

			PROJECT DIRECTORY			
¥	OWNER	CONTRACTOR	ARCHITECT	INTERIOR DESIGNER	STRUCTURAL EN	
entistry.n	PETER BOULDEN, DMD		CSC DESIGN, INC	DESIGN ERGONOMICS	KEYSTONE STRUCTURAL	
tevit\23-060 Blairsville D	2556 APPLE VALLEY RD. SUITE 250 BROOKHAVEN, GA 30319		135 P. RICKMAN INDUSTRIAL DR. SUITE 100 CANTON, GA 30115	198 AIRPORT RD. FALL RIVER, MA 02720	531 ROSELANE ST. SUITE 150 MARIETTA, GA 30060	
Arch\DESIGN\F	CONTACT:		CONTACT: KEVIN WHIPPLE, RA	CONTACT: TIM GAGNON	CONTACT: BRENDAN CROWLEY	
ounty, GA/	678-887-1005 DRBOULDEN@ATLANTADENTALSPA.COM		770-345-2579 KWHIPPLE@CSCDE.COM	800-275-2547 TGAGNON@DESERGO.COM	404-483-6921 BCROWLEY@KEYSTONEP	
Jnion C	MEP ENGINEER					
ו Dental (
P:\23-060 Hometowr	870 CRESTMARK DR. LITHIA SPRINGS, GA 30122					
54:47 PM F	CONTACT: JUSTIN HARDY					
-05-10 3:	JUSTIN@CONVERGEENGINEERS.COM					
2024	CONSULTATINTS NOT IN CSC DESIGN'S SCOPE OF SERVICES. DRAWINGS ARE NOT BY ARCHITECT AND ARE	E INCLUDED HEREIN FOR CONVENIENCE ONLY.				

		<u> </u>		
) SET		
		% CD		
		- 100		
		2024		
SHEET NUMBER	SHEET NAME	5.10.	F #	DATE
		0		
GENERAL G-000				
G-001	SHEET INDEX			
G-005	SYMBOLS & LEGENDS			
G-006 G-020	BUILDING CODE ANALYSIS	-		
G-050	MOUNTING HEIGHTS	•		
LS101	LIFE SAFETY PLAN - LEVEL 01	•		
LS101-A LS101-B	LIFE SAFETY PLAN - LEVEL 01 - SUITE 200	-		
G-230	WOOD STUD PARTITION TYPES	•		
G-400	TESTED RATED ASSEMBLY DETAILS			
ARCHITECTURE				
A-001				
AS101 A-101	FLOOR PLAN - LEVEL 01			
A-101-A	ENLARGED FLOOR PLAN - LEVEL 01 - SUITE 100			
A-101-B	ENLARGED FLOOR PLAN - LEVEL 01 - SUITE 200			
A-201	REFLECTED CEILING PLAN - LEVEL 01			
A-202	REFLECTED SOFFIT PLAN			
A-301 A-311	EXTERIOR ELEVATIONS			
A-312	ENLARGED ELEVATIONS			
A-313	ENLARGED ELEVATIONS			
A-401 A-411	WALL SECTIONS			
A-412	WALL SECTIONS			
A-413	WALL SECTIONS			
A-415	WALL SECTIONS			
A-416	WALL SECTIONS	•		
A-417	WALL SECTIONS			
A-601	ENLARGED SECTION DETAILS			
A-620	TYP. ROOF DETAILS	•		
A-621 A-700	TYP. ROOF DETAILS			
A-701	DOOR SCHEDULE	-		
A-705	DOOR HEAD, JAMB, & SILL DETAILS			
A-720 A-721	STOREFRONT ELEVATIONS			
A-725	STOREFRONT HEAD, JAMB, & SILL DETAILS			
	N			
DE-0.1	▼ B&W RENDERINGS			
DE-1.0	FLOOR PLAN	•		
DE-1.1 DE-1.2	DIMENSIONED FLOOR PLAN			
DE-1.3	REFLECTED CEILING PLAN AND DETAILS	-		
DE-1.4				
DE-2.0 DE-2.1	ENLARGED RECEPTION PLAN AND DETAILS	-		
DE-2.2	ENLARGED STERILIZATION PLAN & DETAILS			
DE-2.3	ENLARGED STERILIZATION PLAN & DETAILS	-		
DE-2.4 DE-2.5	ENLARGED RESTROOM PLANS AND ELEVATIONS			
DE-2.6	INTERIOR ELEVATIONS			
DE-2.7	INTERIOR ELEVATIONS	-		
DE-3.1	SECTIONS AND DETAILS			
DE-3.2	SECTIONS AND DETAILS			
DE-4.0 DE-4.1	DOOR SCHEDULES AND DETAILS			
DE-5.0	MECHANICAL ROOM DETAILS			
STRUCTURAL	STRUCTURAL GENERAL NOTES & SCHEDULES			
S2-1	ROOF FRAMING PLAN	•		
S3-1	FOUNDATION DETAILS			
S5-1	SCHEDULE OF SPECIAL INSPECTIONS			
		I		•
MECHANICAL	MECHANICAL SPECIFICATION			
M002	MECHANICAL SCHEDULES AND DETAILS			
M-100	MECHANICAL FLOOR PLAN 1ST FLOOR			
PLUMBING				
P100	PLUMBING WASTE PLAN			
P200	DOMESTIC WATER PLAN			
ELECTRICAL				
E-0.0	ELECTRICAL LEGEND AND SPECS			
E-1.0 E-2.0	ELECTRICAL LIGHTING PLAN			
E-3.0	MECHANICAL POWER PLAN			
E-4.0	ELECTRICAL RISER AND DETAILS			







