OR OWNER'S AUTHORIZED AGENT FOR SUBMITTAL TO THE BUILDING OFFICIAL STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.
2. APPLICABLE ELEMENTS: (FABRICATOR CERTIFICATION REQUIREMENTS)
   - A. STRUCTURAL STEEL (AISC CERTIFIED FOR CONVENTIONAL STEEL BUILDING)
   - B. STEEL JOISTS (SJI MEMBER)
   - C. STEEL DECK (SDI MEMBER)

COLD-FORMED METAL DECK (SDI QA/QC-2017)

VERIFICATION AND INSPECTION	FREQUENCY (QA)	REFERENCED STANDARD
1. PRIOR TO DECK PLACEMENT, THE FOLLOWING INSPECTION TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. VERIFY COMPLIANCE OF MATERIALS (DECK AND ALL DECK ACCESSORIES) WITH CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERTIES, AND BASE METAL THICKNESS	CONTINUOUS	APPENDIX 1, TABLE 1.1
B. DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES	CONTINUOUS	APPENDIX 1, TABLE 1.1
2. DURING DECK PLACEMENT, THE FOLLOWING INSPECTION TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. VERIFY COMPLIANCE OF DECK AND ALL DECK ACCESSORIES INSTALLATION WITH CONSTRUCTION DOCUMENTS	CONTINUOUS	APPENDIX 1, TABLE 1.2
B. VERIFY DECK MATERIALS ARE REPRESENTED BY THE MILL CERTIFICATIONS THAT COMPLY WITH THE CONSTRUCTION DOCUMENTS	CONTINUOUS	APPENDIX 1, TABLE 1.2
C. DOCUMENT ACCEPTANCE OR REJECTION OF INSTALLATION OF DECK AND DECK ACCESSORIES	CONTINUOUS	APPENDIX 1, TABLE 1.2
3. AFTER METAL DECK PLACEMENT, THE FOLLOWING INSPECTION TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. WELDING PROCEDURE SPECIFICATION (WPS) AVAILABLE	PERIODIC	APPENDIX 1, TABLE 1.3
B. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	PERIODIC	APPENDIX 1, TABLE 1.3
C. MATERIAL IDENTIFICATION (TYPE/GRADE)	PERIODIC	APPENDIX 1, TABLE 1.3
D. CHECK WELDING EQUIPMENT	PERIODIC	APPENDIX 1, TABLE 1.3
4. DURING WELDING OF METAL DECK, THE FOLLOWING INSPECTION TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. USE OF QUALIFIED WELDERS	PERIODIC	APPENDIX 1, TABLE 1.4
B. CONTROL AND HANDLING OF WELDING CONSUMABLES	PERIODIC	APPENDIX 1, TABLE 1.4
C. ENVIRONMENTAL CONDITIONS (WIND SPEED, MOISTURE, TEMPERATURE)	PERIODIC	APPENDIX 1, TABLE 1.4
D. WPS FOLLOWED	PERIODIC	APPENDIX 1, TABLE 1.4
5. AFTER WELDING OF METAL DECK, THE FOLLOWING INSPECTION TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. VERIFY SIZE AND LOCATION OF WELDS, INCLUDING SUPPORT, SIDELAP, AND PERIMETER WELDS	CONTINUOUS	APPENDIX 1, TABLE 1.5
B. WELDS MEET VISUAL ACCEPTANCE CRITERIA	CONTINUOUS	APPENDIX 1, TABLE 1.5
C. VERIFY REPAIR ACTIVITIES	CONTINUOUS	APPENDIX 1, TABLE 1.5
D. DOCUMENT ACCEPTANCE OR REJECTION OF WELDS	CONTINUOUS	APPENDIX 1, TABLE 1.5
6. BEFORE MECH FASTENING OF METAL DECK, THE FOLLOWING TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. MANUFACTURER INSTALLATION INSTRUCTIONS AVAILABLE FOR MECHANICAL FASTENERS	PERIODIC	APPENDIX 1, TABLE 1.6
B. PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION	PERIODIC	APPENDIX 1, TABLE 1.6
C. PROPER STORAGE FOR MECHANICAL FASTENERS	PERIODIC	APPENDIX 1, TABLE 1.6
7. DURING MECH FASTENING OF METAL DECK, THE FOLLOWING TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. FASTENERS ARE POSITIONED AS REQUIRED	PERIODIC	APPENDIX 1, TABLE 1.7
B. FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS	PERIODIC	APPENDIX 1, TABLE 1.7
8. AFTER MECH FASTENING OF METAL DECK, THE FOLLOWING TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. CHECK SPACING, TYPE, AND INSTALLATION OF SUPPORT FASTENERS	CONTINUOUS	APPENDIX 1, TABLE 1.8
B. CHECK SPACING, TYPE, AND INSTALLATION OF SIDELAP FASTENERS	CONTINUOUS	APPENDIX 1, TABLE 1.8
C. CHECK SPACING, TYPE, AND INSTALLATION OF PERIMETER FASTENERS)	CONTINUOUS	APPENDIX 1, TABLE 1.8
D. VERIFY REPAIR ACTIVITIES	CONTINUOUS	APPENDIX 1, TABLE 1.8
E. DOCUMENT ACCEPTANCE OR REJECTION OF MECHANICAL FASTENERS	CONTINUOUS	APPENDIX 1, TABLE 1.8

SOIL BEARING

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

CONCRETE CONSTRUCTION (ACI 318-14)

VERIFICATION AND INSPECTION	FREQUENCY	REFERENCED STANDARD
1. INSPECTION OF REINFORCING STEEL AND PLACEMENT	PERIODIC	ACI 318: Ch 20, 25.2, 25.3, 26.6.1-26.6.3
2. NOT USED.	-	-
3. INSPECTION OF ANCHORS CAST IN CONCRETE INCLUDING, SIZE, LENGTH, PROJECTION, AND LOCATION.	PERIODIC	ACI 318: 17.8.2
4A. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS - ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS. INSPECTIONS SHALL INCLUDE HOLE SIZE AND DEPTH, CLEANING PROCEDURE, MATERIALS, AND LOCATION.	CONTINUOUS	ACI 318: 17.8.2.4
4B. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS - MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 3A.INSPECTIONS SHALL INCLUDE HOLE SIZE AND DEPTH, CLEANING PROCEDURE, MATERIALS, AND LOCATION.	PERIODIC	ACI 318: 17.8.2
5. INSPECTION TO VERIFY USE OF REQUIRED DESIGN MIX.	PERIODIC	ACI 318: CH. 19, 26.4.3, 26.4.4
6. INSPECTION PRIOR TO CONCRETE PLACEMENT, AND AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS, FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE. REF TO GENERAL NOTES, CAST-IN-PLACE CONCRETE EXECUTION FOR TESTING REQUIREMENTS.	CONTINUOUS	ASTM C172, ASTM C31; ACI 318: 26.5, 26.12
7. INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	CONTINUOUS	ACI 318: 26.5
8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	PERIODIC	ACI 318: 26.5.3-26.5.5
9. NOT USED.	-	-
10. INSPECT ERECTION OF PRECAST (OR SITE CAST) CONCRETE MEMBERS.	PERIODIC	ACI 318: CH. 26.9
11. NOT USED.	-	-
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	PERIODIC	ACI 318: 26.11.1.2(b)

EXCEPTIONS TO CONCRETE SPECIAL INSPECTION:
1. INSPECTION IS NOT REQUIRED FOR PLACEMENT OF SLAB-ON-GRADE CONCRETE. INSPECTION OF SLAB-ON-GRADE REINFORCEMENT IS REQUIRED PRIOR TO PLACEMENT OF CONCRETE.

MASONRY CONSTRUCTION (TMS 402/602-16):

VERIFICATION AND INSPECTION (LEVEL 2)	FREQUENCY	REFERENCED STANDARD
1. PRIOR TO MASONRY CONSTRUCTION, THE FOLLOWING TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE::		
A. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED.	-	TMS 602: ART. 1.5
B. VERIFICATION OF f'_m PRIOR TO CONSTRUCTION EXCEPT WHERE SPECIFICALLY EXEMPTED BY THE IBC.	-	TMS 602: ART. 1.4B
C. PROPORTIONS OF SITE-PREPARED MORTAR.	PERIODIC	TMS 602: ART. 2.1, 2.6A, 2.6C
D. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHORS.	PERIODIC	TMS 602: ART. 3.4, 3.6A
E. SAMPLE PANEL CONSTRUCTION.	PERIODIC	TMS 602: ART. 1.6D
2. PRIOR TO GROUTING, THE FOLLOWING TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. GROUT SPACE.	PERIODIC	TMS 602: ART. 3.2D, 3.2F
B. PLACEMENT OF VERTICAL AND HORIZONTAL REINFORCEMENT SHALL BE OBSERVED PRIOR TO GROUT POUR AT LEAST ONCE FOR EVERY 1,250 SQUARE FEET OF WALL CONSTRUCTED.	PERIODIC	TMS 402: SEC. 6.1, 6.3.1, 6.3.6, 6.3.7 TMS 602: ART. 3.2E, 3.4
C. PROPORTIONS OF SITE-PREPARED GROUT.	PERIODIC	TMS 602: ART. 2.6B, 2.4G.1.b
3. DURING MASONRY CONSTRUCTION, THE FOLLOWING TASKS SHALL BE VERIFIED TO ENSURE COMPLIANCE:		
A. VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX AS DELIVERED TO THE SITE FOR SELF-CONSOLIDATING GROUT.	-	TMS 602: ART. 1.5 & 1.6.3
B. MATERIAL AND PROCEDURES WITH THE APPROVED SUBMITTALS.	PERIODIC	TMS 602: ART. 1.5
C. PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION.	PERIODIC	TMS 602: ART. 3.3B
D. SIZE AND LOCATION OF STRUCTURAL MEMBERS.	PERIODIC	TMS 602: ART. 3.3F
E. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION SHALL BE OBSERVED AT LEAST ONCE FOR EVERY 1,250 SQUARE FEET OF WALL CONSTRUCTED.	PERIODIC	TMS 402: SEC.1.2.1(e), 6.2.1, 6.3.1
F. PREPARATION, CONSTRUCTION AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40° F) OR HOT WEATHER (TEMPERATURE ABOVE 90° F).	PERIODIC	TMS 602: ART. 1.8C, 1.8D
G. GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE.	CONTINUOUS	TMS 602, ART. 3.5, 3.6C
H. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED.	PERIODIC	TMS 602: ART. 1.4B.2.a.3, 1.4B.2.b.3, 1.4B.2.c.3,1.4B.3, 1.4B.4

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REVISIONS

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BART J. HALDERSON · LICENSE No. 75746 · STATE OF MISSOURI · PROFESSIONAL ENGINEER
08/12/22

PROFESSIONAL IN CHARGE
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PROJECT NAME
CIRCLE K STORES INC.

LAKE CITY, FL
NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE
TABLE OF SPECIAL INSPECTIONS

SHEET NUMBER
S0.3

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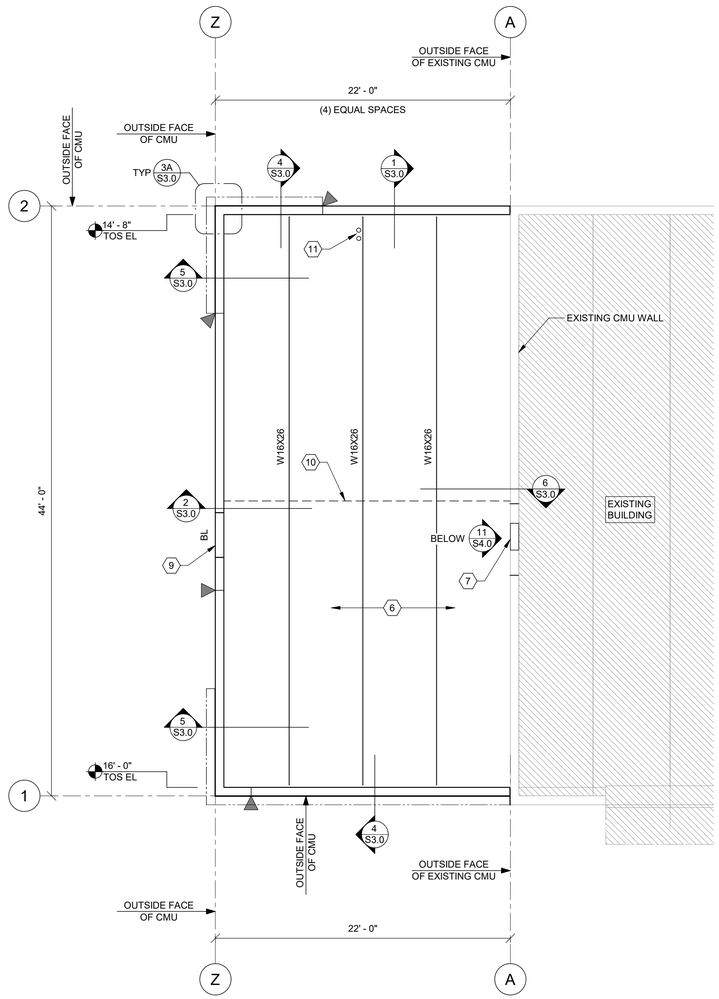
ROOF FRAMING PLAN NOTES

NUMBER	PLAN NOTE
GENERAL PLAN NOTES	
1.	REF SHEET S0.1, S0.2 AND S0.3 FOR GENERAL NOTES, ROOF DECK DIAGRAM AND SPECIAL INSPECTIONS REQUIREMENTS.
2.	REF ARCH DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.
3.	REF FOUNDATION PLAN FOR CMU WALL SIZE, REINFORCING, AND CONTROL JOINT LOCATIONS.
4.	NOT USED.
5.	NOT USED.
REFERENCED PLAN NOTES	
6	METAL ROOF DECK SHALL BE 36" WIDE, 1 1/2" DEEP, 22 GAGE (GALV) TYPE "B" WIDE RIB ROOF DECK. REF DIAGRAM AND SCHEDULE ON DETAIL 2-S0.2 FOR DIAPHRAGM FASTENING TO FRAMING MEMBERS AND DECK SIDELAP ATTACHMENT.
7	REF 11-S4.0 FOR SUPPORT FRAMING AT NEW PENETRATION IN EXISTING CMU WALL.
8	NOT USED.
9	REF DETAIL 4-S4.0 FOR CMU WALL OPENING REINFORCEMENT BELOW.
10	L2x2x1/4 HORIZONTAL BRIDGING AT MIDSPAN OF STEEL BEAMS. REF DETAILS 2-S3.0 AND 6-S3.0 FOR ATTACHMENT TO BEAMS AND CMU WALL.
11	REF ARCH FOR EXACT LOCATION OF ROOF DRAINS. REF 9-S3.0 FOR DECK SUPPORT FRAMING AT OPENING (IF REQUIRED PER DETAIL).

ROOF DEAD LOADS

DEAD LOADS

MEMBRANE (UNBALASTED)	=	1.0 PSF
INSULATION	=	2.0 PSF
METAL DECK	=	2.0 PSF
BEAMS	=	5.0 PSF
MECH/ELEC/FIRE SPRINK	=	3.0 PSF
MISC	=	4.0 PSF
TOTAL	=	17.0 PSF



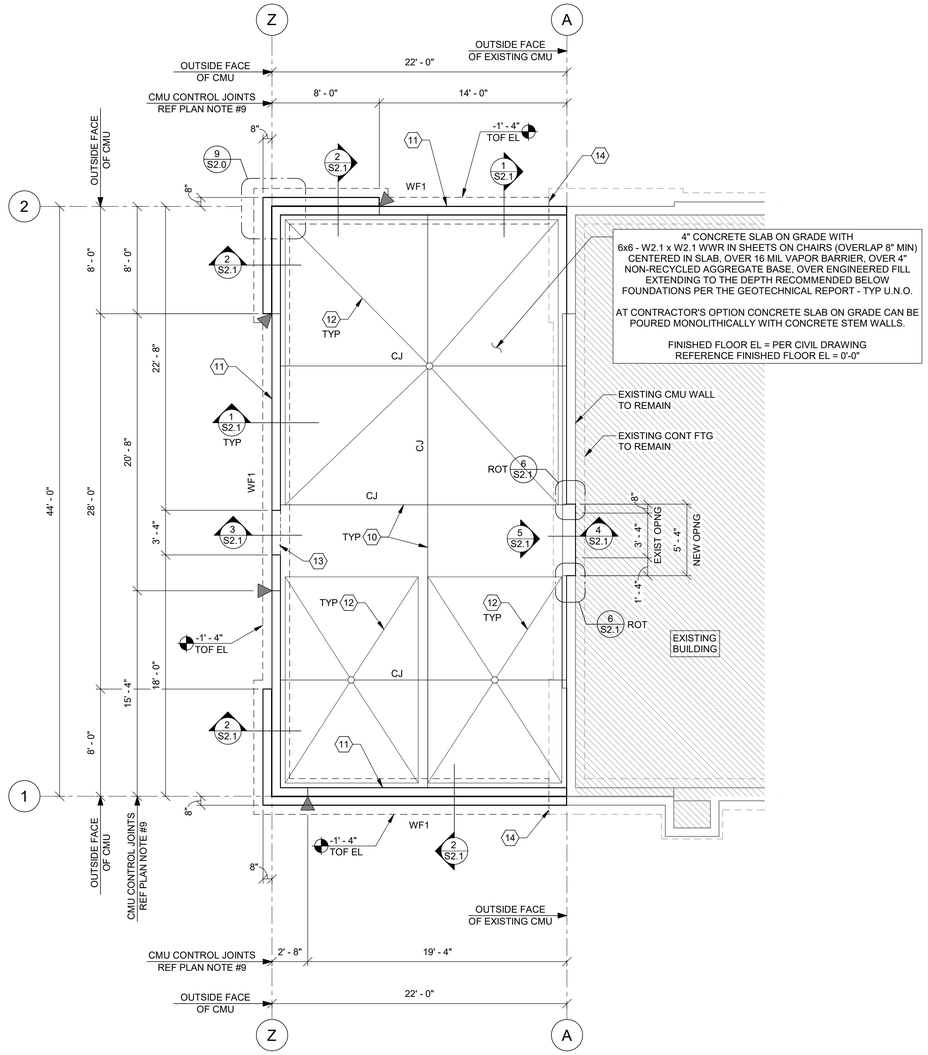
ROOF FRAMING PLAN | 2
3/16" = 1'-0"

FOUNDATION PLAN NOTES

NUMBER	PLAN NOTE
GENERAL PLAN NOTES	
1.	REF SHEET S0.1, S0.2 AND S0.3 FOR GENERAL NOTES, LEGEND AND SPECIAL INSPECTIONS REQUIREMENTS.
2.	ALL ELEVATIONS REFERENCED FROM FINISH FLOOR ELEVATION OF 0'-0" (AT BLDG SLAB) FOR REFERENCE ONLY.
3.	TOP OF FOOTING ELEVATION SHALL BE ASSUMED TO BE CONSTANT BETWEEN ELEVATIONS SHOWN ON PLAN U.N.O. (FOUNDATION REQUIREMENTS ENSCRIBED ON S0.1 PER GEOTECHNICAL ENGINEER RECOMMENDATIONS SHALL BE FOLLOWED AS GRADING CONDITIONS VARY, REF CIVIL).
4.	FOR TYPICAL REINFORCING BAR BEND DETAILS, REF 4-S2.0.
5.	FOR PIPING RUNNING PARALLEL AND PERPENDICULAR TO THE FOUNDATION REF 6-S2.0 & 7-S2.0.
6.	THE GENERAL CONTRACTOR, INCLUDING SUBCONTRACTORS AND SUPPLIERS, SHALL NOT ALLOW ANY VEHICULAR TRAFFIC ON THE BUILDING PAD AFTER THE PAD CERTIFICATION OR THE CONCRETE SLAB ONCE PLACED. ANY DAMAGE TO THE PAD DUE TO THE VEHICULAR TRAFFIC SHALL BE REPAIRED/REPLACED AT THE EXPENSE OF THE CONTRACTOR
7.	REF SHEET S4.0 FOR TYPICAL MASONRY WALL REINFORCING DETAILS & SPLICING.
8.	FOR ALL EXTERIOR CMU WALLS SHOWN, WALL REINFORCING SHALL BE DOWELED INTO FOOTING AND SHALL EXTEND INTO THE BOND BEAM TO TOP OF WALL. REF PLAN FOR REFERENCE SECTIONS. THE VERTICAL CMU WALL REINFORCING SHALL BE LOCATED AT THE MASONRY WALL CENTER LINE, U.N.O.
REFERENCED PLAN NOTES	
9	FOR CMU WALL CONTROL JOINT CRITERIA REFER TO GENERAL NOTES ON SHEET S0.1 AND INFORMATION ON SHEET S4.0.
10	FOR TYPICAL FLOOR CONSTRUCTION JOINT, REF 1-S2.0; FOR TYPICAL FLOOR CONTRACTION JOINT, REF 2-S2.0.
11	8" CMU WALL WITH #6 DOWELS AND VERTS AT 24" OC.
12	COORDINATE SLAB SLOPES AT DRAIN LOCATIONS WITH THE ARCH DRAWINGS.
13	VERIFY ALL WALL OPENING SIZES AND LOCATIONS WITH THE ARCH DRAWINGS. PROVIDE ADDITIONAL WALL REINFORCING AT JAMBS FOR LINTELS SUPPORTING MASONRY WALL OPENINGS AS PER SECTIONS 4-S4.0 THRU 8-S4.0.
14	STEP BOTTOM OF FOOTING IF NECESSARY TO MATCH BOTTOM OF EXISTING FOOTING AND PROVIDE (3) #5 x 2'-0" DOWELS, TYP; DRILL AND EMBED 6" INTO EXISTING CONC FTG WITH HILTI HIT-HY 200 ADHESIVE.

WALL FOOTING SCHEDULE

MARK	WIDTH	THICKNESS	REINF (TRANS)	REINF (LONG)	REINF LOCATION
WF1	2' - 0"	1' - 0"	#4 AT 24" OC	(3) #5	BOT



FOUNDATION PLAN | 1
3/16" = 1'-0"

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JBA PROJECT #22201

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08/17/22

PROFESSIONAL IN CHARGE
BJH

PROJECT MANAGER
SMK

QUALITY CONTROL
JNF

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PROJECT NAME

CIRCLE K STORES INC.

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LAKE CITY, FL 32055

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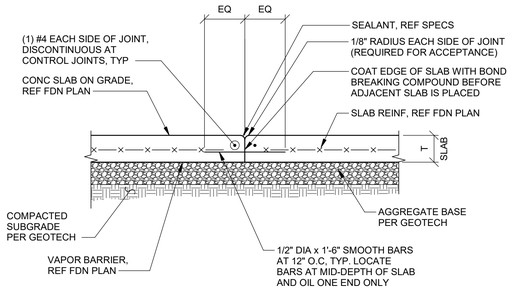
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SHEET TITLE

FOUNDATION AND FRAMING PLANS

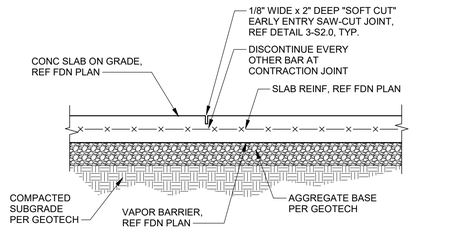
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S1.0



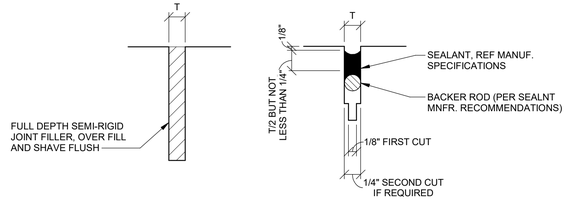
NOTE:
1. SMOOTH BARS SHALL BE INSTALLED HORIZONTALLY.

TYPICAL CONSTRUCTION JOINT | 1
3/4" = 1'-0"



NOTE:
1. SPACE CONTROL JOINTS AT 15'-0" OC MAX.
2. PERFORM SLAB CUTTING AS SOON AS POSSIBLE AFTER FINISHING; WITHIN 1 HOUR IN HOT WEATHER, WITHIN 4 HOURS IN COLD WEATHER.
3. JOINT FILLER SHALL BE PLACED IN CLEAN JOINTS, OVER FILLED, AND SHAVED FLUSH.

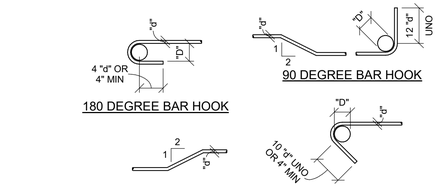
TYPICAL CONTRACTION JOINT | 2
3/4" = 1'-0"



INTERIOR FILLED JOINT

EXTERIOR SEALED JOINT

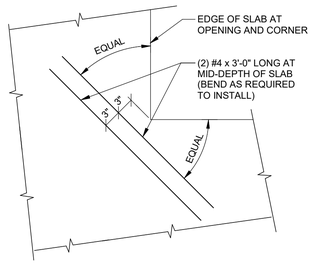
TYPICAL CONCRETE SLAB JOINT DETAIL | 3
3/4" = 1'-0"



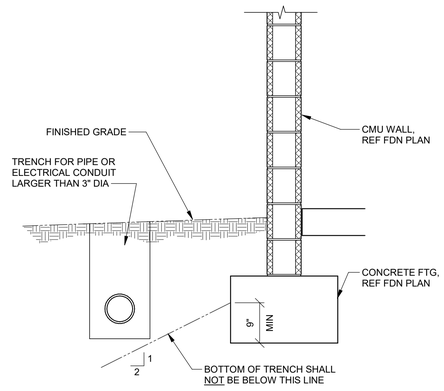
NOTE:
1. PROVIDE THESE HOOKSHROUGHOUT WORK AS INDICATED ON DRAWINGS.

BAR SIZE	"D"
#3 THRU #8	6 "d"
#9 THRU #11	8 "d"
#14 THRU #18	10 "d"

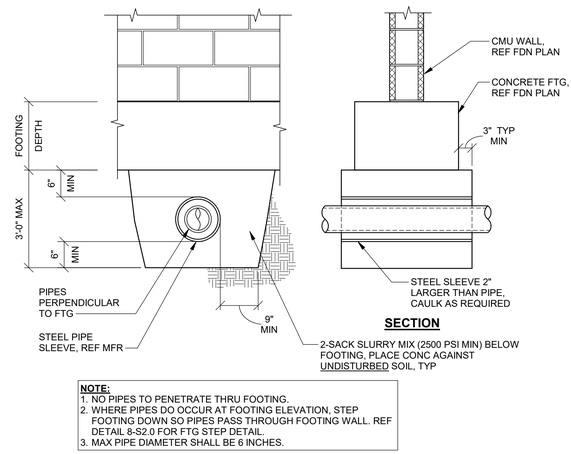
TYPICAL REINFORCING BARS BENDS DETAIL | 4
3/4" = 1'-0"



TYPICAL REINFORCEMENT AT SLAB OPENING | 5
3/4" = 1'-0"



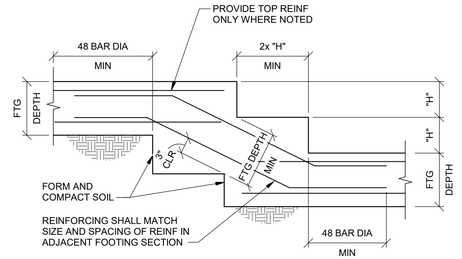
UTILITY LINE PARALLEL TO FDN | 6
3/4" = 1'-0"



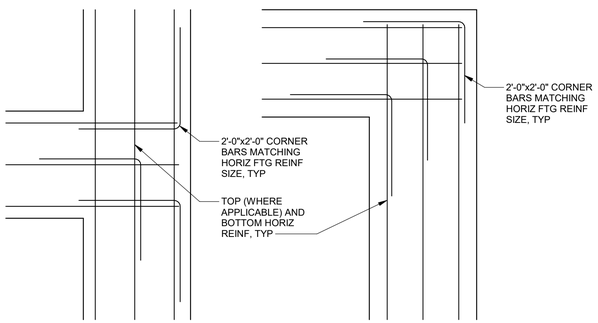
SECTION

NOTE:
1. NO PIPES TO PENETRATE THRU FOOTING.
2. WHERE PIPES DO OCCUR AT FOOTING ELEVATION, STEP FOOTING DOWN SO PIPES PASS THROUGH FOOTING WALL. REF DETAIL 8-S2.0 FOR FTG STEP DETAIL.
3. MAX PIPE DIAMETER SHALL BE 6 INCHES.

UTILITY LINE PERPENDICULAR TO FDN | 7
3/4" = 1'-0"



DETAIL AT STEPPED FOOTING | 8
3/4" = 1'-0"



CONCRETE FOOTING CORNER BAR REINFORCEMENT | 9
1" = 1'-0"

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JBA PROJECT #22201

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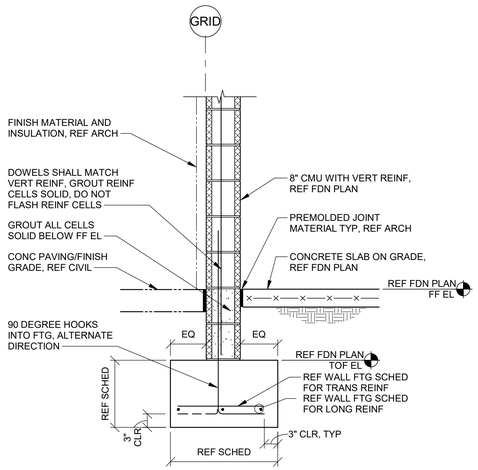
PROJECT NUMBER
22036

SHEET TITLE

FOUNDATION DETAILS

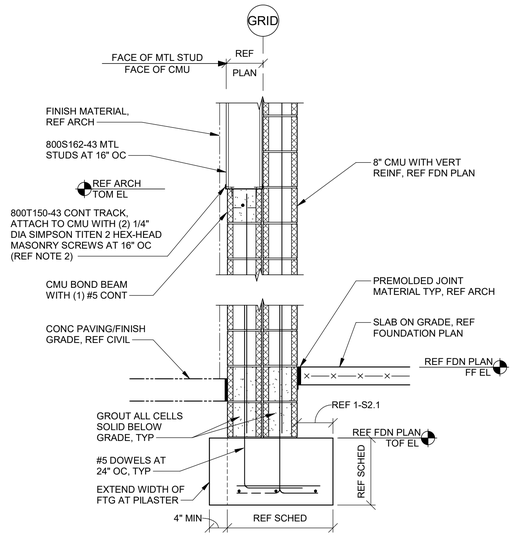
SHEET NUMBER

S2.0



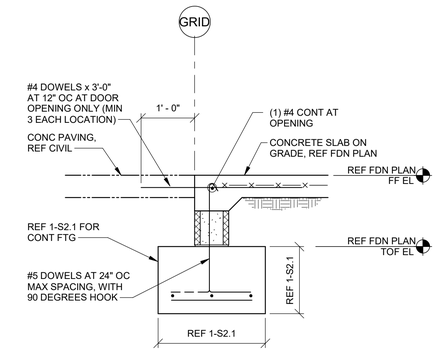
NOTE:
1. BOTTOM OF FOUNDATION SHALL BE PLACED PER GEOTECHNICAL RECOMMENDATIONS. FOR ADDITIONAL INFO, REF GENERAL NOTES ON SHEET S0.1. FOOTING DEPTH SHALL BE COORDINATED TO ALIGN TOP OF BLOCK WITH FINISH FLOOR.

TYPICAL CMU WALL SECTION | 1
3/4" = 1'-0"



NOTE:
1. FOR ADDITIONAL INFORMATION NOT SHOWN, REFER TO DETAIL 1-S2.1 AND WALL FOOTING SCHEDULE.
2. AT CONTRACTORS OPTION: (2) 0.157" DIA HILTI X-U PDF'S AT 16" OC MAY BE USED IN LIEU OF SIMPSON TITEN 2 MASONRY SCREWS.

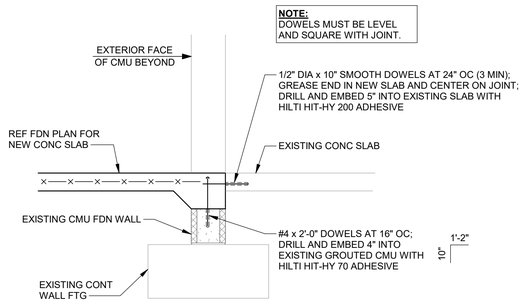
WALL SECTION AT TYPICAL PILASTER | 2
3/4" = 1'-0"



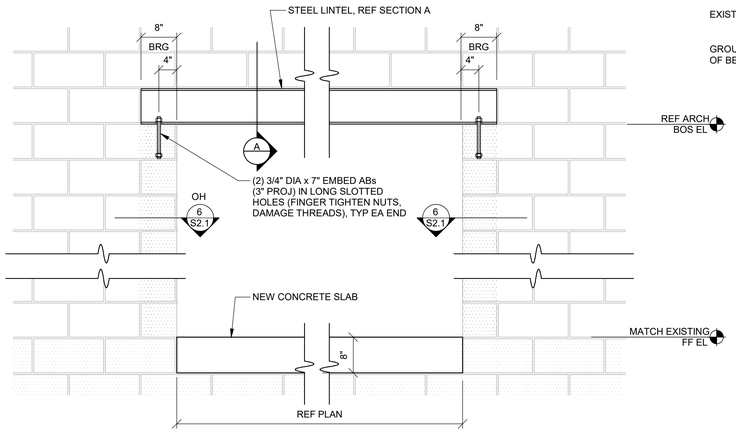
NOTE:
1. FOR ADDITIONAL INFORMATION NOT SHOWN, REFER TO DETAIL 1-S2.1.

CONCRETE SLAB AT OPENING | 3
3/4" = 1'-0"

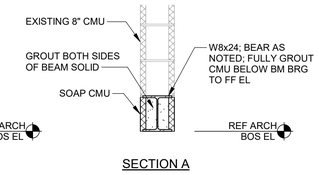
NOTE:
REF 11-S4.0 FOR NEW HVAC PENETRATION IN EXISTING CMU WALL (ABOVE)



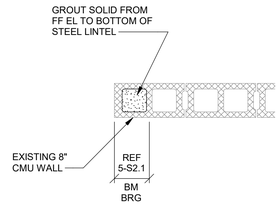
SLAB INFILL AT NEW OPNG | 4
3/4" = 1'-0"



STEEL LINTEL AT CMU OPENING IN EXISTING WALL | 5
3/4" = 1'-0"



SECTION A



BM BEARING AT EXISTING CMU WALL | 6
3/4" = 1'-0"

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JBA PROJECT #22201

REVISIONS

△	ISSUE	DATE
	PERMIT SET	08/15/22
	BID SET	08/15/22

PROFESSIONAL SEAL
BARRY J. HALVERSON LICENSE No. 75746 STATE OF PROFESSIONAL ENGINEER
08/17/22

PROFESSIONAL IN CHARGE
BJH

PROJECT MANAGER
SMK

QUALITY CONTROL
JNF

DRAWN BY
SMK

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY, FL

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

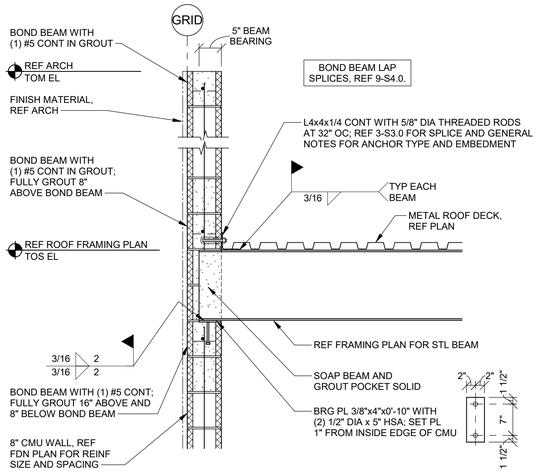
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FOUNDATION DETAILS

SHEET NUMBER

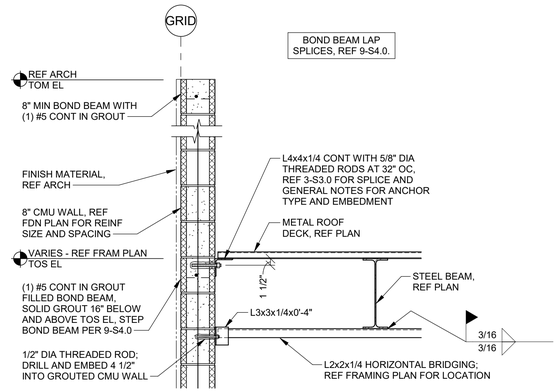
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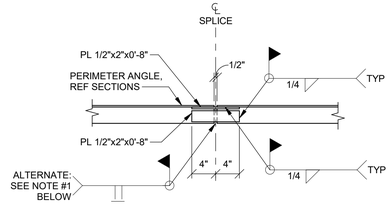
NOTE:
1. THREADED RODS SHALL BE POST-INSTALLED WITH HILTI-HY 270 ADHESIVE SYSTEM WITH MIN 8" GROUT AROUND ANCHORS.
2. AT CONTRACTOR OPTION, PROVIDE CAST IN PLACE ANCHORS. REF GENERAL NOTES AND DETAIL 10-S4.0 FOR ADDITIONAL INFORMATION.
3. LOCATE VERTICAL CMU WALL REINFORCING IN ADJACENT CELL WHEN INTERRUPTED BY BEAM. PROVIDE LAP SPLICE PER LAP SCHEDULE ABOVE AND BELOW BEAM.

BEAM PERPENDICULAR TO WALL | 1
3/4" = 1'-0"



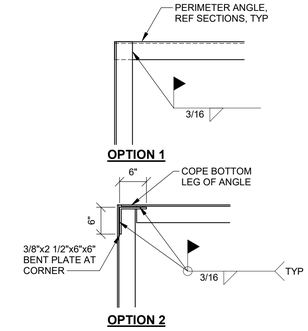
NOTE:
1. THREADED RODS SHALL BE POST-INSTALLED WITH HILTI-HY 270 ADHESIVE SYSTEM WITH MIN 8" GROUT AROUND ANCHORS.
2. AT CONTRACTOR OPTION, PROVIDE CAST IN PLACE ANCHORS. REF GENERAL NOTES AND DETAIL 10-S4.0 FOR ADDITIONAL INFORMATION.

BEAM PARALLEL TO WALL | 2
3/4" = 1'-0"



NOTE:
1. AS AN ALTERNATE, CONTINUOUS COMPETE PENETRATION BUTT WELD SHALL BE USED.

PERIMETER ANGLE SPLICE | 3
3/4" = 1'-0"

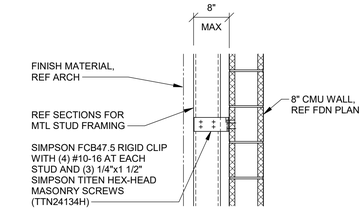


PERIMETER ANGLE AT CORNER | 3A
3/4" = 1'-0"

WALL SECTION AT PILASTER | 4
3/4" = 1'-0"

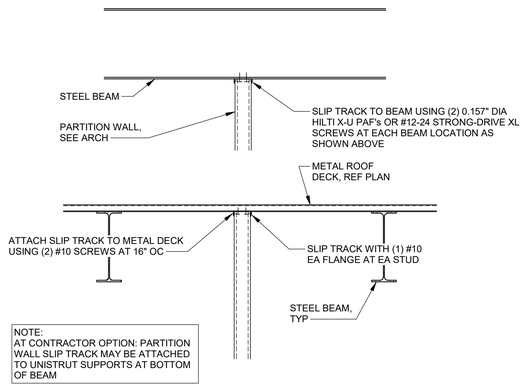
WALL SECTION AT PILASTER | 5
3/4" = 1'-0"

WALL SECTION AT EXISTING BLDG | 6
3/4" = 1'-0"



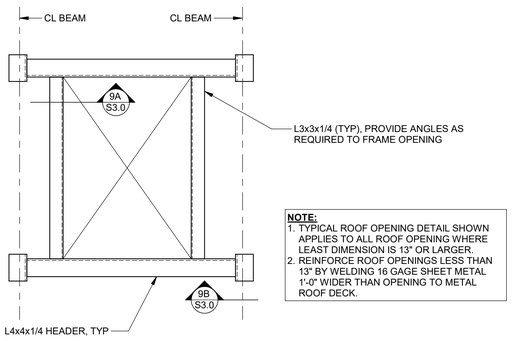
NOTE:
1. AT CONTRACTOR OPTIONS, 0.157" DIA PAFS MAY BE USED IN LIEU OF MASONRY SCREWS FOR ATTACHMENT TO CMU WALL. (MIN EMBED = 1 1/2")

METAL STUD CLIP AT CMU WALL | 7
3/4" = 1'-0"



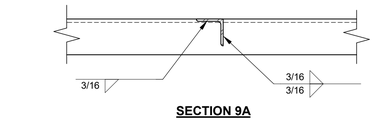
NOTE:
AT CONTRACTOR OPTION: PARTITION WALL SLIP TRACK MAY BE ATTACHED TO UNISTRUT SUPPORTS AT BOTTOM OF BEAM

INTERIOR WALL CONNECTION DETAILS | 8
NTS

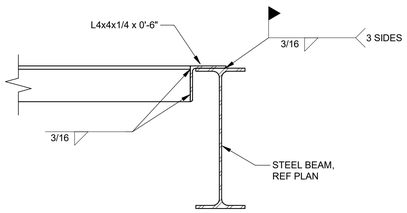


NOTE:
1. TYPICAL ROOF OPENING DETAIL SHOWN APPLIES TO ALL ROOF OPENING WHERE LEAST DIMENSION IS 13" OR LARGER.
2. REINFORCE ROOF OPENINGS LESS THAN 13" BY WELDING 16 GAGE SHEET METAL 1'-0" WIDER THAN OPENING TO METAL ROOF DECK.

TYPICAL ROOF OPENING DETAIL | 9
NTS



SECTION 9A



SECTION 9B

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JBA PROJECT #22201

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BART J. HENDERSON LICENSE No. 75746 STATE OF FLORIDA PROFESSIONAL ENGINEER
08/12/22

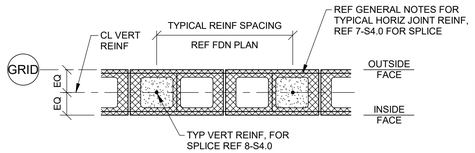
PROFESSIONAL IN CHARGE
BJH
PROJECT MANAGER
SMK
QUALITY CONTROL
JNF
DRAWN BY
SMK

PROJECT NAME
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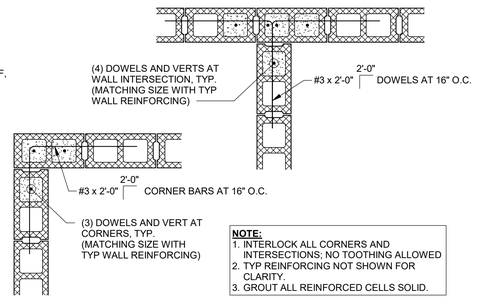
PROJECT NUMBER
22036
SHEET TITLE
ROOF FRAMING DETAILS
SHEET NUMBER
S3.0

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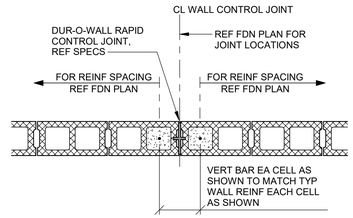
NOTE:
1. GROUT ALL REINFORCED CELLS SOLID.
2. REINFORCEMENT SHALL BE SUPPORTED AND FASTENED TOGETHER TO PREVENT DISPLACEMENTS BEYOND THE TOLERANCES ALLOWED BY 3.4 OF ACI 530.1 PRIOR TO GROUTING. SECURE REINFORCEMENT AT 200d MAX SPACING.
3. CONCAVE JOINTS, TYPICAL U.N.O.
4. FOR TYPICAL WALL REINF, REF FOUNDATION PLAN.

TYPICAL CMU WALL REINFORCING | 1
1" = 1'-0"



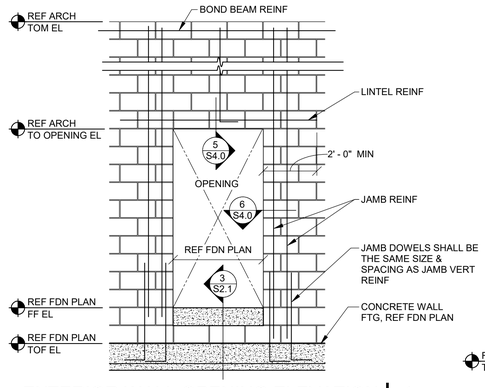
NOTE:
1. INTERLOCK ALL CORNERS AND INTERSECTIONS; NO TOOTHING ALLOWED
2. TYP REINFORCING NOT SHOWN FOR CLARITY.
3. GROUT ALL REINFORCED CELLS SOLID.

CMU WALL REINFORCING AT CORNER | 2
3/4" = 1'-0"



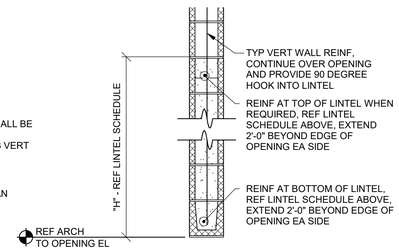
NOTE:
1. JOINT SHALL BE CONTINUOUS WITHOUT INTERRUPTION FROM FOUNDATION TO TOP OF WALL
2. HORIZONTAL REINFORCING AND BOND BEAMS SHALL BE DISCONTINUOUS AT WALL JOINT.
3. NO CONTROL JOINT WITHIN 2'-8" MIN. OF OPENINGS, PIERS OR EMBEDS.
4. SPACE JOINTS AT MAXIMUM DISTANCE EQUAL TO WALL HEIGHT x 1.5 OR 32'-0" O.C. MAX.
5. COORDINATE LOCATION OF JOINTS WITH ARCH DRAWINGS.
6. PROVIDE 3/8" JOINT BETWEEN NEW AND EXISTING CMU WALL. REF ARCH FOR ADDITIONAL DETAILS.

TYPICAL CMU WALL CONTROL JOINT | 3
3/4" = 1'-0"



EXTERIOR WALL OPENING ELEVATION | 4
3/8" = 1'-0"

CONCRETE MASONRY LINTEL SCHEDULE		
CLEAR SPAN	**LINTEL DEPTH "H"**	**LINTEL REINF**
UP TO 3' - 4"	16"	(1) #6 BOT

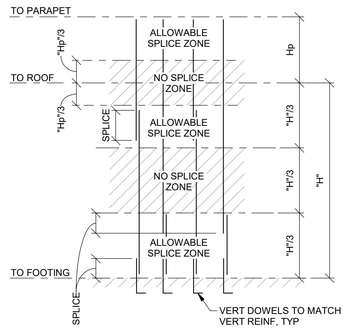


TYPICAL EXTERIOR CMU LINTEL | 5
3/4" = 1'-0"

CONCRETE MASONRY JAMB SCHEDULE		
OPENING WIDTH	**JAMB WIDTH "L"**	**JAMB REINF**
UP TO 3'-4"	8"	(1) #6

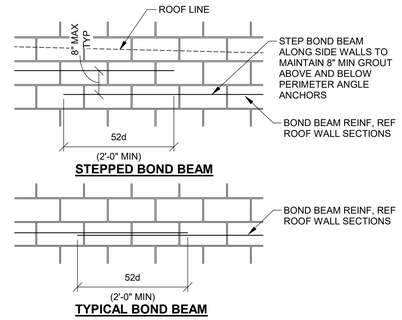
TYP CMU WALL JAMB | 6
3/4" = 1'-0"

CMU WALL HORIZ JOINT REINF LAP SPLICE | 7
3/4" = 1'-0"

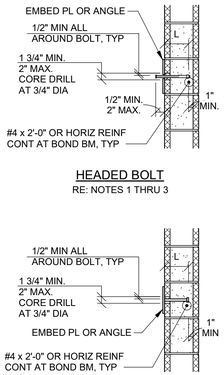


CONCRETE MASONRY LAP SPLICE SCHEDULE		
REINF SIZE	**SINGLE LAYER**	**DOUBLE LAYER**
#4	20"	25"
#5	32"	40"
#6	48"	54"
#7	64"	64"

CMU WALL VERT REINF LAP SPLICE | 8
3/4" = 1'-0"



CMU BOND BEAM LAP SPLICE | 9
1/2" = 1'-0"



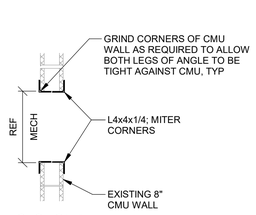
HEADED BOLT
RE: NOTES 1 THRU 3

HEADED STUD
RE: NOTES 4 THRU 6

CMU WALL	BOLT OR STUD SIZE	EFFECTIVE EMBEDMENT "L"	MIN. SPACING
6"	1/2" DIA	4"	4"
8"	5/8" DIA	5"	5"
8"	3/4" DIA	5"	6"
10"	7/8" DIA	6"	7"
12"	1" DIA	7"	8"

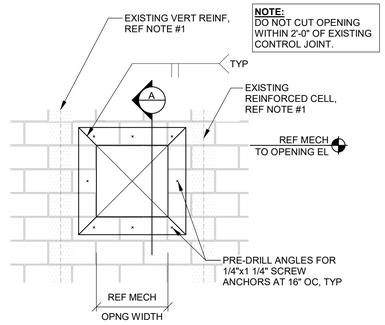
NOTE:
1. HEAVY HEX HEADED ANCHOR BOLTS SHALL BE ASTM A36 GRADE THREADED & CONFORM TO ACI 530.1-13 SEC. 2.4D.
2. SET BOLTS WITH TEMPLATE, TYP.
3. BENT BAR ANCHORS ARE NOT PERMITTED.
4. MATERIAL: ASTM A108, GRADES C-1010 THROUGH C-1020 COLD-DRAWN STEEL, ESR-2614.
5. NELSON HEADED STUDS SHOULD BE AUTOMATICALLY END WELDED WITH EQUIPMENT AND PROCEDURES RECOMMENDED BY NELSON STUD WELDING, INC. AND COMPLY WITH AWS D1.1 SECTION 7.
6. THE LENGTH OF STUDS HAS BEEN SPECIFIED IN DETAIL AS THE OVERALL LENGTH OF STUD BEFORE WELD.
7. THE HOLES AROUND ANCHORS SHOULD BE FULLY GROUTED, TYP
8. GROUT SOLID 3 CELLS MINIMUM AROUND EMBED PLATES OR BOLTS, PROVIDE MINIMUM 8" OF GROUT COVER FOR ALL ANCHORS.

CMU WALL CAST-IN-PLACE ANCHOR OPTIONS | 10
3/4" = 1'-0"



SECTION A

NOTE:
1. CONTRACTOR SHALL FIELD LOCATE ALL VERTICAL WALL REINFORCEMENT IN AREA OF NEW OPENING(S) PRIOR TO CUTTING WALL. PER ORIGINAL CONSTRUCTION DOCUMENTS EXISTING REINFORCEMENT SHOULD BE (1) #5 BAR AT 48" OC.
2. THE LOCATION OF OPENING MAY VARY SLIGHTLY. IF FIELD CONDITIONS PROHIBIT INSTALLATION AS SHOWN, CONTACT OWNER'S CONSTRUCTION MANAGER IMMEDIATELY.



NOTE:
DO NOT CUT OPENING WITHIN 2'-0" OF EXISTING CONTROL JOINT.

NEW PENETRATION IN EXISTING CMU WALL | 11
1/2" = 1'-0"

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CIRCLE K STORES INC.

PROJECT NUMBER
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SHEET TITLE

EXTERIOR WALL DETAILS

SHEET NUMBER

S4.0

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LIGHTING FIXTURE SCHEDULE

ALL LIGHTING FIXTURES ARE SUPPLIED BY CIRCLE K, INSTALLED BY THE ELECTRICAL CONTRACTOR.

TYPE	MANUFACTURER CATALOG NO.	LAMP QTY. & TYPE	FIXTURE WATTAGE	VOLTS	DESCRIPTION	QUANTITY / REMARKS
A	CREE RLA-ZR24-40L-40K-10V	LED	41.9	120	2 X 4 LED TROFFER	QTY 2 - -
F	CREE LS4-40L-40K	LED	50	120	LED SURFACE MOUNT LIGHT FIXTURE	QTY 10 - -
G	CREE LS4-4000L-4000K	LED	50	120	LED SURFACE MOUNT LIGHT FIXTURE/ BATTERY BACK UP	QTY 6 - -
A4B	CREE XSPLG-D-HT-4ME-24L-57K7UL-XX-N + XA-SP2BLS	LED	184	120	MEDIUM EXTERIOR POLE FIXTURE	QTY 6 - -
CAN	CREE CPY250-C-8L-57K7-F-UL-DM-XX	LED	53	208	CANOPY LED LIGHT NO-DIRECTIONAL, VERIFY COLOR AND FINISH WITH ARCHITECT/OWNER	QTY 12 - -
P1	GETC PL-OP2-PD3-P/BW-SINGLE-XX	LED	1.32	120	CANOPY LED EYEBROW LIGHT	QTY 10 - -
P118	GETC PL-OP2-PD3-P/BW-118XX	LED	1.32	120	CANOPY LED EYEBROW LIGHT	QTY 14 - -
WP	CREE INC XSPW-B-WM-3ME-4L-40K-UL-XX	LED	31	120	EXTERIOR WALL PACK VERIFY COLOR AND FINISH WITH ARCHITECT/OWNER	QTY 1 - -

ELECTRICAL SYMBOLS LIST (CONT)

- STANDARD 20A, 120/277V-1ø SPST TOGGLE SWITCH MOUNTED AT +48" A.F.F.-U.O.N.
  - a,b - DENOTES TWO SWITCHES AND THEIR RESPECTIVE CONTROL IDENTIFICATION.
  - 3 – DENOTES 3-WAY SWITCH
  - D – DENOTES - 120V. - 1ø (AS NOTED) SLIDING TYPE DIMMER SWITCH. - LUTRON "NOVA-T" SERIES OR APPROVED EQUAL, PROVIDE SEPARATE NEUTRAL FOR EACH DIMMER AND DIMMER RACK CIRCUIT.
- WALL MOUNTED INFRA-RED OCCUPANCY SENSOR. USE WATTSTOPPER "WI 200" FOR SINGLE SWITCH AND "WI 300" FOR "ab" SWITCHING OR EQUAL.
- CEILING MOUNTED INFRA-RED OCCUPANCY SENSOR. USE LEVITON "ODC0S-I1W" WITH POWER PACK OR EQUAL.
- CEILING MOUNTED ULTRASONIC OCCUPANCY SENSOR. USE LEVITON "ODC0S-I1W" WITH POWER PACK OR EQUAL.
- (PE) CEILING MOUNTED LINE VOLTAGE PHOTOCELL SENSOR. USE LEVITON "PCOSD-W".

REFERENCES & ABBREVIATIONS

(A)	LIGHTING FIXTURE DESIGNATION	(ER)	EXISTING TO BE REMOVED
(E1)	DETAIL REFERENCE	FLA	FULL LOAD AMPS
(1)	KEYNOTE REFERENCE	G	GROUND
(123)	KITCHEN EQUIPMENT DESIGNATION	GFCI/GFI	GROUND FAULT CIRCUIT INTERRUPTER
A	AMPS	MCB	MAIN CIRCUIT BREAKER
AC	ABOVE COUNTER	MLO	MAIN LUGS ONLY
AFF	ABOVE FINISH FLOOR	NL	NIGHT LIGHT
C	CONDUIT	OC	ON CENTER
CO	CONDUIT ONLY W/PULL ROPE	TMB	TELEPHONE MOUNTING BOARD
CU	COPPER	UON	UNLESS OTHERWISE NOTED
(E)	EXISTING TO REMAIN	V	VOLTS
EM	EMERGENCY	VL	VERIFY LOCATION
FCP	FIRE CONTROL PANEL	WP	WEATHER PROOF
		FSA	FIRE ANNUNCIATOR PANEL

ELECTRICAL SYMBOLS LIST (CONT)

- VIDEO OUTLET WITH "F" TYPE CONNECTOR MOUNTED AT +18" A.F.F.. PROVIDE 3/4" CONDUIT STUBBED TO ACCESSIBLE CEILING SPACE ABOVE.
- VIDEO OUTLET MOUNTED FLUSH IN FLOOR. PROVIDE 3/4" C.O. TO NEAREST WALL AND STUB INTO ACCESSIBLE CEILING SPACE.
- AUDIO VIDEO FLOOR BOX WIRE-MOLD - FS 880 OMNI-BOX ; RS RFB2 (OR EQUAL)
- CAMERA OUTLET.
- CONDUIT CONCEALED WITHIN BUILDING WALLS OR CEILING SPACE. TICK MARKS INDICATE QUANTITY OF # 12 THHN / THWN CONDUCTORS - U.O.N.. CONDUIT SHOWN WITH NO TICK MARKS INDICATE 2 # 12 THHN / THWN CONDUCTORS - U.O.N.. CONDUIT SHALL BE 3/4" MINIMUM - U.O.N. - **INCLUDE CODE SIZED COPPER GROUND BOND CONDUCTOR (NOT SHOWN ON PLAN) IN ALL CONDUIT RUNS.**
- CONDUIT ROUTED BELOW FINISHED GRADE AND / OR CONCRETE SLAB. TICK MARKS INDICATE QUANTITY OF # 12 THHN / THWN CONDUCTORS - U.O.N.. CONDUITS SHOWN WITH NO TICK MARKS INDICATE 2 # 12 THHN / THWN CONDUCTORS - U.O.N.. CONDUIT SHALL BE 3/4" MINIMUM - U.O.N.. **INCLUDE CODE SIZED COPPER BOND CONDUCTOR (NOT SHOWN ON PLAN) IN ALL CONDUIT RUNS.**
- INDICATES GREEN CODE SIZE EQUIPMENT GROUNDING CONDUCTOR. **ALTHOUGH AN EQUIPMENT GROUNDING CONDUCTOR IS NOT INDICATED ON ALL BRANCH CIRCUITING, INCLUDE A GREEN EQUIPMENT GROUNDING CONDUCTOR, SIZED PER NEC TABLE 250.122 WITH ALL BRANCH WIRING 50V AND GREATER.**
- HOMERUN TO DESTINATION AS INDICATED. REFER TO CONDUIT SYMBOL ABOVE.
- INDICATES CONDUIT DROP WITHIN BUILDING WALL. REFER TO CONDUIT SYMBOL ABOVE.
- INDICATES CONDUIT RISER WITHIN BUILDING WALL. REFER TO CONDUIT SYMBOL ABOVE.
- FLEXIBLE CONDUIT CONNECTION FROM JUNCTION BOX.
- NL SURFACE MOUNTED LED WRAPAROUND TYPE LIGHTING FIXTURE. "EM" AND/OR SHADED CONNECTION POINT INDICATES FIXTURE WITH EMERGENCY BATTERY PACK (MINIMUM 1100 LUMEN OUTPUT). "NL" INDICATES FIXTURE ON NIGHT LIGHT CIRCUIT.
- NL RECESSED LED LIGHTING FIXTURE. "EM" AND/OR SHADED CONNECTION POINT INDICATES FIXTURE WITH EMERGENCY BATTERY PACK (MINIMUM 1100 LUMEN OUTPUT). "NL" INDICATES FIXTURE ON NIGHT LIGHT CIRCUIT.
- RECESSED OR SURFACED MOUNTED DOWN LIGHTING FIXTURE. "NL" INDICATES FIXTURE ON NIGHT LIGHT CIRCUIT.
- RECESSED WALLWASHER LIGHTING FIXTURE.
- WALL MOUNTED LIGHTING FIXTURE.
- RECESSED STEP LIGHTING FIXTURE.
- BOLLARD TYPE LIGHTING FIXTURE. PROVIDE CONCRETE FOOTING PER MFGRS. REQUIREMENTS.
- SINGLE OR TWO CKT. LIGHTING TRACK AS SPECD IN LTG. FIXTURE SCHEDULE.
- LANDSCAPE FLOOD LIGHTING FIXTURE.
- POLE MOUNTED H.I.D. LIGHTING FIXTURE.
- ILLUMINATED EXIT SIGN WITH NUMBER OF FACES AND DIRECTION OF EGRESS ARROWS AS INDICATED.
- LOW LEVEL EXIT SIGN AS SPECIFIED ON LIGHTING FIXTURE SCHEDULE.
- EGRESS EMERGENCY BATTERY PACK LIGHT FIXTURE (BUGEYE).
- INVERTER EMERGENCY POWER INVERTER

ELECTRICAL SYMBOLS LIST

- STANDARD 20A, 120V-1ø GROUNDING TYPE SIMPLEX RECEPTACLE MOUNTED AT +18" A.F.F. - U.O.N.
- STANDARD 20A, 120V-1ø GROUNDING TYPE DUPLEX RECEPTACLE MOUNTED AT +18" A.F.F. - U.O.N.
- STANDARD 20A, 120V-1ø GROUNDING TYPE DUPLEX RECEPTACLE HALF SWITCHED MOUNTED AT +18" A.F.F. - U.O.N.
- STANDARD 20A, 120V-1ø GROUNDING TYPE FOUR-PLEX RECEPTACLE MOUNTED AT +18" A.F.F. - U.O.N.
- STANDARD 20A, 120V-1ø GROUNDING TYPE "GROUND FAULT INTERRUPTER" (G.F.I.) RECEPTACLE MOUNTED AT +18" A.F.F. - U.O.N.
- STANDARD 20A, 120V-1ø ISOLATED GROUND TYPE DUPLEX RECEPTACLE, ORANGE IN COLOR, MOUNTED AT +18" A.F.F. - U.O.N.
- STANDARD 20A, 120V-1ø GROUNDING TYPE DUPLEX RECEPTACLE MOUNTED WITHIN FLUSH FLOOR OUTLET BOX.
- STANDARD 20A, 120V-1ø GROUNDING TYPE FOUR-PLEX RECEPTACLE MOUNTED WITHIN FLUSH FLOOR OUTLET BOX.
- SPECIAL RECEPTACLE MOUNTED AT +18" A.F.F. - U.O.N.. AMPS - VOLTS & PHASE AS INDICATED ON PLANS. VERIFY NEMA CONFIGURATION WITH INSTALLED EQUIPMENT SUPPLIER PRIOR TO PLACING ORDER.
- STANDARD 20A, 120V-1ø ISOLATED GROUND TYPE FOUR-PLEX RECEPTACLE, ORANGE IN COLOR, MOUNTED AT +18" A.F.F. - U.O.N.
- HOSPITAL GRADE 20A, 120V-1ø GROUNDING TYPE DUPLEX RECEPTACLE, RED IN COLOR, ON EMERGENCY CIRCUIT MOUNTED AT +18" A.F.F. - U.O.N.
- SWITCHED OR DIMMED (AS NOTED) SIMPLEX 120V RECEPTACLE MOUNTED AT +18" A.F.F. - U.O.N.
- STANDARD 15A, 120V-1ø SIMPLEX CLOCK RECEPTACLE.
- JUNCTION BOX. SIZED BY THE CONTRACTOR PER ACTUAL NUMBER OF CONDUITS AND/OR CONDUCTORS PASSING THRU.
- FLOOR MOUNTED JUNCTION BOX. SIZED BY THE CONTRACTOR PER ACTUAL NUMBER OF CONDUITS AND/OR CONDUCTORS PASSING THRU.
- COMBINATION FLOOR BOX WIRE-MOLD - FS 880 OMNIBOX ; RS RFB2 OR RF34 (OR EQUAL)
- SHOW WINDOW RECEPT. MOUNTED FLUSH ON CEILING. -U.O.N.
- STANDARD 20A, 120V-1ø GROUNDING TYPE DUPLEX RECEPTACLE CEILING MOUNTED.
- FUSED DISCONNECT SWITCH. AMPS, POLES AND FUSE SIZE AS INDICATED.
  - OPEN - INDICATES NON-FUSED
  - W.P. - INDICATES NEMA 3R ENCLOSURE
- MAGNETIC MOTOR STARTER. POLES AND NEMA SIZE AS INDICATED. PROVIDE COMPLETE WITH THERMAL OVERLOAD PROTECTION PER MOTOR NAMEPLATE DATA, 120V CONTROL COIL - U.O.N., AND H.O.A. (HAND-OFF-AUTO) SWITCH.
  - W.P. - INDICATES NEMA 3R ENCLOSURE
- COMBINATION DISCONNECT SWITCH/MAGNETIC MOTOR STARTER. AMPS, POLES, FUSE SIZE, AND NEMA SIZE AS INDICATED. PROVIDE COMPLETE WITH THERMAL OVERLOAD PROTECTION PER MOTOR NAMEPLATE DATA, 120V CONTROL COIL - U.O.N., AND H.O.A. (HAND-OFF-AUTO) SWITCH.
  - W.P. - INDICATES NEMA 3R ENCLOSURE
- MANUAL MOTOR STARTER SWITCH. HORSEPOWER RATED-120V - 1ø -U.O.N. PROVIDE COMPLETE WITH THERMAL OVERLOAD PROTECTION.
- MOTOR OUTLET. H.P. OR F.L.A. - VOLTS & PHASE AS INDICATED. VERIFY ELECTRICAL CHARACTERISTICS AND CONNECTION REQUIREMENTS WITH INSTALLED EQUIPMENT MFG. PRIOR TO ANY ROUGH-IN WORK.
- SERVICE ENTRANCE OR DISTRIBUTION EQUIPMENT AS SPECIFIED.
- BRANCH CIRCUIT PANELBOARD. FLUSH OR SURFACE MTD. AS INDICATED.
- TRANSFORMER AS SPECIFIED.
- TELEPHONE PLYWOOD BACKBOARD.
- THERMOSTAT FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR. PROVIDE J-BOX AT +48" A.F.F. - U.O.N. PROVIDE 1/2" C.O. TO ASSOCIATED HVAC UNIT OR ACCESSIBLE CEILING SPACE.
- VOLUME CONTROL MOUNTED AT +48" AFF. PROVIDE SINGLE GANG BACK BOX WITH 3/4" RISER TO ACCESSIBLE CEILING SPACE ABOVE OR AS OTHERWISE INDICATED.
- TELEPHONE OUTLET MOUNTED AT +18" A.F.F. WITH (2) RJ45 PORTS - U.O.N.. PROVIDE 3/4" C.O. TO POINT ABOVE ACCESSIBLE CEILING SPACE OR AS OTHERWISE INDICATED. W - DENOTES WALL MOUNTED @ +48" A.F.F. U.O.N.
- DATA OUTLET MOUNTED AT +18" A.F.F. WITH (2) RJ45 PORTS - U.O.N.. PROVIDE 3/4" C.O. TO POINT ABOVE ACCESSIBLE CEILING SPACE OR AS OTHERWISE INDICATED. W - DENOTES WALL MOUNTED @ +48" A.F.F. U.O.N.
- COMBINATION TELE/DATA OUTLET MOUNTED AT +18" A.F.F. WITH (4) RJ45 - U.O.N.. PROVIDE (2) 3/4" C.O. TO POINT ABOVE ACCESSIBLE CEILING SPACE OR AS OTHERWISE INDICATED. W - DENOTES WALL MOUNTED @ +48" A.F.F. U.O.N.
- DATA OUTLET MOUNTED FLUSH IN FLOOR. PROVIDE 3/4" C.O. TO NEAREST WALL AND STUB INTO ACCESSIBLE CEILING SPACE.
- COMBINATION TELE/DATA OUTLET MOUNTED FLUSH IN FLOOR. PROVIDE 3/4" C.O. TO NEAREST WALL AND STUB INTO ACCESSIBLE CEILING SPACE.
- COMBINATION TELE/DATA OUTLET MOUNTED FLUSH IN CEILING. PROVIDE 3/4" C.O. TO NEAREST WALL AND STUB INTO ACCESSIBLE CEILING SPACE.

CODE COMPLIANCE INFORMATION

2017 NATIONAL ELECTRICAL CODE
2020 INTERNATIONAL BUILDING CODE
2020 INTERNATIONAL FUEL GAS CODE
2020 INTERNATIONAL FIRE CODE
2020 INTERNATIONAL ENERGY CONSERVATION CODE

Jason C. Adams

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JASON C. ADAMS LICENSED No. 75948 STATE OF FLORIDA PROFESSIONAL ENGINEER

Jason C. Adams State of Florida, Professional Engineer, License No. 75948

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PROJECT NAME

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LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

ELECTRICAL COVER SHEET AND LEGEND

SHEET NUMBER

E0.0

1. SECTION 16010 - BASIC ELECTRICAL REQUIREMENTS

A. THE WORK OF EACH OF THE ELECTRICAL SECTIONS INCLUDES FURNISHING AND INSTALLING THE MATERIAL, EQUIPMENT, AND SYSTEMS COMPLETE AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS. THE ELECTRICAL INSTALLATIONS, WHEN FINISHED, SHALL BE COMPLETE AND COORDINATED, READY FOR SATISFACTORY SERVICE.

THE WORK UNDER THIS CONTRACT SHALL BE DONE IN STRICT ACCORDANCE WITH ALL APPLICABLE MUNICIPAL, STATE AND OTHER LOCAL CODES, THE 2017 EDITION OF THE NATIONAL ELECTRICAL CODE AND THE 2010 ADA STANDARDS .

B. THE CONTRACTOR SHALL MAKE APPLICATION AND PAY FOR ALL PERMITS, LICENSES AND INSPECTIONS AS REQUIRED UNDER THE ABOVE CODES.

C. THE GENERAL ARRANGEMENT OF CONDUIT, WIRING AND EQUIPMENT SHALL BE AS IDENTIFIED ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE SITE, STRUCTURAL, AND FINISH CONDITIONS AFFECTING HIS WORK AND SHALL ARRANGE SUCH WORK ACCORDINGLY, PROVIDING SUCH FITTINGS AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS.

D. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND SERVICES NECESSARY FOR AND REASONABLY INCIDENTAL TO THE COMPLETE INSTALLATION OF THE ELECTRICAL WORK AND RELATED SYSTEMS AS INDICATED ON THE DRAWINGS OR AS NECESSARY TO PROVIDE A COMPLETE SYSTEM.

E. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY WIRING, LIGHTING AND CONSTRUCTION POWER FOR ALL TRADES AS REQUIRED TO COMPLETE THE PROJECT.

F. ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED AND COMPLETED IN A FIRST CLASS WORKMANLIKE MANNER. ALL MATERIALS SHALL BE NEW AND THE BEST OF THEIR RESPECTIVE KINDS. ALL EQUIPMENT AND SYSTEMS SHALL BE APPROVED BY UL OR SIMILAR NATIONALLY ACCEPTED TESTING AGENCY SUCH AS ETL TESTING LABORATORIES.

G. THE CONTRACTOR SHALL VISIT THE SITE AND OBSERVE THE CONDITIONS UNDER WHICH THE WORK SHALL BE COMPLETED. NO ALLOWANCE WILL BE MADE SUBSEQUENTLY IN THIS CONTRACT FOR ANY ERROR OR NEGLIGENCE IN THE CONTRACTOR'S PART.

H. THE CONTRACTOR SHALL SUBMIT DETAILED DIMENSIONED SHOP DRAWINGS, TOGETHER WITH WIRING DIAGRAMS, SPECIFICATIONS, OPERATING DATA, AND/OR CATALOG CUTS FOR ALL EQUIPMENT.

I. A THOROUGH TEST SHALL BE MADE PRIOR TO ENERGIZING THE SYSTEM TO DEMONSTRATE THAT THE SYSTEM IS ENTIRELY FREE FROM GROUND FAULTS, SHORT CIRCUITS, AND OPEN CIRCUITS; THAT THE RESISTANCE TO GROUND OF ALL NON-GROUNDED CIRCUITS, BEFORE AND AFTER CONNECTION OF EQUIPMENT MEETS THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND IEEE STANDARDS/RECOMMENDATIONS.

J. IDENTIFY ALL MOTOR STARTERS, SWITCHES, CONTROLS, PANELBOARDS, SWITCHBOARDS, TERMINAL BOARDS, CONTROL CENTERS AND OTHER EQUIPMENT. IDENTIFICATION PLATES SHALL BE LAMINATED PLASTIC, BLACK AND WHITE ENGRAVED LETTERS. LETTERING FOR CONTROL CENTERS, CONTROL PANELS, METERING AND INSTRUMENT PANELS SHALL BE 3/8" HIGH.

K. THE MATERIAL AND WORKMANSHIP OF ALL PARTS OF THE ELECTRICAL INSTALLATION SPECIFIED HEREIN SHALL BE GUARANTEED UNCONDITIONALLY FOR A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL CERTIFICATE OF OCCUPANCY OR GRAND OPENING, WHICH EVER COMES FIRST.

L. UPON COMPLETION OF THE ELECTRICAL INSTALLATION, THE CONTRACTOR SHALL DELIVER TO THE OWNER ONE SET OF SCANNED DIGITAL PRINTS OF ELECTRICAL CONTRACT DRAWINGS WHICH SHALL BE LEGIBLY MARKED IN RED TO SHOW ALL ADDITIONS, CHANGES AND DEPARTURES OF THE INSTALLATION AS COMPARED WITH THE ORIGINAL DESIGN. THEY SHALL BE SUITABLE FOR USE IN PREPARATION OF RECORD DRAWINGS.

M. THE CONTRACTOR SHALL PREPARE A RECORD AND INFORMATION MANUAL. THE MANUAL SHALL BE SCANNED INTO A DIGITAL FORMAT AND FORWARDED TO CIRCLE K CONSTRUCTION.
PROVIDE THE FOLLOWING DATA IN THE RECORD AND INFORMATION MANUAL:
1) CUT SHEETS OF ALL EQUIPMENT WITH TECHNICAL SPECIFICATIONS.
2) OPERATION AND MAINTENANCE PROCEDURES.
3) SERVICING INSTRUCTIONS.
4) COPIES OF PANELBOARD DIRECTORIES.
5) COPIES OF WARRANTIES.
6) LIST OF LAMPS SHOWING QUANTITY, TYPE, WATTAGE, MANUFACTURER, CATALOG NUMBER, ETC., FOR EACH FIXTURE TYPE.
7) COPIES OF TEST REPORTS.

O. EXACT LOCATIONS OF OUTLETS SHALL BE COORDINATED WITH DOOR SWINGS AND VARIOUS PROTRUSIONS. MOUNTING HEIGHTS OF THE VARIOUS ELECTRICAL DEVICES SHALL BE AS FOLLOWS:

SWITCHES	46" AFF TO CENTER OF BOX
RECEPTACLES	20" AFF TO CENTER OF BOX
TELEPHONE OUTLETS	20" AFF TO CENTER OF BOX
EXIT LIGHTS	CENTERED BETWEEN CEILING AND TOP OF DOOR (UP TO 1'-0" ABOVE DOOR), SURFACE OR CEILING MOUNTED AS SHOWN.
DISCONNECTING SWITCHES	52" AFF TO CENTER OF SWITCH

P. PROVIDE A DISCONNECT SWITCH FOR EACH MOTOR AS SHOWN ON THE DRAWINGS SIZED AS REQUIRED TO MEET THE NEC AND PROVIDE ALL WIRING CONNECTIONS FROM SOURCE. PROVIDE REQUIRED VOLTAGE.

Q. SEAL ALL CONDUIT PENETRATIONS THRU RATED WALLS AND FLOORS TO MAINTAIN FIRE INTEGRITY. REFER TO ARCHITECTURAL DRAWING FOR FIRE WALL LOCATIONS.

R. ELECTRICAL CONTRACTOR SHALL VERIFY ALL VOLTAGES OF MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

2. SECTION 16050 - BASIC ELECTRICAL MATERIALS AND METHODS

A. INSTALL ALL WIRING CONDUIT EXCEPT AS OTHERWISE INDICATED. MINIMUM CONDUIT SIZE SHALL BE 3/4". ALL CONDUIT EMBEDDED IN CONCRETE SHALL BE 3/4" MINIMUM. INSTALL ALL CONDUIT CONCEALED UNLESS ON UNFINISHED WALLS, ON UNFURRED CEILINGS OR MECHANICAL EQUIPMENT SPACES. PROVIDE CONDUIT AS FOLLOWS:

1) RIGID STEEL CONDUIT FOR WORK EXPOSED TO WEATHER OR EMBEDDED IN CONCRETE OR MASONRY.

2) GALVANIZED ELECTRICAL METALLIC TUBING (EMT) FOR INTERIOR EXPOSED WORK, CONCEALED WORK ABOVE SUSPENDED CEILINGS, AND WITHIN INTERIOR PARTITIONS OR NON-MASONRY WALLS.

3) FLEXIBLE METAL CONDUIT IN SHORT LENGTHS (6' MAXIMUM) FOR THE CONNECTION OF RECESSED LIGHTING FIXTURES AND MOTORS.

4) LIQUID TIGHT FLEXIBLE METAL CONDUIT WHEREVER MOISTURE MAY BE PRESENT AND MOTORS IN MECHANICAL EQUIPMENT SPACES.

5) POLYVINYLCHLORIDE (PVC) SCHEDULE 40 AND 80 CONDUIT WITH GROUND CONDUCTOR FOR UNDERGROUND OUTSIDE OF BUILDING (SITE) INSTALLATION AS PERMITED BY 2008 NEC ARTICLE 352 .

B. INSTALL CONDUITS PARALLEL AND PERPENDICULAR TO WALLS AND INTERIOR SURFACES. CLEAN AND PLUG AND PROVIDE A PULL LINE IN EACH CONDUIT LEFT EMPTY. USE MANUFACTURED ELBOWS AND SCREW JOINTED CONDUIT FITTINGS. USE CAPPED BUSHINGS OR "PUSH PENNY" PLUGS. ALL FITTINGS SHALL BE STEEL OR MALLEABLE IRON. ALL EMT FITTINGS SHALL BE COMPRESSION TYPE.

C. ALL OUTLET, SWITCH AND JUNCTION BOXES, SHALL BE STAINLESS STEEL BY STEEL CITY, RACO, APPLETON, VALEN, OR EQUIVALENT. OUTLET BOXES IN CONCRETE CONSTRUCTION SHALL BE OCTAGONAL. NO "THRU-WALL" BOXES SHALL BE USED IN PARTITIONS. ALL BOXES SHALL BE FURNISHED WITH APPROPRIATE COVERS.

D. JUNCTION AND PULL BOXES SHALL BE FURNISHED AND INSTALLED AS INDICATED OR WHERE REQUIRED TO FACILITATE PULLING OF WIRES OR CABLES. BOXES FOR EXTERIOR WORK SHALL BE CAST ALUMINUM OR GALVANIZED CAST IRON TYPE WITH THREADED HUBS, UNLESS OTHERWISE DIRECTED. GASKETED COVER PLATES SHALL BE FURNISHED FOR OUTDOOR INSTALLATIONS.

E. BUILDING WIRE, UNLESS OTHERWISE INDICATED, SHALL BE COPPER, 600 VOLT, TYPE THWN/THHN INSULATION, #12 AWG MINIMUM, FOR INTERIOR AND EXTERIOR USE. FOR BRANCH CIRCUITS TYPE MC (METAL CLAD) CABLE MAY BE USED WHERE PERMITTED BY THE NEC AND LOCAL CODES. NO ROMEX OR AC (BX) CABLE WILL BE ALLOWED ON THE PROJECT.

F. MINIMUM WIRE SIZE SHALL BE NUMBER TWELVE (12) AWG. NO SPLICES SHALL BE MADE EXCEPT WITHIN OUTLET OR JUNCTION BOXES. WIRES NUMBER EIGHT (8) AWG AND LARGER SHALL BE STRANDED. WIRES AND CABLES SHALL BE MANUFACTURED BY PIRELLI, ROYAL, TRIANGLE OR EQUIVALENT.

G. THE COLOR CODING SYSTEM LISTED BELOW SHALL BE USED THROUGHOUT THE BUILDING:

SYSTEM	PHASE A	PHASE B	PHASE C	NEUTRAL	GROUND	ISOLATED GROUND
120/208V	BLACK	RED	BLUE	WHITE	GREEN	GREEN/YELLOW
277/480V	BROWN	ORANGE	YELLOW	GRAY	GREEN	GREEN/YELLOW

H. THE WIRE SIZE INDICATED IN THE HOMERUN SHALL BE USED THROUGH THE CIRCUIT.

I. PROVIDE DISCONNECT SWITCHES WHERE INDICATED AND AS REQUIRED. SWITCHES SHALL BE OF SIZE, NUMBER OF POLES AND FUSED OR NONFUSED, AS REQUIRED FOR JOB CONDITIONS AND THE NATIONAL ELECTRICAL CODE. ALL SAFETY SWITCHES SHALL BE NEMA I ENCLOSURE "HD" WITH INTERLOCKING COVER AND HANDLE, MANUFACTURED BY SQUARE "D" OR APPROVED EQUAL. PROVIDE NEMA 3R ENCLOSURES WHERE REQUIRED.