ABBREVIATION LEGEND

ER Igineer Crete Institute Hung Tile H Dissabilities N Finish Grade /Ing
IGINEER CRETE INSTITUTE EILING TILE TH DISSABILITIES N FINISH GRADE /ING
CRETE INSTITUTE EILING TILE TH DISSABILITIES N FINISH GRADE /ING
CRETE INSTITUTE EILING TILE TH DISSABILITIES N FINISH GRADE /ING
N FINISH SRADE VING
TH DISSABILITIES N FINISH BRADE /ING
N TINISH GRADE /ING
N TINISH GRADE /ING
TNISH RADE /ING
/ING
JNIT
ITUTE OF
ITUTE OF STEEL
I
ONIAL
STITUTE
L WOODWORKING
N
AL UNIT NG
IDOCUMENTS
R MINUTE
R SECOND
-
IMANAGEMENT
SONRY UNIT
- OCCUPANCY;
I
I
I I SPECIFICATION
I I SPECIFICATION
I I SPECIFICATION
I I SPECIFICATION
I SPECIFICATION
I SPECIFICATION
I SPECIFICATION
I SPECIFICATION
ISPECIFICATION

E EA EF EIFS EJ ELEC ELEV EMERG ENCL ENGR ENTR EPA EQ EST EW EWC EXH EXP EXT	EAST EACH EACH FACE; EXHAUST FAN EXTERIOR INSULATION AND FINISH SYSTEM EXPANSION JOINT ELEVATION ELECTRIC; ELECTRICAL ELEVATOR EMERGENCY ENCLOSURE ENGINEER ENTRANCE ENVIRONMENTAL PROTECTION AGENCY EQUAL ESTIMATE EACH WAY ELECTRIC WATER COOLER EXHAUST EXPANSION; EXPOSED EXTERIOR; EXTERIOR;
F F.O. FAR FC FCO FD FDN FE FF&E FF&E FF&E FFC FIC FIC FIC FIC FIC FIC FIC FIC FLOUR FLR FOM FOS FP FPL FR FR FT FTG FURR FWC G	FACE OF FLOOR AREA RATING FOOT CANDLES FLOOR CLEANOUT FLOOR DRAIN FOUNDATION FIRE EXTINGUISHER FURNITURE, FIXTURES & EQUIPMENT FIRE EXTINGUISHER CABINET FIRE HOSE CABINET FIGURE FINISH FIXTURE FLEXIBLE FLOORING FLOURESCENT FLOOR FACE OF MASONRY FACE OF STUD FIRE PROTECTIONS FABRIC PANEL FIRE RATING; FIRE RESISTANT; FRAME FIRE RETARDENT TREATED WOOD FEET (FOOT) FOOTING FURRING FABRIC WALL COVERTING
G GA GALV GC GEN GENR GFI GL GLZ GRD GSB GWB GYP	GAGE GALVANIZED GENERAL CONTRACTOR GENERAL GENERATOR GROUND FAULT INTERRUPTER GLASS GLAZING GROUND GYPSUM SHEATHING BOARD GYPSUM WALL BOARD GYPSUM
H HB HC HDR HDW HEX HID HM HR HT HTG HTR HVAC HW HWY	HIGH HOSE BIBB HANDICAP; HOLLOW CORE HEADER HARDWARE HEXAGONAL HIGH INTENSITY DISCHARGE HOLLOW METAL HOUR HEIGHT HEATING HEATER HEATING, VENTILATING AND AIR CONDITIONING HOT WATER HOT WATER HIGHWAY
I IAQ IBC ID ID INCAND INCL INCLDG INFO INSUL INT INV	INDOOR AIR QUALITY INTERNATIONAL BUILDING CODE IN CONTRACT IDENTIFICATION; INTERIOR DESIGN; INSIDE DIAMETER INCHES INCANDESCENT INCLUSIVE INCLUDING INFORMATION INSULATION INTERIOR INVERT
J JAN JB JST JT	JANITOR JUNCTION BOX JOIST JOINT
k Kd Kip Kit	KNOCK DOWN THOUSAND POUNDS KITCHEN