J. PROVIDE STARTERS AND CONTROL WIRING AS INDICATED ON THE DRAWINGS, OR SPECIFIED HEREIN. ALL TEMPERATURE CONTROL WIRING AND COMPONENTS SHALL BE UNDER DIVISION 15.

K. PROVIDE THERMAL MANUAL MOTOR STARTING SWITCHES FOR FRACTIONAL HORSEPOWER, SINGLE PHASE MOTORS. THE STARTERS SHALL BE SQUARE D COMPANY, CLASS 2510, ALLEN BRADLEY BULLETIN 600, OR APPROVED EQUAL FOR SINGLE SPEED MOTORS. ENCLOSURES SHALL BE NEMA I FOR INTERIOR USE AND NEMA 3R FOR EXTERIOR USE.

L. THREE PHASE MOTOR STARTERS SHALL BE 3 POLE, FULL-VOLTAGE, MAGNETIC TYPE. ENCLOSURES SHALL BE NEMA I FOR INTERIOR USE AND NEMA 3R FOR EXTERIOR USE. PROVIDE HOA SWITCH WHEN AUTOMATICALLY CONTROLLED, PILOT INDICATING LIGHT, CONTROL TRANSFORMER, AND NO/NC AUXILIARY CONTACTS. STARTERS SHALL BE SQUARE D COMPANY, CLASS 8536 AND CLASS 8538 COMBINATION TYPE OR APPROVED EQUAL.

M. WIRING DEVICES SHALL BE ARROW HART, GENERAL ELECTRIC, P & S LEVITON OR HUBBELL:

1) WALL SWITCHES: ARROW HART 1991. THREE AND FOUR-WAY SWITCHES SHALL BE OF THE SAME MANUFACTURER AND GRADE.

2) RECEPTACLES: ARROW HART 5362 FOR 20 AMPERES. GFCI SHALL BE #GFCS20 RATED 20 AMPERE, 120 VOLT. PROVIDE TAMPER RESISTANT AND MOISTURE RESISTANT TYPE WHERE REQUIRED BY 2008 NEC.

3) DIMMERS: 600/1000/1500/2000 WATTS AS REQUIRED BY JOB CONDITIONS. LUTRON 'NOVA' SERIES OR EQUAL.

4) DEVICE PLATES: ARROW HART SWITCH PLATES SI-S6 SERIES. ARROW HART RECEPTACLE PLATES S8. ARROW HART TELEPHONE BLANK PLATES S14.

N. MOUNT WEATHERPROOF DEVICES IN CAST METAL BOXES WITH GASKETED, SPRING-HINGED LID-TYPE LOCKING COVERS HAVING CORROSION-RESISTANT FINISH.

O. THE ENTIRE ELECTRICAL SYSTEM SHALL BE SOLIDLY GROUNDED INCLUDING MAIN SERVICE EQUIPMENT, DISCONNECT SWITCHES, WIRING TROUGHS AND PULL BOXES, CONDUIT SYSTEM, OUTLET BOXES, MOTORS, ELECTRIC HEATING EQUIPMENT, LIGHTING FIXTURES, TRANSFORMERS, EMERGENCY SYSTEMS, UPS SYSTEMS, AND FIRE ALARM SYSTEMS.

P. PROVIDE EQUIPMENT GROUNDING CONDUCTORS IN ALL BRANCH CIRCUITS AND FEEDERS SIZED IN ACCORDANCE WITH THE NEC TABLE 250.112.

Q. ALL BRANCH CIRCUITS SHALL BE RUN CONCEALED IN EXISTING AND NEW WALLS. CUT AND PATCH EXISTING WALLS AND SURFACES AS REQUIRED.

R. ALL D.C. WIRING SHALL BE #10 AWG MINIMUM.

S. GROUND, PHASE AND NEUTRAL CONDUCTORS SHALL BE PIG-TAILED IN OUTLET BOXES OR MULTI-OUTLET ASSEMBLY FOR RECEPTACLES SO THAT GROUND AND ELECTRICAL SERVICE WILL NOT BE DISRUPTED TO OTHER RECEPTACLES ON THE SAME MULTI-WIRE CIRCUIT IF RECEPTACLE IS REMOVED.

3. SECTION 16400 - SERVICE AND DISTRIBUTION

A. COORDINATE ALL SERVICE ENTRANCE WORK WITH THE ELECTRIC UTILITY.

B. DISTRIBUTE POWER AT 120/208V, 3 PHASE, 4 WIRE, LED LIGHTING, AIR CONDITIONING, ELECTRIC HEATING, MOTOR CIRCUITS, AND 120/208V FOR RECEPTACLES, INCANDESCENT LIGHTS AND SMALL MOTORS.

C. PANELBOARDS SHALL BE 120/208 VOLTS, THREE PHASE EMPLOYING BREAKERS MINIMUM 10,000 SYMMETRICAL A.I.C. AT 120 VOLTS. FURNISH PANELBOARDS AS INDICATED ON DRAWINGS E6.0 AND E7.0.

D. PANELBOARDS SHALL BE FACTORY ASSEMBLED WITH BOLT-ON TYPE CIRCUIT BREAKERS. BUSS SHALL BE ALUMINUM. PROVIDE 50% GROUND BUS BAR. PANELS CONNECTED TO K-RATED TRANSFORMERS SHALL HAVE 200% RATED NEUTRAL BUS BARS.

E. PROVIDE THREE (3) 3/4 INCH SPARE CONDUITS FROM EACH RECESSED PANEL TO THE CEILING SPACE.

F. FUSES FOR SERVICE ENTRANCE EQUIPMENT SHALL BE U.L. LISTED CLASS L, J, OR RKI. FUSES FOR FEEDER CIRCUITS AND PANELBOARDS SHALL BE U.L. CLASS RKI FAST-ACTING TYPE. FUSES FOR MOTOR OVERCURRENT, MOTOR CONTROLLER, AND TRANSFORMER PROTECTION SHALL BE DUAL-ELEMENT, U.L. CLASS RKI TIME-DELAY TYPE.

G. PROVIDE ENERGY EFFICIENT, NEMA TP-1, SELF-COOLED, DRY TYPE TRANSFORMERS OF KVA, PHASE, "K" AND VOLTAGE RATINGS AS INDICATED. TRANSFORMERS 15 KVA AND LESS SHALL HAVE A CLASS F INSULATION, 115 DEGREES C RISE. TRANSFORMERS ABOVE 15 KVA SHALL HAVE CLASS H INSULATION, 115 DEGREE C RISE. PROVIDE FOUR 2-1/2 TAPS BELOW TWO 2-1/2 TAPS ABOVE RATED PRIMARY VOLTAGE. TRANSFORMERS OF 150 KVA AND LESS SHALL BE RATED 45 DB, LARGER TRANSFORMERS SHALL BE RATED 55 DB. NEUTRALS AND NEUTRAL CONNECTIONS OF ALL "K" RATED DRY TYPE TRANSFORMERS SHALL BE 200% OF THE PHASE CONDUCTOR SIZE. TRANSFORMER SHALL BE HEVI-DUTY ELECTRIC COMPANY, GENERAL ELECTRIC, SORGEL, ACME OR HOWARD INDUSTRIES.

4. SECTION 16500 - LIGHTING

A. PROVIDE A COMPLETE LIGHTING FIXTURE AT EACH LOCATION INDICATED ON THE DRAWINGS. FIXTURES SHALL BE SPECIFIED ON THE LIGHTING FIXTURE SCHEDULE ON THE DRAWINGS.

B. ALL PLASTIC DIFFUSERS SHALL BE 100 PERCENT VIRGIN ACRYLIC (NOMINAL .125 INCH THICK) AND ALL LEXAN DIFFUSERS SHALL BE LEXAN TYPE MR-4000, OR EQUAL.

C. 8-FOOT TANDEM UNITS MAY BE USED IN LIEU OF 4 FOOT UNITS IN CONTINUOUS ROWS.

D. THE CONTRACTOR SHALL CONSULT THE CEILING CONTRACTOR AND ARCHITECT'S DRAWINGS FOR APPROVED REFLECTED CEILING PLANS BEFORE ORDERING FIXTURES TO INSURE THAT ALL ARE COMPATIBLE WITH THE CEILING SYSTEM AND PROPERLY LOCATED. VERIFY THAT ADEQUATE CLEARANCE FOR INSTALLATION, MAINTENANCE, AND HEAT DISSIPATION IS AVAILABLE.

E. PROVIDE A MINIMUM OF TWO (2) GALVANIZED STEEL #12 GAUGE HANGER WIRES (ALTERNATE CORNERS) ON ALL RECESSED FIXTURES.

F. CONTRACTOR SHALL PROVIDE ADDITIONAL EXIT LIGHTS AND EMERGENCY BATTERY PACK WITH DUAL HEADS AS NEEDED TO MEET FIRE MARSHAL'S WALK-THROUGH AND ACCEPTANCE.

G. CONNECT EXIT LIGHTS, EMERGENCY BATTERY UNITS AND NIGHT LIGHTS (NL) TO UNSWITCHED PORTION OF LIGHTING CIRCUIT SERVING RESPECTIVE AREA.

5. SECTION 16700 - COMMUNICATION SYSTEMS

A. TELEPHONE SERVICE SHALL BE INSTALLED BY THE TELEPHONE COMPANY.

B. PROVIDE WALL OUTLETS IN 4" SQUARE 2-1/8" DEEP BOX WITH RAISED SINGLE GANG COVERS EQUIPPED WITH BLANK STAINLESS STEEL DEVICE PLATES. EXTEND 3/4" EMPTY CONDUIT FROM EACH OUTLET TO THE CEILING SPACE AND TERMINATE WITH INSULATED BUSHINGS. PROVIDE NYLON PULL WIRE IN ALL CONDUITS LEFT EMPTY.

Jason C. Adams

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PROJECT NAME
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LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE
ELECTRICAL SPECIFICATIONS

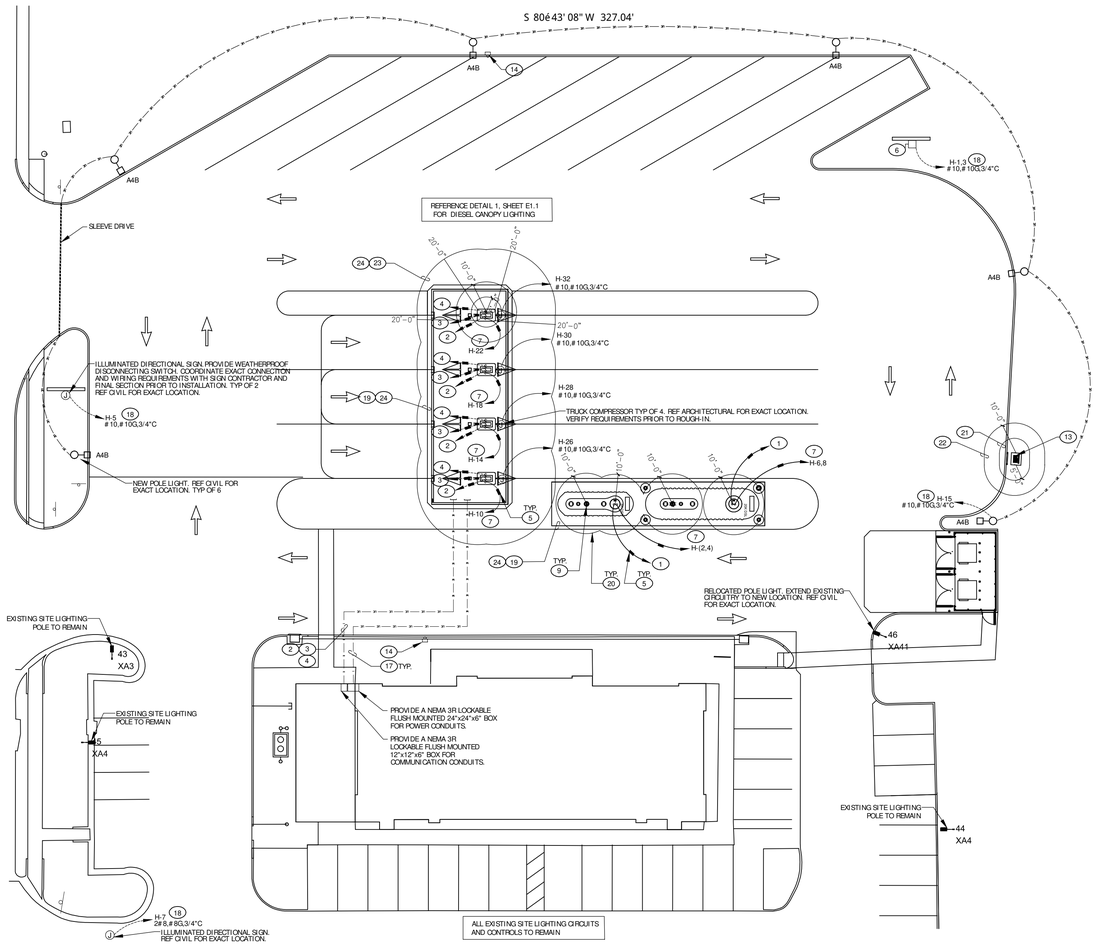
SHEET NUMBER
E0.1

JASON C. ADAMS LICENSED ENGINEER No. 75948 STATE OF FLORIDA PROFESSIONAL ENGINEER

Jason C. Adams State of Florida, Professional Engineer, License No. 75948

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1 ELECTRICAL SITE PLAN
SCALE: 1" = 20'-0"

Jason C. Adams

Digitally signed by Jason C. Adams
DN: E=jca@teamofchoice.com, CN=Jason C. Adams, C=US
Date: 2022.08.17 14:09:15-05'00'

GENERAL NOTES

1. ALL EXTERIOR DEVICES TO BE WEATHERPROOF.
2. ALL FUEL ISLAND CONDUITS SHALL BE ROUTED TO THE RESPECTIVE PANELS AND/OR TO THE FUEL CONTROL PANELS LOCATED IN THE MANAGERS OFFICE/STORAGE ROOM.
3. PROVIDE ALL EMPTY CONDUITS WITH PULL STRING. ELECTRICAL CONTRACTOR SHALL CONTACT POWER COMPANY REGARDING EXACT LOCATION OF ALL PRIMARY SERVICE EQUIPMENT, TRENCH LOCATIONS, TRANSFORMER LOCATION, METER LOCATION, ETC.
4. ELECTRICAL CONTRACTOR SHALL PROVIDE NECESSARY SECONDARY CONDUITS, POWER TRENCHING, BACKFILL, CONCRETE PADS FOR TRANSFORMERS AND SERVICE EQUIPMENT AND CONDUIT STUBS INTO TRENCH AS REQUIRED BY POWER COMPANY AND TO THEIR SPECIFICATIONS.
5. ELECTRICAL CONTRACTOR SHALL CONTACT TELEPHONE COMPANY REGARDING EXACT LOCATION OF ALL PRIMARY SERVICE EQUIPMENT, SERVICE EQUIPMENT, TRENCH LOCATIONS, ETC.
6. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY TELEPHONE TRENCHING, BACKFILL, AND CONDUIT STUBS INTO TRENCH AS REQUIRED BY TELEPHONE COMPANY AND TO THEIR SPECIFICATIONS.
7. ALL WIRING OUTSIDE SHALL BE A MINIMUM OF #10 COPPER WITH TYPE "XHHW-2" INSULATION. FOR UNDERGROUND CIRCUITS RUN IN P.V.C., PROVIDE A #10 COPPER BOND IN ADDITION TO CIRCUIT CONDUCTORS.
8. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION AND COMPLIANCE WITH THE UTILITY COMPANY'S REQUIREMENTS. WITH-IN TWO WEEKS AFTER AWARD OF CONTRACT, SUBMIT (2) COMPLETE SETS OF PLANS, INCLUDING PLOT OF SURVEY, TO UTILITY COMPANY FOR COORDINATION. ROUTING OF INCOMING POWER AND TELEPHONE SERVICE SHOWN ARE FOR ESTIMATING PURPOSES ONLY. ACTUAL ROUTING, CONDUIT, TRENCH, AND PAD REQUIREMENTS SHALL BE AS SPECIFIED BY THE UTILITY COMPANY. CONFIRM ALL REQUIREMENTS WITH UTILITIES PRIOR TO INSTALLATION.
9. ALL UNDERGROUND CABLE, PIPE, AND CONDUITS SHALL BE DETECTIBLE (METALLIC) OR HAVE A DETECTABLE UNDERGROUND DEVICE INSTALLED PER AZ STATUTE 40-360.22.M.

KEY NOTES

1. 3/4" CONDUIT FOR TANK MOTION SENSORS. PROVIDE AND INSTALL BELDEN 88760 SENSOR WIRE FOR ALL SUMP AND INTERSTITIAL SENSORS AT TANKS.
2. 3/4" CONDUIT FOR DISPENSER SUMP SENSORS. PROVIDE AND INSTALL BELDEN 88760 OR EQUIV. SENSOR WIRE FOR ALL DISPENSER SUMP SENSORS.
3. 3/4" CONDUIT TO LOW VOLTAGE PANEL FOR INTERCOM. PROVIDE AND INSTALL (2) 18 GA. 4 CONDUCTOR SHIELDED CABLES PER DISPENSER.
4. 3/4" CONDUIT FOR 18 GA. TWISTED PAIRS FOR CRIND/EMV/APPLAUSE AND PUMP DATA. TWISTED PAIR COLORING SHOULD BE BLUE/WHITE FOR CRIND & YELLOW/PURPLE FOR PUMP DATA. PETROLEUM ELECTRICIAN TO WIRE TO BRDM2 PER CK STANDARD.
5. PROVIDE SEAL-OFF FITTINGS AT EACH END OF CONDUIT IN CONJUNCTION WITH G.V.R. DISPENSER MANUAL. REFER TO DETAIL 4/E1.1
6. PROVIDE WEATHERPROOF DISCONNECT SWITCH. COORDINATE EXACT CONNECTION AND WIRING REQUIREMENTS WITH SIGN CONTRACTOR AND FINAL SECTION PRIOR TO INSTALLATION. PROVIDE (2) 1" CONDUITS 1 FOR POWER AND 1 FOR PHONE AND COMMUNICATION.
7. 3/4" CONDUIT TO POWER HOMERUN.
8. NOT USED.
9. TANK FILL STATION.
10. NOT USED.
11. NOT USED.
12. NOT USED.
13. VENT RISER FROM TANKS.
14. "EMERGENCY POWER OFF" SWITCH PER NEC 2011, NEC ART 514.11. PROVIDE SIGNAGE PER IFC SECTION 2204, 2205. (VERIFY EXACT LOCATION WITH CIRCLE 'K').
15. NOT USED.
16. NOT USED.
17. TWO 3/4"C CONDUITS FROM ELECTRICAL ROOM/MECHANICAL ROOM, TO CLOSEST CANOPY COLUMN. ROUTE FIRST UP TO CANOPY DECK FOR SPEAKER CONNECTION. ROUTE SECOND UP TO CANOPY DECK WITH PULLSTRING AS A SPARE.
18. LIGHTING CIRCUITS SHALL BE ROUTED VIA 20A 4 POLE ELECTRICALLY HELD LIGHTING CONTACTOR CONTROLLED BY THE 'EPO' SWITCH LOCATED ON THE GAS CANOPY. SEE DETAIL 2 SHEET E6.0.
19. CLASS 1 DIVISION 1 HAZARDOUS AREA: UNDERGROUND TANK: INSIDE TANK - ENTIRE INSIDE VOLUME. FILL OPENING - ENTIRE SPACE WITHIN ANY PIT OR BOX BELOW GRADE LEVEL. PER NEC TABLE 514.3 (B)(1)
20. CLASS 1 DIVISION 2 HAZARDOUS AREA: UNDERGROUND TANK FILL OPENING: UP TO 18" ABOVE GRADE LEVEL, EXTENDING 5 FT. HORIZONTALLY IN ALL DIRECTIONS FROM ANY TIGHT-FILL CONNECTION AND EXTENDING 10 FT. HORIZONTALLY IN ALL DIRECTIONS FROM ANY LOOSE-FILL CONNECTION. PER NEC TABLE 514.3 (B)(1)
21. CLASS 1 DIVISION 1 HAZARDOUS AREA: UNDERGROUND TANK VENT: WITHIN 5 FT. OF OPEN END OF VENT, EXTENDING IN ALL DIRECTIONS. PER NEC TABLE 514.3(B)(1)
22. CLASS 1 DIVISION 2 HAZARDOUS AREA: UNDERGROUND TANK VENT: BETWEEN 5FT. AND 10FT. OF OPEN END OF VENT, EXTENDING IN ALL DIRECTIONS. PER NEC TABLE 514.3(B)(1)
23. CLASS 1 DIVISION 2 HAZARDOUS AREA: OUTDOOR DISPENSING DEVICE: UP TO 18" OF DISPENSER ENCLOSURE, EXTENDING 20 FT. HORIZONTALLY IN ALL DIRECTIONS FROM DISPENSER ENCLOSURE. PER NEC TABLE 514.3 (B)(1)
24. ALL WIRING IN THIS AREA INCLUDING BELOW GRADE SHALL BE INSTALLED IN RIGID CONDUIT PER NEC ARTICLE 514.8. HOWEVER, PER NEC 514.8 EXCEPTION 2, NONMETALLIC RIGID CONDUIT (PVC) HAVING A MINIMUM OF 24" OF GROUND COVER IS ALLOWED. IN ADDITION, THREADED RIGID METAL CONDUIT OR THREADED STEEL INTERMEDIATE METAL CONDUIT SHALL BE USED FOR THE LAST 2 FEET OF THE UNDERGROUND RUN TO EMERGENCE OR TO THE POINT OF CONNECTION TO THE ABOVEGROUND RACEWAY, AND AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INCLUDED. PROVIDE ALL EXPLOSION PROOF FITTINGS AND SEALS NECESSARY TO COMPLETE CONDUIT SYSTEMS. NO SUBSTITUTIONS SHALL BE MADE UNLESS APPROVED BY THE AUTHORITY HAVING JURISDICTION. PROVIDE EXPLOSION PROOF J-BOXES (CHOUSE HINDS) MODEL GUP215 WITH 0302 'O' RING OR OWNER APPROVED EQUAL.
25. NOT USED.
26. PROVIDE AND INSTALL W.P. J-BOXES IN CANOPY FOR WHITE SPEAKERS. MAKE CONNECTIONS TO CONDUITS PROVIDED IN CANOPY COLUMN.
27. CANOPY EYEBROW LED STRIP LIGHTS. ONE DOUBLE KWIK BOX POWER CONNECTION PER EACH GROUP OF FOUR 9'-10" SECTIONS.

JASON C. ADAMS
"LICENSED"
No. 75948
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Jason C. Adams State of Florida, Professional Engineer, License No. 75948

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PROJECT NAME
CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

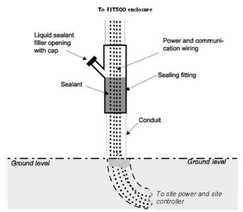
SHEET TITLE
ELECTRICAL SITE PLAN

SHEET NUMBER
E1.0

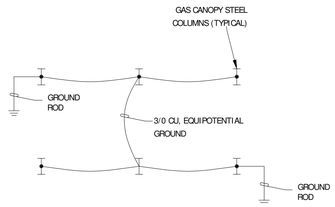
KEY NOTES

1. PROVIDE SEAL-OFF FITTINGS AT EACH END OF CONDUIT IN CONJUNCTION WITH G.V.R. DISPENSER MANUAL. REFER TO DETAIL 4/E1.1
2. CANOPY EYEBROW LED STRIP LIGHTS. ONE DOUBLE KWIK BOX POWER CONNECTION PER EACH GROUP OF FOUR 9'-10" SECTIONS.
3. LIGHTING CIRCUITS SHALL BE ROUTED VIA 20A 4 POLE ELECTRICALLY HELD LIGHTING CONTACTOR CONTROLLED BY THE 'EPO' SWITCH LOCATED ON THE GAS CANOPY. SEE DETAIL 2 SHEET E6.0.
4. PROVIDE AND INSTALL W.P. J-BOXES IN CANOPY FOR WHITE SPEAKERS. MAKE CONNECTIONS TO CONDUITS PROVIDED IN CANOPY COLUMN.

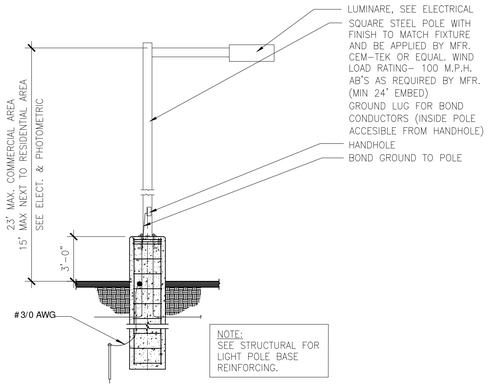
Conduit entering the hazardous area must have a seal-off installed 18 inches above grade to prevent liquid or fumes from entering the area.



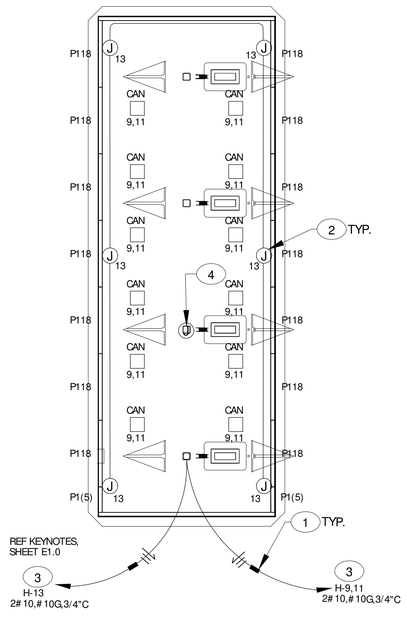
4 SEAL OFF DETAIL
SCALE: NTS



3 CANOPY GROUNDING DETAIL
NOT TO SCALE



2 LIGHT POLE BASE
SCALE: NTS



1 CANOPY LIGHTING PLAN
SCALE: 1" = 15'-0"

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PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

ELECTRICAL SITE PLAN DETAILS

SHEET NUMBER

E1.1

JASON C. ADAMS LICENSE No. 75948 STATE OF FLORIDA PROFESSIONAL ENGINEER

Jason C. Adams State of Florida, Professional Engineer, License No. 75948

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GENERAL NOTES

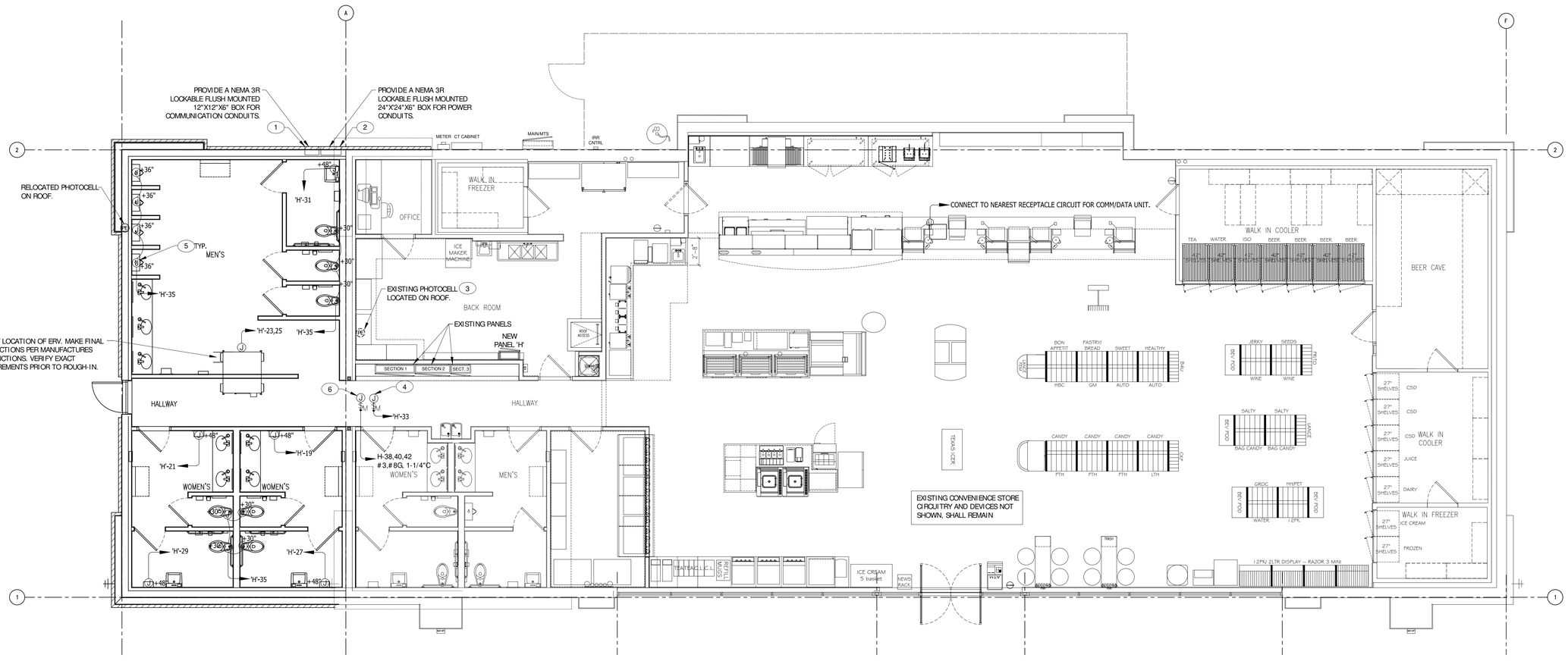
1. ALL EXTERIOR DEVICES SHALL BE WEATHERPROOF.
2. ALL 125V, 15A OR 20A RECEPTACLES LOCATED AT FOOD PREPARATION, FOOD SERVICE OR BEVERAGE COUNTERS SHALL BE PROTECTED BY A READILY ACCESSIBLE GFCI DEVICE PER NEC 210.8(B)(2). GFCI DEVICE MAY BE LOCATED EITHER IN A RECEPTACLE OR CIRCUIT BREAKER. FACE PLATE OF RECEPTACLE CONTROLLED BY GFCI DEVICE SHALL BE MARKED WITH GFCI PROTECTED SYMBOL.
3. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL STRINGS.
4. REFER TO DRAWING A1.5 FOR EQUIPMENT SCHEDULE. REFER TO ARCHITECTURAL DRAWINGS FOR ISLAND DETAILS.
5. ALL EQUIPMENT WITH REMOTE CONDENSERS MOUNTED ON THE ROOF SHALL HAVE 1/2" EMPTY CONDUIT (SEE GENERAL NOTE 3) BETWEEN THE EQUIPMENT AND THE REMOTE CONDENSER FOR CONTROL CIRCUITS.
6. ELECTRICAL CONTRACTOR SHALL VERIFY ALL EQUIPMENT CONNECTIONS, MOUNTING HEIGHTS AND CORD REQUIREMENTS WITH EQUIPMENT MANUFACTURER PRIOR TO INSTALLATION. ALL EQUIPMENT SHALL BE LISTED FOR ITS INTENDED USE PER N.E.C. ART. #400.7.
7. PROVIDE HEAT TAPE FOR ALL EXPOSE PIPING. HEAT TAPE FROM THE SAME CIRCUIT SERVING EQUIPMENT. SEE MECHANICAL FOR DETAILS.
8. ELECTRICAL CONVEYANCES FROM BREAKERS TO OUTLET OR FIXTURE SHALL BE ENCLOSED WITHIN CEILING SPACE, FINISHED WALLS OR CABINETRY AND NOT BE EXPOSED. CODE 6-201.12
9. PROVIDE POWER TO SMOKE DAMPER WITH DISCONNECT. COORDINATE WITH MECHANICAL INSTALLER FOR LOCATION. CIRCUIT A-39

KEY NOTES

1. EACH FUEL ISLAND WILL HAVE THE FOLLOWING CONDUITS WITH PULL STRINGS RUN TO IT:
   (1) 1" CONDUIT - INTERCOM (4 WIRE SHIELDED CABLE WITH SHIELD)
   (1) 1" CONDUIT - UDC
   (1) 1" CONDUIT - SPARE
2. (1) 1" CONDUIT - POWER/ DATA
3. PROVIDE LABOR AND MATERIALS AS REQUIRED TO MAINTAIN EXISTING PHOTOCELL. PHOTOCELL AND CONTROLS, UNTIL PHOTOCELL CAN BE RE-INSTALLED.
4. PROVIDE J-BOX FOR HARD WIRE CONNECTION TO RE-CIRC PUMP AND AQUA-STAT TIMER. PROVIDE MOTOR RATED SWITCH PER 422.31(C). VERIFY EXACT LOCATION AND MOUNTING HEIGHT PRIOR TO ROUGH-IN.
5. JUNCTION BOX FOR AUTOMATIC FLUSH SENSOR. COORDINATE EXACT MOUNTING HEIGHT WITH MANUFACTURER INSTRUCTIONS AND PLUMBING CONTRACTOR.
6. WATER HEATER AT 208V 3PH. PROVIDE 100A 250V 3P+ E.G., NON-FUSIBLE DISCONNECT SWITCH AND HAVE THE DEVICE INSTALLED IN A READILY ACCESSIBLE LOCATION.

NOTE:

PLEASE REFER TO SHEETS A1.4 AND A1.5 FOR ADDITIONAL ELECTRICAL INFORMATION.



1 ELECTRICAL FLOOR PLAN
SCALE: 3/16" = 1'-0"

Jason C. Adams

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Date: 2022.08.17 14:09:24-05'00'

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PROJECT NAME
CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE
ELECTRICAL FLOOR PLAN

SHEET NUMBER
E2.0

JASON C. ADAMS — LICENSED — No. 75948 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

Jason C. Adams State of Florida, Professional Engineer, License No. 75948

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KEY NOTES

(1) PROVIDE WITH EMERGENCY BATTERY BACK-UP BALLAST BODINE B50.

GENERAL NOTES

A. COORDINATE ALL WORK WITH OTHER TRADES AND THE PROJECT MANAGER.

B. VERIFY LOCATION AND MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH THE ARCHITECT/OWNER PRIOR TO ROUGH-IN.

C. THE EXIT, EMERGENCY AND NIGHT LIGHT FIXTURES SHALL NOT BE SWITCHED.

D. RGS CONDUIT SHALL BE USED IN ALL EXTERIOR LOCATIONS.

E. MINIMUM CONDUIT SIZE SHALL BE 1/2".

F. MINIMUM WIRE SIZE SHALL BE #12 THHN/THWN CU.

G. ALL EXTERIOR LIGHT FIXTURES SHALL BE CONTROLLED VIA PHOTOCELL.

H. REFER TO THE PANEL SCHEDULE ON DRAWING E7.0 FOR LOAD DESIGNATIONS. THERE SHALL BE NO SHARED NEUTRALS.

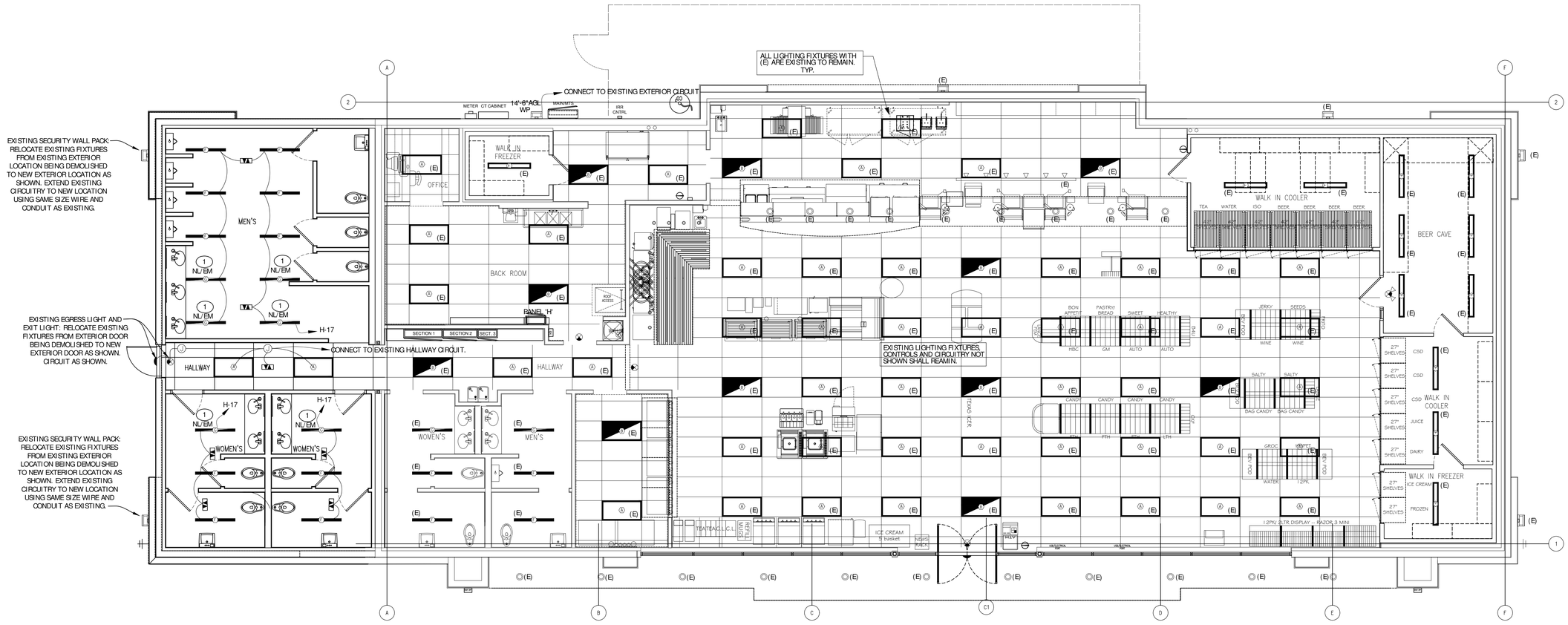
I. CONDUIT(S) SHALL NOT BE ROUTED EXPOSED ON ANY EXTERIOR WALL.

J. ALL EXTERIOR DEVICES SHALL BE WEATHERPROOF RATED.

K. REFER TO DRAWING E0.0 FOR THE LIGHT FIXTURE SCHEDULE.

L. PROVIDE STAINLESS STEEL SWITCH COVER PLATES FOR ALL CUSTOMER ACCESSIBLE AREAS. (RESTROOMS, HALLWAY, COOLER, SALES AREA).

M. ALL EMERGENCY EQUIPMENT SHALL BE LISTED TO UL 924 AND BE INSTALLED PER NEC 700.



1 ELECTRICAL LIGHTING PLAN

SCALE: 3/16" = 1'-0"

Jason C. Adams

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PROJECT NAME

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LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

LIGHTING PLAN

SHEET NUMBER

E5.0

COMcheck Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2020 Florida Building Code, Energy Conservation
Project Title: Circle K Lake City FL addition
Project Type: Addition

Construction Site:
143 NW Centurion Ct
Lake City, Arkansas 32055

Owner/Agent:
Arkansas

Designer/Contractor:
Jason C. Adams P.E.
Benchmark Group
1805 N 2nd Street
Rogers, Arkansas 72756
479-636-5004
JCA@teamofchoice.com

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Retail	842	1.06	893
		Total Allowed Watts =	893

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
1-Retail				
LED: LED Other Fixture Unit 60W:	1	16	50	800
LED: LED Panel 41W:	1	2	42	84
			Total Proposed Watts =	884

Interior Lighting PASSES: Design 1% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2020 Florida Building Code, Energy Conservation requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title _____ Signature _____ Date _____

COMcheck Software Version COMcheckWeb

Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2020 Florida Building Code, Energy Conservation
Project Title: Circle K Lake City FL addition
Project Type: Addition
Exterior Lighting Zone 2 (Neighborhood business district (LZ2))

Construction Site:
143 NW Centurion Ct
Lake City, Arkansas 32055

Owner/Agent:
Arkansas

Designer/Contractor:
Jason C. Adams P.E.
Benchmark Group
1805 N 2nd Street
Rogers, Arkansas 72756
479-636-5004
JCA@teamofchoice.com

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Net added drive and parking (Driveway)	37075 ft2	0.04	Yes	1483
Diesel Sales Canopy (Free standing/attached sales canopy)	1679 ft2	0.4	Yes	672
Illuminated area of facade wall or surface	220 ft2	0.07	No	16
			Total Tradable Watts (a) =	2155
			Total Allowed Watts =	2171
			Total Allowed Supplemental Watts (b) =	400

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Net added drive and parking (Driveway, 37075 ft2): Tradable Wattage				
LED: A48: LED Roadway-Parking Unit 42W:	1	6	184	1104
Diesel Sales Canopy (Free standing/attached sales canopy, 1679 ft2): Tradable Wattage				
LED: CAN: LED Canopy Lights: LED Panel 54W:	1	12	53	636
LED: P1: LED Linear 8W:	1	10	1	13
LED: P118: Other:	1	14	1	18
Illuminated area of facade wall or surface (220 ft2): Non-tradable Wattage				
LED: LED Other Fixture Unit 28W:	1	1	31	31
			Total Tradable Proposed Watts =	1771

Exterior Lighting PASSES: Design 30% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2020 Florida Building Code, Energy Conservation requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title _____ Signature _____ Date _____

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Jason C. Adams State of Florida, Professional Engineer, License No. 75948

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PROFESSIONAL IN CHARGE
JCA
PROJECT MANAGER
SAG
QUALITY CONTROL
SAG
DRAWN BY
ROA

PROJECT NAME
CIRCLE K STORES INC.