KWY KEYWAY

L L	ANGLE; LENGTH; LOW	R R	MEASURE OF THERMAL RESISTANCE; RADIUS;
LAB LAM	LABORATORY LAMINATE;	RB	RISER RESILIENT BASE;
1 4 1 /		RBR	
		RC	
LB	POUNDS	RCP	REFLECTED CEILING PLA
LDG		RD	ROAD;
LED	LIGHT EMITTING DIODE		ROOF DRAIN
LF	LINEAR FOOT;	REBAR	REINFORCING STEEL BA
	LINEAR FEET	REC	RECESSED
LH		RECEPT	
		REF	REFERENCE:
LIN	LINEAR		REFRIGERATOR
LL	LIVE LOAD	REINF	REINFORCE;
LONG	LONGITUDINAL		REINFORCING; REINFORCEMENT
LR	LIVING ROOM	REQ	REQUIRE;
LT	LIGHT		REQUIRED
	LIGHTING LAMINATED VENEER LUMBER:	RET	RETURN
	LEVEL	REV	REVISE; REVISED:
			REVISION
Μ		RFG	ROOFING
m		RFI	REQUEST FOR INFORMAT
MAINT		KH DUD	
MAS	MASONRY	RM	ROOM
MATL	MATERIAL	RO	ROUGH OPENING
MAX	MAXIMUM	ROW	RIGHT OF WAY
MBR	MEMBER	RPM	ROTATIONS PER MINUTE
		RSF	
MED ME77	MEZION	RTG	RUBBER TILE RATING
MFR	MANUFACTURER	RTU	ROOFTOP UNIT
MIN	MINIMUM;	RWC	RAIN WATER CONDUCTO
MICO			
MO	MISCELANIOUS MASONRY OPENING	S	COLITU
MT	MOUNT	SAN	SANITARY
MTG	MOUNTING	SB	STONE BASE
MTL	METAL	SC	SOLID CORE
MVV	MICROWAVE	SCH	SCHEDULE;
Ν		SCHEM	SCHEMATIC
Ν	NORTH	SD	SMOKE DETECTOR;
N/A		000	
		SDG	SIDING SOUTH FAST
NEG	NEGATIVE	SECT	SECTION
NFPA	NATIONAL FIRE PROTECTION	SF	SQARE FOOT;
NIC		801	SQUARE FEET
NO		SHT	SHEET
NOM	NOMINAL	SHWR	SHOWER
NRC	NOISE REDUCTION COEFFICIENT	SIM	SIMILAR
NSF	NET SQUARE FOOT;	SPEC	SPECIFICATION
NTS	NOT TO SCALE	SPKR	SPEAKER
NW	NORTHWEST	SST	STAINLESS STEEL
		ST	STAIRS;
0			STREET; STAIN
00		STC	SOUND TRANSMISSION
000	OCCUPIED		COEFFICIENT
OD	OUTSIDE DIAMETER	STD	STANDARD
OFF	OFFICE	SIL	STEEL
OPG		STO	STORAGE
OPP	OPPOSITE	STR	STRUCTURE;
OZ	OUNCE;		STRUCTURAL
	OUNCES	SUSP	SUSPENDED
		SWR	SEWER
PART	PARTIAI	SYMB	SYMBOL
PASS	PASSAGE	SYS	SYSTEM
PC	PRECAST	т	
PCC		Т	TILE:
PD			TREAD;
PERP	PERPENDICULAR	TOD	TREADS
PL	PLATE;	T&D	
	PROPERTY LINE	T.O.	TOP OF
PLAS	PLASTIC	ТВ	TILE BASE
PLB	PLUMB	TBD	TO BE DETERMINED
PLBG	PLUMBING	TEL	
	POUNDS PER LINEAR FOOT		TEMPORARY
PNL	PANEL	TERR	TERRAZZO
POS	POSITIVE	IHK	THICK; THICKENED:
PR	PAIR		THICKNESS
PREFAB		THRES	THRESHOLD
FNUJ	PROJECTED	I HRU TMPD	
PROP	PROPERTY;	TOC	TOP OF CONCRETE:
DCC	PROPOSAL		TOP OF CURB
ror PSI	POUNDS PER SQUARE FOUT	TOPO	TOPOGRAPH; TOPOGRAPHY
PT	PAINT;		TOPOGRAPHIC
	PRESSURE TREATED	TOS	TOP OF STEEL
PTD ואדם		TOW	TOP OF WALL
1° EIN		I KANSF	THERMOSTAT
Q		TV	TELEVISION
QT		TYP	TYPICAL
QIY	QUANTITY		

		SECTION/PLAN LEGEND	SYMBOLS LEGEND
RMAL	U U HEAT TRANSFER COEFFICIENT UC UNDERCUT	ALUMINUM	A-NNN-UU SHEET NUMBI
ODETE	UL UNDERWRITERS LABORATORIES INC. UNEXCAV UNEXCAVATED UNO UNLESS NOTED OTHERWISE	BATT INSULATION	OPTIONAL: SUPPL SHEET SEQUENCE SHEET TYPE DESIG
IGRETE NG PLAN EEL BARS	UPS UNITERRUPTABLE POWER SUPPLY UR URINAL USF USABLE SQUARE FOOTAGE	BRICK	
	USG UNITED STATES GYPSUM CORPORATION UTIL UTILITY	CONCRETE	
	V VENT; VOLT V.I.F. VERIFY IN FIELD VAR VARIES	CONCRETE MASONRY	
	VAV VARIABLE AIR VOLUME VB VINYL BASE VCT VINYL COMPOSITION TILE VENT VENTILATION	EARTH	$ \begin{array}{c c} 1 & FLOOR PLAN - LEVEL 01 \\ \hline $
	VERT VERTICAL VEST VESTIBULE VOC VOLATILE ORGANIC COMPOUND VOL VOLUME	GRAVEL / DGA	VIEW NAME VIEW SCALE SHEET NUMBER VIEW NUMBER
:K3E	VIR VENT THROUGH ROOF VWC VINYL WALL COVERING W	PLASTER, GYPSUM WALL BOARD	GRID LINE
1INUTE E FEET	W WATT; WEST; WIDE; WIDTH W/ WITH		
DUCTOR	W/D WASHER / DRYER W/O WITHOUT WB WOOD BASE WC WATER CLOSET;	RIGID INSULATION	1'-0"
	WCO WALL CLEANOUT WD WOOD WDW WINDOW WF WIDE FLANGE	SAND	FROM FACE OF ST
ξ ;	WH WATER HEATER WL WIND LOAD WLD WELDED WP WATERPROOF;	SPRAY FOAM INSULATION	FROM FINISH FAC
	WATERPROOFING; WEATHERPROOF WPT WORKING POINT WT WEIGHT	STEEL, IRON	FROM CENTER TC
	X XPS EXTRUDED POLYSYRENE BOARD (INSULATION)	STONE	— — — — — ← CENTERLINE
	Y YD YARD; YARD DRAIN	WOOD BLOCKING / SHIM	BREAK LINE
SION		WOOD DIMENSIONAL	ALIGN

WOOD FINISH

MATCHLINE - SHEET NUMBER - VIEW NUMBER

<u>1 / A101</u>





CSC

INC.

05/10/2024

DESIGN,



	GE	ENERAL NOTES
	1.	DO NOT SCALE DRAWINGS - USE DIMENSIONS ONLY. FOR DIMENSIONS NOT SHOWN OR IN QUESTION, CONTRACTOR SHALL REQUEST CLARIFICATION FROM ARCHITECT BEFORE PROCEEDING. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB AND MUST NOTIFY THE ARCHITECT IMMEDIATELY IN WRITING OF ANY DISCREPANCIES OR VARIATIONS FROM THE DIMENSIONS OR CONDITIONS SHOWN BY THESE DRAWINGS PRIOR TO ORDERING MATERIALS OR OTHERWISE PROCEEDING WITH THE WORK.
	2.	<u>UNLESS NOTED OTHERWISE</u> , WALL AND PARTITION DIMENSIONS ARE GIVEN FROM FACE OF STUD/CMU TO FACE OF STUD/CMU OR TO COLUMN CENTERLINE. EXCEPTION: MILLWORK DETAILS WHERE DIMENSIONS ARE GIVEN FROM FACE OF FINISH SURFACES (GWB, PLASTER, ETC.). LOCATE EDGE OF DOOR OPENINGS 6" FROM FACE OF ADJACENT PARTITION UNLESS NOTED OTHERWISE.
	3.	ELEVATIONS AND LEVELS ARE SHOWN FROM TOP OF SLAB BASED ON A "REFERENCE BENCHMARK ELEVATION" - THE CONTRACTOR SHALL COORDINATE THE ELEVATIONS PROVIDED WITH THE CIVIL DRAWINGS AND EXISTING ELEVATIONS WHEN APPLICABLE.
	4.	ALL CENTERLINE OF FOOTINGS, WALLS, GRADE BEAMS, COLUMNS AND BEAMS SHALL COINCIDE, UNLESS NOTED OTHERWISE.
	5.	ALL DETAILS, SECTIONS AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE, UNLESS SPECIFICALLY SHOWN OTHERWISE.
	6.	THIS SET OF CONSTRUCTION DOCUMENTS IS INTENDED TO BE READ AS A COMPREHENSIVE SET OF DRAWINGS AND SPECIFICATIONS. NOTE THAT THE SPECIFICATIONS FORM AN INTEGRAL PART OF THIS CONSTRUCTION DOCUMENTATION. THE CONTRACTOR SHALL CAREFULLY STUDY & COMPARE THE CONTRACT DOCUMENTS WITH EACH OTHER (EACH DISCIPLINE) AND THE INFORMATION FURNISHED BY THE DEVELOPER AND NOTIFY THE ARCHITECT OF ANY ERRORS, INCONSISTENCIES OR OMISSIONS. INFORMATION GIVEN BY ONE DISCIPLINE SHALL BE APPLICABLE FOR ALL PORTIONS OF THE CONSTRUCTION DOCUMENTS IN ORDER TO MEET THE DESIGN INTENT. IF THE CONTRACTOR PERFORMS ANY CONSTRUCTION ACTIVITY WHERE AN ERROR, INCONSISTENCY OR OMISSION IN THE CONTRACT DOCUMENTS IS EVIDENT WITHOUT SUCH NOTICE TO THE ARCHITECT. THE CONTRACTOR SHALL ASSUME THE APPROPRIATE RESPONSIBILITY AT NO ADDITIONAL COST TO THE OWNER.
	7.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, COORDINATING AND PAYING FOR THE COST OF ALL INSPECTIONS, TESTS, PERMITS, LICENSES AND OTHER GOVERNMENTAL FEES, AS NECESSARY FOR PROPER EXECUTION TO COMPLETE THE WORK AND AS INDICATED ON THE PLANS AND SPECIFICATIONS, RECOMMENDED BY THE GEOTECHNICAL REPORT AND/OR AS REQUIRED BY ANY GOVERNMENTAL AGENCY. REVISIONS MADE AFTER INITIAL PERMIT PULL REQUIRING RESUBMISSION OF REVISED DOCUMENTS AND/OR ADDITIONAL FEES SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
	8.	THE CONTRACTOR SHALL COMPLY WITH AND GIVE NOTICES REQUIRED BY LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF THE PUBLIC AUTHORITIES BEARING ON THE PERFORMANCE OF THE WORK.
	9.	THE CONTRACTOR SHALL PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES REQUIRED TO EXECUTE AND COMPLETE ALL ITEMS OF WORK AS SHOWN, OR INDICATED
	10.	THE CONTRACTOR SHALL PROVIDE ALL REGULATORY AGENCY REQUIRED SIGNAGE NECESSARY FOR CERTIFICATE OF OCCUPANCY.
	11.	ANY AND ALL REVISIONS FROM THESE PLANS MUST BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION. ONCE CONSTRUCTION HAS COMMENCED, ANY REVISIONS IN THE FIELD MUST BE APPROVED BY THE OWNER'S CONSTRUCTION REPRESENTATIVE AND THE ARCHITECT.