LAKE CITY
FLORIDA

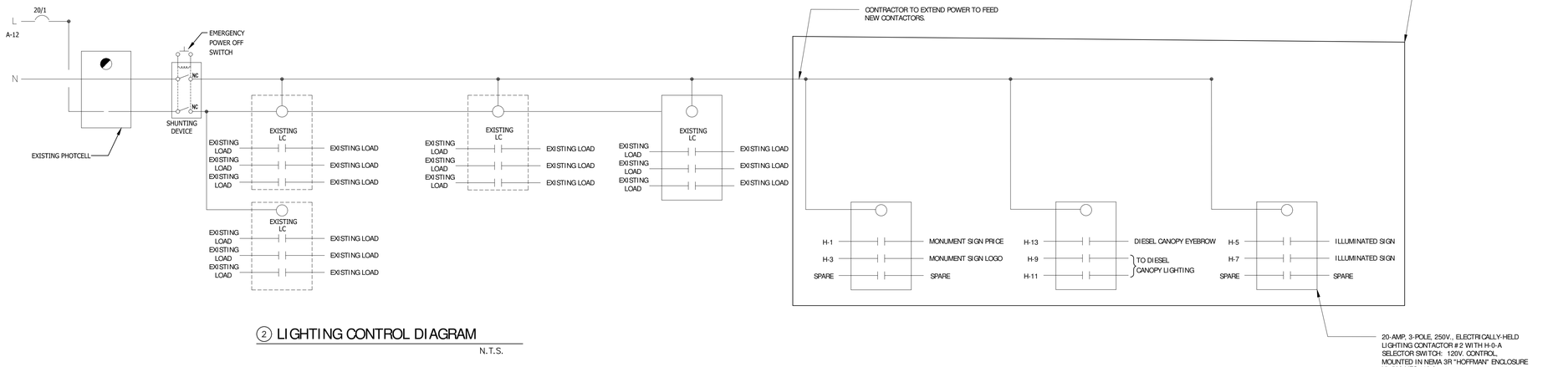
NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE
IECC COMPLIANCE REPORT

SHEET NUMBER
E5.1



(2) LIGHTING CONTROL DIAGRAM

N.T.S.

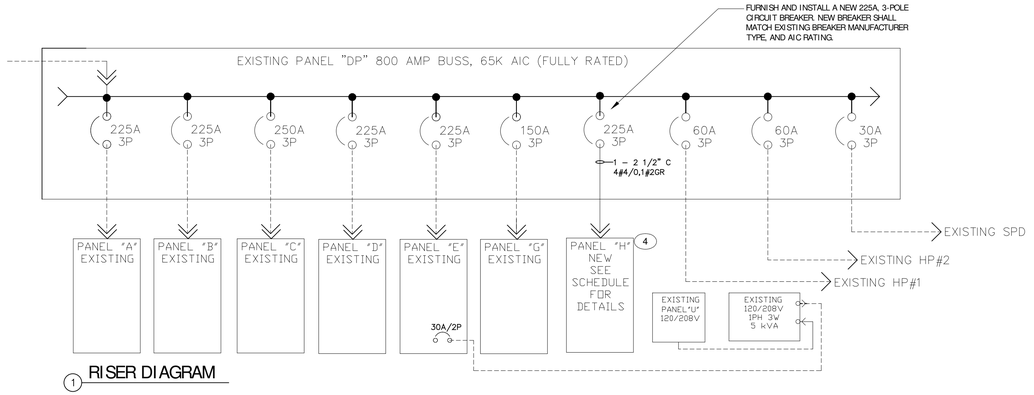
SERIES RATING KEY NOTES

(1) THIS SERVICE IS A SERIES RATED SYSTEM: 2-TIER 65/10. ALL S.E.S. SYSTEM COMPONENTS SHALL BE RATED 65K, WITH SERIES RATED DOWNSTREAM.

(2) NOT USED.

(3) CONTRACTOR SHALL LABEL PANEL(S) "CAUTION" - SERIES RATED SYSTEM ("X"). "X" AMPS AVAILABLE IDENTIFIED REPLACEMENT COMPONENT REQUIRED." IN ACCORDANCE WITH NEC 110-22. (REFER TO SHORT CIRCUIT CALCULATIONS FOR ACTUAL AMPS TO BE LABELED).

(4) CIRCUIT BREAKERS SHALL BE A BOLT-ON TYPE, U.L.-LISTED SERIES-RATED COMBINATION WITH THE BREAKERS AT DISTRIBUTION PANEL "DP".



(1) RISER DIAGRAM

PER 2017 NEC 110.24 SERVICE EQUIPMENT LEGIBLY MARKED IN THE FIELD WITH MAXIMUM AVAILABLE FAULT CURRENT AND INCLUDE THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED ON EQUIPMENT.

NOTE:
CONTRACTOR SHALL FURNISH INSTALLATION MANUAL FOR EACH EQUIPMENT SUCH AS PANELBOARD, CONTROL EQUIPMENT, ETC..

Digitally signed by Jason C. Adams
DN: Erica@teamofchoice.com, CN=Jason C. Adams, C=US
Date: 2022.08.17 14:06:37-06'00'

Jason C. Adams

rdc.

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P.E.

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1805 N 2ND ST
ROGERS, AR 72756
479-636-5004
JOB NO.: 28764
DESIGNED BY: ROA

REVISION

ISSUE	
PERMIT SET	08/15/22
BID SET	08/15/22

PROFESSIONAL SEAL

PROFESSIONAL IN CHARGE
JCA

PROJECT MANAGER
SAG

QUALITY CONTROL
SAG

DRAWN BY
ROA

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

CALCULATIONS AND SCHEMATICS

SHEET NUMBER

E6.0

JASON C. ADAMS LICENSED No. 75948 STATE OF FLORIDA PROFESSIONAL ENGINEER

Jason C. Adams State of Florida, Professional Engineer, License No. 75948

This item has been electronically signed and sealed by Jason C. Adams, PE on Aug 16, 2022 using a Digital Signature.

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PANELBOARD A | BUS RATING = 225A | VOLTAGE = 208/120V | SYSTEM = 3P, 4W | MOUNTING = CABINET | TRIM = DOOR-IN-DOOR | NEMA RATING= 1 | MAIN RATING UPSTREAM = 225A | MAIN TYPE = M.L.O. | AIC RATING= 65/10K | FULLY/SERIES = SERIES | BRANCH BREAKER TYPE = BOLT-ON | FEED TYPE = BOTTOM | TERMINATIONS = 75°C CU | BUS MATERIAL = CU | GROUND BUS (COPPER) = YES | NEUTRAL BUS (COPPER) = 100% | IG GROUND BUS (COPPER) = NO | SKIRT TYPE = NONE | SECTION # = 1

STATUS = EXIST | MANUFACTURER = CPI | PHASE SERIES = | FEED THRU LUGS = NO

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BRK SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO.
1	1	rec-water dispenser-33	20	0.18	0.80			0.62			2	2
3	1	rec-water dispenser-33	20	0.18		0.80		0.62	20/3	ltg-future canopy it fascia	2	4
5	1	red box-110	20	0.18			0.80	0.62			2	6
7	1	rec-rear receptacle	20	0.18	0.80			0.62			2	8
9	1	misc-irrigation controls	20/2	0.24		0.86		0.62	20/3	ltg-future canopy it fascia	2	10
11	1			0.84			1.46	0.62			2	12
13	1	glacier water	20	1.13	1.66			0.53			2	14
15	1	existing load	20	1.60		2.13		0.53	20/3	ltg-canopy signs	2	16
17	1	existing load	20	1.60			2.13	0.53			2	18
19	4			6.00	6.75			0.75	20/2	ltg-canopy lights	2	20
21	4	existing load	50/3	6.00		6.75		0.75			2	22
23	4			6.00			6.75	0.75	20/2	ltg-canopy lights	2	24
25	3	sand case	20	1.60	2.35			0.75			2	26
27	3	sand case	20	1.60		2.22		0.62			2	28
29	2	ltg-exterior bldg lights	20	0.64			1.26	0.62	20/3	ltg-future canopy it fascia	2	30
31	2	ltg-exterior bldg lights	20	0.64	1.26			0.62			2	32
33	2	ltg-exterior bldg lights	20	0.54		2.62		2.08	20/2	existing load	2	34
35	2	ltg-exterior parking poles	20/2	0.53			2.61	2.08			2	36
37	2	ltg-exterior parking poles		0.53	3.65			3.12	30/2	existing load	2	38
39	2			0.53		3.65		3.12			1	40
41	2	ltg-exterior parking poles	20/2	0.53			1.80	2.20		existing load	1	42
				17.27	19.03	17.34		Phase Total				
				53.63		149		Connected Amps				
				57.89		161		Demand Amps				

DEMAND LOADS MAY VARY FROM CONNECTED LOADS BECAUSE OF DEMAND FACTORS

CIRCUIT NUMBERING BY POLE POSITION
CIRCUIT BREAKERS FEEDING A/C EQUIPMENT SHALL BE "HACR" RATED

Load Codes	Load Summaries	Connected kVA	Factor	Demand kVA	Phase Amps	
0	Lighting – Non-Continuous	0.00	1.00	0.00	Phase (A)	143.89
1	Lighting – Continuous	11.05	1.25	13.82	Phase (B)	158.56
2	Receptacles	21.36	1.00	21.36	Phase (C)	144.47
3	Special Loads	3.20	1.00	3.20		
4	Motors	18.01	1.00	18.01		
5	Kitchen (Commercial)	0.00	0.65	0.00	Per Table 220.56	
6	Heating	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	Cooling	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	Computer Outlets	0.00	1.00	0.00		
10	Exterior Lighting	0.00	1.25	0.00		
11	Miscellaneous – Continuous	0.00	1.25	0.00		
12	Modular Furniture Outlets	0.00	1.00	0.00		
	Subtotals	53.63		56.39		
	Highest Motor		6.00	0.25	1.50	Spare Capacity (Amps) 64
						Spare Capacity Load (%) 29
	Total kVA	53.63		57.89		

PANELBOARD B | BUS RATING = 225A | VOLTAGE = 208/120V | SYSTEM = 3P, 4W | MOUNTING = CABINET | TRIM = DOOR-IN-DOOR | NEMA RATING = 1 | MAIN RATING UPSTREAM = 225A | MAIN TYPE = M.L.O. | AIC RATING= 65/10K | FULLY/SERIES = SERIES | BRANCH BREAKER TYPE = BOLT-ON | FEED TYPE = BOTTOM | TERMINATIONS = 75°C CU | BUS MATERIAL = CU | GROUND BUS (COPPER) = YES | NEUTRAL BUS (COPPER) = 100% | IG GROUND BUS (COPPER) = NO | SKIRT TYPE = NONE | SECTION # = 1

STATUS = EXIST | MANUFACTURER = CPI | PHASE SERIES = | FEED THRU LUGS = NO

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BRK SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO.
1	3	rec. – fountain drink & ice maker*	20	0.62	1.35			0.73	20	f-rea freeze*	3	2
3	3	rec. – fountain drink & ice maker*	20	0.62		0.92		0.30	20	blender- 35*	3	4
5	2	ltg.- led	20	0.25			0.98	0.73	20	ice cream case*	3	6
7	1	back counter equipment*	20	0.60	1.80			1.20	20	food service order screen – 86	1	8
9	3	back counter ig receptacle*	20	0.36		0.54		0.18	20	monitor	3	10
11	3	back counter uc trig*	20	0.82			2.04	1.22	20	rec. – fountain drink & ice maker*	3	12
13	1	existing load	20/2	1.80	3.69			3.33	20/2	rec. equip. 29 – coffee brewer	3	14
15	1			1.80		1.36		3.33			3	16
17	1	mech. wic –evap. Cooler	20	0.30			0.40	0.10	20	rec. equip. 89 atm	1	18
19	1	misc. – recirc. pump/aqua stat*	20	1.00	1.82			0.82	20	back counter equipment*	3	20
21	3	convey or oven	50/2	5.88		11.76		5.88	50/2	convey or oven	3	22
23	3			5.88			14.76	5.88			3	24
25	1	existing load	20/2	3.30	3.48			0.18	20	roof receptacle*	1	26
27	3			3.30		4.08		0.78	20	panni press*	3	28
29	3	drinking fountain optional	20	0.50			1.28	0.78	20	panni press*	3	30
31	2	ltg.- sales area	20	0.90	1.62			0.72	20	window ceiling receptacle	2	32
33	1	rec.– front wall	20	0.60		1.32		0.72	20	window ceiling receptacle	2	34
35	2	display neon sign	20	0.50			1.24	0.74	20	ltg. restroom/kickroom	2	36
37	2	ltg.– counter/storefront	20	1.45	2.44			0.99	20	back counter uc freeze*	3	38
39	2	ltg.– sales area	20	0.90		1.35		0.45	20	ltg. cooler/freezer	2	40
41	2			0.15			1.05	0.90	20	ltg. Sales area	2	42
				16.20	21.33	21.75		Phase Total				
				59.28		165		Connected Amps				
				60.23		167		Demand Amps				

DEMAND LOADS MAY VARY FROM CONNECTED LOADS BECAUSE OF DEMAND FACTORS

CIRCUIT NUMBERING BY POLE POSITION
CIRCUIT BREAKERS FEEDING A/C EQUIPMENT SHALL BE "HACR" RATED

Load Codes	Load Summaries	Connected kVA	Factor	Demand kVA	Phase Amps	
0	Lighting – Non-Continuous	0.00	1.00	0.00	Phase (A)	135.00
1	Lighting – Continuous	3.80	1.25	4.75	Phase (B)	177.75
2	Receptacles	7.68	1.00	7.68	Phase (C)	181.25
3	Special Loads	47.80	1.00	47.80		
4	Motors	0.00	1.00	0.00		
5	Kitchen (Commercial)	0.00	0.65	0.00	Per Table 220.56	
6	Heating	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	Cooling	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	Computer Outlets	0.00	1.00	0.00		
10	Exterior Lighting	0.00	1.25	0.00		
11	Miscellaneous – Continuous	0.00	1.25	0.00		
12	Modular Furniture Outlets	0.00	1.00	0.00		
	Subtotals	59.28		60.23		
	Highest Motor		0.00	0.25	0.00	Spare Capacity (Amps) 58
						Spare Capacity Load (%) 26
	Total kVA	59.28		60.23		

PANELBOARD C | BUS RATING = 250A | VOLTAGE = 208/120V | SYSTEM = 3P, 4W | MOUNTING = CABINET | TRIM = DOOR-IN-DOOR | EMA RATING = 1 | MAIN RATING UPSTREAM = 250A | MAIN TYPE = M.L.O. | AIC RATING= 65/10K | FULLY/SERIES = SERIES | BRANCH BREAKER TYPE = BOLT-ON | FEED TYPE = BOTTOM | TERMINATIONS = 75°C CU | BUS MATERIAL = CU | GROUND BUS (COPPER) = YES | NEUTRAL BUS (COPPER) = 100% | IG GROUND BUS (COPPER) = NO | SKIRT TYPE = NONE | SECTION # = 1

STATUS = EXIST | MANUFACTURER = CPI | PHASE SERIES = | FEED THRU LUGS = NO

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BRK SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO.
1	2	ltg-dairy cooler	20	0.60	1.83			1.23				
3	2	ltg-dairy cooler	20	0.60		1.83		1.23	30	sand case cond	1	4
5	2	ltg/heater-dairy cooler	20	0.60			1.83	1.23			1	6
7	2	ltg/heater-dairy cooler	20	0.60	1.31			0.71	20	coffee warmer	3	8
9	1	front counter ig receptacle	20	0.36		1.07		0.71	20	coffee warmer	3	10
11		ltg/heater-dairy cooler	20	0.60			2.04	1.44	20	hatco hot food display*	3	12
13	1			2.00	3.44			1.44	20	hatco hot food display*	3	14
15	1	mech. 5 –door dairy cond.	35/3	2.00		2.74		0.74	20	front counter uc unit*	3	16
17	1			2.00			2.74	0.74	20	front counter uc unit*	3	18
19	3			2.70	3.30			0.60	20	front counter receptacle	1	20
21	3	multiplex chiller #1 equip. 105	35/3	2.70		3.35		0.65	20	mech-3 dr. dairy evap cooler	3	22
23	3			2.70			3.92	1.22	20/2	hot well	3	24
25	1			2.00	3.22			1.22			3	26
27	1	mech. 7 door dairy cond.	35/3	2.00		2.25		0.25	20	sales area freezer heat tape*	3	28
29	1			2.00			2.25	0.25	20	back room freezer heat tape*	1	30
31	1			3.94	5.94			2.00			1	32
33	1	mech.– beer cave cond.	50/3	3.94		5.94		2.00	25/3	mech.– bathroom freezer	1	34
35	1			3.94			5.94	2.00			1	36
37	3			2.70	3.78			1.08	20	front counter uc unit*	1	38
39	3	multiplex chiller #2 equip. 105	40/3	2.70		3.64		0.94	20/2	existing load	1	40
41	3			2.70			3.64	0.94			3	42
				22.82	20.82	22.36		Phase Total				
				66.00		183		Connected Amps				
				75.01		208		Demand Amps				

DEMAND LOADS MAY VARY FROM CONNECTED LOADS BECAUSE OF DEMAND FACTORS

CIRCUIT NUMBERING BY POLE POSITION
CIRCUIT BREAKERS FEEDING A/C EQUIPMENT SHALL BE "HACR" RATED
ALL BREAKERS BE FULLY RATED

Load Codes	Load Summaries	Connected kVA	Factor	Demand kVA	Phase Amps	
0	Lighting – Non-Continuous	0.60	1.00	0.60	Phase (A)	190.17
1	Lighting – Continuous	36.04	1.25	45.05	Phase (B)	173.47
2	Receptacles	2.40	1.00	2.40	Phase (C)	186.33
3	Special Loads	26.96	1.00	26.96		
4	Motors	0.00	1.00	0.00		
5	Kitchen (Commercial)	0.00	0.65	0.00	Per Table 220.56	
6	Heating	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	Cooling	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	Computer Outlets	0.00	1.00	0.00		
10	Exterior Lighting	0.00	1.25	0.00		
11	Miscellaneous – Continuous	0.00	1.25	0.00		
12	Modular Furniture Outlets	0.00	1.00	0.00		
	Subtotals	66.00		75.01		
	Highest Motor		0.00	0.25	0.00	Spare Capacity (Amps) 17
						Spare Capacity Load (%) 7 %
	Total kVA	66.00		75.01		

PANELBOARD D | BUS RATING = 225A | VOLTAGE = 208/120V | SYSTEM = 3P, 4W | MOUNTING = CABINET | TRIM = DOOR-IN-DOOR | NEMA RATING = 1 | MAIN RATING UPSTREAM = 225A | MAIN TYPE = M.L.O. | AIC RATING= 65/10K | FULLY/SERIES = SERIES | BRANCH BREAKER TYPE = BOLT-ON | FEED TYPE = BOTTOM | TERMINATIONS = 75°C CU | BUS MATERIAL = CU | GROUND BUS (COPPER) = YES | NEUTRAL BUS (COPPER) = 100% | IG GROUND BUS (COPPER) = NO | SKIRT TYPE = NONE | SECTION # = 1

STATUS = EXST | MANUFACTURER = CPI | PHASE SERIES = | FEED THRU LUGS = NO

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BRK SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO.
1	3	refrigerated merch.–94*	20	0.58	1.78			1.20	20	rec-equip. 92-pastry case*	3	2
3	1	cashier counter	20	0.12		1.54		1.44	20	front counter receptacle*	3	4
5	2	cashier counter	20	0.18			1.39	1.21	20/2	men's hand dryer	1	6
7	1	front counter receptacle*	20	0.18	1.39			1.21			1	8
9	3	jetwave microwave	20/2	1.60		2.90		1.30	20	rec.–equip. 30 cappuccino	3	10
11	3			1.60			1.62	0.02	20	creamiser	3	12
13	3	jetwave microwave	20/2	1.60	2.86			1.26	20/2	froyo dispenser	3	14
15	3			1.60		2.86		1.26			3	16
17	1	gondola	20	0.18			1.44	1.26	20/2	froyo dispenser	3	18
19	3	oven convection	30/2	2.27	3.53			1.26			3	20
21	3			2.27		3.48		1.21	20/2	womens hand dryer	1	22
23	3	existing load	20	1.60			2.81	1.21			1	24
25	3	cts		0.01	0.31			0.30	20	liquor display & cig baobar	1	26
27	3			0.01		0.19		0.18	20	gondola	1	28
29	3		20/3	0.01			0.35	0.34	20	rec	3	30
31	1	existing load	20	1.60	2.81			1.21	20/2	womens hand dryer	1	32
33	3	water heater	30/2	2.23		3.44		1.21			1	34
35	3			2.23			5.53	3.30	40/2	rec-equip. 29-coffee	3	36
37	1	existing load	20	1.60	4.90			3.30			3	38
39	1	existing load	20	1.60		2.81		1.21	20/2	womens hand dryer	1	40
41	1	existing load	20	1.60			2.81	1.21			1	42
				17.58	17.21	15.95		Phase Total				
				50.74		141		Connected Amps				
				55.04		153		Demand Amps				

DEMAND LOADS MAY VARY FROM CONNECTED LOADS BECAUSE OF DEMAND FACTORS

CIRCUIT NUMBERING BY POLE POSITION
CIRCUIT BREAKERS FEEDING A/C EQUIPMENT SHALL BE "HACR" RATED

Load Codes	Load Summaries	Connected kVA	Factor	Demand kVA	Phase Amps	
0	Lighting – Non-Continuous	0.00	1.00	0.00	Phase (A)	146.48
1	Lighting – Continuous	17.20	1.25	21.50	Phase (B)	143.44
2	Receptacles	0.00	1.00	0.00	Phase (C)	132.88
3	Special Loads	33.54	1.00	33.54		
4	Motors	0.00	1.00	0.00		
5	Kitchen (Commercial)	0.00	0.65	0.00	Per Table 220.56	
6	Heating	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	Cooling	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	Computer Outlets	0.00	1.00	0.00		
10	Exterior Lighting	0.00	1.25	0.00		
11	Miscellaneous – Continuous	0.00	1.25	0.00		
12	Modular Furniture Outlets	0.00	1.00	0.00		
	Subtotals	50.74		55.04		
	Highest Motor		0.00	0.25	0.00	Spare Capacity (Amps) 72
						Spare Capacity Load (%) 32 %
	Total kVA	50.74		55.04		

PANELBOARD E | BUS RATING = 225A | VOLTAGE = 208/120V | SYSTEM = 3P, 4W | MOUNTING = CABINET | TRIM = DOOR-IN-DOOR | NEMA RATING = 1 | MAIN RATING UPSTREAM = 225A | MAIN TYPE = M.L.O. | AIC RATING= 65/22K SERIES | FULLY/SERIES = SERIES | BRANCH BREAKER TYPE = BOLT-ON | FEED TYPE = BOTTOM | TERMINATIONS = 75°C CU | BUS MATERIAL = CU | GROUND BUS (COPPER) = YES | NEUTRAL BUS (COPPER) = 100% | IG GROUND BUS (COPPER) = NO | SKIRT TYPE = NONE | SECTION # = 1

STATUS = EXISTING | MANUFACTURER = CPI | PHASE SERIES = | FEED THRU LUGS = NO

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BRK SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO.
1	3	rec-equip. 18-hot dog roller*	20	1.54	1.54			0.00	filler	space		2
3	3	rec-equip. 18-hot dog roller*	20	1.54			2.14	0.60	20	starbucks*	3	4
5	3	rec-equip. 18-hot dog roller*	20	1.54				0.60	20	rece-equip. 28–chili/chees disp*	3	6
7	3	hot dog island receptacle*	20	0.18	0.78			0.60	20	creamiser iced coffe–66*	3	8
9	3	soft serve island receptacle*	20	0.18		0.60		0.42	20	backroom receptacle*	3	10
11	3	soft serve island receptacle*	20	0.18			1.19	1.01	20	rec-equip cooler–33*	3	12
13	1	panel receptacle	20/2	0.90	1.32			0.42	20	backroom receptacle*	3	14
15	1			0.90		1.61		0.71	20/2	frozen beverage cond.@1	3	16
17	1	pizza cart	20	0.18			0.89	0.71			3	18
19	3	vitamin water*	20	0.42	0.60			0.18	30	rec-equip. 20 microwave	1	20
21	3	ice tea counter*	20	0.42		0.60		0.18	30	rec-equip 20 microwave	1	22
23	3	ice tea counter*	20	0.42			1.13	0.71	20/2	frozen beverage cond.@2	3	24
25	3	equip. 17–frozen beverage #1	20/2	0.96	1.67			0.71			3	26
27	3			2.04		2.75		0.71	20/2	frozen beverage cond.@3	3	28
29	3	equip. 17–frozen beverage #2	20/2	2.04			2.75	0.71			3	30
31	3			1.32	2.55			1.23	30/2	ice maker #1	3	32
33	3	equip. 17–frozen beverage #3	20/2	1.32		2.55		1.23			3	34
35	3			1.32			1.94	0.62	30/2	ice maker #2	3	36
37	3			3.00	3.62			0.62			3	38
39	3	existing load	25/3	3.00		3.62		0.62	30/2	ice maker #3	3	40
41	3			3.00			3.62	0.62			3	42
				12.08	13.87	13.26		Phase Total				
				39.21		109		Connected Amps				
				39.80		111		Demand Amps				

DEMAND LOADS MAY VARY FROM CONNECTED LOADS BECAUSE OF DEMAND FACTORS

CIRCUIT NUMBERING BY POLE POSITION
CIRCUIT BREAKERS FEEDING A/C EQUIPMENT SHALL BE "HACR" RATED
ALL BREAKERS BE FULLY RATED

Load Codes	Load Summaries	Connected kVA	Factor	Demand kVA	Phase Amps	
0	Lighting – Non-Continuous	0.00	1.00	0.00	Phase (A)	100.68
1	Lighting – Continuous	2.34	1.25	2.93	Phase (B)	115.58
2	Receptacles	0.00	1.00	0.00	Phase (C)	110.49
3	Special Loads	36.87	1.00	36.87		
4	Motors	0.00	1.00	0.00		
5	Kitchen (Commercial)	0.00	0.65	0.00	Per Table 220.56	
6	Heating	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	Cooling	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	Computer Outlets	0.00	1.00	0.00		
10	Exterior Lighting	0.00	1.25	0.00		
11	Miscellaneous – Continuous	0.00	1.25	0.00		
12	Modular Furniture Outlets	0.00	1.00	0.00		
	Subtotals	39.21		39.80		
	Highest Motor		0.00	0.25	0.00	Spare Capacity (Amps) 114
						Spare Capacity Load (%) 51 %
	Total kVA	39.21		39.80		

PANELBOARD G | BUS RATING = 150A | VOLTAGE = 208/120V | SYSTEM = 3P TO 1P, MIXED | MOUNTING = CABINET | TRIM = DOOR-IN-DOOR | NEMA RATING = 1 | MAIN RATING UPSTREAM = 150A | MAIN TYPE = M.L.O. | AIC RATING= 65/10K | FULLY/SERIES = SERIES | BRANCH BREAKER TYPE = BOLT-ON | FEED TYPE = BOTTOM | TERMINATIONS = 75°C CU | BUS MATERIAL = CU | GROUND BUS (COPPER) = YES | NEUTRAL BUS (COPPER) = 100% | IG GROUND BUS (COPPER) = NO | SKIRT TYPE = NONE | SECTION # = 1

STATUS = EXST | MANUFACTURER = CPI | PHASE SERIES = | FEED THRU LUGS = NO

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BRK SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO.
1	4			0.00	1.62			1.62				
3	4	dispenser 1/2	20/2	0.26		1.88		1.62	20/2	stp regular	4	4
5	4			0.00			1.62	1.62	20/2	stp premium	4	6
7	4	dispenser 3/4	20/2	0.26	1.88			1.62			4	8
9	4			0.00		1.62		1.62	20/2	stp diesel	4	10
11	4	dispenser 5/6	20/2	0.26			1.88	1.62			4	12
13	4			0.00	1.62			1.62	20/2	stp diesel #2	4	14
15	4	dispenser 7/8	20/2	0.26		1.88		1.62			4	16
17	4			0.00		1.62		1.62	20/2	stp alternate	4	18
19	4	dispenser 9/10	20/2	0.26			1.88	1.62			4	20
21	4			0.00	1.60			1.60	20	existing load	4	22
23	4	dispenser 11/2	20/2	0.26		1.86		1.60	20	existing load	4	24
25		switched neutral	–	0.00	1.60			1.60	20	existing load	4	26
27	4	dispenser 13/14	20	0.26		0.52		0.26	–	dispenser 27/22	4	28
29		switched neutral	–	0.00	0.00			0.00	20	switched neutral	4	30
31	4	dispenser 15/16	20	0.26			0.52	0.26	–	dispenser 23/24	4	32
33		switched neutral	–	0.00	0.00			0.00	20	switched neutral	4	34
35	4	dispenser 17/18	20	0.26		0.52		0.26	–	dispenser 25/26	4	36
37		switched neutral	–	0.00	0.00			0.00	20	switched neutral	4	38
39	4	dispenser 19/20	20	0.26			0.52	0.26	20	dispenser 27/28	4	40
41		space	filler	0.00	0.00			0.00	–	switched neutral	4	42
				5.10	10.42	9.12		Phase Total				
				24.64		118		Connected Amps				
				24.64		118		Demand Amps				

DEMAND LOADS MAY VARY FROM CONNECTED LOADS BECAUSE OF DEMAND FACTORS

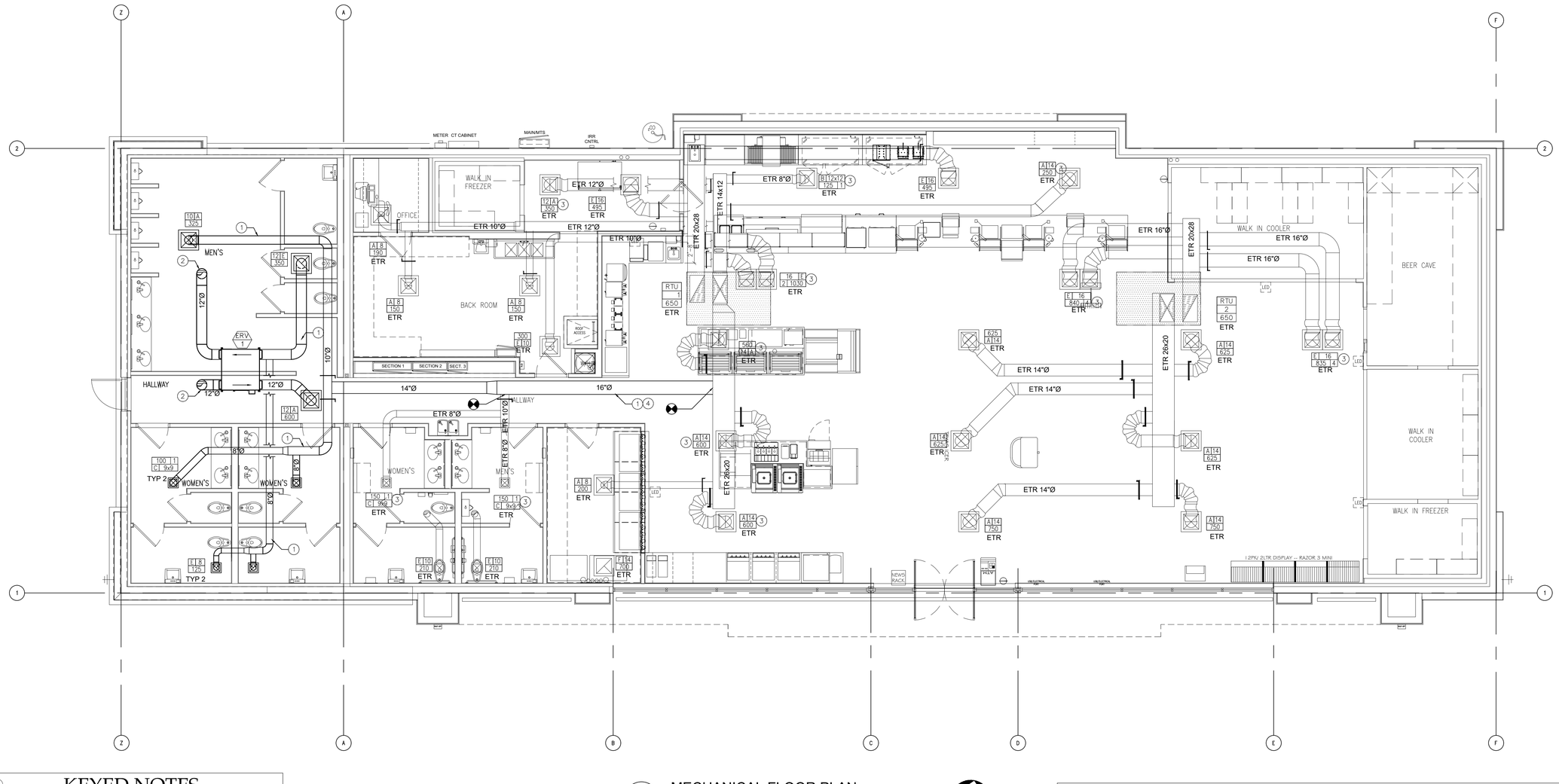
CIRCUIT NUMBERING BY POLE POSITION
CIRCUIT BREAKERS FEEDING A/C EQUIPMENT SHALL BE "HACR" RATED
ALL BREAKERS BE FULLY RATED

Load Codes	Load Summaries	Connected kVA	Factor	Demand kVA	Phase Amps	
0	Lighting – Non-Continuous	0.00	1.00	0.00	Phase (A)	42.50
1	Lighting – Continuous	0.00	1.25	0.00	Phase (B)	86.83
2	Receptacles	0.00	1.00	0.00	Phase (C)	76.00
3	Special Loads	0.00	1.00	0.00		
4	Motors	24.64	1.00	24.64		
5	Kitchen (Commercial)	0.00	0.65	0.00	Per Table 220.56	
6	Heating	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
7	Cooling	0.00	1.00	0.00	Larger of the two loads per NEC 220-60	
9	Computer Outlets	0.00	1.00	0.00		
10	Exterior Lighting	0.00	1.25	0.00		
11	Miscellaneous – Continuous	0.00	1.00	0.00		
12	Modular Furniture Outlets	0.00	1.00	0.00		
	Subtotals	24.64		24.64		
	Highest Motor		0.00	0.25	0.00	Spare Capacity (Amps) 7
						Spare Capacity Load (%) 5 %
	Total kVA	24.64		24.64		

PANELBOARD H | BUS RATING = 225A | VOLTAGE = 208/120V | SYSTEM = 3P, 4W | MOUNTING = CABINET | TRIM = DOOR-IN-DOOR | NEMA RATINGS = | MAIN RATING UPSTREAM = 225A | MAIN TYPE = M.L.O. | AIC RATING= 65/10K | FULLY/SERIES = SERIES | BRANCH BREAKER TYPE = BOLT-ON | FEED TYPE = BOTTOM | TERMINATIONS = 75°C CU | BUS MATERIAL = CU | GROUND BUS (COPPER) = YES | NEUTRAL BUS (COPPER) = 100% | IG GROUND BUS (COPPER) = NO | SKIRT TYPE = NONE | SECTION # = 1

STATUS = NEW | MANUFACTURER = CPI | PHASE SERIES = | FEED THRU LUGS = NO

| CCT NO. | LOAD CODE | LOAD DESCRIPTION | BKR SIZE | LOAD (KVA) | PHASE A | PHASE B | PHASE C | LOAD (KVA) | BRK SIZE | LOAD DESCRIPTION | LO



1 MECHANICAL FLOOR PLAN

3/16" = 1'-0"

KEYED NOTES

1. ROUTE ALL DUCTWORK WITHIN THE JOISTS UNLESS OTHERWISE SPECIFIED (TYPICAL).
2. 12" DUCT UP ROOF AND TERMINATE WITH ROOF VENT CAP WITH INSECT SCREEN.
3. REBALANCE EXISTING DIFFUSER AS SHOWN
4. REMOVE EXISTING 10" DUCT AND REPLACE WITH DUCT AS SHOWN

GENERAL NOTES

A. EQUIPMENT SHALL COMPLY WITH ASHRAE STANDARDS.

B. ALL WORK SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, LAWS, ACTS, AND AUTHORITIES HAVING JURISDICTION.

C. THE COMPLETED INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE INDUSTRY STANDARD OF GOOD PRACTICE AND SAFETY, AND THE MANUFACTURER'S STRICTEST RECOMMENDATIONS FOR EQUIPMENT AND PRODUCT APPLICATION AND INSTALLATION.

D. ALL WORK SHALL BE LOCATED TO PROVIDE ADEQUATE CLEARANCE FOR ARCHITECTURAL DESIGN AND PROPER OPERATION AND SERVICE OF EQUIPMENT.

E. FIRE SPRINKLERS AND LIGHTS TAKE PRECEDENCE OVER DIFFUSERS. CONTRACTOR TO VERIFY LOCATIONS WITH ARCHITECT.

F. ALL WORK SHALL BE LOCATED TO AVOID CONFLICTS WITH OTHER TRADES. CLOSELY COORDINATES ALL WORK WITH ALL OTHER TRADES. FAILURE OF THE CONTRACTOR TOO COORDINATE WITH ALL OTHER TRADES SHALL RELIEVE THE OWNER/ENGINEER FROM ANY ADDED COSTS.

G. DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL MAKE ANY MINOR MODIFICATIONS, INCLUDING ALL OFFSETS, TURNS, AND REROUTING REQUIRED TO COMPLETE THE INSTALLATION.

H. COORDINATE LOCATION OF ALL GRILLES, DIFFUSERS, DUCTS, ETC. WITH CEILING, LIGHTS, FIRE PROTECTION AND ARCHITECTURAL MATERIALS.

ENERGY RECOVERY VENTILATION SCHEDULE

MARK	AREA SERVED	MANUFACTURER	MODEL	CFM	E.S.P. ("W.C.)	MOTOR			WEIGHT (LB)
						MCA	MOCP	V–PH	
ERV–1	EXPANSION AREA	LOSSNAY	LGH–F600RVX2–E	600	0.86"	5.2	15	208–1	123

NOTES:

1. CONNECT TO LINE VOLTAGE, RUN CONTINUOUSLY
2. INTAKE AND EXHAUST CFM SHALL MATCH.

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PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

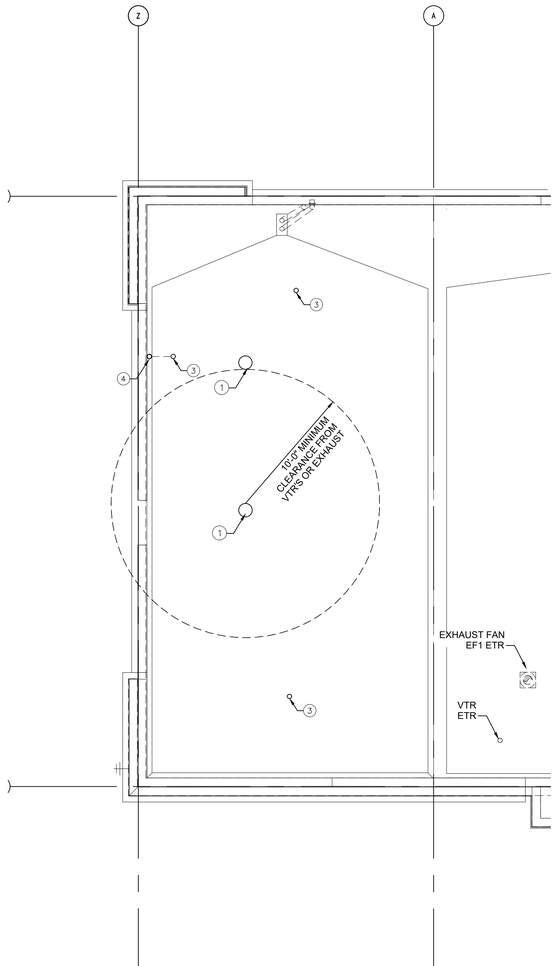
SHEET TITLE

MECHANICAL-FLOOR PLAN

SHEET NUMBER

M1.1

Drawing Name: \\rdc\Projects\2022\04\Dgn\Sheets\M1.1 Mechanical - Floor Plan.dwg Last Modified: Aug 18, 2022 - 3:20pm Plotted on: Aug 18, 2022 - 3:20pm by SHF



1 MECHANICAL ROOF PLAN
3/16" = 1'-0"

GENERAL NOTES

A. EQUIPMENT SHALL COMPLY WITH ASHRAE STANDARDS.

B. ALL WORK SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, LAWS, ACTS, AND AUTHORITIES HAVING JURISDICTION.

C. THE COMPLETED INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE INDUSTRY STANDARD OF GOOD PRACTICE AND SAFETY, AND THE MANUFACTURER'S STRICTEST RECOMMENDATIONS FOR EQUIPMENT AND PRODUCT APPLICATION AND INSTALLATION.