	12.	THE CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR BRACING AND SHORING OF THE STRUCTURE DURING CONSTRUCTION TO ENSURE STABILITY.
	13.	THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSPECTIONS WITH THE AUTHORITIES HAVING JURISDICTION ON THE PROJECT.
	14.	THE CONTRACTOR SHALL MAINTAIN ON SITE AND MAKE AVAILABLE IN THE JOB TRAILER A LIST OF SPECIAL INSPECTORS CONDUCTING INSPECTIONS ON THE PROJECT. THE LIST SHALL INDICATE THE NAMES OF INSPECTOR, DATES, AND TIMES PRESENT ON JOB SITE AND TYPES OF INSPECTIONS BEING CONDUCTED. INSPECTION REPORTS SHALL ALSO BE MADE AVAILABLE UPON REQUEST.
	15.	THE CONSTRUCTION SCHEDULE SHALL BE RELATED TO THE ENTIRE PROJECT AND BE CONDUCTED IN STRICT ACCORDANCE WITH THE SEQUENCE OF OPERATIONS IN WHICH THE CONTRACTOR HAS COORDINATED WITH THE OWNER'S APPROVAL ON ALL SCHEDULE SEQUENCING TO AVOID CONFLICTS WITH DAILY OPERATIONS AND SPECIAL EVENTS INCLUDING ANY EXISTING FACILITIES AND ACCESS AS MAY BE APPLICABLE.
	16.	THE USE OF THE SITE SHALL BE CONFINED TO THOSE AREAS APPROVED BY THE OWNER AND CODE IN ORDER TO MINIMIZE PUBLIC EXPOSURE TO UNSAFE CONDITIONS AND TO CONTINUE THE OPERATION OF THE SURROUNDING DEVELOPMENT.
	17.	NO STRUCTURE OF ANY KIND IS TO BE CONSTRUCTED ON OR PLACED WITHIN PUBLIC UTILITY EASEMENTS EXCEPT WOOD, WIRE OR REMOVABLE SECTION TYPE FENCING, REQUIRE PAVING FOR ACCESS AND GROUND COVER INCLUDING GRASS. THE CONTRACTOR SHALL REPLACE ANY OBSTRUCTIONS OR PLANTING THAT MUST BE REMOVED DURING THE COURSE OF MAINTENANCE, CONSTRUCTION OR RECONSTRUCTION OF THE PUBLIC UTILITIES AT NO COST TO THE OWNER.
	18.	NO BUILDING OR PORTION OF A BUILDING SHALL BE OCCUPIED OR USED INCLUDING STORAGE PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY. APPROVAL FOR OCCUPANCY IS ONLY GRANTED AFTER ACCEPTANCE BY THE FIRE MARTIAL AND BUILDING OFFICIAL.
	19.	MATERIAL AND EQUIPMENT STORAGE SHALL BE ON SITE AND COORDINATED WITH OWNER'S DIRECTIVES.
	20.	SIGNS, LOCATION, NUMBER, AND SIZE ARE NOT APPROVED UNDER THIS BUILDING PERMIT. A SEPARATE PERMIT IS REQUIRED FOR EACH SIGN. ALL IDENTIFICATION SIGNAGE SHALL BE PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR UNLESS NOTED OTHERWISE SIGNAGE ON RESTROOM DOORS SHALL BE RAISED AND BRAILLE CHARACTERS AND PICTORIAL SYMBOL SIGNS. IDENTIFICATION SIGNAGE 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 COMPLY WITH THE GEORGIA ACCESSIBILITY CODE AND THE ADA STANDARDS FOR ACCESSIBLE DESIGN.
	21.	EXIT DOORS SHALL NOT BE SUBJECTED TO USE OF A KEY OR REQUIRE SPECIAL KNOWLEDGE TO OPERATE PER THE NFPA 101 LIFE SAFETY CODE 2018 EDITION, CHAPTER 5-2.15.2. PANIC HARDWARE SHALL BE PROVIDED FOR ALL EXIT DOORS PER THE REQUIREMENTS OF THE NFPA LIFE SAFETY CODE. EXIT DOORS SHALL OPERATE PER NFPA 101 LIFE SAFETY CODE.
	22.	(DOOR/HARDWARE) HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE. LEVER-OPERATED MECHANISMS, PUSH-TYPE MECHANISMS, AND U-SHAPED HANDLES SHALL BE PROVIDED THAT COMPLY WITH GEORGIA ACCESSIBILITY CODE AND THE ADA STANDARDS FOR ACCESSIBLE DESIGN.
	23.	PROTRUDING OBJECTS SHALL NOT REDUCE THE CLEAR WIDTH OF AN ACCESSIBLE ROUTE AND SHALL BE INSTALLED WITH THE GEORGIA ACCESSIBILITY CODE AND THE ADA STANDARDS FOR ACCESSIBLE DESIGN.
	24.	DETECTIBLE WARNINGS ON WALKING SURFACES SHALL COMPLY WITH THE GEORGIA ACCESSIBILITY CODE AND THE ADA STANDARDS FOR ACCESSIBLE DESIGN.
	25.	ALL MATERIALS EXPOSED WITHIN PLENUMS ARE REQUIRED TO BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 AS DETERMINED IN ACCORDANCE WITH ASTM E84.
	26.	THE CONTRACTOR SHALL DOCUMENT THAT INSULATION MATERIALS IN CONCEALED OR EXPOSED SPACES SHALL HAVE A FLAME SPREAD INDEX AND A SMOKE-DEVELOPED INDEX THAT MEETS CODE.
	27.	ALL INTERIOR FINISH PRODUCTS SHALL BE PROVIDED IN COMPLIANCE WITH THE REQUIREMENTS OF THE RESPECTIVE OCCUPANCY CHAPTER OF THE NFPA 101 LIFE SAFETY CODE FOR WHICH THE PROJECT IS BEING PERMITTED UNDER. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION VERIFYING AT THE TIME OF FINAL INSPECTION THAT PRODUCTS ARE COMPLIANT WITH THE CODE REQUIREMENTS.
	28.	ALL WOOD LUMBER AND PLYWOOD OR O.S.B. USED IN EXTERIOR CONSTRUCTION SHALL BE PRESSURE TREATED THAT COMES IN CONTACT WITH CONCRETE OR WITHIN 12" OF GRADING/SOIL.
	29.	EMERGENCY LIGHTING COMPLYING WITH NFPA 101 LIFE SAFETY CODE SHALL BE INSTALLED. ADDITIONAL EMERGENCY LIGHTING MAY BE REQUIRED UPON FIELD INSPECTION.
,	30.	THE CONTRACTOR SHALL PERMANENTLY IDENTIFY ALL FIRE-RATED WALLS AND SMOKE BARRIERS WITH SIGNS OR STENCILING ABOVE CEILING OR IN CONCEALED SPACES WITH LETTERS A MINIMUM OF 2" HIGH ON A CONTRASTING BACKGROUND SPACED AT A MAXIMUM OF 12'-0" ON CENTER WITH A MINIMUM OF ONE PER WALL OR BARRIER IN ACCORDANCE WITH CODE.
	31.	PRIOR TO INSTALLATION, THE CONTRACTOR SHALL SUBMIT DETAILS FOR REVIEW AND APPROVAL WHICH CLEARLY INDICATE LATERAL BRACING TO BUILDING STRUCTURE FOR ALL PARTITIONS OF LIGHT GAUGE METAL FRAMING WHICH EXCEED 9'-0" IN HEIGHT TO ADEQUATELY RESIST THE APPLICABLE LATERAL SEISMIC DESIGN FORCES PER CODE.
	32.	ALL COLD FORM METAL FRAMING SHOWN OF THE DRAWINGS IS FOR DIAGRAMMATIC USE ONLY. MEMBER SIZE, CONFIGURATION, DETAILS AND CONNECTIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR'S COLD FORM METAL FRAMING ENGINEER. COLD FORM METAL FRAMING SHOP DRAWINGS, COMPLETE WITH CALCULATIONS, SHALL BE SIGNED AND SEALED BY THE COLD FORM METAL FRAMING ENGINEER IN THE STATE OF HAVING JURISDICTION OVER THE PROJECT AND SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.
	33.	PROVIDE FIRE RETARDANT TREATED BLOCKING IN PARTITIONS AS REQUIRED FOR SUPPORTING WALL MOUNTED EQUIPMENT, ETC.
	34.	ELECTRICAL PANELS, ALARM BOXES, FIRE EQUIPMENT CABINETS AND OTHER SIMILARLY RECESSED BOXES GREATER THAN 16" THAT ARE LOCATED IN A RATED ASSEMBLY SHALL BE BACKED BY GYPSUM WALLBOARD LAYERS SUFFICIENT TO MAINTAIN THE DESIGNATED FIRE RATING. FIRE EQUIPMENT CABINETS MAY BE PROVIDED WITH A RATED CABINET TO MATCH THE MINIMUM DESIGNED ASSEMBLY RATING THEY ARE LOCATED WITHIN.
1	35.	ATTIC ACCESS FROM AN ADJACENT SPACE SHALL BE PROVIDED WHERE THE BELOW ITEMS OCCUR OVER GYPSUM BOARD CEILINGS: A. VALVES B. FLOW MEASURING DEVICES C. MIXING BOXES D. POWER OPERATED DAMPERS E. ACCESS PANELS IN DUCTWORK F. VOLUME AND BALANCING DEVICES G. WATERFLOW SWITCHES H. SPRINKLER SYSTEM DRAINS AND TEST CONNECTIONS I. PRESSURE SWITCHES J. ANY OTHER SIMILAR RELATED ITEMS/DEVICES REQUIRING ACCESS FOR SERVICING OR MAINTENANCE
	36.	PATCH AND REPAIR ALL ITEMS DAMAGED OR ALTERED DURING CONSTRUCTION. ALL PATCHES SHALL BLEND WITH ADJACENT MATERIAL, COLOR, FINISH, AND TEXTURE. ALL EXISTING WORK FURNISHINGS, EQUIPMENT OR MATERIAL TO REMAIN THAT ARE DAMAGED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
	37. 38.	SLOPE ALL SLABS AT EXTERIOR BUILDING ENTRANCES 1/8" FT AWAY FROM BUILDING IN ALL LOCATIONS. ISOLATE DISSIMILAR METALS BY MEANS OF HEAVY BITUMINOUS COATING, APPROVED PAINT, ADHERED POLYETHYLENE SHEET, OR OTHER MEANS OF APPROVED BY THE
		ARCHITECT.