D. ALL WORK SHALL BE LOCATED TO PROVIDE ADEQUATE CLEARANCE FOR ARCHITECTURAL DESIGN AND PROPER OPERATION AND SERVICE OF EQUIPMENT.

E. ALL WORK SHALL BE LOCATED TO AVOID CONFLICTS WITH OTHER TRADES. CLOSELY COORDINATES ALL WORK WITH ALL OTHER TRADES. FAILURE OF THE CONTRACTOR TOO COORDINATE WITH ALL OTHER TRADES SHALL RELIEVE THE OWNER/ENGINEER FROM ANY ADDED COSTS.

(X) KEYED NOTES

1. 12" DUCT UP ROOF AND TERMINATE WITH ROOF VENT CAP WITH INSECT SCREEN.
2. PROVIDE MINIMUM 10'-0" SEPARATION FROM OUTSIDE AIR INTAKES ON SUPPLY AIR FLUE.
3. VTR'S SHOWN FOR REFERENCE ONLY, REFER TO PLUMBING DRAWINGS FOR MORE INFORMATION. PROVIDE MINIMUM 10'-0" SEPARATION FROM OUTSIDE AIR INTAKES ON HVAC UNITS.
4. 3" GREASE TRAP VENT DOWN IN WALL AND CONNECT TO GREASE TRAP.

Drawing Name: \\rdc\Projects\257\28764\Dgn\Sheets\01 M1.1 Mechanical - Roof Plan.dwg Last Modified: Aug 18, 2022 - 2:50pm Plotted on: Aug 18, 2022 - 3:00pm by SHF

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LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

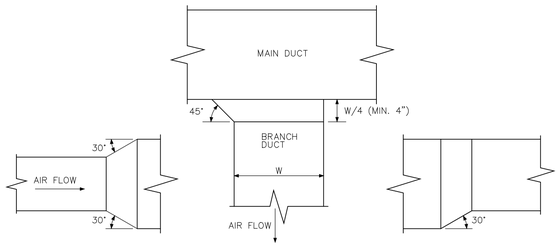
SHEET TITLE

MECHANICAL-ROOF PLAN AND DETAILS

SHEET NUMBER

M1.1.1

4625 NATIONAL PROTOTYPE - R1

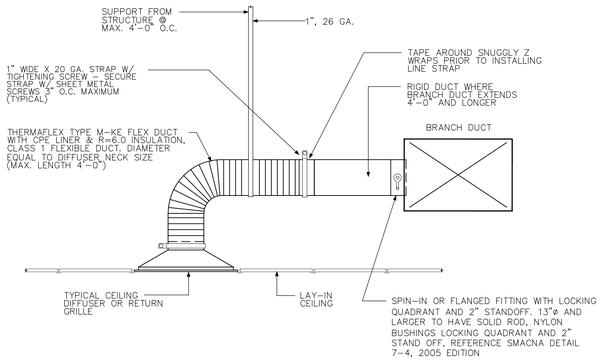


NOTE:

FABRICATE PER SMACNA DUCT CONSTRUCTION STANDARDS FIGURE #2-8.

DO NOT USE EXTRACTORS IN BRANCH DUCTWORK.

DUCT CONNECTION | 4



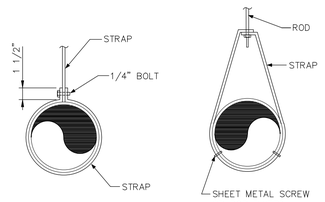
DIFFUSER/GRILLE CONNECTION DETAIL | 1

GRILLE, REGISTER, AND DIFFUSER SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	MATERIAL	MODULE	FRAME	FRONT BLADES	DAMPER
A	CEILING DIFFUSER	TITUS	TMSA	STEEL	24X24	LAY-IN	4-WAY	YES
B	CEILING DIFFUSER	TITUS	TMSA	STEEL	12X12	SURFACE MOUNT	4-WAY	YES
C	CEILING DIFFUSER	TITUS	TDC	STEEL	-	SURFACE MOUNT	4-WAY	YES
D	CEILING DIFFUSER	TITUS	TDX	STEEL	24X24	SURFACE MOUNT	3-WAY	YES
E	RETURN DIFFUSER	TITUS	23R	STEEL	-	SURFACE MOUNT	LONG	YES
F	RETURN DIFFUSER	TITUS	23R	STEEL	24X24	LAY-IN	LONG	YES
G	TRANSFER DIFFUSER	TITUS	TMSA	STEEL	24X24	SURFACE MOUNT	4-WAY	YES
H	TRANSFER DIFFUSER	TITUS	TDX	STEEL	24X24	SURFACE MOUNT	3-WAY	YES

NOTE:

FIELD PAINT ALL DIFFUSERS AND GRILLES - COLOR WHITE

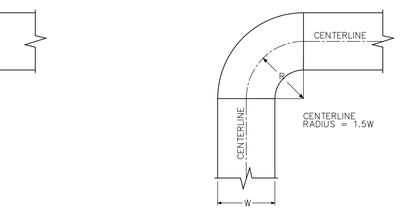


REFER TO SMACNA HVAC DUCT CONSTRUCTION STANDARDS TABLE 4-2 FOR "MINIMUM HANGER SIZES FOR ROUND DUCT".

ROUND DUCT HANGER DETAIL | 3

AIR BALANCE SCHEDULE

UNIT	O.A.	R.A.	S.A.	E.A.	PRESSURE
RTU-1	650	3350	4000	-	+650
RTU-2	650	3350	4000	-	+650
EF-1	-	-	-	210	-210
EF-2	-	-	-	210	-210
EF-3	-	-	-	700	-700
ERV-1	550	-	-	550	-
TOTALS	1,850	6700	8000	1670	180



MITERED ELBOW WITH TURNING VANES

RADIUS ELBOW

NOTE:

RADIUS ELBOWS WITH MITERED THROAT ARE NOT ALLOWED

DUCT ELBOW DETAILS | 2

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CIRCLE K STORES INC.

PROJECT NUMBER
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SHEET TITLE

MECHANICAL-DETAILS AND SCHEDULES

SHEET NUMBER

M1.2

Drawing Name: I:\rdc\Projects\22036\CAD\Dgn\Sheets\M1.2 Mechanical Details And Schedules.dgn, Last Modified: Aug 18, 2022 - 5:53pm Plotted on: Aug 18, 2022 - 3:09pm by SHF

4625 NATIONAL PROTOTYPE - R1

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AC	AIR CONDITIONING UNIT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AL	ACOUSTICAL LINING
AMP	AMPERE (AMPS)
AP	ACCESS PANEL
BF	BELOW FLOOR
BHP	BRAKE HORSE POWER
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BTU	BRITISH THERMAL UNIT
BTUH	BTU PER HOUR
BD	BACKDRAFT DAMPER
C	CELSIUS
CI	CAST IRON
CFM	CUBIC FEET PER MINUTE
CO	CLEANOUT
CONT.	CONTINUATION
D	DRAIN
Db	DECIBEL
DB	DRY BULB
DBT	DRY BULB TEMPERATURE
DIA.	DIAMETER
DX	DIRECT EXPANSION
EFF	EFFICIENCY
ENT	ENTERING
EXH	EXHAUST
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM
°F	DEGREES FAHRENHEIT
FB	FLAT BOTTOM
FCO	FLOOR CLEANOUT
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FD	FIRE DAMPER
F.G.	FILTER GAUGE
FLEX	FLEXIBLE
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FS	FLOOR SINK
FT	FLAT TOP
FT.	FEET
FSD	FIRE/SMOKE DAMPER
GA	GAUGE
GAL	GALLONS
GPM	GALLONS PER MINUTE
GPH	GALLONS PER HOUR
HB	HOSE BIBB
HD	HAND DAMPER (VOLUME DAMPER)
HORZ	HORIZONTAL
HP	HORSEPOWER
HR	HOUR(S)
IN	INCHES
KVA	KILOVOLT-AMPERE
KW	KILOWATT
KWH	KILOWATT HOUR
LBS	POUNDS
MAX	MAXIMUM
MA	MAIN AIR (CONTROLS)
MCC	MOTOR CONTROL CENTER
MIN	MINIMUM
N/A	NOT APPLICABLE
NC.	NOISE CRITERIA
NIC	NOT IN CONTRACT
#,NO.	NUMBER (QUANTITY)
NO	NORMALLY OPEN
NC	NORMALLY CLOSED
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PD	PRESSURE DROP
QTY	QUANTITY
QUAD	QUADRANT
RA	RETURN AIR
REQ	REQUIRED
RH	RELATIVE HUMIDITY
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SCD	SMOKE CONTROL DAMPER
S.DPR.	SMOKE DAMPER
SP	STATIC PRESSURE (INCHES OF WATER)
SPEC	SPECIFICATION
SQ	SQUARE
SDVV	SINGLE DUCT VARIABLE VOLUME
ST	SOUND TRAP
TEMP	TEMPERATURE
TSTAT	THERMOSTAT
TP	TOTAL PRESSURE (INCHES OF WATER)
TYP	TYPICAL
UC	UNDERCUT
V	VOLTS
VAC	VOLTS, ALTERNATING CURRENT
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VERT	VERTICAL
VTR	VENT THRU ROOF
WB	WET BULB
WCO	WALL CLEANOUT
WH	WALL HYDRANT
Z	ZONE

PIPING FLOWSTREAM ID

SYMBOL	DESCRIPTION
— D —	DRAIN LINE
— CD —	CONDENSATE DRAIN
— SCD —	SECONDARY CONDENSATE DRAIN

PIPE FITTING SYMBOLS

SYMBOL	DESCRIPTION
	ANCHOR
	ANCHOR, WALL
	BLIND FLANGE
	DROP AT END
	DROP AT MID
	TOP CONNECTION, 45° OR 90°
	BOTTOM CONNECTION, 45° OR 90°
	TEE CONNECTION
	CAPPED OUTLET
	PIPE CAP
	RISE IN PIPE
	PIPE GUIDES
	PIPE PLUG
	FLEX CONNECTION
	FLEX PIPE
	PRESSURE GAGE W/O COCK
	PRESSURE GAUGE W/ COCK
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
	STRAINER
	STRAINER, FLANGED
	SWITCH, FLOW
	SWITCH, PRESSURE
	SWITCH, TEMPERATURE
	TEST & PRESSURE (T&P) FITTING
	THERMOMETER
	UNION
	ORIFICE UNION
	FLANGED UNION
DOWN	SLOPE IN DIRECTION SHOWN (DOWN)
	DIRECTION OF FLOW
	NEW PIPING
	EXISTING PIPING TO REMAIN
	EXISTING PIPING TO BE REMOVED
	NEW PIPE CONNECTION TO EXISTING PIPING
	POINT OF NEW CONNECTION TO EXISTING

ANNOTATION SYMBOLS

SYMBOL	DESCRIPTION
X	KEYED NOTE
XXX	ROOM NUMBER
* / * / *	SYMBOL INDICATES NEW EQUIPMENT NUMBER REFERS TO SPECIFIC EQUIPMENT OUTSIDE AIR CFM REQUIRED
XX / XX	HEX SYMBOL INDICATES NEW EQUIPMENT NUMBER REFERS TO SPECIFIC EQUIPMENT IDENTIFIED IN EQUIPMENT SCHEDULE
X	REVISION TRIANGLE REVISION NUMBER
XXX / XX	DETAIL NUMBER DETAIL SYMBOL DRAWING WHERE DETAIL APPEARS
X	SECTION LETTER SECTION CUT SYMBOL
X / XXX	SECTION LETTER SECTION CUT SYMBOL DRAWING WHERE SECTION APPEARS
	NORTH ARROW
	POINT OF NEW CONNECTION TO EXISTING
	FLOW ARROWS
V12	OVAL SYMBOL INDICATES A CONTROL VALVE V-NUMBER REFERS TO A SPECIFIC VALVE IDENTIFIED IN THE CONTROL VALVE SCHEDULE

DUCTWORK SYMBOLS

SYMBOL	DESCRIPTION
12x8	RECTANGULAR DUCT, WIDTH x DEPTH (INCHES)
12"	ROUND DUCT (INCHES)
12x8?	OVAL DUCT (INCHES)
	FLEXIBLE DUCT
12x8 W/1"AL	ACOUSTICAL DUCT LINING
	FLEXIBLE CONNECTION
	SUPPLY DUCT - SECTION/ END VIEW
	RETURN DUCT - SECTION/ END VIEW
	EXHAUST DUCT - SECTION/ END VIEW
	CROSS SECTION THROUGH ROUND DUCT
	VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EXCEPT TRANSFER AIR SOUND ELBOW)
	LARGE RADIUS ELBOW
	SMALL RADIUS ELBOW
	RETURN AIR CEILING GRILLE AND RETURN AIR CEILING GRILLE WITH SOUND BOOT
	CEILING DIFFUSERS (ARROWS DENOTE THROW PATTERN IF THROW IS SOMETHING OTHER THAN 4-WAY)
	EXHAUST CEILING REGISTER OR GRILLE
	LINEAR DIFFUSER
	ROUND DIFFUSER
	SIDEWALL EXHAUST OR RETURN AIR GRILLE
	SIDEWALL SUPPLY REGISTER
	DIFFUSER UNDER DUCT
	POINT OF NEW CONNECTION TO EXISTING
T	ROOM THERMOSTAT
S	ROOM TEMPERATURE SENSOR
	DUCT SMOKE DETECTOR (DSD)
	ACCESS DOOR
	MANUAL VOLUME DAMPER (VD)
	FIRE DAMPER (FD) THROUGH WALL/ FLOOR
	FIRE/SMOKE DAMPER (FSD) THROUGH WALL/ FLOOR
M	MOTOR OPERATED DAMPER
	CONNECT NEW DUCT TO EXISTING DUCT
	EXISTING DUCT
	EXISTING DUCT TO BE REMOVED
	30° RISE(R)/DROP(D) IN DUCTWORK IN DIRECTION OF ARROW
	CONCENTRIC DUCT REDUCER
	ECCENTRIC DUCT REDUCER
	DUCT TRANSITION FROM RECTANGULAR TO ROUND
	CONICAL TAP FITTING
	SHOE TAP FITTING
	DUCT OVER/UNDER ANOTHER DUCT

SINGLE LINE DUCTWORK

SYMBOL	DESCRIPTION
N	NEW
E	EXISTING
R	RELOCATED
	NEW/RELOCATED SUPPLY DIFFUSER, NECK SIZE, AND BALANCE AIR AS INDICATED (MATCH EXISTING)
	NEW/RELOCATED RETURN GRILLE WITH BOOT (MATCH EXISTING)
	EXISTING SUPPLY DIFFUSER
	EXISTING RETURN GRILLE WITH BOOT
	RELOCATED EXISTING GRILLE OR DIFFUSER
TR	RELOCATED ROOM THERMOSTAT, ELECTRIC
TE	EXISTING ROOM THERMOSTAT, ELECTRIC
	1-1/2 X BRANCH DUCT FROM SIDE OF MAIN
	SQUARE ELBOW WITH TURNING VANES
	RADIUS TYPE 90° ELBOW
	DUCT TRANSITION
	ACCESS PANEL (AP)
	EXISTING DUCTWORK
	EXISTING DUCT TO BE REMOVED
	FLEXIBLE DUCT

DIFFUSER,REGISTER & GRILLE SYMBOLS

SYMBOL	DESCRIPTION
X XXXX / XXX X	SYMBOL (AS SHOWN ON SCHEDULE) NECK SIZE (SQUARE, RECTANGULAR OR ROUND) NO. OF TYPICAL CFM
X XX / XXX	SYMBOL (AS SHOWN ON SCHEDULE) NECK SIZE (DIA.) CFM

GENERAL NOTES

A. ALL PIPING AND DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN FURRED CHASES OR SUSPENDED CEILINGS, UNLESS OTHERWISE NOTED.

B. PROVIDE ACCESS PANELS OR DOORS IN UNACCESSIBLE CEILINGS AND/OR CHASES FOR ALL VALVES, TRAPS, DAMPERS, CLEANOUTS, COILS, FANS, CONTROLS, ETC. ACCESS DOOR RATING SHALL MATCH CLASSIFICATION OF WALL AND CEILING FIRE RATING.

C. COORDINATE THE LOCATION OF ALL DIFFUSERS, GRILLES, REGISTERS, ACCESS DOORS, ETC., WITH THE ARCHITECTURAL REFLECTED CEILING PLAN(S).

D. ALL ROUND RUNOUTS AND DROPS TO DIFFUSERS SHALL BE THE SAME NOMINAL SIZE AS THE SCHEDULED DIFFUSER NECK SIZE.

E. THE FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED. ALL DUCT SIZES SHOWN ON DRAWINGS ARE NET INSIDE DIMENSIONS.

F. PROVIDE TURNING VANES IN ALL SQUARE ELBOWS. EXCEPT TRANSFER AIR SOUND ELBOWS.

G. THE CFM OF EACH DIFFUSER, REGISTER, ETC., IS INDICATED IN THE SYMBOL DESIGNATION ON THE DRAWINGS.

H. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FIRE RATED AND/OR SMOKE RATED WALLS AND ASSEMBLIES. PROVIDE APPROVED FIRE AND FIRE/SMOKE DAMPERS IN ALL REQUIRED PENETRATIONS FOR DUCTWORK, GRILLES, REGISTERS AND DIFFUSERS. ALL PIPE AND DUCTWORK PENETRATIONS OF FIRE, SMOKE AND FULL HEIGHT WALLS SHALL BE CAULKED AIRTIGHT TO THE ADJACENT STRUCTURE BY MEANS OF U.L. APPROVED FIRE PROOF CAULKING MATERIAL.

I. CONTRACTOR SHALL COORDINATE ALL DUCTWORK, PIPING, PLUMBING AND FIRE PROTECTION PIPING WITH STRUCTURAL AND ELECTRICAL SYSTEMS AND SHALL PROVIDE NECESSARY OFFSETS TO AVOID CONFLICTS AND TO MAINTAIN EQUIPMENT ACCESS AND SERVICEABILITY.

J. CONTRACTOR SHALL FURNISH ALL NECESSARY STRUCTURES, INSERTS, SLEEVES, AND HANGING DEVICES FOR INSTALLATION OF MECHANICAL AND PLUMBING EQUIPMENT, DUCTWORK AND PIPING, ETC. CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR AND ALL BUILDING TRADES TO AVOID CONFLICTS AND TO MAINTAIN EQUIPMENT ACCESS AND SERVICEABILITY.

K. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY MISCELLANEOUS ANGLES, CHANNELS, UNISTRUT, ETC., AS MAY BE REQUIRED TO ADEQUATELY SUPPORT THE MECHANICAL PIPING, DUCTWORK, AND EQUIPMENT IN A MANNER APPROVED BY THE ARCHITECT WHICH WILL NOT OVERLOAD THE BUILDING STRUCTURAL SYSTEM.

L. CONTRACTOR SHALL PROVIDE RETURN AIR OR TRANSFER AIR OPENINGS IN FULL HEIGHT WALLS SIZED AT 500 FPM (UNLESS OTHERWISE SPECIFICALLY SHOWN ON THE DRAWINGS) TO CREATE AND/OR MAINTAIN A RETURN AIR PATH AS REQUIRED. FIRE DAMPERS AND/OR SMOKE DAMPERS SHALL BE PROVIDED IN SUCH OPENINGS WHERE REQUIRED BY NOTE "H".

M. SEAL ALL TRANSVERSE JOINTS, LONGITUDINAL SEAMS, DUCT WALL PENETRATIONS AND FITTING CONNECTIONS ON ALL DUCT SYSTEMS.

CODE INFORMATION

A. 2020 FLORIDA BUILDING CODE(FBC), 2020 FLORIDA MECHANICAL CODE (FMC), 2020 FLORIDA ENERGY CODE (FLEC) AND 2020 FLORIDA PLUMBING CODE (FPC).

ALL SYSTEMS SHALL BE IN COMPLIANCE WITH THE ABOVE CODES AS ADOPTED BY HAINES CITY, FL.

B. OUTDOOR AIR VENTILATION PROVIDED AND BASED ON CHAPTER 4, SECTION 403.2 AND TABLE 403.3.

1. SEE SHEET M1.2.2 FOR VENTILATION CALCULATIONS.

C. ALL ROOFTOP EQUIPMENT SHALL BE PERMANENTLY IDENTIFIED AS TO THE AREA SERVED WITH A RUST-PROOF METAL NAMEPLATE PER 2020 FMC.

D. DUCT SMOKE DETECTORS REQUIRED BY 2020 FMC SECTION 606 SHALL BE INSTALLED IN THE SUPPLY DUCTWORK AS SHOWN ON THE PLANS PER FMC 606.2.1, 606.2.2, 606.3, AND NFPA 72. IF A FIRE ALARM SYSTEM IS AVAILABLE, THAT THE DUCT SMOKE DETECTOR(S) SHALL BE CONNECTED TO THE FIRE ALARM SYSTEM (FMC 606.4.1) AND IF A FIRE ALARM SYSTEM IS NOT AVAILABLE, PROVIDE A VISIBLE AND AUDIBLE SUPERVISORY SIGNAL AT A CONSTANTLY SUPERVISED LOCATION TRIGGERED BY THE ACTIVATION OF A DUCT SMOKE DETECTOR. INCLUDE THE AIR DUCT DETECTOR TROUBLE INDICATOR (LED AT THE CEILING BELOW THE DUCT DETECTOR) AS REQUIRED BY FMC 606.4.1, EXCEPTION 2.

E. EQUIPMENT AND APPLIANCES SHALL BE INSTALLED AS REQUIRED BY THE TERMS OF THEIR APPROVAL, IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING, THE MANUFACTURERS INSTALLATION INSTRUCTIONS AND THIS CODE. MANUFACTURERS INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON THE JOB SITE AT THE TIME OF INSPECTION PER FMC SECTION 304.1.

F. ACCESS TO ROOF MOUNTED EQUIPMENT COMPLIES WITH 2020 FMC. SEE ARCHITECTURAL DRAWINGS FOR ROOF ACCESS DETAILS.

SYMBOLS LIST NOTES

1. SYMBOLS LISTS, NOTES, ABBREVIATIONS, ETC. ARE FOR GENERAL REFERENCE ONLY. THE PRESENCE OF SYMBOLS, NOTES, ABBREVIATIONS, ETC. DOES NOT IMPLY ITS USE ON THIS PROJECT. REFER TO DRAWINGS FOR SPECIFIC SYMBOLS, NOTES, ABBREVIATIONS, ETC. USED.

DUCT SMOKE DETECTOR TESTING

TESTING AND INSPECTION OF SMOKE CONTROL DEVICES

A. PRIOR TO TESTING SMOKE CONTROL DEVICES:

1. VERIFY PROPER OPERATION OF EACH EXISTING SMOKE DETECTOR. ACTIVATION TESTING SHALL BE PERFORMED USING "CANNED SMOKE" ACCEPTABLE TO THE AUTHORITIES HAVING JURISDICTION.
2. VERIFY ACTIVATION OF THE EXISTING SMOKE DETECTOR SHUTS DOWN THE APPROPRIATE AIR-MOVING SYSTEM(S). VERIFY ACTIVATION OF THE SMOKE DETECTOR IS SHOWN BY THE FIRE ALARM SYSTEM WHERE MONITORING IS REQUIRED.

B. INSPECTION & TESTING OF SMOKE CONTROL DEVICES:

1. TESTING OF FIRE/SMOKE DAMPERS AND SMOKE DETECTORS SHALL BE ACCOMPANIED BY THE ELECTRICIAN AND/OR THE CONTROLS SYSTEM SUPPLIER. IF THE BUILDING HAS A FIRE ALARM SYSTEM, A REPRESENTATIVE OF THE MANUFACTURER MUST BE PRESENT DURING THE TESTING.

VENTILATION VERIFICATION

AN AIR BALANCE REPORT SHOWING FRESH AIR COMPLIANCE IS REQUIRED BY THE MECHANICAL INSPECTOR FOR FINAL INSPECTION APPROVAL. VENTILATION SYSTEMS SHALL BE BALANCED BY AN APPROVED METHOD. A BALANCE REPORT SHALL VERIFY THAT THE VENTILATION SYSTEM IS CAPABLE OF SUPPLYING AIRFLOW RATES REQUIRED BY SECTION 403 (2020 FMC SECTION 403.3).

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SHF

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

MECHANICAL-NOTES

SHEET NUMBER

M1.2.3

Roy R. Payne, Jr. State of Florida, Professional Engineer, License No. 61494
This item has been electronically signed and sealed by Roy R. Payne, Jr., PE on Aug 15, 2022 using a Digital Signature.
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ROY R. PAYNE JR. LICENSED PROFESSIONAL ENGINEER No 61494 STATE OF FLORIDA

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4625 NATIONAL PROTOTYPE - R1

SECTION	MECHANICAL SPECIFICATIONS
15010 BASIC MECHANICAL REQUIREMENTS	1. ALL WORK TO BE DONE AND MATERIALS FURNISHED COMPLYING WITH APPLICABLE LAWS, AND RESOLUTIONS, INCLUDING THE CURRENTLY ENFORCED VERSIONS OF THE FLORIDA MECHANICAL CODE (F.MC.), FLORIDA PLUMBING CODE (F.P.C.), FLORIDA BUILDING CODE (F.B.C), AND LOCAL, STATE, AND FEDERAL FIRE SAFETY CODES (NFPA). 2. ALL MATERIALS USED SHALL BE NEW AND UNDAMAGED. 3. ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH CURRENT CONSTRUCTION INDUSTRY STANDARDS AND WORKMANSHIP. 4. PRIOR TO SUBMITTING A PROPOSAL, THE CONTRACTOR SHALL VISIT THE SITE AND THOROUGHLY INSPECT ALL EXISTING CONDITIONS TO ENSURE THAT THE WORK REPRESENTED ON THE DRAWINGS AND THESE SPECIFICATIONS CAN BE INSTALLED AS INDICATED. 5. AT SUBSTANTIAL COMPLETION OF THE CONSTRUCTION, FURNISH AS–BUILT PLANS TO ARCH/ENGINEER FOR APPROVAL BEFORE THEY ARE TURNED OVER TO OWNER 6. ALL MANUFACTURED EQUIPMENT, ACCESSORIES AND MATERIALS SHALL BE USED AS INTENDED BY THE MANUFACTURER, IN STRICT ACCORDANCE WITH THE MANUFACTURERS WRITTEN INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS. 7. THE MECHANICAL CONTRACTOR SHALL PROVIDE, IN ADDITION TO ANY OTHER WARRANTIES SPECIFIED, A ONE(1) YEAR FULL LABOR AND MATERIAL WARRANTY ON ALL WORKMANSHIP, MATERIAL AND EQUIPMENT FURNISHED FOR THIS PROJECT. THE CONTRACTOR SHALL REPLACE ALL DEFECTIVE WORKMANSHIP, EQUIPMENT, AND MATERIALS WITHOUT ADDITIONAL CHARGES, INCLUDING ALL REFRIGERANT CAUSED TO BE LOST BY REPAIR OF DEFECTIVE WORK OR MATERIALS. 8. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR INSTRUCTING THE OWNER IN PROPER OPERATION AND MAINTENANCE OF THE EQUIPMENT. A WIRING DIAGRAM WITH INSTRUCTIONS FOR THE OPERATION, INSTALLER'S NAME, PHONE NUMBER, MODEL, AND MAKE OF EQUIPMENT PROVIDED, ETC., SHALL BE FURNISHED TO OWNER. AT A TIME DESIGNATED, PROVIDE AN ENGINEER OR MECHANIC TO GO OVER SYSTEM WITH OWNER'S REPRESENTATIVE TO THOROUGHLY FAMILIARIZE HIM WITH THE OPERATION AND MAINTENANCE OF THE SYSTEM. 9. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL OPENINGS AND REQUIRED LINTELS NEEDED FOR GENERAL CONTRACTOR FOR THE INSTALLATION OF MECHANICAL EQUIPMENT. 10. SAWCUTS, LINTELS, HEADERS, AND STRUCTURAL MODIFICATIONS TO THE BUILDING STRUCTURE NEEDED FOR THE INSTALLATION OF MECHANICAL EQUIPMENT SHALL BE APPROVED BY THE GENERAL CONTRACTOR, BEFORE INSTALLATION. 11. IN GENERAL, OPENINGS AND REQUIRED LINTELS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING DETAILS AND TEMPLATES OF ALL OPENINGS NECESSARY FOR MECHANICAL EQUIPMENT INSTALLATION INCLUDING: HOUSING, ACCESS DOORS, INSPECTION DOORS, AND PASSAGE WAYS FOR MECHANICAL EQUIPMENT. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR SEALING CRACKS AND FINISHING ROUGH EDGES LEFT FOLLOWING MECHANICAL INSTALLATION. 12. THE USE OF THE MECHANICAL EQUIPMENT FOR HEATING, COOLING, OR DRYING DURING CONSTRUCTION IS PROHIBITED, UNLESS APPROVED BY WRITTEN DOCUMENTATION BY THE OWNER. 13. ALL OTHER MANUFACTURERS BESIDES THE SPECIFIED PRODUCT MUST BE PRE–APPROVED PRIOR TO BIDDING. SUBMIT DETAILED EQUIPMENT CUT–SHEETS AND CLEARLY IDENTIFY ANY DIFFERENCES FROM THE SPECIFIED PRODUCT. ANY EQUIPMENT SUBMITTED DURING THE REGULAR SUBMITTAL PROCESS THAT WAS NOT PRE–APPROVED WILL BE AUTOMATICALLY BE REJECTED. 14. PERMITS AND INSPECTIONS: MECHANICAL CONTRACTOR IS RESPONSIBLE TO OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND LICENSES. WHEN REQUIRED BY CODE, ALL WORK MUST BE INSPECTED AND APPROVED BY LOCAL AUTHORITIES. PRIOR TO FINAL APPROVAL, FURNISH THE ARCHITECT/OWNER WITH CERTIFICATES OF INSPECTION AND APPROVALS BY LOCAL AUTHORITIES. 15. PRIOR TO SUBMITTING BID, THE MECHANICAL CONTRACTOR SHALL CAREFULLY EXAMINE THE PLANS FOR THE PROPER FITTING OF THE MATERIAL AND APPARATUSES INTO THE BUILDING. ARRANGE WORK SCHEDULE FOR MINIMUM INTERFERENCE WITH THE WORK OF OTHER TRADES. SHOULD THE PARTICULAR EQUIPMENT PROPOSED FOR INSTALLATION REQUIRE OTHER ARCHITECTURAL, STRUCTURAL, PLUMBING, OR ELECTRICAL CONDITIONS THAT THOSE SHOWN, ARRANGE FOR SUCH SPACE BEFORE SUBMITTING BID. ALL CHANGES NECESSITATED BY THE FAILURE TO COMPLY WITH THIS CLAUSE, SHALL BE MADE AT NO ADDED EXPENSE TO THE OWNER. 16. WITHIN 10 DAYS AFTER AWARD OF CONTRACT, SUBMIT (4) COPIES OF A COMPLETE WRITTEN LIST OF ALL MAJOR ITEMS OF EQUIPMENT AND MATERIALS AS WELL AS ADDITIONAL COPIES, THAT THE CONTRACTOR MAY NEED RETURNED. THE SUBMITTAL SHALL DEFINITELY AND CLEARLY STATE WHERE SUBMITTED EQUIPMENT DOES NOT AGREE WITH THE CONTRACT DOCUMENTS, AND LIST DEVIATIONS IN COLOR OTHER THAN RED. SUBMIT ALL ITEMS AT ONE TIME AND IN A NEAT AND ORDERLY MANNER. PARTIAL LISTS WILL NOT BE ACCEPTABLE. SUBMITTALS SHALL INCLUDE MANUFACTURER'S SPECIFICATIONS, PHYSICAL DIMENSIONS AND RATINGS OF ALL EQUIPMENT SUBMITTED. SUBMITTALS SHALL BE INDEXED, SEPARATED BY DIVIDERS, AND BOUND IN LOOSE LEAF RING BINDERS.
15140 SUPPORTS AND ANCHORS	1. FURNISH PIPE AND DUCT HANGERS, WHERE REQUIRED, FIRMLY SUPPORTED FROM BUILDING STEEL, CONCRETE OR MASONRY STRUCTURE. 2. SUPPORT PIPING SYSTEMS SECURELY WHILE ALLOWING FOR PIPE AND BUILDING EXPANSION AND CONTRACTION. PROVIDE COPPER PLATED HANGERS FOR COPPER PIPE. USE ADJUSTABLE STEEL BAND HANGERS. MAXIMUM SPACING SHALL BE 5' FOR 1/2" PIPING, 7' FOR 3/4" TO 1–1/4" PIPING, AND 9' FOR 1–1/2" PIPING. 3. FURNISH MECHANICAL EQUIPMENT SUPPORTS AS DETAILED OR AS REQUIRED TO SAFELY AND PERMANENTLY CARRY THE WEIGHT OF THE EQUIPMENT.
15250 MECHANICAL INSULATION	1. INSULATE ALL METAL SUPPLY AND RETURN DUCTWORK WITH 2" FOIL BACKED FIBERGLASS INSULATION. IN UNHEATED ATTICS OR IN AREAS LOCATED ABOVE THE LINE OF BUILDING INSULATION, INSULATE ALL DUCTWORK, INCLUDING RETURN AIR AND EXHAUST AIR DUCTWORK, WITH 3" FOIL–BACKED INSULATION, AND REQUEST THAT GENERAL CONTRACTOR BLOW ATTIC INSULATION OVER THE TOP OF THE INSULATED DUCTWORK, EXPOSED SPIRAL DUCTWORK, OR DUCTWORK LOCATED WITHIN A HEATED SPACE DOES NOT REQUIRE INSULATION. 2. LINE ALL SUPPLY AND RETURN DUCTWORK WITHIN FIFTEEN (15) FEET OF SUPPLY FAN WITH 1/2" DUCT LINER TO REDUCE SOUND. 3. ALL INSULATION MATERIALS TO HAVE A FLAME SPREAD RATING OF 25 OR LESS AND SMOKE DEVELOPMENT RATING OF 50 OR LESS AS TESTED BY ASTM E–84, UL–723, NFPA 90A–90–B.

SECTION	MECHANICAL SPECIFICATIONS
15853 POWERED VENTILATORS	1. THE MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL VENTILATOR(S) AND/OR EXHAUST FAN(S) AS SHOWN AND SCHEDULED. THE UNIT(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS, AND SHALL PERFORM AT THE CONDITIONS SCHEDULED. 2. INSTALL VENTILATOR(S) AND/OR EXHAUST FAN(S) WITH CLEARANCES FOR SERVICE AND MAINTENANCE. 3. THE MECHANICAL CONTRACTOR SHALL PROVIDE ONE (1) BACKDRAFT DAMPER FOR EACH VENTILATOR AND/OR EXHAUST FAN, OR SHALL VERIFY A BACKDRAFT DAMPER HAS BEEN FACTORY INSTALLED. 4. THE MECHANICAL CONTRACTOR SHALL ADJUST DAMPER LINKAGES FOR PROPER OPERATION.
15891 METAL DUCTWORK SYSTEMS	1. ALL DUCTWORK SHALL BE CONSTRUCTED FROM HOT NEW DIPPED GALVANIZED SHEET IRON OR STEEL, ASTM A–120, IN COMPLIANCE WITH 2020 F.M.C. CHAPTER 6, AND SMACNA HVAC DUCT CONSTRUCTION STANDARDS FOR GAGE AND REINFORCEMENT. ALL DUCTWORK SHALL BE SEALED AND INSULATED IN ACCORDANCE WITH ASHRAE 90.1 2007. 2. ALL LOW VELOCITY AIR CONDITIONING SUPPLY AIR AND RETURN AIR DUCTWORK SHALL BE 2–INCH DUCT CONSTRUCTION. CONSTRUCT AND ERECT DUCTWORK IN ACCORDANCE WITH THE CURRENT ISSUES OF THE IMC, SMACNA STANDARDS AND ASHRAE HANDBOOKS. DUCTS SHALL CONFORM TO DIMENSIONS ON THE DRAWINGS UNLESS LOCATION OF STRUCTURAL MEMBERS PROHIBITS. IN CASE OF CHANGE IN DIMENSIONS, CROSS SECTIONAL AREAS SHALL BE MAINTAINED. 3. ROUND FLEX DUCT SHALL BE USED FOR DIFFUSER–GRILL CONNECTIONS ABOVE LAY–IN CEILINGS. FLEXDUCT MAY BE USED IN OTHER AREAS WHERE THE DUCT AND GRILLE ARE PERMANENTLY AND REASONABLY ACCESSIBLE. MAXIMUM FLEX DUCT LENGTH IS 5'–0" AND THE DUCTWORK SHALL BE PRE–LINED WITH 1" INSULATION. PERFORMANCE OF FLEXIBLE DUCT SHALL MEET OR EXCEED THE RIGID DUCTWORK. 4. FLEXIBLE DUCTS SHALL BE THERMAFLEX II TYPE M–KE, FACTORY FABRICATED ASSEMBLY, SPIRAL CONSTRUCTION, FIBERGLASS BLANKET INSULATION (R=6.0), AND MYLAR SHEATH. FLEXIBLE DUCTS UL LISTED FOR CLASS 0 DUCT AND COMPLY WITH NFPA–90A. 5. PAINT ALL DUCTWORK, TURNING VANES, INSULATION ECT., THAT IS VISIBLE THROUGH GRILLES, REGISTERS, OR CEILING DIFFUSERS FLAT BLACK. 6. TAPE ALL JOINTS IN SHEET METAL DUCTWORK WITH ARABOL AND CANVAS OR EQUAL ADHESIVE. 7. FLEXIBLE CONNECTIONS SHALL BE 30 OUNCE, CLOSELY WOVEN, NEOPRENE COATED GLASS FABRIC THAT IS FIRE RETARDENT, WEATHERPROOF AND AIRTIGHT, A MINIMUM OF 6" WIDTH. 8. FABRICATE ALL SHEET METAL DUCTS OF PRIME GRADE, LOCKING FORMING QUALITY GALVANIZED STEEL SHEETS USING GAUGES OF METAL AND REINFORCING BETWEEN JOINTS AS FOLLOWS 8.1. 12" AND SMALLER (LONGEST SIDE)–24 GAUGE 8.2. 13"–18" (LONGEST SIDE) – 24 GAUGE. 8.3. 19"–30" (LONGEST SIDE) – 24 GAUGE, WITH 1"x1"x1/8" ANGLES AT 5 FT. ON CENTER 8.4. 31"–42" (LONGEST SIDE) – 22 GAUGE, WITH 1"x1"x1/8" ANGLES AT 5 FT. ON CENTER 9. DUCT LINER SHALL HAVE A FLAME SPREAD AND SMOKE DEVELOPMENT 25 OR LESS AND 50 OR LESS WHEN TESTED BY ASTM E–84 (NFPA 255) METHOD. 10. INSULATE THE FIRST 10 FEET OF ALL RECTANGULAR SUPPLY AIR AND ALL RECTANGULAR RETURN AIR SHEET METAL DUCTWORK INTERNALLY WITH JOHNS–MANVILLE LINACOUSTIC RC FIBERGLASS DUCT LINER WITH REINFORCED COATING SYSTEM, THICKNESS 1" (R=6.0) AND DENSITY 1–1/2 PCF. ALL OTHER RECTANGULAR SUPPLY AIR AND RIGID ROUND DUCTWORK SHALL BE INSULATED WITH 2" THICK (R=6.0) JOHNS–MANVILLE MICROLITE DUCT WRAP WITH FSK VAPOR BARRIER.
15910 DUCT ACCESSORIES	1. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING VOLUME DAMPERS, TURNING VANES, ACCESS DOORS, VIBRATION ISOLATORS, ETC. 2. THE ACCESSORIES SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
15990 TESTING, ADJUSTING, AND BALANCING	1. THE MECHANICAL CONTRACTOR SHALL SUBCONTRACT AN AIR BALANCER TO BALANCE THE SYSTEMS DESCRIBED BELOW. 2. THE BALANCING SHALL BE COMPLETED BY AN INDEPENDENT AIR BALANCER WHO IS NOT AN EMPLOYEE OF THE MECHANICAL CONTRACTOR. 3. THE BALANCING SHALL BE DONE BY A QUALIFIED AIR BALANCER THAT HAS AT LEAST (3) YEARS OF DOCUMENTED AIR BALANCING EXPERIENCE. 4. PER COMPLIANCE WITH ASHRAE 90.1–2007, THE BALANCER SHALL SUBMIT AN AIR BALANCE REPORT TO THE ENGINEER AND CITY INSPECTOR. 5. THE BALANCE REPORT SHALL SHOW PROOF THAT THE SYSTEM HAS BEEN BALANCED TO +/– 10% OF THE DESIGNED AIRFLOW. IT IS THE MECHANICAL CONTRACTOR AND AIR BALANCER'S DUTY TO PROVIDE ACCURATE DATA, SO AREAS OF INCORRECT FLOW MAY BE DISCLOSED TO THE ENGINEER, INSPECTOR, AND OWNER. 6. ALL AIRSIDE SYSTEMS, COMPONENTS, ETC. INCLUDING SUPPLY, RETURN, OUTDOOR, AND EXHAUST AIR SYSTEMS SHALL BE BALANCED. THE BALANCER SHALL PROVIDE SHEAVES AND BELTS AS NEEDED TO PROPERLY BALANCE EQUIPMENT TO +/– 10% OF THE DESIGNED AIRFLOWS. ALL DIFFUSERS, REGISTERS, GRILLES, AND LOUVERS SHALL BE INDIVIDUALLY BALANCED AND LISTED IN THE BALANCE REPORT. ALL AIRSIDE EQUIPMENT, SUPPLY, RETURN, AND OUTDOOR AIR FLOWRATES SHALL BE LISTED IN THE BALANCE REPORT.

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SHEET TITLE
MECHANICAL-SPECIFICATIONS

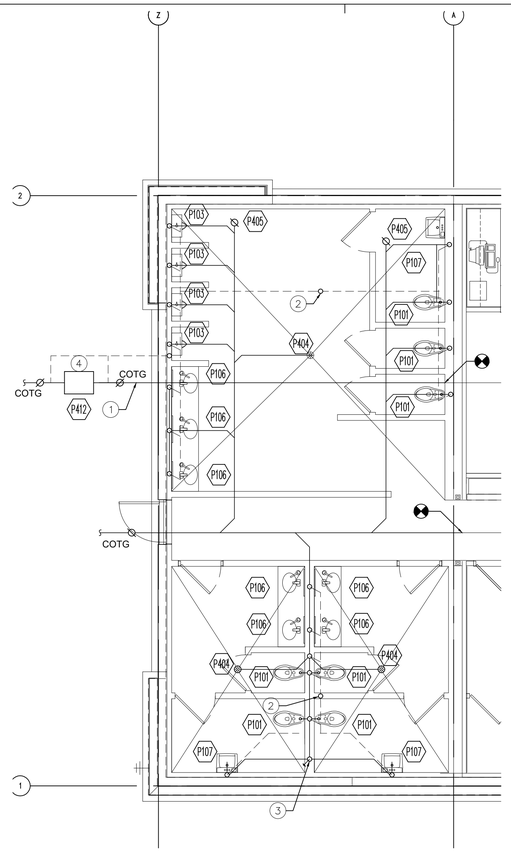
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M1.3

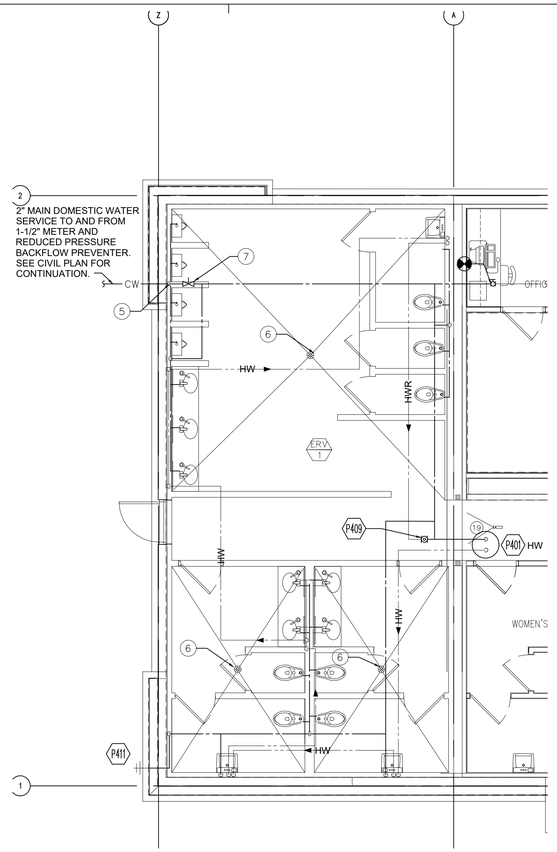
Roy R. Payne, Jr. State of Florida, Professional Engineer, License No. 61494
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ROY R. PAYNE, JR. LICENSED PROFESSIONAL ENGINEER No 61494 STATE OF FLORIDA

Drawing Name: J:\rdc\Projects\20\22036\04\Dwg\Sheets\01 M1.3 Mechanical Specifications.dwg Last Modified: Aug 14, 2022 – 6:10pm Plotted on: Aug 18, 2022 – 3:32pm by SHF

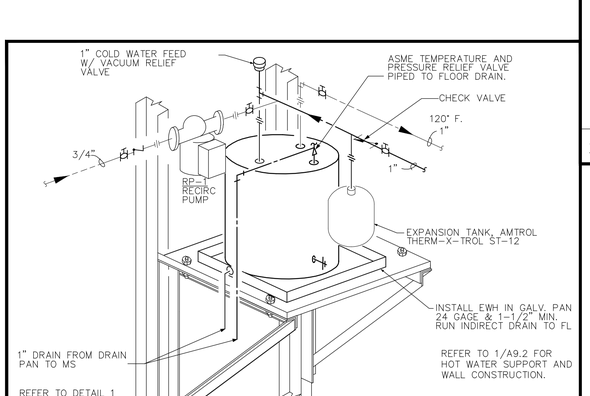
4625 NATIONAL PROTOTYPE – R1



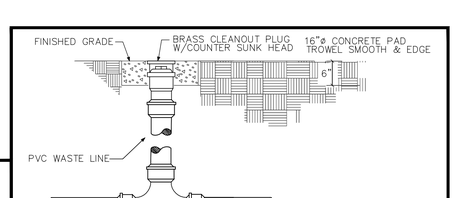


5 WASTE & VENT
3/16" = 1'-0"

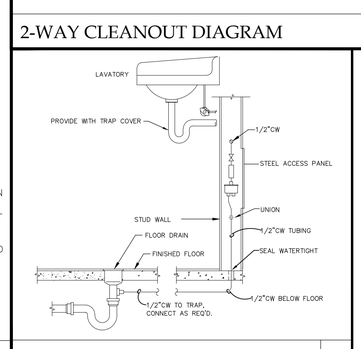
4 HOT & COLD WATER
3/16" = 1'-0"



WALL MOUNTED ELECTRIC WATER HEATER | 2



2-WAY CLEANOUT DIAGRAM | 3



TRAP PRIMER ASSEMBLY | 1

PLUMBING SYMBOL LIST

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
— — — —	VENT LINE (V)	—⋈—	SHUT OFF VALVE (GATE)
—— · ——	COLD WATER (C.W.)	—⊣/—	CHECK VALVE
—— •• ——	HOT WATER (H.W.)	——⊣	HOSE BIBB (H.B.)
—— ••• ——	HOT WATER RETURN	Ø C.O.T.G.	CLEANOUT TO GRADE
—— G ——	GAS LINE	Ø F.C.O.	FLOOR CLEANOUT
⊘	FLOOR DRAIN (F.D.)	—H	WALL CLEANOUT

FSYM-1

PLUMBING ABBREVIATIONS

SYMBOL	DESCRIPTION
SAN	SANITARY WASTE
GW	GREASE WASTE
HW	HOT WATER
CW	COLD WATER
HWR	HOT WATER RETURN

NOTE: ONLY THOSE SYMBOLS SHOWN ON THE DRAWING APPLY

KITCHEN EQUIPMENT LIST (XXXX)

- (P101) TOILET
- (P103) URINAL
- (P106) WALL MOUNTED LAVATORY
- (P107) WALL MOUNTED LAVATORY
- (P401) ELECTRIC WATER HEATER
- (P404) FLOOR DRAIN W/TRAP PRIMER
- (P405) FLOOR CLEANOUT
- (P411) HOSE BIB
- (P412) RELOCATED RECESSED GREASE TRAP

KEYED NOTES (X)

1. CONTRACTOR TO COORDINATE UNDERGROUND SEWER LINE TO AVOID COLUMN FOOTING.
2. 3" VTR. MAINTAIN 10'-0" FROM ALL OUTDOOR AIR INTAKES.
3. PROVIDE WALL CLEANOUT. REFER TO SHEET P1.2
4. EVERY DRY VENT SHALL RISE VERTICALLY TO A POINT NOT LESS THAN 6 INCHES ABOVE THE FLOOD LEVEL RIM OF THE HIGHEST TRAP OR TRAPPED FIXTURE BEING VENTED BEFORE CONNECTING TO ANOTHER VENT. PROVIDE CLEANOUTS ON UNDERSLAB VENTS.
5. MAIN WATER SUPPLY LINE UP WALL TO ABOVE CEILING, COORDINATE EXACT LOCATION.
6. PROVIDE TRAP PRIMER FOR FLOOR DRAIN, CONNECT WITH NEAREST COLD WATER LINE.
7. SHUT-OFF (BALL VALVE) ABOVE CEILING. PROVIDE ACCESS (TYPICAL).

Roy R. Payne, Jr. State of Florida, Professional Engineer, License No. 61494

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REVISION

ISSUE	
OTP	08/03/22

PROFESSIONAL SEAL

PROFESSIONAL IN CHARGE
RRP
PROJECT MANAGER
SAG
QUALITY CONTROL
RRP
DRAWN BY
SHF

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER
22036

SHEET TITLE

PLUMBING FLOOR PLAN AND DETAILS

SHEET NUMBER

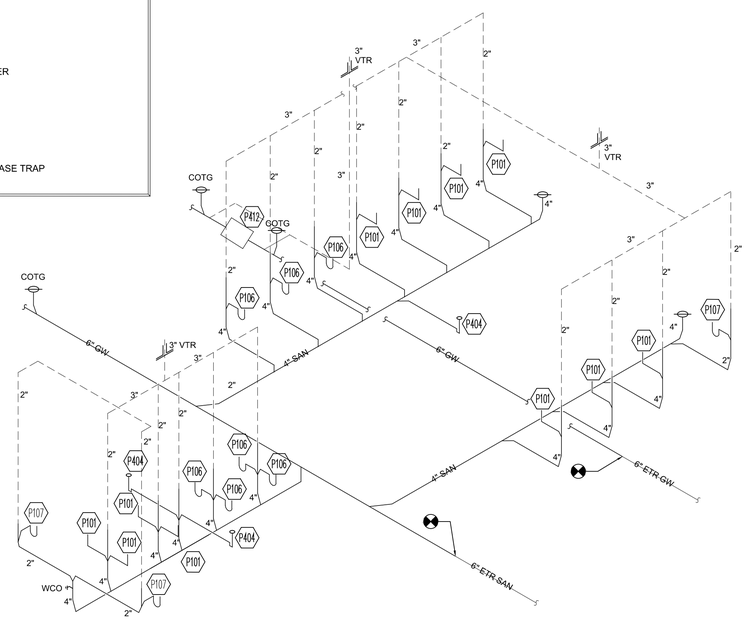
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4625 NATIONAL PROTOTYPE - R1

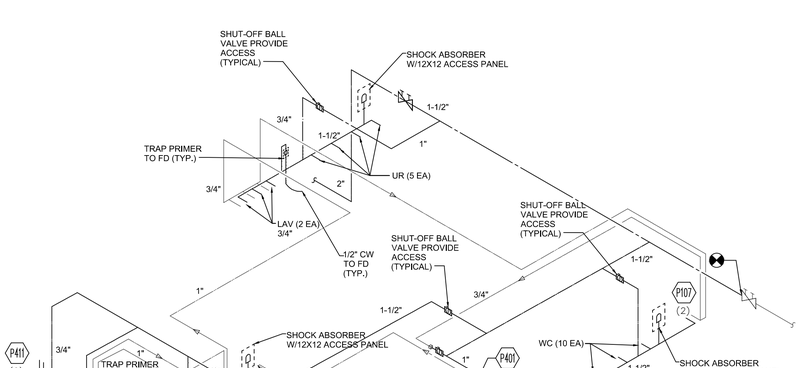
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PLUMBING EQUIPMENT LIST

- P101 TOILET
- P103 URINAL
- P106 UNDERMOUNT LAVATORY
- P107 WALL MOUNTED LAVATORY
- P401 ELECTRIC WATER HEATER
- P404 FLOOR DRAIN W/TRAP PRIMER
- P405 FLOOR CLEANOUT
- P409 CIRCULATION PUMP
- P411 HOSE BIB
- P412 RELOCATED RECESSED GREASE TRAP



WASTE & VENT SCHEMATIC



HOT & COLD WATER SCHEMATIC

PLUMBING FIXTURE SCHEDULE

TAG	DESCRIPTION	MFG.	MODEL	ROUGH-IN SIZE CW	HW	FW	SAN	QTY. OF FIXTURES	TRIM	REMARKS
P101	TOILET	AMERICAN STANDARD	3043.001	1"	–	–	4"	7	OPEN FRONT SEAT, OLSONITE #10CC	WATER CONSERVATION 1.28 GALLONS PER FLUSH.
P102	TOILET FLUSH VALVE	SLOAN	111-ESS-1.28-TMO-HW					7	AUTOMATIC, HARDWIRED.	
P103	URINAL	AMERICAN STANDARD	6590.001	3/4"	–	–	2"	4	WATER CONSERVATION 0.5 GALLONS PER FLUSH.	WALL BRACKET SUPPORT SET AT ELEV. TO MEET ADA
P104	URINAL FLUSH VALVE	SLOAN	186-ESS-0.5-TMO-HW					4	AUTOMATIC, HARDWIRED.	
P106	RESTROOM UNDERMOUNT LAVATORY BOWL	ROYSTON	INTERGRATED	3/8"	3/8"	–	1-1/4"	7	ZURN #Z6915-XL. PROVIDE WITH F FLOW CONTROL. PROVIDE WITH TRAP COVER – TRUEBRO MODEL# 100 E-Z OR EQUAL	CHROME STOPS 1/4 TURN, SUPPLIES INSUL SUPPLIES & TRAP PER ADA. ASSE 1070 CERTIFIED MIXING VALVE SET TO 110°F.
P107	RESTROOM WALL MOUNTEDLAVATORY BOWL	AMERICAN STANDARD	9047.044	3/8"	3/8"	–	1-1/4"	3		CHROME STOPS 1/4 TURN, SUPPLIES INSUL SUPPLIES & TRAP PER ADA ASSE 1070 CERTIFIED MIXING VALVE SET TO 110°F.
P401	ELECTRIC WATER HEATER	BRADFORD WHITE	LE230LN3-3	3/4"	3/4"	–	–	1	3/4" P & T RELIEF VALVE	26 GAL STORAGE. ELECTRICAL, 25 KW, 208V, 3PH.
P404	FLOOR DRAIN WITH TRAP PRIMER	WADE	1002STD6.1	–	–	–	–	3	SATIN STRAINER	–
P405	FLOOR CLEANOUT	J.R. SMITH	4100 SERIES	–	–	–	4"	2	NICKEL BRONZE TOP	TWST TO FLOOR ADJUSTMENT
P409	RECIR. PUMP	TACO	T003-BC4	–	–	–	–	1	BRONZE CONTRUCTION	120V/1-PH, 1/40 HP, PROVIDE AQUASTAT W/TIMER
P411	HOSE BIBB	MIFAB	MHY-35	3/4"	–	–	–	1	ANTI-SIPHON VACUUM BREAKER PROTECTED	VANDAL RESISTANT VACUUM BREAKER

(1) TRAP PRIMER WITH THREADED CONNECTIONS EQUAL TO PRECISION PLUMBING PRODUCTS OREGON #1 PO-500 SINGLE.

(2) LAVATORY CARRIER CONCEALED ARMS, EQUAL TO WADE 520. (3) VERIFY VOLTAGE/PHASE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING.

PLUMBING PROJECT NOTES

A. FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, FEES, PERMITS, CERTIFICATE OF INSPECTION, ETC. NECESSARY OR REASONABLE, REQUIRED FOR THE COMPLETE INSTALLATION OF ALL PLUMBING WORK.

B. WORK SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES, LAWS, ACTS, ORDINANCES, REGULATIONS AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.

C. THE COMPLETED INSTALLATION SHALL BE IN ACCORDANCE WITH ALL THE APPLICABLE INDUSTRY STANDARDS OF GOOD PRACTICE, SAFETY, AND THE MANUFACTURERS STRICTEST RECOMMENDATIONS FOR EQUIPMENT AND PRODUCT APPLICATION AND INSTALLATION.

D. THESE DRAWINGS ARE DIAGRAMMATIC ONLY. CONTRACTOR SHALL MAKE MODIFICATIONS INCLUDING OFFSETS, TURNS, AND RE-ROUTING REQUIRED TO COMPLETE THE INSTALLATION. DO NOT SCALE LOCATION OF EQUIPMENT OR PIPING.

E. COORDINATE ALL PLUMBING WORK, INCLUDING EQUIPMENT AND PIPING, WITH OTHER TRADES PRIOR TO WORK.

F. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING EQUIPMENT SO THAT NO INTERFERENCES ARE ENCOUNTERED WITH OTHER EQUIPMENT OR WITH STRUCTURAL ELEMENTS.

G. ALL PLUMBING WORK IS TO RUN IN A NEAT AND PROFESSIONAL MANNER, WITH THE AESTHETICS OF THE FACILITY OF PARAMOUNT IMPORTANCE. ALL ROUGH-IN WORK TO BE HIDDEN WITHIN WALLS AND ABOVE CEILING UNLESS OTHERWISE NOTED.

H. ALL WORK SHALL BE LOCATED TO AVOID CONFLICTS WITH OTHER TRADES. CLOSELY COORDINATE ALL WORK WITH ALL OTHER TRADES. FAILURE OF THE CONTRACTOR TO COORDINATE WITH ALL OTHER TRADES SHALL RELIEVE THE OWNER FROM ANY ADDED COSTS.

I. THE CONTRACTOR SHALL DO ALL NECESSARY CUTTING OF WALLS AND CEILING. PATCH AROUND ALL OPENINGS TO MATCH EXISTING CONSTRUCTION. NO STRUCTURAL MEMBER SHALL BE CUT WITHOUT PERMISSION FROM THE ENGINEER.

J. THESE DRAWINGS ARE DIAGRAMMATIC ONLY. DO NOT SCALE LOCATIONS OF FIXTURES, EQUIPMENT, LINES, ETC. COORDINATE ALL DOCUMENTS AS TO PROPER LOCATIONS OF ALL EQUIPMENT AND MATERIALS.

K. EXACT LOCATION OF PLUMBING FIXTURES SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS.

L. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS OF SEWERS TO WHICH NEW WASTE LINES ARE TO BE CONNECTED BEFORE MAKING UP OR INSTALLATION OF NEW WASTE SYSTEM.

M. NO PIPING OR EQUIPMENT SHALL BE INSTALLED ABOVE ELECTRICAL EQUIPMENT OR INSTALLED IN ELECTRICAL ROOMS.

N. WASTE AND SOIL PIPING SHALL BE SLOPED AT 1/8" PER FOOT UNLESS OTHERWISE NOTED ON PLANS.

O. DO NOT SUSPEND ANY PIPING, ACCESSORIES, OR ANY OTHER ITEMS FROM 2X JOIST IN PANELIZED ROOF SYSTEM OR THE STEEL ROOF DECK ITSELF. ALL SUPPORTS SHALL CONFORM TO TRUSS MANUFACTURERS RECOMMENDATIONS.

P. SUBMIT ACCURATE "AS-BUILT" DRAWINGS TO OWNER UPON PROJECT COMPLETION.

Q. PROVIDE A READY-TO-USE SYSTEM WITH ALL WORK GUARANTEED IN WRITING AGAINST DEFECTIVE WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR MINIMUM FROM OWNER OCCUPANCY UNLESS ARCHITECT SPECIFIES A LONGER WARRANTY TERM.

R. FINISHED SURFACES ARE TO BE PATCHED AND FINISHED TO MATCH EXISTING SURFACES WHEN ROUGH-IN PIPING AND FIXTURES ARE REMOVED AND/OR RELOCATED.

S. AVOID COLUMN AND WALL FOOTING FOUNDATION.

SECTION	PLUMBING SPECIFICATIONS
15010 BASIC MECHANICAL REQUIREMENTS	1. ALL WORK TO BE DONE AND MATERIALS FURNISHED COMPLYING WITH APPLICABLE LAWS AND REGULATIONS, INCLUDING THE 2020 STATE OF FLORIDA MECHANICAL, PLUMBING AND FIRE SAFETY CODES. OBTAIN AND PAY FOR REQUIRED PERMITS AND FEES. 2. ALL MATERIALS USED SHALL BE NEW AND UNDAMAGED. 3. ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH CURRENT CONSTRUCTION INDUSTRY STANDARDS AND WORKMANSHIP. 4. FURNISH SHOP DRAWINGS TO ARCH/ENGINEER FOR APPROVAL PRIOR TO PLACING DELIVERY ORDERS. PROVIDE SHOP DRAWINGS OF ALL MANUFACTURED EQUIPMENT AND MATERIALS EXCEPT PIPE, PIPE FITTINGS AND GALVANIZED DUCTWORK. 5. FURNISH ACCESS DOORS (RATED OR NON-RATED AS REQUIRED) WHERE VALVES OR EQUIPMENT ARE CONCEALED BEHIND A NON ACCESSIBLE CEILING OR WALL. FURNISH ACCESS DOORS TO GENERAL CONTRACTOR FOR INSTALLATION. 6. FURNISH STEEL PIPE SLEEVES WHERE PIPES PENETRATE RATED WALLS. PROVIDE FIRESTOPPING MATERIALS AND SYSTEM TO MAINTAIN THE REQUIRED RATING OF THE WALL PENETRATED. PROVIDE SHOP DRAWINGS SHOWING LISTING AND RATING OF FIRESTOPPING MATERIALS. 7. ALL MANUFACTURED EQUIPMENT, ACCESSORIES AND MATERIALS SHALL BE USED AS INTENDED BY THE MANUFACTURER IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS. 8. CONTRACTOR SHALL PROVIDE IN ADDITION TO ANY OTHER WARRANTIES SPECIFIED, A ONE YEAR FULL LABOR AND MATERIAL WARRANTY ON ALL WORKMANSHIP, MATERIAL AND EQUIPMENT FURNISHED FOR THIS PROJECT. 9. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL OPENINGS AND REQUIRED LINTELS NEEDED FOR THE GENERAL CONTRACTOR FOR THE INSTALLATION OF MECHANICAL EQUIPMENT. 10. SAWCUTS, LINTELS, HEADERS, AND STRUCTURAL MODIFICATIONS TO THE BUILDING STRUCTURE NEEDED FOR THE INSTALLATION OF MECHANICAL EQUIPMENT SHALL BE APPROVED BY THE GENERAL CONTRACTOR, BEFORE INSTALLATION. 11. IN GENERAL, OPENINGS AND REQUIRED LINTELS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR PROVIDING DETAILS AND TEMPLATES OF ALL OPENINGS NECESSARY FOR MECHANICAL EQUIPMENT INSTALLATION INCLUDING: HOUSING, ACCESS DOORS, INSPECTION DOORS, AND PASSAGEWAYS FOR MECHANICAL EQUIPMENT. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR SEALING CRACKS AND FINISHING ROUGH EDGES LEFT FOLLOWING MECHANICAL INSTALLATION. 12. APPROVAL EQUALS: PLUMBING ITEMS MANUFACTURED BY A COMPANY OTHER THAN THAT WHICH WAS SPECIFIED IN THE SCHEDULE MAY BE SUBSTITUDED BY APPROVED SHOP DRAWINGS CONTIGENT UPON MEETING THE DESIGN, APPEARANCE, AND FUNCTIONAL STANDARDS ESTABLISHED BY THE ORIGINALLY SPECIFIED ITEM(S). THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING DIMENSIONS, CLEARANCES, ASSEMBLY, FIT, ETC. OF THE APPROVED EQUAL(S), AND THEIR AFFECT ON OTHER EQUIPMENT FIT AND OPERATION. THE CONTRACTOR IS LIABLE FOR ANY ADDED COSTS TO HIMSELF OR OTHERS CAUSED BY THE APPROVED EQUALS.

SECTION	PLUMBING SPECIFICATIONS
15100 VALVES	1. BALL VALVES SHALL BE CLASS 125 FOR WATER WITH ENDS AND MATERIALS TO MATCH PIPING SYSTEMS. 2. BALL VALVES 2" AND SMALLER SHALL HAVE BRONZE BODY, STAINLESS STEEL BALL, TEFLON SEATS, AND STUFFING BOX RING, LEVER HANDLE AND BALANCING STOPS, ENDS TO MATCH PIPING SYSTEM.
15140 SUPPORTS & ANCHORS	1. FURNISH PIPE AND DUCT HANGERS, WHERE REQUIRED, FIRMLY SUPPORTED FORM BUILDING STEEL, CONCRETE OR MASONRY STRUCTURE. SUPPORT PIPING SYSTEMES SECURELY WHILE ALLOWING FOR PIPE AND BUILDING EXPANSION AND CONTRACTION. PROVIDE COPPER PLATED HANGERS, FOR COPPER PIPE. USE ADJUSTABLE CLEVIS HANGERS OR ADJUSTABLE STEEL BAND HANGERS. MAXIMUM SPACING SHALL BE 5' FOR 1/2" PIPING, 7' FOR 3/4" TO 1/4" PIPING, 9' FOR 1-1/2" TO 2" PIPING. FURNISH PLUMBING EQUIPMENT SUPPORTS AS DETAILED OR AS REQUIRED TO SAFELY AND PERMANENTLY CARRY THE WEIGHT OF THE EQUIPMENT.
15250 PLUMBING INSULATION	1. INSULATE ABOVE FLOOR WATER PIPING WITH ELASTOMERIC PLACTIC PERFORMED PIPE INSULATION WITHOUT JACKETING. ALL INSULATING MATERIALS TO HAVE FLAME SPREAD RATING OF 25 OR LESS AND SMOKE DEVELOPMENT RATING OF 50 OR LESS AS TESTED BY ANSI/ASTM E 84 (NFPA 233) METHOD. INSULATE ALL PIPING WITH SURFACE TEMPERATURES BELOW 75 DEGREE F WITH 1/2" INSULATION. INSULATE ALL PIPING WITH SURFACE TEMPERATURES 75 DEGREES F AND HIGHER WITH 1" THICK INSULATION. INSTALL MINIMUM 1" INSULATION ON ALL HOT WATER PIPING AND THE FIRST 8' OF COLD WATER PIPING AT THE TANK. JOINTS IN INSULATION SHALL BE GLUED, NOT TAPED. WHERE PIPES ARE EXPOSED AND LESS THAN 8' ABOVE FLOOR, PROVIDE HEAVY DUTY METAL JACKETING OVER INSULATION. INSULATE ABOVE FLOOR HORIZONTAL STORM PIPING WITH 1" FIBERGLASS PERFORMED PIPE INSULATION WITH FACTORY APPLIED ALL PURPOSE COVER.
15411 WATER DISTRIBUTION SYSTEM	1. ABOVE GRADE, WATER PIPING SHALL BE TYPE L COPPER ASTM B 75, ASTM B 88, ASTM 251, ASTM B 447 WITH WROUGHT COPPER SOLDER-JOINT FITTINGS ASME B 16. 2. BELOW GRADE: WATER PIPING SHALL BE TYPE K COPPER WITH WROUGHT COPPER SOLDER-JOINT FITTINGS. SOLDER SHALL BE 9596-396 TIN-ANTIMONY ANSI/ASTM B 32 FOR HEATING SYSTEM PIPING. THOROUGHLY FLUSH AND CLEAN ALL NEW AND EXISTING WATER PIPING SYSTEMS. TEST ALL PIPING SYSTEMS PER REGULATIONS IN ITEM NO.1 OR AT 225 PSI FOR A MINIMUM OF 2 HOURS WITH NO PRESSURE DROP INDICATED PRIOR TO INSULATING. 3. STERILIZE ALL DOMESTIC WATER PIPING PRE REQUIREMENTS OF LOCAL HEALTH DEPARTMENT.
15420 DRAINAGE & VENT SYSTEMS	1. WITHIN BUILDING, SCHEDULE 40 PVC, DWV TYPE PIPE AND SOLVENT WELDED PIPE FITTINGS, SCHEDULE 30 PVC PIPE MAY BE USED FOR VENT PIPING WHERE PERMITTED BY CODE. HORIZONTAL PIPE SHALL BE SUPPORTED BY ADJUSTABLE RING HANGERS EQUAL TO ITT-GRINNEL FIG. 97. VERTICAL PIPING SHALL BE SUPPORTED AT EACH FLOOR OR ATTIC LEVEL BY RISER.
15440 PLUMBING FIXTURES	1. PROVIDE AIR CHAMBERS AT EACH FIXTURE CONNECTION. AIR CHAMBERS SHALL BE ONE SIZE LARGER THAN SUPPLY PIPE AND SHALL BE 12" LONG. WHERE REQUIRED BY PLUMBING CODE, FURNISH AND INSTALL MANUFACTURED WATER HAMMER ARRESTORS. 2. PLUMBING FIXTURES SHALL BE INSTALLED WHERE SHOWN ON THE ARCHITECTURAL DRAWINGS. INSTALL FIXTURES LEVEL AND PLUMB. FURNISH TRAPS WHERE REQUIRED. FIXTURES SHALL BE EASILY REMOVABLE FOR SERVICE AND CLEANING. 3. PROVIDE CHROME PLATED RIGID OR FLEXIBLE SUPPLIES TO FIXTURES WITH STOP VALVES, CHROME PLATED 17 GAUGE BRASS TRAPS WITH CHROME PLATED ESCUTCHEONS. 4. SEAL ALL FIXTURES TO WALL AND FLOOR USING SILICONE SEALANT. MATCH SEALANT COLOR TO FIXTURE COLOR. 5. FIXTURES DESIGNATED BARRIER FREE SHALL BE INSTALLED IN COMPLIANCE WITH AMERICAN'S WITH DISABILITIES ACT. 6. ALL CLEANOUT COVERS TO BE STAINLESS STEEL.

Roy R. Payne, Jr. State of Florida, Professional Engineer, License No. 61494
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ROGERS, AR 72756 DESIGNED BY: SHF

REVISION

ISSUE	
PERMIT SET	08/15/22
BID SET	08/15/22

PROFESSIONAL SEAL

PROFESSIONAL IN CHARGE RRP
PROJECT MANAGER SAG
QUALITY CONTROL RRP
DRAWN BY SHF

PROJECT NAME

CIRCLE K STORES INC.

LAKE CITY
FLORIDA

NWC I-75 & W. US HWY 90
LAKE CITY, FL 32055

CIRCLE K STORES INC.

PROJECT NUMBER 22036

SHEET TITLE

PLUMBING-SCHEMATICS

SHEET NUMBER

P1.2

4625 NATIONAL PROTOTYPE - R1

Drafting Name: \\rdc\Projects\2022\3010\Cad\proj\Sheets\Lot P1.2 Plumbing - Schematics And Specifications.dwg Last Modified: Aug 18, 2022 - 12:42pm Plotted on: Aug 18, 2022 - 3:01pm by SHF

JOHNSTON BURKHOLDER ASSOCIATES
consulting structural engineers

STRUCTURAL CALCULATIONS

FOR

Circle K expansion

Lake City, FL

08/15/22



930 CENTRAL • KANSAS CITY, MO 64105
(816) 421-4200 • WWW.JBAENGR.COM

Johnston Burkholder Associates
930 Central St
Kansas City, MO 64105
816-421-4200

JOB TITLE	Circle K expansion		
	Lake City, FL		
JOB NO.	22201	**SHEET NO.**	
CALCULATED BY	SMK	**DATE**	
CHECKED BY		**DATE**	

www.struware.com

Code Search

Code: Florida Building Code 2020

Occupancy:

Occupancy Group = M Mercantile

Risk Category & Importance Factors:

Risk Category =	II
Wind factor =	1.00
Snow factor =	1.00
Seismic factor =	1.00

Type of Construction:

Fire Rating:

Roof =	0.0 hr
Floor =	0.0 hr

Building Geometry:

Roof angle (θ)	0.25 / 12	1.2 deg
Building length	44.0 ft	
Least width	22.0 ft	
Mean Roof Ht (h)	15.3 ft	
Parapet ht above grd	23.0 ft	
Minimum parapet ht	4.0 ft	

Live Loads:

Roof
0 to 200 sf: 20 psf
200 to 600 sf: 24 - 0.02Area, but not less than 12 psf
over 600 sf: 12 psf

Roofs used for roof gardens 100 psf

Floor:

Typical Floor	50 psf
Partitions	15 psf
Corridors above first floor	80 psf
Lobbies & first floor corridors	100 psf
Stairs and exit ways	100 psf

Johnston Burkholder Associates
930 Central St
Kansas City, MO 64105
816-421-4200

JOB TITLE	Circle K expansion		
	Lake City, FL		
JOB NO.	22201	**SHEET NO.**	
CALCULATED BY	SMK	**DATE**	
CHECKED BY		**DATE**	

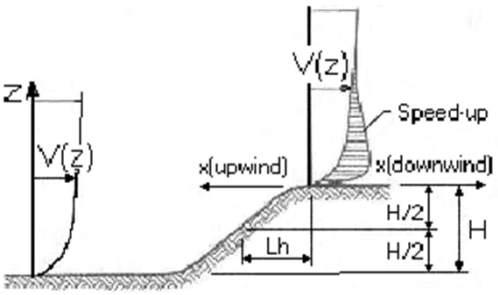
Wind Loads : ASCE 7 - 16

Ultimate Wind Speed	118 mph
Nominal Wind Speed	91.4 mph
Risk Category	II
Exposure Category	C
Enclosure Classif.	Enclosed Building
Internal pressure	+/-0.18
Directionality (Kd)	0.85
Kh case 1	0.853
Kh case 2	0.853
Type of roof	Monoslope

Topographic Factor (Kzt)

Topography		Flat
Hill Height	(H)	0.0 ft
Half Hill Length (Lh)		0.0 ft
Actual H/Lh	=	0.00
Use H/Lh	=	0.00
Modified Lh	=	0.0 ft
From top of crest: x =		0.0 ft
Bldg up/down wind?		downwind

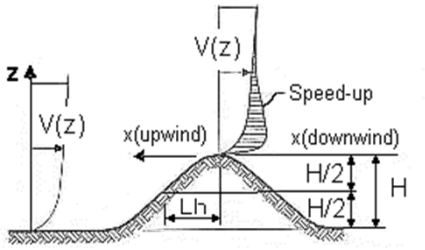
H< 15ft;exp C
∴ Kzt=1.0



ESCARPMENT

H/Lh= 0.00 K_1 = 0.000
x/Lh = 0.00 K_2 = 0.000
z/Lh = 0.00 K_3 = 1.000

At Mean Roof Ht:
Kzt = $(1+K_1K_2K_3)^2$ = 1.00



2D RIDGE or 3D AXISYMMETRICAL HILL

Gust Effect Factor

h =	15.3 ft
B =	22.0 ft
/z (0.6h) =	15.0 ft

Flexible structure if natural frequency < 1 Hz (T > 1 second).
If building h/B>4 then may be flexible and should be investigated.
h/B = 0.70 Rigid structure (low rise bldg)

G = 0.85 Using rigid structure formula

Rigid Structure

$\bar{e}$ =	0.20
ℓ =	500 ft
z_{min} =	15 ft
c =	0.20
g_Q, g_v =	3.4
L_z =	427.1 ft
Q =	0.94
I_z =	0.23
G =	**0.89** use G = 0.85

Flexible or Dynamically Sensitive Structure

Natural Frequency (η_1) =	0.0 Hz			
Damping ratio (β) =	0			
/b =	0.65			
/α =	0.15			
Vz =	99.6			
N_1 =	0.00			
R_n =	0.000			
R_h =	28.282	η =	0.000	h = 15.3 ft
R_B =	28.282	η =	0.000	
R_L =	28.282	η =	0.000	
g_R =	0.000			
R =	0.000			
Gf =	0.000			

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Enclosure Classification

Test for Enclosed Building: Ao < 0.01Ag or 4 sf, whichever is smaller

Test for Open Building: All walls are at least 80% open.
Ao ≥ 0.8Ag

Test for Partially Enclosed Building: Predominately open on one side only

	Input			Test	
Ao	500.0	sf	Ao ≥ 1.1Aoi	NO	
Ag	600.0	sf	Ao > 4' or 0.01Ag	YES	
Aoi	1000.0	sf	Aoi / Agi ≤ 0.20	YES	Building is NOT
Agi	10000.0	sf			Partially Enclosed

Conditions to qualify as Partially Enclosed Building. Must satisfy all of the following:
Ao ≥ 1.1Aoi
Ao > smaller of 4' or 0.01 Ag
Aoi / Agi ≤ 0.20
Where:
Ao = the total area of openings in a wall that receives positive external pressure.
Ag = the gross area of that wall in which Ao is identified.
Aoi = the sum of the areas of openings in the building envelope (walls and roof) not including Ao.
Agi = the sum of the gross surface areas of the building envelope (walls and roof) not including Ag.

Test for Partially Open Building: A building that does not qualify as open, enclosed or partially enclosed.
(This type building will have same wind pressures as an enclosed building.

Reduction Factor for large volume partially enclosed buildings (Ri) :

If the partially enclosed building contains a single room that is unpartitioned , the internal pressure coefficient may be multiplied by the reduction factor Ri.