PRIME AND PAINT ALL STEEL LINTELS, HANDRAILS, AND ANY AND ALL OTHER INTERIOR OR EXTERIOR EXPOSED FERROUS METAL SURFACES NOT OTHERWISE INDICATED AS

40. STRUCTURAL WORK, INCLUDING MATERIAL STRESSES AND METHODS OF CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE LATEST ADOPTED BUILDING CODE, OSHA AND

39

COATED OR PAINTED.

GOVERNING AGENCIES HAVING JURISDICTION.

41. THE CONTRACTOR SHALL USE CONSTRUCTION METHODS THAT ARE IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

RIALS 42. THE CONTRACTOR SHALL MAINTAIN THE PREMISES FREE FROM ACCUMULATIONS OF WASTE MATERIALS, DEBRIS AND RUBBISH CAUSED BY OPERATIONS.

AFTER COMPLETION OF WORK ALL ADDITIONAL MATERIALS REMAINING DUE TO CONSTRUCTION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF/REMOVED FROM THE SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, AND REGULATIONS U.N.O. THE CONTRACTOR SHALL ALSO REMOVE ALL WASTE DEBRIS, RUBBISH, TOOLS, EQUIPMENT, AND SURPLUS MATERIALS UPON COMPLETION OF WORK. THROUGHOUT CONSTRUCTION THE SITE SHALL BE ORGANIZED AND CLEANED BY THE CONTRACTOR ON A DAILY BASIS.

44. THE CONTRACTOR SHALL RESTORE TO ITS ORIGINAL CONDITION ALL SITE APPURTENANCES DAMAGED UNDER THIS CONTRACT AT NO ADDITIONAL COST TO THE OWNER.
 45. ANY MATERIAL SCHEDULED FOR DEMOLITION SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS NOTED OTHERWISE AND SHALL BE DISPOSED OF LEGALLY BY

THE CONTRACTOR.

46. THE FLOOR LEVEL SHALL BE THE SAME ON BOTH SIDES OF ALL INTERIOR DOORS.

43.

47. ALL PENETRATIONS INTO OR THROUGHOUT EITHER A VERTICAL AND/OR HORIZONTAL FIRE RATED ASSEMBLY SHALL BE PROTECTED BY A FIRE-STOPPING ASSEMBLY LISTED BY A RECOGNIZED TESTING AGENCY.

48. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PRODUCT DATA, SAMPLES, AND SHOP DRAWINGS FOR SPECIFIED ITEMS. THESE ITEMS MUST BE SUBMITTED TO THE ARCHITECT FOR REVIEW PRIOR TO FABRICATION.

49. COMPLETE SHOP DRAWINGS FOR ALL SPECIALITY ITEMS INCLUDED BUT NOT LIMITED TO ORNAMENTAL GUARDRAILS SHALL BE PROVIDED BY THE CONTRACTOR WITH SIGNATURE AND SEAL SIGNIFYING REVIEW AND APPROVAL BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF GEORGIA AND SHALL BE MADE AVAILABLE AT THE JOB SITE DURING TIMES OF CONSTRUCTION.

50. THE CONTRACTOR SHALL PROVIDE TEMPORARY FIRE EXTINGUISHERS DURING CONSTRUCTION AND PERMANENT FIRE EXTINGUISHERS INCLUDING AT ALL FIRE EXTINGUISHER CABINET LOCATIONS MARKED ON PLAN IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 10.

RITIES 51. ALL FINAL MATERIAL FINISH SELECTIONS TO BE APPROVED BY OWNER PRIOR TO ORDERING.

52. INDICATED TELEVISION LOCATIONS ON PLAN SHALL BE PROVIDED WITH BLOCKING AS REQUIRED IN WALLS WITH OWNER'S FINAL FURNITURE, FIXTURES, AND EQUIPEMNT PACKAGE. T.V.'S AND WALL BRACKETS ARE BY OWNER'S F.F.E. AND/OR RESIDENTS. CONTRACTOR SHALL CONFIRM FINAL BLOCKING REQUIREMENTS WITH OWNER PRIOR TO WALL COVER-UP.

53. SPECIAL INSPECTION REPORTS AND FINAL REPORT IN ACCORDANCE WITH SECTION 1704.2.4 SHALL BE SUBMITTED TO THE BUILDING OFFICIAL PRIOR TO THE TIME THAT PHASE OF WORK IS APPROVED FOR OCCUPANCY.

54. UNLESS DETERMINED BY THE "FIRE CODE OFFICIAL" THAT A RADIO COVERAGE SYSTEM IS NOT NEEDED FOR NEW BUILDINGS THE GENERAL CONTRACTOR WHALL PROVIDE FOR IFC 510 TESTING AND PROVIDE SYSTEM AS REQUIRED BASED ON TEST DATA AND FIRE MARTIAL REQUIREMENTS.