Total area of all wall & roof openings (Aog): 0 sf
Unpartitioned internal volume (Vi) : 0 cf
Ri = 1.00

Ground Elevation Factor (Ke)

Grd level above sea level = 0.0 ft Ke = 1.0000
Constant = 0.00256 Adj Constant = 0.00256

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Wind Loads - MWFRS h≤60' (Low-rise Buildings) except for open buildings

Kz = Kh (case 1) = 0.85
Base pressure (qh) = **25.8 psf**
GCpi = +/-0.18

Edge Strip (a) = 3.0 ft
End Zone (2a) = 6.0 ft
Zone 2 length = 11.0 ft

Wind Pressure Coefficients

	CASE A				CASE B		
		θ = 1.2 deg					
Surface	GCpf	w/-GCpi	w/+GCpi		GCpf	w/-GCpi	w/+GCpi
1	0.40	0.58	0.22		-0.45	-0.27	-0.63
2	-0.69	-0.51	-0.87		-0.69	-0.51	-0.87
3	-0.37	-0.19	-0.55		-0.37	-0.19	-0.55
4	-0.29	-0.11	-0.47		-0.45	-0.27	-0.63
5					0.40	0.58	0.22
6					-0.29	-0.11	-0.47
1E	0.61	0.79	0.43		-0.48	-0.30	-0.66
2E	-1.07	-0.89	-1.25		-1.07	-0.89	-1.25
3E	-0.53	-0.35	-0.71		-0.53	-0.35	-0.71
4E	-0.43	-0.25	-0.61		-0.48	-0.30	-0.66
5E					0.61	0.79	0.43
6E					-0.43	-0.25	-0.61

Ultimate Wind Surface Pressures (psf)

1		15.0	5.7		-7.0	-16.3
2		-13.2	-22.5		-13.2	-22.5
3		-4.9	-14.2		-4.9	-14.2
4		-2.8	-12.1		-7.0	-16.3
5					15.0	5.7
6					-2.8	-12.1
1E		20.4	11.1		-7.8	-17.1
2E		-23.0	-32.3		-23.0	-32.3
3E		-9.0	-18.3		-9.0	-18.3
4E		-6.5	-15.8		-7.8	-17.1
5E					20.4	11.1
6E					-6.5	-15.8

Parapet

Windward parapet = 42.2 psf (GCpn = +1.5)
Leeward parapet = -28.1 psf (GCpn = -1.0)

Windward roof overhangs = 18.1 psf (upward) add to windward roof pressure

Horizontal MWFRS Simple Diaphragm Pressures (psf)

Transverse direction (normal to L)

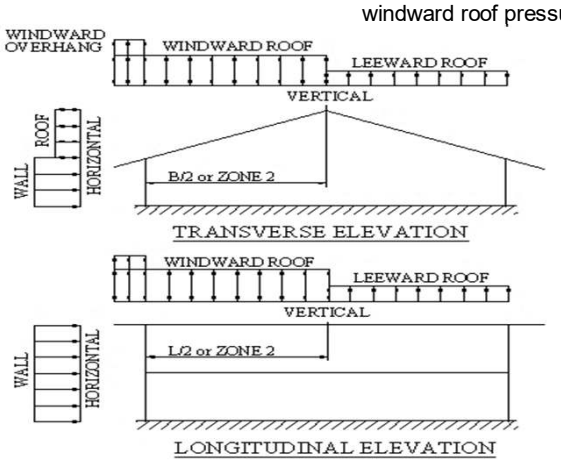
Interior Zone: Wall 17.8 psf
Roof -8.3 psf **
End Zone: Wall 26.9 psf
Roof -14.0 psf **

Longitudinal direction (parallel to L)

Interior Zone: Wall 17.8 psf
End Zone: Wall 26.9 psf

** NOTE: Total horiz force shall not be less than that determined by neglecting roof forces (except for MWFRS moment frames).

The code requires the MWFRS be designed for a min ultimate force of 16 psf multiplied by the wall area plus an 8 psf force applied to the vertical projection of the roof.



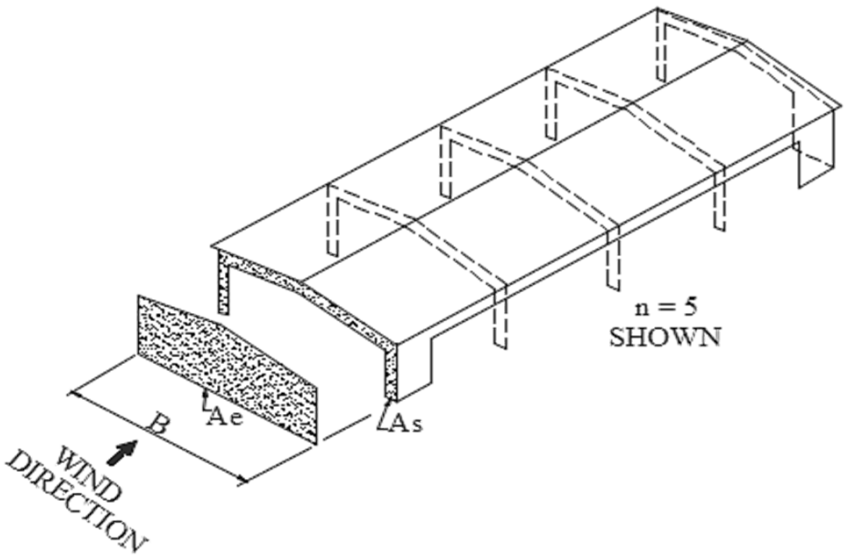
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Wind Loads - h≤60' Longitudinal Direction MWFRS On Open or Partially Enclosed Buildings with Transverse Frames and Pitched Roofs

ASCE 7-16 procedure

Base pressure (qh) = **25.8 psf**
GCpi = +/-0.18 Enclosed bldg, procdure doesn't apply
Roof Angle (θ) = 1.2 deg



B=	22.0	ft
# of frames (n) =	5	
Solid are of end wall including fascia (As) =	1,500.0	sf
Roof ridge height =	15.6	ft
Roof eave height =	15.3	ft
Total end wall area if soild (Ae) =	339.8	sf

Longidinal Directional Force (F) = pAe
p= qh [(GCpf)windward -(GCpf)leeward] K_B K_S

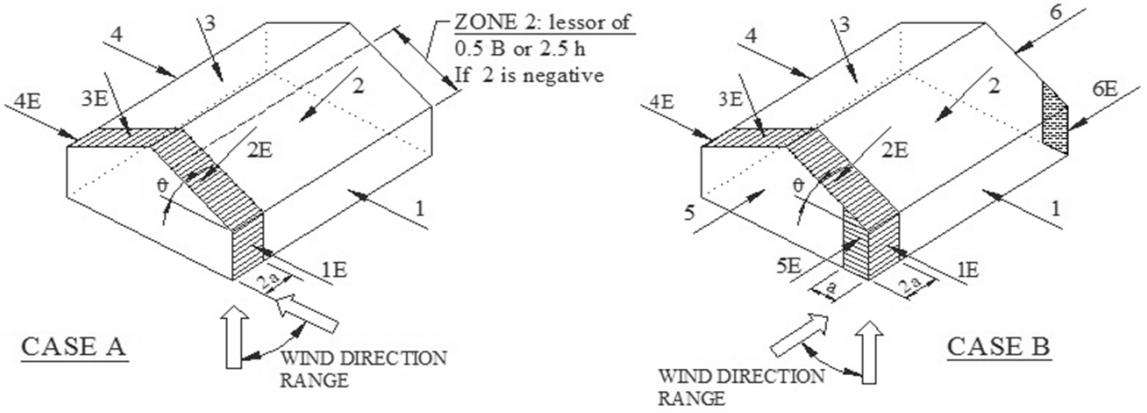
Solidarity ratio (Φ) =	4.414	
n =	5	
KB =	1.58	
KS =	18.841	
Zones 5 & 6 area =	294	sf
5E & 6E area =	46	sf
(GCpf) windward - (GCpf) leeward] =	0.738	
p =	567.3	psf

Total force to be resisted by MWFRS (F) = **192.8 kips** applied at the centroid of the end wall area Ae

Note: The longidudinal force acts in combination with roof loads calculated elsewhere for an open or partially enclosed building.

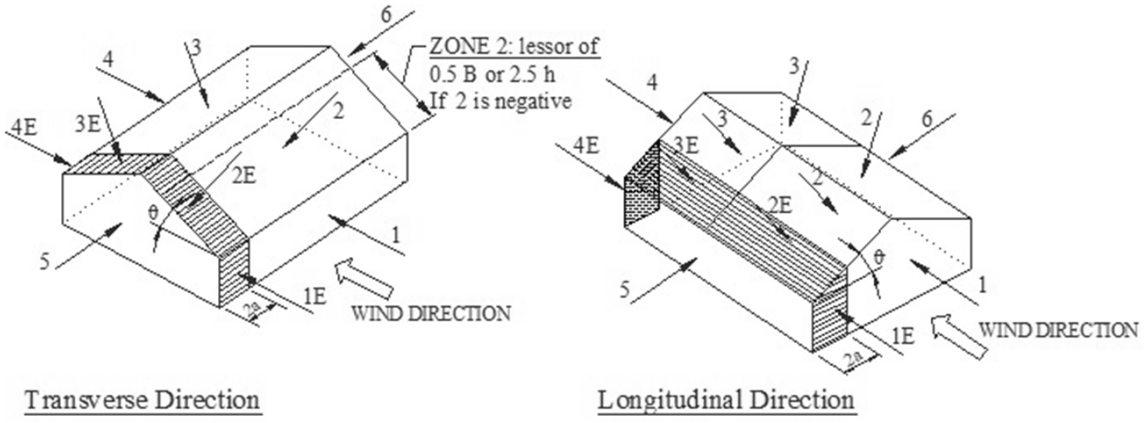
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NOTE: Torsional loads are 25% of zones 1 - 6. See code for loading diagram.
Exception: One story buildings h<30' and 1 to 2 storybuildings framed with light-frame construction or with flexible diaphragms need not be designed for the torsional load case.

ASCE 7-98 & ASCE 7-10 (& later) - MWFRS wind pressure zones



NOTE: Torsional loads are 25% of zones 1 - 4. See code for loading diagram.
Exception: One story buildings h<30' and 1 to 2 storybuildings framed with light-frame construction or with flexible diaphragms need not be designed for the torsional load case.

ASCE 7-02 and ASCE 7-05 - MWFRS wind pressure zones

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Ultimate Wind Pressures

Wind Loads - Components & Cladding : h ≤ 60'

Kh (case 2) =	0.85	h =	15.3 ft	0.2h = 3.1 ft
Base pressure (qh) =	**25.8 psf**	0.6h =	9.2 ft	
Minimum parapet ht =	4.0 ft	GCpi =	+/-0.18	
Roof Angle (θ) =	1.2 deg	qi = qh =	25.8 psf	
Type of roof =	Monoslope			

Roof

	Surface Pressure (psf)								User input	
Area	10 sf	20 sf	50 sf	100 sf	200 sf	350 sf	500 sf	1000 sf	75 sf	150 sf
Negative Zone 1	-48.6	-45.4	-41.1	-37.9	-34.7	-32.1	-30.5	-30.5	-39.3	-36.1
Negative Zone 1'	-27.9	-27.9	-27.9	-27.9	-24.0	-20.9	-18.9	-16.0	-27.9	-25.6
Negative Zone 2	-64.1	-60	-54.5	-50.4	-46.3	-42.9	-40.8	-40.8	-52.1	-48.0
Negative Zone 3	-64.1	-60	-54.5	-50.4	-46.3	-42.9	-40.8	-40.8	-52.1	-48.0
Positive Zone 1 & 1'	16	16	16	16	16.0	16.0	16.0	16.0	16.0	16.0
Positive Zones 2 & 3	27.9	26.7	25	23.8	22.6	21.6	20.9	19.7	24.3	23.1
Overhang Zone 1&1'	-43.9	-43.1	-42.1	-41.3	-34.7	-29.3	-25.8	-25.8	-41.7	-37.4
Overhang Zone 2	-59.4	-53.9	-46.7	-41.2	-35.7	-31.3	-28.4	-28.4	-43.5	-38.0
Overhang Zone 3	-59.4	-53.9	-46.7	-41.2	-35.7	-31.3	-28.4	-28.4	-43.5	-38.0

Negative zone 3 = zone 2, since parapet >= 3ft.

Overhang pressures in the table above assume an internal pressure coefficient (Gcpi) of 0.0
Overhang soffit pressure equals adj wall pressure (which includes internal pressure of 4.7 psf)

Parapet

qp = 28.1 psf

		Surface Pressure (psf)						User input
Solid Parapet Pressure		10 sf	20 sf	50 sf	100 sf	200 sf	500 sf	50 sf
CASE A:	Zone 2 :	90.1	84.2	76.5	70.7	64.8	57.1	76.5
	Zone 3 :	90.1	84.2	76.5	70.7	64.8	57.1	76.5
CASE B :	Interior zone :	-53.2	-50.5	-46.9	-44.2	-41.5	-38.0	-46.9
	Corner zone :	-60.8	-56.7	-51.4	-47.4	-43.3	-38.0	-51.4

wall a = 3.0 ft

Walls

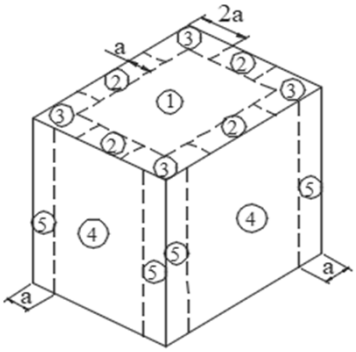
	GCp +/- GCpi				Surface Pressure at h				User input	
Area	10 sf	100 sf	200 sf	500 sf	10 sf	100 sf	200 sf	500 sf	20 sf	50 sf
Negative Zone 4	-1.17	-1.01	-0.96	-0.90	-30.2	-26.1	-24.9	-23.3	-29.0	-27.4
Negative Zone 5	-1.44	-1.12	-1.03	-0.90	-37.2	-29.0	-26.5	-23.3	-34.7	-31.5
Positive Zone 4 & 5	1.08	0.92	0.87	0.81	27.9	23.8	22.6	20.9	26.7	25.0

Note: GCp reduced by 10% due to roof angle <= 10 deg.

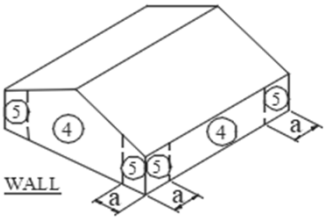
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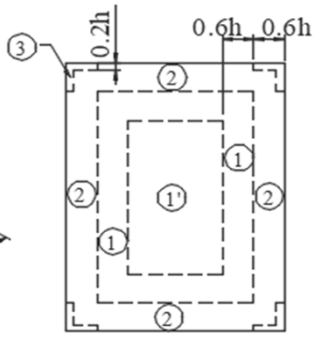
Location of C&C Wind Pressure Zones - ASCE 7-16



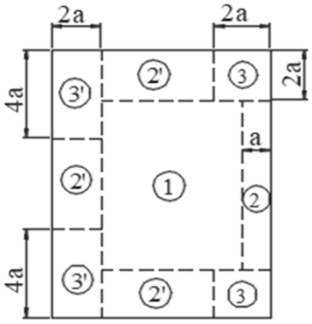
Roofs w/ θ ≤ 10°
and all walls
h > 60'



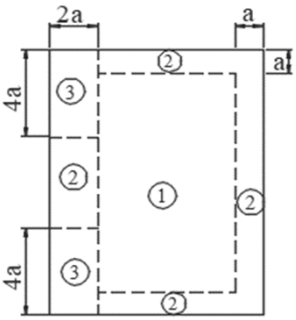
Walls h ≤ 60'
& alt design h<90'



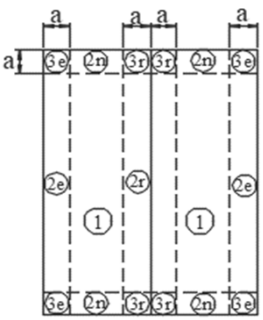
Gable, Sawtooth and
Multispan Gable θ ≤ 7 degrees &
Monoslope ≤ 3 degrees
h ≤ 60' & alt design h<90'



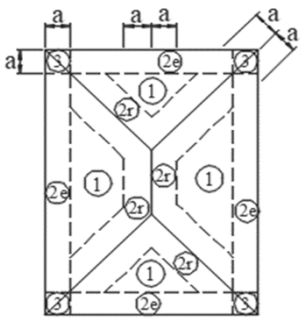
Monoslope roofs
3° < θ ≤ 10°
h ≤ 60' & alt design h<90'



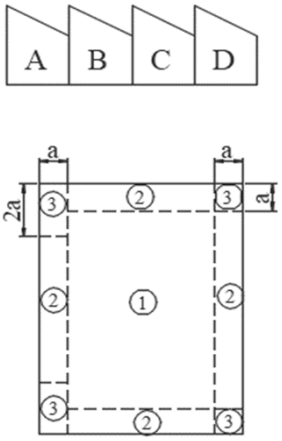
Monoslope roofs
10° < θ ≤ 30°
h ≤ 60' & alt design h<90'



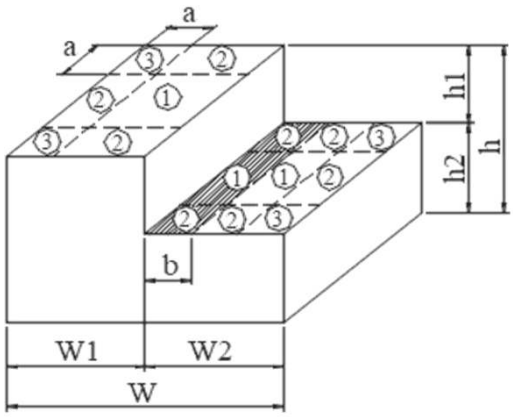
Multispan Gable &
Gable 7° < θ ≤ 45°

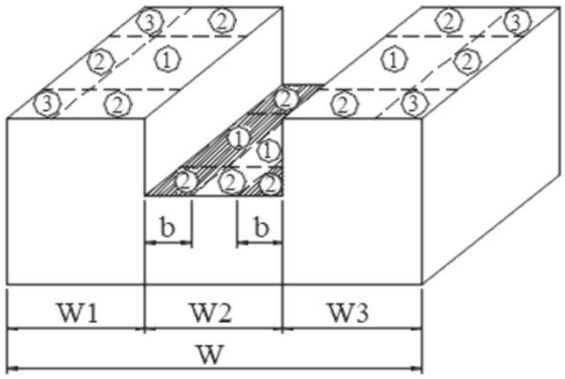


Hip 7° < θ ≤ 27°



Sawtooth 10° < θ ≤ 45°
h ≤ 60' & alt design h<90'





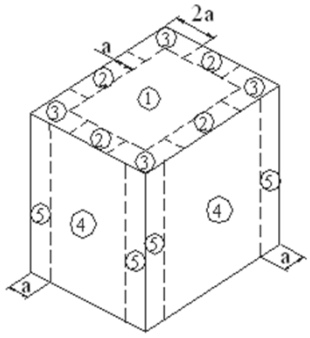
Stepped roofs θ ≤ 3°
h ≤ 60' & alt design h<90'

Note: The stepped roof zones above are as shown in ASCE 7-16 (except the upper roof zones 1 and 2 are shown at the inside edge per the notes). Prior editions didn't show zones, but the notes sent you to the low slope gable figure. The note in ASCE 7-16 still sends you to the low slope gable figure, but for some reasons the zones shown are per editions prior to ASCE 7-16. Therefore, the above zones may be a code mistake and the correct zone locations may be per the low slope gable roof shown at the top of this page.

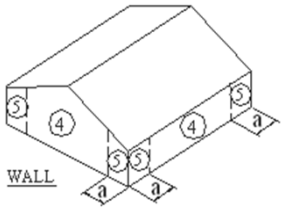
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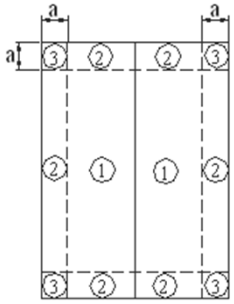
Location of C&C Wind Pressure Zones - ASCE 7-10 & earlier



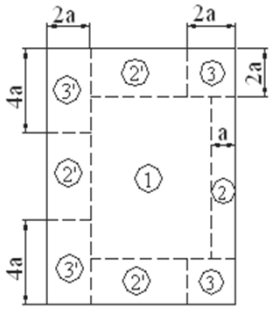
Roofs w/ θ ≤ 10°
and all walls
h > 60'



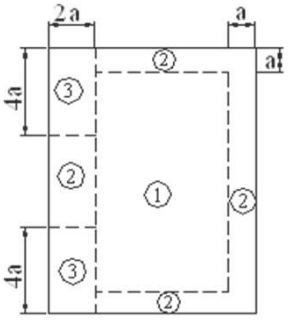
Walls h ≤ 60'
& alt design h<90'



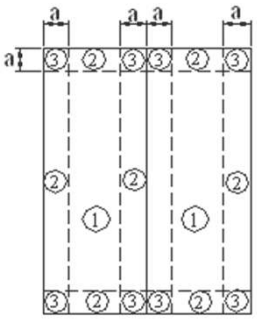
Gable, Sawtooth and
Multispan Gable θ ≤ 7 degrees &
Monoslope ≤ 3 degrees
h ≤ 60' & alt design h<90'



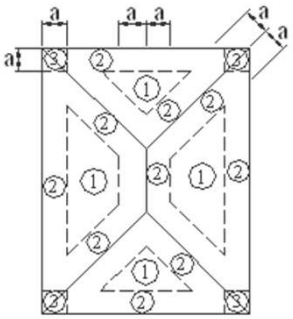
Monoslope roofs
3° < θ ≤ 10°
h ≤ 60' & alt design h<90'



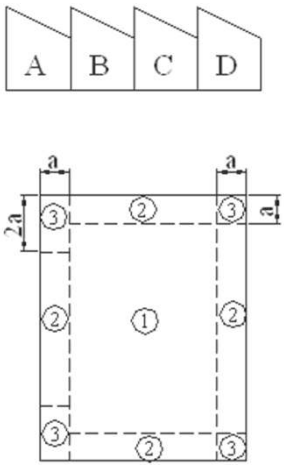
Monoslope roofs
10° < θ ≤ 30°
h ≤ 60' & alt design h<90'



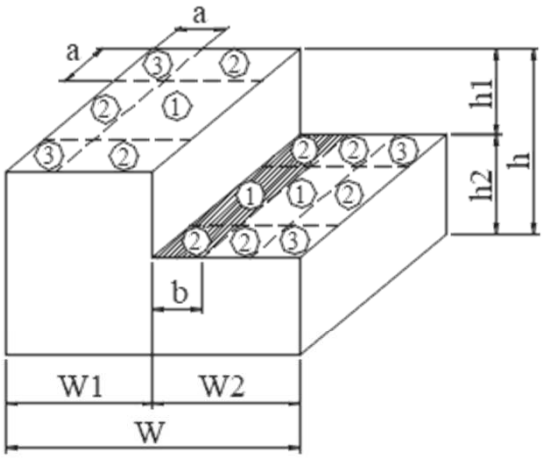
Multispan Gable &
Gable 7° < θ ≤ 45°

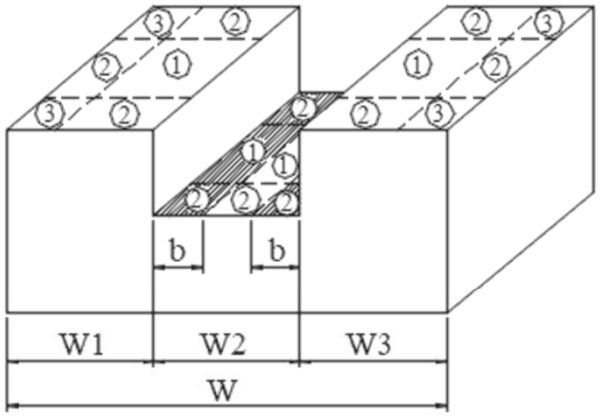


Hip 7° < θ ≤ 27°



Sawtooth 10° < θ ≤ 45°
h ≤ 60' & alt design h<90'





Stepped roofs θ ≤ 3°
h ≤ 60' & alt design h<90'

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JOB TITLE	Circle K expansion		
	Lake City, FL		
JOB NO.	22201	**SHEET NO.**	
CALCULATED BY	SMK	**DATE**	
CHECKED BY		**DATE**	

NOTE: Per Section 101.2 of the FBC, snow loading shall not be utilized or enforced because Florida has no snow threat.

Snow Loads : ASCE 7-16

Nominal Snow Forces

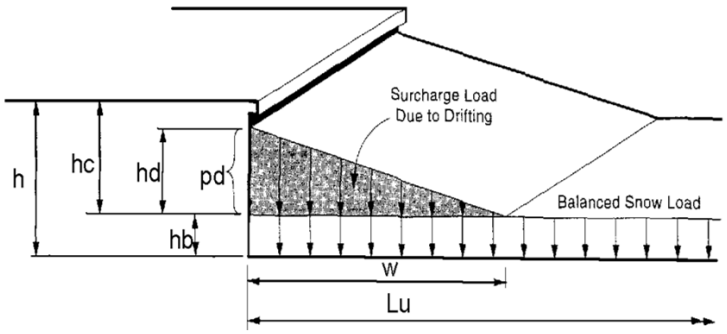
Roof slope		=	1.2 deg
Horiz. eave to ridge dist (W)		=	22.0 ft
Roof length parallel to ridge (L)		=	44.0 ft
Type of Roof			Monoslope
Ground Snow Load	Pg	=	0.0 psf
Risk Category		=	II
Importance Factor	I	=	1.0
Thermal Factor	Ct	=	1.00
Exposure Factor	Ce	=	1.0
Pf = 0.7*Ce*Ct*I*Pg		=	0.0 psf
Unobstructed Slippery Surface			no
Sloped-roof Factor	Cs	=	1.00
Balanced Snow Load		**=**	**0.0 psf**
Rain on Snow Surcharge Angle			0.44 deg
Code Maximum Rain Surcharge			5.0 psf
Rain on Snow Surcharge		=	0.0 psf
Ps plus rain surcharge		=	0.0 psf
Minimum Snow Load	Pm	=	0.0 psf
Uniform Roof Design Snow Load		=	**0.0 psf**

Near ground level surface balanced snow load = **0.0 psf**

NOTE: Alternate spans of continuous beams shall be loaded with half the design roof snow load so as to produce the greatest possible effect - see code for loading diagrams and exceptions for gable roofs..

Windward Snow Drifts 1 - Against walls, parapets, etc

Up or downwind fetch	lu	=	220.0 ft
Projection height	h	=	5.2 ft
Projection width/length	lp	=	10.0 ft
Snow density	g	=	14.0 pcf
Balanced snow height	hb	=	0.00 ft
	hd	=	2.34 ft
	hc	=	5.20 ft
#DIV/0! #DIV/0!	**lp <15', drift not req'd**		
Drift height (hd)		=	#DIV/0!
Drift width	w	=	#DIV/0!
Surcharge load:	pd = γ*hd	=	**#DIV/0!**
Balanced Snow load:		=	0.0 psf
			#DIV/0!



Note: If bottom of projection is at least 2 feet above hb then snow drift is not required.

Windward Snow Drifts 2 - Against walls, parapets, etc

Up or downwind fetch	lu	=	160.0 ft
Projection height	h	=	4.0 ft
Projection width/length	lp	=	20.0 ft
Snow density	g	=	14.0 pcf
Balanced snow height	hb	=	0.00 ft
	hd	=	1.99 ft
	hc	=	4.00 ft
#DIV/0! #DIV/0!	**#DIV/0!**		
Drift height (hd)		=	#DIV/0!
Drift width	w	=	#DIV/0!
Surcharge load:	pd = γ*hd	=	**#DIV/0!**
Balanced Snow load:		=	0.0 psf
			#DIV/0!

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JOB TITLE	Circle K expansion
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NOTE: Per Section 101.2 of the FBC, siesmic loading shall not be utilized or enforced because Florida has no seismic threat.

Seismic Loads: IBC 2018 Strength Level Forces

Risk Category : II
Importance Factor (Ie) : 1.00
Site Class : D

Ss (0.2 sec) = 8.50 %g
S1 (1.0 sec) = 5.04 %g

Site specific ground motion analysis performed:

Fa =	1.600	Sms =	0.136	S_{DS} =	0.091	Design Category =	A
Fv =	2.400	Sm1 =	0.121	S_{D1} =	0.081	Design Category =	B

Seismic Design Category = **B**
Redundancy Coefficient ρ = 1.00
Number of Stories: 1
Structure Type: All other building systems
Horizontal Struct Irregularities: No plan Irregularity
Vertical Structural Irregularities: No vertical Irregularity
Flexible Diaphragms: No
Building System: **Bearing Wall Systems**
Seismic resisting system: **Intermediate reinforced masonry shear walls**
System Structural Height Limit: **Height not limited**
Actual Structural Height (hn) = 15.3 ft

DESIGN COEFFICIENTS AND FACTORS

Response Modification Coefficient (R) = 3.5
Over-Strength Factor (Ωo) = 2.5
Deflection Amplification Factor (Cd) = 2.25
S_{DS} = 0.091
S_{D1} = 0.081

Seismic Load Effect (E) = Eh +/-Ev = ρQ_E +/- $0.2S_{DS}D$ = Qe +/- 0.000D Q_E = horizontal seismic force
Special Seismic Load Effect (Em) = Emh +/- Ev = $\Omega o\, Q_E$ +/- $0.2S_{DS}D$ = 2.5Qe +/ 0.018D D = dead load

PERMITTED ANALYTICAL PROCEDURES

Simplified Analysis - Use Equivalent Lateral Force Analysis

Equivalent Lateral-Force Analysis - Permitted

Building period coef. (C_T) =	0.020			Cu = 1.70
Approx fundamental period (Ta) =	$C_T h_n^{\wedge}$ =	0.155 sec	x= 0.75	Tmax = CuTa = 0.263 sec
User calculated fundamental period =				T = 0.155 sec
Long Period Transition Period (TL) =	ASCE7 map =	8 sec		
Seismic response coef. (Cs) =	SdsI/R =	0.026		
need not exceed Cs =	Sd1 I /RT =	0.149		
but not less than Cs =		0.010		
USE Cs =		0.026		

Design Base Shear V = 0.026W

Model & Seismic Response Analysis - Permitted (see code for procedure)

ALLOWABLE STORY DRIFT

Structure Type: All other structures

Allowable story drift Δa = 0.020hsx where hsx is the story height below level x

Total Stories =	1	Floor Dead Load =	40.0 psf	Roof Dead Load =	20.0 psf
Building length L =	44.0 ft	Floor LL to include =	0.0 psf	Roof Snow Load =	0.0 psf
Building width W =	22.0 ft	Floor Equip wt =	0.0 kips	Roof Equip wt =	0.0 kips
hn =	15.3 ft	Partition weight =	10.0 psf	Parapet weight =	0.0 psf
k =	1.000	Ext Wall Weight =	0.0 psf	Parapet height =	0.0 ft
V =	0.026W				

Bottom Floor is a slab on grade

Diaphragm shall be designed for level force Fx, but not less than Fpx = (Σ Fi / Σ wi) wpx, but :
Fpx min = $0.2S_{DS}$ Ie wpx = 0.018 wpx
Fpx max = $0.4S_{DS}$ Ie wpx = 0.036 wpx

Seismic Forces Normal to Building Length

V = 0.5k

Level (x)	EL above Seismic Base hx (ft)	Level Weight Wx (kips)	Wx hx^k (ft-kips)	Cvx = $\frac{Wx\ hx^k}{\Sigma\ Wi\ hi^k}$	Base Shear Distribution Fx=CvxV	Σ Fx (k)	Story M	Diaphragm Force Fpx Σ Wi (k)	Fpx	Design Fpx
Roof	15.00	19	290	1.000	0.50	0.5	0	19	0.5	0.5
1	2.00	0	0	0.000	0.00	0.0	0	0	0.0	0.0
Base		19		1.000		0.5	8			
							8	= Base M		

Seismic Forces Parallel to Building Length

V = 0.5k

Level (x)	hx (ft)	Wx (kips)	Wx hx^k	Cvx =	Base Shear Distribution Fx=CvxV	Σ Fx (k)	Story M	Diaphragm Force Fpx Σ Wi (k)	Fpx	Design Fpx
Roof	15.00	19	290	1.000	0.50	0.5	0	19	0.5	0.5
1	2.00	0	0	0.000	0.00	0.0	0	0	0.0	0.0
Base	0.00	19		1.000		0.5	8			
							8	= Base M		

Prototype	190

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CMU WALL DESIGN WORKSHEET

2020 FBC (ACI 530-14)

Version 2.0

Wall Lateral Forces

Wall Location	Wind		Seismic	
Main Wall	Wall WL, Service =	14.3 psf	OOP Wall(serv.) 0.7*EQ =	0.001
Parapet Only	Parapet WL, Service =	42.4 psf	Parapet(serv.) 0.7*EQ =	0.001
DL= 15 psf	RoofLL= 20 psf		SL= 0 psf	

Wall Properties

CMU Density= 135 pcf

Masonry Inspection = Y

Masonry, f'_m = 2,000 psi

Rebar yield strength, F_y= 60,000 psi

Masonry Mod. Of Elasticity, E_m = 1,800 ksi

Steel Mod. Of Elasticity, E_s= 29,000 ksi

Fm = 900 psi

Fs = 32000 psi

$n = E_s/E_m$ = 16.11

General Wall Information												Seismic Loads		Roof Uniform Loads			Wall Properties								
Wall Location	Bearing Wall	Wind Girt Location	Top of Wall Elev.	TOS Elev.	Roof Elev. h	Depth to T.O. Ftg h_f	Nominal Wall Thk. t	Rebar Location	Face Shell Thick. t_f	Depth to Rebar d	Wall Weight Wt	Wall EQ_w	Parapet EQ_p	DL wd	RLL wl	SL ws	Steel Ratio p	Radius of Gyration r	Eff. Wall Area A_w	k_1	k_1*d	j_1	k_2	k_2*d	j_2
	Y / N	Y / N	(ft)	(ft)	(ft)	(ft)	(in)	c/e/comp	(in)	(in)	(psf)	(psf)	(psf)	(plf)	(plf)	(plf)		(in)	(in^2)		(in)			(in)	
Grid 1 (front wall)	Y	N	23.333	16.00	16.13	1.33	8	Center	1.25	3.813	63.25	0.06	0.06	447	995		0.004808	2.523585	102.5888	0.323695	1.23425	0.892102	0.323716	1.23433	0.847071
						1.33	8	Center	1.25	3.813	63.25	0.06	0.06	447	995		0.004808	2.523585	102.5888	0.323695	1.23425	0.892102	0.323716	1.23433	0.847071
Grid Z (side wall)	N	N	23.333	15.33	15.46	1.33	8	Center	1.25	3.813	63.25	0.06	0.06	270	360		0.004808	2.523585	102.5888	0.323695	1.23425	0.892102	0.323716	1.23433	0.847071
						1.33	8	Center	1.25	3.813	63.25	0.06	0.06	445	594		0.004808	2.523585	102.5888	0.323695	1.23425	0.892102	0.323716	1.23433	0.847071
Grid 2 (rear wall)	Y	N	23.333	14.67	14.80	1.33	8	Center	1.25	3.813	63.25	0.06	0.06	330	840		0.004808	2.523585	102.5888	0.323695	1.23425	0.892102	0.323716	1.23433	0.847071
						1.33	8	Center	1.25	3.813	63.25	0.06	0.06	330	840		0.004808	2.523585	102.5888	0.323695	1.23425	0.892102	0.323716	1.23433	0.847071

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CMU WALL DESIGN WORKSHEET

Wall Location	Bending Forces												Rectangular Section Stresses				T-Beam Section Stresses				Applied Axial Stresses			Allow. Axial Stress Fa	Axial Check
	Wind				Seismic				Roof Loads + Self Wt.				CMU Comp. Str.		Steel Stress		CMU Comp. Str.		Steel Stress		Roof Loads + Self Wt.				
	M_{span}	$M_{parapet}$	M_{max}	hm	M_{span}	$M_{parapet}$	M_{max}	hm	eccent. e	DL M_{roof}	RLL M_{roof}	SL M_{roof}	Wind fb1	EQ fb1eq	Wind fs1	EQ fs1eq	Wind fb2	EQ fb2eq	Wind fs2	EQ fs2eq	DL fadl	RLL fall	SL fasl		
	lb-ft	lb-ft	lb-ft	ft	lb-ft	lb-ft	lb-ft	ft	in.	lb-ft	lb-ft	lb-ft	psi	psi	psi	psi	psi	psi	psi	psi	psi	psi	psi	psi	
Grid 1 (front wall)	735	2203	2203	7.21	3	3	3	17.42	2	149	332	0	525	1	17662	27	553	1	18601	28	30	19	0	324	O.K.
0	0	0	0	0.00	0	0	0	0.67	0	0	0	0	0	0	0	0	0	0	0	0	10	19	0	499	O.K.
Grid Z (side wall)	598	2629	2629	8	3	4	4	8	0	0	0	0	626	1	21082	31	660	1	22203	33	15	7	0	337	O.K.
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	9	12	0	499	O.K.
Grid 2 (rear wall)	465	3091	3091	9	2	5	5	9	2	110	280	0	736	1	24781	37	775	1	26099	39	17	16	0	350	O.K.
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7	16	0	499	O.K.

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CMU WALL DESIGN WORKSHEET

Wall Location	Masonry Combined Stress Ratios Due to Axial & Bending						Steel Combined Stress Ratios Due to Axial Eccentric & Bending					
	DL+RLL	DL+SL	DL+WL	DL+EQ	DL+ 0.75WL+ .75(LorS)	DL+ 0.75EQ+ .75(LorS)	DL+RLL	DL+SL	DL+WL	DL+EQ	DL+ 0.75WL+ .75(LorS)	DL+ 0.75EQ+ .75(LorS)
Grid 1 (front wall)	0.182	0.073	0.656	0.074	0.592	0.156	0.120	0.037	0.589	0.038	0.514	0.100
0	0.032	0.011	0.011	0.011	0.027	0.027	0.000	0.000	0.000	0.000	0.000	0.000
Grid Z (side wall)	0.024	0.017	0.713	0.018	0.544	0.023	0.000	0.000	0.659	0.001	0.494	0.001
0	0.023	0.011	0.011	0.011	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000
Grid 2 (rear wall)	0.140	0.048	0.866	0.049	0.731	0.118	0.098	0.028	0.802	0.029	0.661	0.081
0	0.026	0.008	0.008	0.008	0.022	0.022	0.000	0.000	0.000	0.000	0.000	0.000

Design Summary

Wall Location	Bar Spacing Sb (in)	Bar Size	Bar Area Ab (in^2)	Max CMU Stress Ratio	Max Steel Stress Ratio	Check	Does Parapet or Wall Control?
Grid 1 (front wall)	24	6	0.44	0.66	0.59	O.K.	Parapet
0	24	6	0.44	0.06	0.00	O.K.	Wall
Grid Z (side wall)	24	6	0.44	0.71	0.66	O.K.	Parapet
0	24	6	0.44	0.04	0.00	O.K.	Wall
Grid 2 (rear wall)	24	6	0.44	0.87	**0.80**	**Check**	Parapet
0	24	6	0.44	0.05	0.00	O.K.	Wall

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JAMB DESIGN

Calc #		CMU Wall Details								Low Roof Loads			Jamb Details							Jamb Design Values			Final Design Check		
		Girt	CMU Wall Thick.	Rebar Size	Bar Spacing	CMU Wall Weight	Top of Wall El.	Roof El.	Top of Ftg El below FF	Low Roof Trib Width	Low Roof Drift Only	Add'l Wall Weight	Jamb Type	Jamb Reinf Location	1st Opening Width	2nd Opening Width	Top of Opening El.	Lintel End Brg.	Pier or End Jamb Width	# of Cells Grouted	# of Tension Bars	Jamb Rebar Size	Grout, Reinf, and Stress Design Check	Max CMU Stress Ratio	Max Steel Stress Ratio
	Wall Location	Y/N	in	#	in	psf	(ft)	(ft)	(ft.)	(ft)	(plf)	(plf)			(ft)	(ft)	(ft)	(in)	(ft)	n_c	n_b	#			
1	Grid Z (side wall)	N	8	6	24	63.25	23.33	15.46	1.33				Jamb	Center	3.33		7.33			1	1	6	OK	0.71	0.66
2		0	0	6	24	0	0.00	0.13	0.00				Jamb	Edge						1	1	6			

Note: Parapet lateral trib is taken as the spacing of the wall reinforcement plus the spacing of the jamb bars, unless the height of the opening exceeds 75% of the height o the roof, in which case the lateral trib becomes half the spacing of the wall reinforcement plus the spacing of the jamb bars plus half the width of the opening

Note: Wall wind is used on the parapet when checking the wall moment, parapet wind is used o the parapet when checking the parapet moment

User Notes:
1. Number of Reinforced Cells should only include full height reinforcement.
2. Number of Grouted Cells should include grout below steel lintel bearing.
3. Pier or End Length should be the full width of masonry jamb and include any steel lintel bearing length (refer to diagrams below)
4. Jamb design assumes a uniform lateral trib on the jamb trib width.

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JAMB DESIGN

	Uniform Load											Wind Moment							Seismic Moment						
	Roof Loads			Wind				Seismic				Moment				Applied Location			Moment				Applied Location		
	DL	RLL	SL	w Jamb wall	w Jamb parapet	Rf	w Jamb parapet	eq Jamb wall	eq Jamb parapet	Rf	eq Jamb parapet	Opening Mopen	Span Mspan	Parapet Mparapet	Mwall Design	Xspan	Xpara	Xwall	Opening Mopen	Span Mspan	Parapet Mparapet	Mwall Design	Xspan	Xpara	Xwall
Location	(plf)	(plf)	(plf)	plf	plf	lb	plf	plf	plf	lb	plf	lb-ft	lb-ft	lb-ft	lb-ft	ft	ft	ft	lb-ft	lb-ft	lb-ft	lb-ft	ft	ft	ft
Grid Z (side wall)	270	360	0	42.90	28.60	252	84.80	0.19	0.13	1	0.13	1034	1079	2629	2629	7.22	16.79	16.79	5	5	4	5	7.16	16.79	7.16
	0	0	0																						

Notes:

1. Girt uses a simple span condition with a reduced wall span (TOF to Roof) factor of 0.75.

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JAMB DESIGN

	CMU Jamb Dimensions			Eff. Beam Width		Jamb Design Parameters				Area Calcs			CMU Wall Parameters										
	Block Thickness t_s	Faceshell Thickness t_f	Depth to Rebar d	At Opening b_o	Above Opening b_w	Trib Width at Opening Sw	Trib Width Above Roof Sp	X open	Jamb Width b	Wall Area Below A_o	Wall Area Above A_w	Steel Area A_s	Axial Jamb Width S_w	Wall Height above X h_m	Axial Load Below	Axial Load Above	Moment of Inertia I_{solid}	Moment of Inertia I_{hollow}	Wall Area Grouted A_{solid}	Wall Area Hollow A_{hollow}	Radius of Gyration		
																					I_{net}	A_{net}	Final r
Location	in	in	in	in	in	ft	ft	ft	ft	in^2	in^2	in^2	ft	ft	plf	plf	in^4	in^4	in^2	in^2	in^4	in^2	in
Grid Z (side wall)	7.625	1.25	3.813	16	24	3.00	2.00	8.66	2.00	81	101	0.44	2.000	7.875	1282.0	768.1	443.3	334	91.5	41.5	6218	1064	2.42

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JAMB DESIGN

	Applied Axial Stresses						Allowable Axial Stress			Bending Stress Parameters						
	Opening			Wall						% Jamb reinf	Wall		Opening		Above Op. % Jamb Reinf	Below Op. % Jamb Reinf
	DL $fa\text{-}dl_o$	RLL $fa\text{-}ll_o$	SL $fa\text{-}sl_o$	DL $fa\text{-}dl_w$	RLL $fa\text{-}ll_w$	SL $fa\text{-}sl_w$	Fa_1	Fa_2	Fa	r	k_{1w}	k_{1w}*d	k_{1o}	k_{1o}*d	r_w	r_o
Location	psi	psi	psi	psi	psi	psi	psi	psi	psi	%/100		in		in	%/100	%/100
Grid Z (side wall)	47.48	13.33	0.00	15.21	7.13	0.00	323	353	323	0.0048	0.3237	1.23	0.3797	1.45	0.0048	0.0072

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JAMB DESIGN

	Bending Stress - If $k_1d < t_f$										Bending Stress - If $k_1d >= t_f$ (T-Beam Condition)													
			Wind				Seismic										Wind				Seismic			
	Wall	Opening	CMU Comp.		Steel Stress		CMU Comp. Stress		Steel Stress		Wall			Opening			CMU Comp Stress		Steel Stress		CMU Comp Stress		Steel Stress	
	j_{1w}	j_{1o}	$fb1_w$	$fb1_o$	$fs1_w$	$fs1_o$	$fb1_w$	$fb1_o$	$fs1_w$	$fs1_o$	k_{2w}	$k_{2w} * d$	j_{2w}	k_{2o}	$k_{2o} * d$	j_{2o}	fb_{2w}	fb_{2o}	fs_{2w}	fs_{2o}	fb_{2w}	fb_{2o}	fs_{2w}	fs_{2o}
Location			psi	psi	psi	psi	psi	psi	psi	psi		in			in		psi	psi	psi	psi	psi	psi	psi	psi
Grid Z (side wall)	0.892	0.873	626	322	21082	8465	1	2	39	40	0.324	1.234	0.847	0.383	1.459	0.847	660	336	22203	8727	1	2	41	41

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JAMB RESULTS

	Applied Bending Stresses								Final Design Stress Ratios																	
	Wind				Seismic				Axial Stress Ratio	Masonry Combined Stress Ratios Due to Axial and Bending Loads													Steel Stress Ratios				
	CMU Comp Stress		Steel Stress		CMU Comp Stress		Steel Stress		DL+RLL/SL	LOAD CASE 1		LOAD CASE 2		LOAD CASE 3		LOAD CASE 4		LOAD CASE 5		LOAD CASE 6		Wind		EQ		Stress Design Check
	fb_w	fb_o	fsw	fso	fb_w	fb_o	fsw	fso																		
Location	psi	psi	psi	psi	psi	psi	psi	psi	WALL	OPEN.	WALL	OPEN.	WALL	OPEN.	WALL	OPEN.	WALL	OPEN.	WALL	OPEN.	WALL	OPEN.	WALL	OPEN.	WALL	OPEN	
Grid Z (side wall)	626	336	21082	8727	1	2	39	41	0.069	0.188	0.025	0.068	0.017	0.053	0.713	0.426	0.018	0.055	0.545	0.344	0.011	0.033	0.659	0.273	0.001	0.001	OK

Project No.	Project Name:	Made By:	Sheet No:
22201	Lake City, FL	SMK	7

JAMB SUPPORT DATA & DETAILS

Applied Loads

Roof DL =	15.00	psf
Roof LL =	20.00	psf
Roof SL =	0.00	psf

Wall Lateral Forces

Wall WL, Service =	14.3	psf
Parapet WL, Service =	42.4	psf
OOP Wall(serv.) 0.7*EQ =	0.001	*weight
Parapet(serv.) 0.7*EQ =	0.001	*weight

Wall Properties

Masonry Inspection =	Y	y/n
Masonry, f'_m =	2,000	psi
Rebar yield strength, F_y=	60,000	psi
Masonry Mod. Of Elasticity, E_m =	1,800	ksi
Steel Mod. Of Elasticity, E_s=	29,000	ksi

Fm =	900	psi
Fs =	32000	psi
n = E_s/E_m =	16.11	

Reinforcing Bar Properties

size	area
4	0.20 in^2
5	0.31 in^2
6	0.44 in^2
7	0.60 in^2
8	0.79 in^2

Wall Thickness Properties

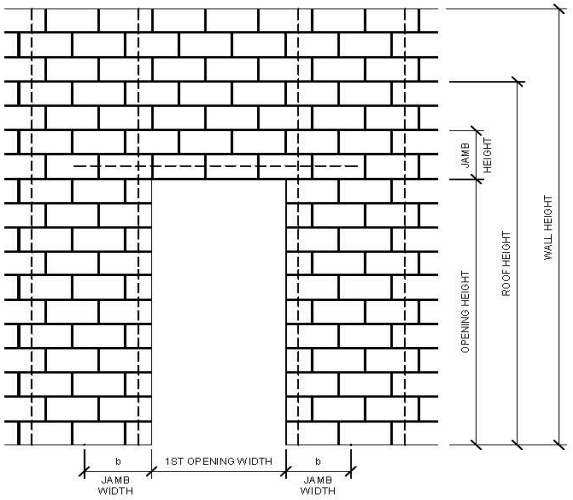
Unit	tf	d(edge)	d(center)	Isolid	Ihollow	Asolid	Ahollow	ta
6	1.00	2.875	2.813	178	139.3	67.5	32.2	5.625
8	1.25	4.875	3.813	443.3	334	91.5	41.5	7.625
10	1.25	6.875	4.813	891.7	606.3	115.5	48	9.625
12	1.25	8.875	5.813	1571	971.5	139.5	53.1	11.625

Jamb Schedule - Double Bars

Wall Thick.	Opening Width	Jamb Width
8 in	3.33 ft	8 in
8 in	3.33 ft	16 in
8 in	3.33 ft	24 in
12 in	0.00 ft	8 in
12 in	0.00 ft	16 in
12 in	0.00 ft	24 in

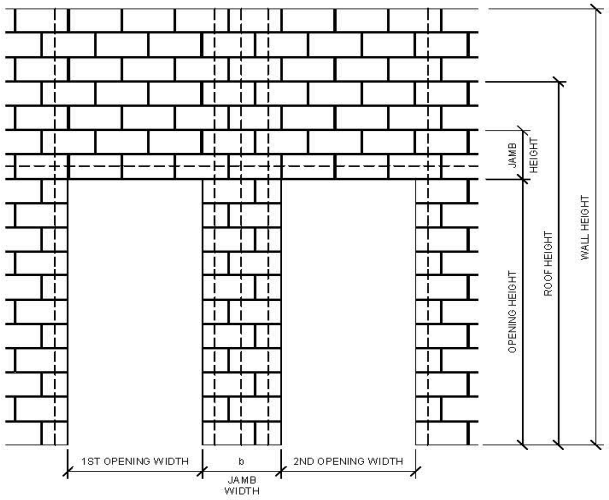
Load Combinations

1	1.00	DL	1.00	RLL	0.00	SL	0.00	WL	0.00	EQ
2	1.00	DL	0.00	RLL	1.00	SL	0.00	WL	0.00	EQ
3	1.00	DL	0.00	RLL	0.00	SL	1.00	WL	0.00	EQ
4	1.00	DL	0.00	RLL	0.00	SL	0.00	WL	1.00	EQ
5	1.00	DL	0.75	RLL	0.75	SL	0.75	WL	0.00	EQ
6	0.60	DL	0.00	RLL	0.00	SL	0.00	WL	1.00	EQ



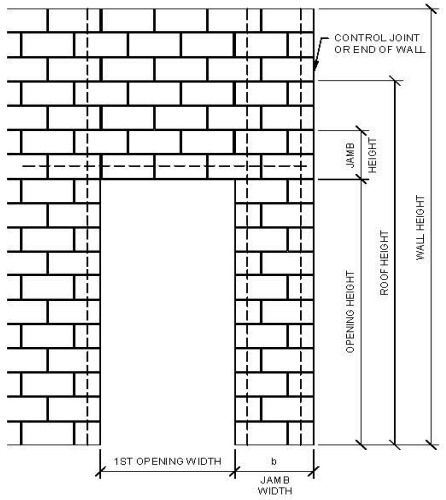
JAMB

(TYPICAL WALL JAMB CONDITION AWAY FROM CONTROL JOINTS OR END OF WALL)



PIER

(WALL JAMB CONDITION WITH OPENINGS ON BOTH SIDE)



END

(WALL JAMB CONDITION WITH CONTROL JOINT OR END OF WALL AT ONE SIDE)

Project No.	Project Name:	Made By:	Sheet No:
22201	Lake City, FL	SMK	1

LINTEL DESIGN

	CMU Wall Details					Low Roof Loads			Jamb Details				Lintel Details										Final Design Check				
	Girt	CMU Wall Thick.	CMU Wall Weight	Top of Wall El.	Roof El.	Low Roof Trib Width	Low Roof Drift Only	Add'l Wall Weight	1st Opening Width	2nd Opening Width	Top of Opening El.	Lintel End Brg.	Lintel Type	Lintel Depth	Horiz Reinf Size	# of Bottom Reinf Bars	# of Top Reinf Bars	Bottom Reinf Bar Clearance	Arching Action Eligible	Include Arching Action	Check Lateral Loads	Defl. Limit Vert	Defl. Limit Horiz	CMU	Steel	Shear	Steel Deflect	Design Check
Wall Location	Y/N	in	psf	ft	ft	ft	plf	plf	ft	ft	ft	in		in	#			in	Yes/No	Yes/No	Yes/No	L/x	L/x					
Grid Z (side wall)	N	8	63.25	23.33	15.46	0.00	0	0	3.33	0.00	7.333	0.00	CMU	16.00	6	1	0	3.50	Yes	Yes	Yes			0.11	0.09	0.16		OK
													CMU	16.00	6	1	0	3.50		Yes	Yes							

Notes:

1. Girt uses a simple span condition equal to the wall span (TOF to Roof) multipled by a factor of 0.75.
2. Lintel lateral trib assumes 1/2 height of wall trib (TOF to Roof) trib to lintel in lateral direction.
3. Steel lintels are assumed to be braced at the mid-span for design.

Notes:

4. Deflection is only checked for steel lintels.
5. Shear is only checked for Masonry Lintels
6. Refer to page 7 for load combinations.

Project No.	Project Name:	Made By:	Sheet No:
22201	Lake City, FL	SMK	2

LINTEL LOAD ANALYSIS

	Lintel Dead Load			Lintel Uniform Load														
				High & Low Roof Loads			Vertical Dead Load			Vertical Live/Snow Load			Horizontal Wind Load			Horizontal Seismic Load		
	Effective Span	Lintel Weight DL	Wall Weight DL	DL	RLL	SL	DL Vert	DL Mspan	DL Vspan	LL/SL Vert	LL/SL Mspan	LL/SL Vspan	WL Horiz	WL Mspan	WL Vspan	EQ Horiz	EQ Mspan	EQ Vspan
Location	ft	plf	plf	plf	plf	plf	plf	lb-ft	lb	plf	lb-ft	lb	plf	lb-ft	lb	plf	lb-ft	lb
Grid Z (side wall)	4.00	112	126	270	360	0	238	393	350	0	0	0	111	221	221	0	1	1

Project No.	Project Name:	Made By:	Sheet No:
22201	Lake City, FL	SMK	3

MASONRY LINTEL DESIGN

	Masonry Bending												Masonry Stress											
	Vertical Bending						Horizontal Bending						Vertical Dead Load			Vertical Live Load			Horizontal - Wind			Horizontal - Seismic		
	As	b	d	ρ	k	j	As	b	d	ρ	k	j	fb	fs	fv	fb	fs	fv	fb	fs	fv	fb	fs	fv
Location	in^2	in	in				in^2	in	in				psi	psi	psi	psi	psi	psi	psi	psi	psi	psi	psi	psi
Grid Z (side wall)	0.440	7.625	12.500	0.0046	0.3184	0.8939	0.440	16.000	3.813	0.0072	0.3797	0.8734	27.8	958.3	3.7	0.0	0.0	0.0	68.8	1810.1	3.6	0.3	8.0	0.0

Project No.	Project Name:	Made By:	Sheet No:
22201	Lake City, FL	SMK	4

STEEL LINTEL DESIGN

	Steel Beam Bending																										Steel Deflection					
	Unbraced Length & Flange Compactness						Steel Section Properties													Moment Capacities (Cb = 1.3)										Deflection					
	L_b	Lp	Lr	λ	λpf	λft	bf	tf	Z_{xx}	S_{xx}	I_{xx}	Z_{yy}	S_{yy}	I_{yy}	r_y	rts	h0	Jc	Cw	Fcr xx	Mn/Ω (F2-1)	Mn/Ω (F2-2)	Mn/Ω (F2-3)	Mn/Ω (F3-1)	Mn/Ω (F6-1)	Mn/Ω (F6-2)	Mnx allow	Mny allow	$D_{x\ Max}$	$D_{y\ Max}$	DL Vert Δ	LL/SL Vert Δ	WL Vert Δ	EQ Vert Δ
Location	in	in	in				in	in	in^3	in^3	in^4	in^3	in^3	in^4	in	in	in	in^4	in^6	ksi	kip-ft	kip-ft	kip-ft	kip-ft	kip-ft	kip-ft	kip-ft	kip-ft	in	in	in	in	in	in
Grid Z (side wall)																																		

Project No.	Project Name:	Made By:	Sheet No:
22201	Lake City, FL	SMK	5

LINTEL DESIGN RESULTS

	Final Design																													
	Combined Stress Ratios with Load Combinations																													
	LOAD COMBINDATION 1					LOAD COMBINDATION 2					LOAD COMBINDATION 3					LOAD COMBINDATION 4					LOAD COMBINDATION 5					LOAD COMBINDATION 6				
Location	CMU	Steel	Shear	Vert Δ	Horiz Δ	CMU	Steel	Shear	Vert Δ	Horiz Δ	CMU	Steel	Shear	Vert Δ	Horiz Δ	CMU	Steel	Shear	Vert Δ	Horiz Δ	CMU	Steel	Shear	Vert Δ	Horiz Δ	CMU	Steel	Shear	Vert Δ	Horiz Δ
Grid Z (side wall)	0.03	0.03	0.08			0.03	0.03	0.08			0.09	0.07	0.14			0.11	0.09	0.16			0.03	0.03	0.08			0.02	0.02	0.05		

Project No.	Project Name:	Made By:	Sheet No:
22201	Lake City, FL	SMK	6

LINTEL SUPPORT DATA & DETAILS

Applied Loads

Roof DL =	15.00	psf
Roof LL =	20.00	psf
Roof SL =	0.00	psf

Wall Lateral Forces

Wall WL, Service =	14.3	psf
Parapet WL, Service =	42.4	psf
OOP Wall(serv.) 0.7*EQ =	0.001	*weight
Parapet(serv.) 0.7*EQ =	0.001	*weight

Wall Properties

Masonry Inspection =	Y	y/n
Masonry, f'_m =	2,000	psi
Rebar yield strength, F_y=	60,000	psi
Masonry Mod. Of Elasticity, E_m =	1,800	ksi
Steel Mod. Of Elasticity, E_s=	29,000	ksi

Fm =	900	psi
Fs =	32000	psi
Fv =	44.7	psi
n = E_s/E_m =	16.11	

Reinforcing Bar Properties

size	area
4	0.20 in^2
5	0.31 in^2
6	0.44 in^2
7	0.60 in^2
8	0.79 in^2

Wall Thickness Properties

Unit	tf	d(edge)	d(center)	Isolid	Ihollow	Asolid	Ahollow	ta	Wsolid
	in	in	in	in^4	in^4	in^2	in^2	in	psf
6	1.00	2.875	2.813	178	139.3	67.5	32.2	5.625	63
8	1.25	4.875	3.813	443.3	334	91.5	41.5	7.625	84
10	1.25	6.875	4.813	891.7	606.3	115.5	48	9.625	104
12	1.25	8.875	5.813	1571	971.5	139.5	53.1	11.625	133

Steel Design Properties

F_y =	50.00	ksi
C_b =	1.00	

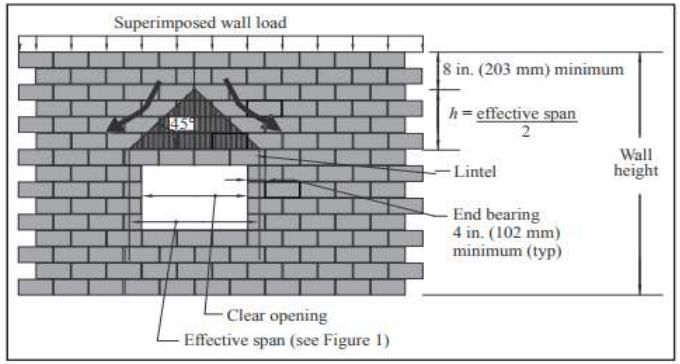
Load Combinations

1	1.00	DL	0.00	RLL/SL	0.00	WL	0.00	EQ
2	1.00	DL	1.00	RLL/SL	0.00	WL	0.00	EQ
3	1.00	DL	0.75	RLL/SL	0.75	WL	0.00	EQ
4	1.00	DL	0.00	RLL/SL	1.00	WL	0.00	EQ
5	1.00	DL	0.00	RLL/SL	0.00	WL	1.00	EQ
6	0.60	DL	0.00	RLL/SL	0.00	WL	1.00	EQ

Lintel Schedule

Wall Thick.	Opening Width	Lintel Depth	Bottom Reinf	Top Reinf
8 in	3.33 ft	16 in	(1) #6	(0) #6
8 in	3.33 ft	32 in	(1) #6	(0) #6
12 in	0.00 ft	16 in	(0) #6	(0) #6
12 in	0.00 ft	32 in	(0) #6	(0) #6
	0.00 ft		(0) #6	(0) #6
	0.00 ft		(0) #6	(0) #6

Masonry Lintel Arching Diagram



This program uses the roof height for the wall height when checking arching. When arching is selected roof loads are neglected.

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Beam

Project File: CK Lake City, FL.ec6

LIC# : KW-06015958, Build:20.22.7.25 JOHNSTON - BURKHOLDER (c) ENERCALC INC 1983-2022

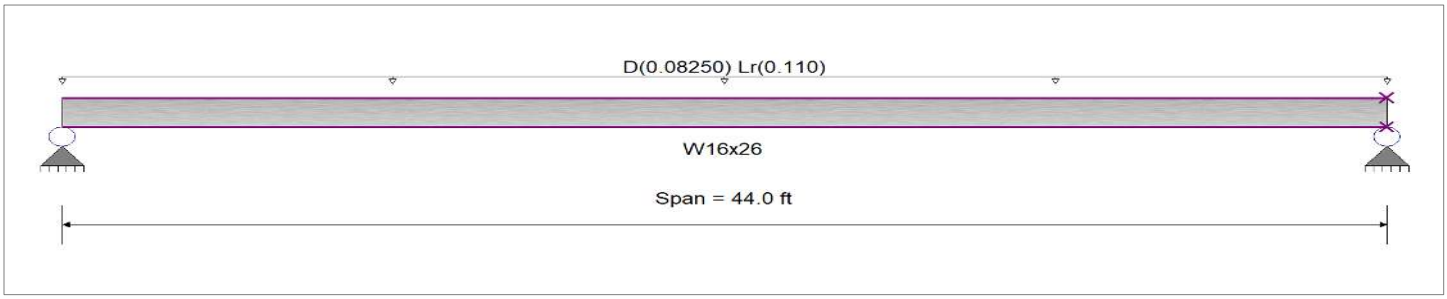
DESCRIPTION: Typical roof beam

CODE REFERENCES

Calculations per AISC 360-16, IBC 2018, CBC 2019, ASCE 7-16
Load Combination Set : ASCE 7-16

Material Properties

Analysis Method :	Allowable Strength Design	Fy : Steel Yield :	50.0 ksi
Beam Bracing :	Beam is Fully Braced against lateral-torsional buckling	E: Modulus :	29,000.0 ksi
Bending Axis :	Major Axis Bending		



Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Beam self weight calculated and added to loading
Uniform Load : D = 0.0150, Lr = 0.020 ksf, Tributary Width = 5.50 ft, (Roof DL + LL)

DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio =	0.479 : 1	Maximum Shear Stress Ratio =	0.068 : 1
Section used for this span	W16x26	Section used for this span	W16x26
Ma : Applied	52.877 k-ft	Va : Applied	4.807 k
Mn / Omega : Allowable	110.279 k-ft	Vn/Omega : Allowable	70.509 k
Load Combination	+D+Lr	Load Combination	+D+Lr
		Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1

Maximum Deflection

Max Downward Transient Deflection	1.067 in	Ratio =	494	>=360	
Max Upward Transient Deflection	0.000 in	Ratio =	0	<360	Span: 1 : Lr Only
Max Downward Total Deflection	2.121 in	Ratio =	249	>=180	Span: 1 : +D+Lr
Max Upward Total Deflection	0.000 in	Ratio =	0	<180	

Maximum Forces & Stresses for Load Combinations

Load Combination / Segment Length	Span #	Max Stress Ratios M	V	Summary of Moment Values Mmax +	Mmax -	Ma Max	Mnx	Mnx/Omega	Cb	Rm	Summary of Shear Values Va Max	VnxVnx/Omega
D Only												
Dsgn. L = 44.00 ft	1	0.238	0.034	26.26		26.26	184.17	110.28	1.00	1.00	2.39	117.75 70.51
+D+Lr												
Dsgn. L = 44.00 ft	1	0.479	0.068	52.88		52.88	184.17	110.28	1.00	1.00	4.81	117.75 70.51
+D+0.750Lr												
Dsgn. L = 44.00 ft	1	0.419	0.060	46.22		46.22	184.17	110.28	1.00	1.00	4.20	117.75 70.51
+0.60D												
Dsgn. L = 44.00 ft	1	0.143	0.020	15.75		15.75	184.17	110.28	1.00	1.00	1.43	117.75 70.51

Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+Lr	1	2.1206	22.126		0.0000	0.000

Vertical Reactions

Support notation : Far left is #1 Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	4.807	4.807
Overall MINimum	1.432	1.432
D Only	2.387	2.387
+D+Lr	4.807	4.807
+D+0.750Lr	4.202	4.202
+0.60D	1.432	1.432
Lr Only	2.420	2.420

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Beam

Project File: CK Lake City, FL.ec6

LIC# : KW-06015958, Build:20.22.7.25 JOHNSTON - BURKHOLDER (c) ENERCALC INC 1983-2022

DESCRIPTION: Typical roof beam - UPLIFT

CODE REFERENCES

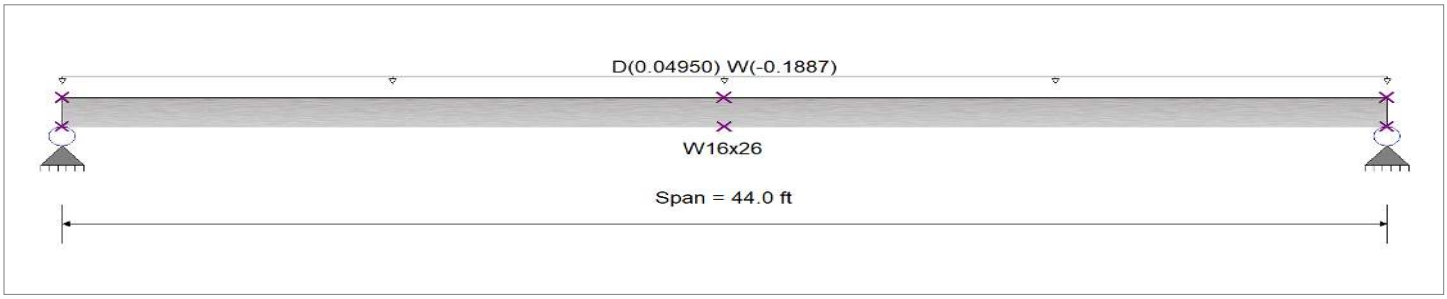
Calculations per AISC 360-16, IBC 2018, CBC 2019, ASCE 7-16
Load Combination Set : ASCE 7-16

Material Properties

Analysis Method :	Allowable Strength Design	Fy : Steel Yield :	50.0 ksi
Beam Bracing :	Beam bracing is defined as a set spacing over all spans	E: Modulus :	29,000.0 ksi
Bending Axis :	Major Axis Bending		

Unbraced Lengths

First Brace starts at 22.0 ft from Left-Most support
Regular spacing of lateral supports on length of beam = 22.0 ft



Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Beam self weight NOT internally calculated and added
Uniform Load : D = 0.0090, W = -0.03430 ksf, Tributary Width = 5.50 ft, (Roof DL + LL)

DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio =	0.891 : 1	Maximum Shear Stress Ratio =	0.026 : 1
Section used for this span	W16x26	Section used for this span	W16x26
Ma : Applied	20.205 k-ft	Va : Applied	1.837 k
Mn / Omega : Allowable	22.677 k-ft	Vn/Omega : Allowable	70.509 k
Load Combination	+0.60D+0.60W	Load Combination	+0.60D+0.60W
		Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1

Maximum Deflection

Max Downward Transient Deflection	0.000 in	Ratio =	0	<240.0	Span: 1 : W Only
Max Upward Transient Deflection	-1.828 in	Ratio =	288	>=240.	
Max Downward Total Deflection	0.480 in	Ratio =	1099	>=180	Span: 1 : D Only
Max Upward Total Deflection	-0.810 in	Ratio =	652	>=180	Span: 1 : +0.60D+0.60W

Maximum Forces & Stresses for Load Combinations

Load Combination / Segment Length	Span #	Max Stress Ratios M	V	Summary of Moment Values Mmax +	Mmax -	Ma Max	Mnx	Mnx/Omega	Cb	Rm	Summary of Shear Values Va Max	VnxVnx/Omega
D Only												
Dsgn. L = 22.00 ft	1	0.405	0.015	11.98		11.98	49.35	29.55	1.30	1.00	1.09	117.75 70.51
Dsgn. L = 22.00 ft	1	0.408	0.015	11.98		11.98	49.04	29.37	1.30	1.00	1.09	117.75 70.51
+D+0.60W												
Dsgn. L = 22.00 ft	1	0.680	0.020		-15.41	15.41	37.87	22.68	1.00	1.00	1.40	117.75 70.51
Dsgn. L = 22.00 ft	1	0.680	0.020		-15.41	15.41	37.87	22.68	1.00	1.00	1.40	117.75 70.51
+D+0.450W												
Dsgn. L = 22.00 ft	1	0.378	0.011		-8.56	8.56	37.87	22.68	1.00	1.00	0.78	117.75 70.51
Dsgn. L = 22.00 ft	1	0.378	0.011		-8.56	8.56	37.87	22.68	1.00	1.00	0.78	117.75 70.51
+0.60D+0.60W												
Dsgn. L = 22.00 ft	1	0.891	0.026		-20.20	20.20	37.87	22.68	1.00	1.00	1.84	117.75 70.51
Dsgn. L = 22.00 ft	1	0.891	0.026		-20.20	20.20	37.87	22.68	1.00	1.00	1.84	117.75 70.51
+0.60D												
Dsgn. L = 22.00 ft	1	0.243	0.009	7.19		7.19	49.35	29.55	1.30	1.00	0.65	117.75 70.51
Dsgn. L = 22.00 ft	1	0.245	0.009	7.19		7.19	49.04	29.37	1.30	1.00	0.65	117.75 70.51

Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
	1	0.0000	0.000	W Only	-1.8309	22.126

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Beam

Project File: CK Lake City, FL.ec6

LIC# : KW-06015958, Build:20.22.7.25 JOHNSTON - BURKHOLDER (c) ENERCALC INC 1983-2022

DESCRIPTION: Typical roof beam - UPLIFT

Vertical Reactions

Support notation : Far left is #1 Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	-4.150	-4.150
Overall MINimum	0.653	0.653
D Only	1.089	1.089
+D+0.60W	-1.401	-1.401
+D+0.450W	-0.779	-0.779
+0.60D+0.60W	-1.837	-1.837
+0.60D	0.653	0.653
W Only	-4.150	-4.150

COMcheck Software Version COMcheckWeb
Envelope Compliance Certificate

Project Information

Energy Code:	2020 Florida Building Code, Energy Conservation
Project Title:	Circle K Lake City FL addition
Location:	Alachua, Florida
Climate Zone:	2a
Project Type:	Addition

Construction Site:
143 NW Centurion Ct
Lake City, Florida 32055

Owner/Agent:

Designer/Contractor:
rdc
11921 Freedom Drive # 1110
Reston, Virginia 20190
703.668.0086

Building Area	Floor Area
1-Retail : Nonresidential	965

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Floor: Unheated Slab-On-Grade, [Bldg. Use 1 - Retail] (b)	88	---	---	0.730	0.730
Roof: Insulation Entirely Above Deck, 3-Year-Aged Solar Reflectance Index = 55.00, Thermal Emittance = 0.75 (d), [Bldg. Use 1 - Retail]	965	---	38.0	0.026	0.039
NORTH					
Ext. Wall: Concrete Block, 8in., Partially Grouted, Cells Ins., Normal Density, Furring: None (c), [Bldg. Use 1 - Retail]	295	---	7.6	0.068	0.151
SOUTH					
Ext. Wall: Concrete Block, 6in., Partially Grouted, Cells Empty, Normal Density, Furring: None, [Bldg. Use 1 - Retail]	313	---	7.6	0.103	0.151
WEST					
Ext. Wall: Concrete Block, 8in., Partially Grouted, Cells Empty, Normal Density, Furring: None, [Bldg. Use 1 - Retail]	668	---	7.6	0.101	0.151
Door: Insulated Metal, Swinging, [Bldg. Use 1 - Retail]	21	---	---	0.610	0.610

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.
(c) CMU insulated cells must be filled with a material having a maximum thermal conductivity of 0.44 Btu in./h-ft2-degrees F. Perlite, vermiculite, polystyrene beads, or spray foam as defined in ASHRAE 2009 Handbook of Fundamentals meet this requirement. Other materials require documentation of thermal conductivity.
(d) High albedo roof requirement options: 1) 3-year aged solar reflectance index >= 55.0 thermal emittance >= 0.75, 2) 3-year aged solar reflectance index >= 64.0, 3) Initial year aged solar reflectance >= 0.70 thermal emittance >= 0.75, 4) Initial year aged solar reflectance index >= 82.0.

Envelope PASSES: Design 28% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2020 Florida Building Code, Energy Conservation requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title	Signature	Date

COM*check* Software Version COMcheckWeb

Inspection Checklist

Energy Code: 2020 Florida Building Code, Energy Conservation

Requirements: 0.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR1][1]	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.4.1 [PR10][1]	The vertical fenestration area <= 30 percent of the gross above-grade wall area.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.4.1 [PR11][1]	The skylight area <= 3 percent of the gross roof area.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.4.2 [PR14][1]	In enclosed spaces > 2,500 ft2 directly under a roof with ceiling heights >15 ft. and used as an office, lobby, atrium, concourse, corridor, storage, gymnasium/exercise center, convention center, automotive service, manufacturing, non-refrigerated warehouse, retail store, distribution/sorting area, transportation, or workshop, the following requirements apply: (a) the daylight zone under skylights is >= half the floor area; (b) the skylight area to daylight zone is >= 3 percent with a skylight VT >= 0.40; or a minimum skylight effective aperture >= 1 percent or <= 0.66 using Tubular Daylighting Device's VT rating.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C406 [PR9][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C303.2 [FO4][2]	Slab edge insulation installed per manufacturer's instructions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C303.2.1 [FO6][1]	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C104 [FO3][2]	Installed slab-on-grade insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.2.5 [FO7][2]	Slab edge insulation depth/length. Slab insulation extending away from building is covered by pavement or >= 10 inches of soil.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Framing / Rough-In Inspection	Complies?	Comments/Assumptions
C303.1.3 [FR12][2]	Fenestration products rated in accordance with NFRC.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C303.1.3 [FR13][1]	Fenestration products are certified as to performance labels or certificates provided.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.4.3 [FR10][1]	Vertical fenestration SHGC value.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.4.3, C402.4.3.4 [FR8][1]	Installed vertical fenestration U-factor and SHGC consistent with label specifications and as reported in plans and COMcheck reports.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.5.1 [FR16][1]	The building envelope contains a continuous air barrier that is sealed in an approved manner and either constructed or tested in an approved manner. Air barrier penetrations are sealed in an approved manner.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.5.5, C403.2.4.3 [ME3][3]	Stair and elevator shaft vents have motorized dampers that automatically close. Refernece section C403.2.4.3 for operational details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.6 [EL26][2]	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.7 [EL27][2]	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.8.2, C405.8.2.1 [EL28][2]	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.5.3 [EL29][2]	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

Section # & Req.ID	Insulation Inspection	Complies?	Comments/Assumptions
C402.2.1.1 [IN20][1]	Insulation installed on a suspended ceiling having ceiling tiles is not being specified for roor/ceiling assemblies. Continuous insulation board installed in 2 or more layers with edge joints offset between layers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C303.2 [IN10][2]	Building envelope insulation is labeled with R-value or insulation certificate providing R-value and other relevant data.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C303.2 [IN7][1]	Above-grade wall insulation installed per manufacturer's instructions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C303.2.1 [IN14][2]	Exterior insulation is protected from damage with a protective material. Verification for exposed foundation insulation may need to occur during Foundation Inspection.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C104 [IN6][1]	Installed above-grade wall insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.2.4 [IN8][2]	Installed floor insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.2.6 [IN18][3]	Radiant panels and associated components, designed for heat transfer from the panel surfaces to the occupants or indoor space are insulated with a minimum of R-3.5.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.3 [IN5][3]	High-albedo roofs satisfy one of the following: 3-year-aged solar reflectance >= 0.55 and thermal emittance >= 0.75 or 3-year-aged solar reflectance index >= 64.0.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C104 [IN2][1]	Installed roof insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. For some ceiling systems, verification may need to occur during Framing Inspection.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
C402.5.1.1 [IN1][1]	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C402.5.6 [FI37][1]	Weatherseals installed on all loading dock cargo door openings and provide direct contact along the top and sides of vehicles parked in the doorway.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.5.8 [FI26][3]	Recessed luminaires in thermal envelope to limit infiltration and be IC rated and labeled. Seal between interior finish and luminaire housing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.1.1 [FI57][1]	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, recommendations, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated. Regular maintenance actions shall be clearly stated on accessible label.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

COM*check* Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Jason C. Adams State of Florida, Professional Engineer, License No. 75948
This item has been electronically signed and sealed by Jason C. Adams, PE on Aug 16, 2022 using a Digital Signature.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Project Information

Energy Code:	2020 Florida Building Code, Energy Conservation
Project Title:	Circle K Lake City FL addition
Project Type:	Addition

Construction Site:
143 NW Centurion Ct
Lake City, Arkansas 32055

Owner/Agent:
Arkansas

Designer/Contractor:
Jason C. Adams P.E.
Benchmark Group
1805 N 2nd Street
Rogers, Arkansas 72756
479-636-5004
JCA@teamofchoice.com

JASON C. ADAMS LICENSE No. 75948 STATE OF FLORIDA PROFESSIONAL ENGINEER

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Retail	842	1.06	893
		Total Allowed Watts =	893

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
1-Retail				
LED: LED Other Fixture Unit 60W:	1	16	50	800
LED: LED Panel 41W:	1	2	42	84
			Total Proposed Watts =	884

Interior Lighting PASSES: Design 1% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2020 Florida Building Code, Energy Conservation requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Jason C. Adams P. E. — Name - Title

Signature

08/16/22 — Date

COMcheck Software Version COMcheckWeb

Exterior Lighting Compliance Certificate

Project Information

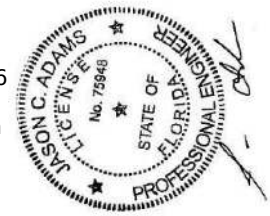
Energy Code:	2020 Florida Building Code, Energy Conservation
Project Title:	Circle K Lake City FL addition
Project Type:	Addition
Exterior Lighting Zone	2 (Neighborhood business district (LZ2))

Construction Site:
143 NW Centurion Ct
Lake City, Arkansas 32055

Owner/Agent:
Arkansas

Designer/Contractor:
Jason C. Adams P.E.
Benchmark Group
1805 N 2nd Street
Rogers, Arkansas 72756
479-636-5004
JCA@teamofchoice.com

Jason C. Adams State of Florida, Professional Engineer, License No. 75948
This item has been electronically signed and sealed by Jason C. Adams, PE on Aug 16, 2022 using a Digital Signature.
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Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Net added drive and parking (Driveway)	37075 ft2	0.04	Yes	1483
Diesel Sales Canopy (Free standing/attached sales canopy)	1679 ft2	0.4	Yes	672
Illuminated area of facade wall or surface	220 ft2	0.07	No	16
			Total Tradable Watts (a) =	2155
			Total Allowed Watts =	2171
			Total Allowed Supplemental Watts (b) =	400

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Net added drive and parking (Driveway, 37075 ft2): Tradable Wattage				
LED: A4B: LED Roadway-Parking Unit 42W:	1	6	184	1104
Diesel Sales Canopy (Free standing/attached sales canopy, 1679 ft2): Tradable Wattage				
LED: CAN: LED Canopy Lights: LED Panel 54W:	1	12	53	636
LED: P1: LED Linear 8W:	1	10	1	13
LED: P118: Other:	1	14	1	18
Illuminated area of facade wall or surface (220 ft2): Non-tradable Wattage				
LED: LED Other Fixture Unit 28W:	1	1	31	31
			Total Tradable Proposed Watts =	1771

Exterior Lighting PASSES: Design 30% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2020 Florida Building Code, Energy Conservation requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Jason C. Adams P. E.		08/16/22
Name - Title	Signature	Date

Inspection Checklist

Energy Code: 2020 Florida Building Code, Energy Conservation

Requirements: 0.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C103.2 [PR8][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C406 [PR9][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2.2 [EL22][1]	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1, C405.2.1.1 [EL18][1]	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1.2 [EL19][1]	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1.3 [EL20][1]	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.2, C405.2.2.1, C405.2.2.2 [EL21][2]	Each area not served by occupancy sensors (per C405.2.1) have time-switch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3, C405.2.3.1, C405.2.3.2 [EL23][2]	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.4 [EL26][1]	Separate lighting control devices for specific uses installed per approved lighting plans. 1. Display and accent lighting, lighting in display cases, supplemental task lighting and lighting equipment for sale shall have occupancy sensor control. 2) Sleeping units shall have auto off controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.5 [EL28][3]	Manual lighting controls are in a location with ready access and where controlled lights are visible.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.6 [EL30][3]	Exterior lighting systems provided with controls complying with C405.2.6.1 through C405.2.6.4 for daylight shutoff and decorative lighting shutoff.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.6 [EL26][2]	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.7 [EL27][2]	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.8.2, C405.8.2.1 [EL28][2]	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.5.3 [EL29][2]	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C408.2.5.2 [FI17][3]	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.3.2 [FI18][1]	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Interior Lighting fixture schedule for values.*
C405.4.2 [FI19][1]	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Exterior Lighting fixture schedule for values.*
C408.1.1 [FI57][1]	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, recommendations, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated. Regular maintenance actions shall be clearly stated on accessible label.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.3 [FI33][1]	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)