	1. SCOPE			LACE OF BUSINES	S WITH A SIN	GLE-STORY M	OOD STRUCT	URE. BUIII DINI	G IS DIVIDEI
HOUR FIRE WALL SEPARATING IT INTO T LEFT AS COLD-DARK-SHELL FOR FUTUR					VANT SPACES	5. SUITE 100 T	O BE A NEW D	ENTAL OFFICE	E. SUITE 200
	2. GOVER 2018 IN	NING CODE	s Al Buildin	NG CODE (IBC) W/ G		NTS			
	2018 IN 2018 IN	TERNATION, TERNATION,	AL FIRE CO AL PLUMB	DDE (IFC) ING CODE (IPC) W/	GA AMENDM	ENTS			
	2018 IN 2018 IN	TERNATION, TERNATION,	AL MECHA AL FUEL G	NICAL CODE (IMC) AS CODE W/ GA AN	W/ GA AMENI 1ENDMENTS	DMENTS			
	2020 N/ 2015 IN	ATIONAL ELE	CTRICAL	CODE (NEC) W/ GA Y CONSERVATION	AMENDMENT CODE (IECC)	'S W/ GA SUPPL	IMENTS AND A	AMENDMENTS	(2020)
	ACCES	SIBILITY							()
	GEORO 2010 EI	GIA STATE HA	ANDICAPP 1E AMERI(ED ACCESSIBILITY CANS WITH DISABIL	LAW 120-3-20 ITIES ACT (AE	(EFFECTIVE DA)	January 1, 20)15)	
	2017 AI	NSI A-117.1 A	CCESSIBL	E & USABLE BUILD	NGS & FACIL	ITIES			
	2018 NI	FETY PA 101, LIFE	SAFETY	CODE (LSC) W/ GA	AMENDMENT	S			
	2018 IN CHAPT	ER 120-3-3 R	ULES & RI	EGULATIONS OF TH	IE STATE MIN	. & FIRE SAFE	TY STANDAR	DS (EFFECTIVE	JANUARY
	OCCUPANCY O		ION (IBC C	HAPTER 3)					
	GROUP	CL	ASSIFICA	ΓΙΟΝ					
	В		BUSINES	S					
	М	Ν	/IERCANTI	LE					
	TYPE OF CONSTRUCTION (IBC TABLE 503)								
	GROUP	TYPE							
	В	B V-B NO		NO					
	Μ	V-B		NO					
		REA I IMITE		E 504 3 504 4 506 3	8 406 5 4)				
				<u> </u>	. <u>,</u>				
	GROUP	SPRINK		MAX HEIGHT*		ES* MAX AI	REA/LEVEL**]	
	В	NC)	40'	2	9	000 SF		
	M * PER IBC TA	NC ABLE 504.3 &) 504.4	40'	1	9	000 SF]	
	** PER IBC TA	BLE 506.2							
				ΕΛ·					
	GROUP	SPRINKI	ERED	HEIGHT	STORIES	ARE	A/LEVEL]	
	MIXED	NC)	24'-4"	1	8,9	13.39 SF		
	PRIMARY STRUCTURAL FRAME			0					
INTERIOR BEARING WALLS		()						
	EXTERIOR NONBEARING WALLS AND PARTITIONS INTERIOR NONBEARING WALLS AND PARTITIONS FLOOR CONSTRUCTION		SE	E F					
			()					
	ROOF CONSTRUCTION		0						
	PROVIDED B	JILDING FIR	E-RESISTA	NCE ASSEMBLIES					
	BUILDING EL	EMENT			TYPE	EV-B			
	EXTERIOR BE	ARING WAL	RAME LS		0				
	INTERIOR BE	ARING WALL	.S		()			
				ID PARTITIONS	SEE F				
	FLOOR CONS		LU AN		0				
	ROOF CONST	RUCTION			()			
	FIRE-RESISTAI	ICE RATING	REQUIRE	MENTS FOR EXTER	IOR WALLS E	BASED ON FIR	E SEPARATIO	<u>N DISTANCE (I</u>	BC TABLE
			- , -= -			OCCUPAN	CY GROUP		
	FIRE SEP	ARATION 5		ALL	н 3	⊦-1, M, S-1 2	A, B, E, F-2	, i, ĸ, s-2, U 1	
	5≤X	< 10		I-A, IV-A	3	2	1	1	
	40 -11	(< 30	1.4		2	1	1	 *	
	10 ≤)	N ~ 3U	I-A,	н-в, ту-а, ту-в II-B, V-В	2 1	0		o l	
				OTHERS	1	1	1	*	
		30							ISTANCE R
	X≥	* OPEN PARKING GARAGES COMPLYING WITH SEC						, <u>-</u> INE-REOI	
	X≥ * OPEN PARI	(ING GARAG							
	X≥ * OPEN PARI	KING GARAG					BLE 705.2)		
	X≥ * OPEN PAR	KING GARAG	ROJECTIC	ON PER FIRE SEPAR	RATION DISTA				
	X≥ * OPEN PARI MINIMUM DIS	TANCE OF P		ON PER FIRE SEPAR	RATION DISTA	O DETERMIN	EFSD		
	X ≥ * OPEN PARI MINIMUM DIS FIRE SEP 0 TO LES 2 TO LES	KING GARAG TANCE OF P ARATION S THAN 2 S THAN 3	ROJECTIC MINIMUI PROJEC 24 INCH	ON PER FIRE SEPAR M DISTANCE FROM TIONS NOT PERMITES	RATION DISTA	O DETERMIN	EFSD		
	X ≥ * OPEN PARI MINIMUM DIS FIRE SEP 0 TO LES 2 TO LES 3 TO LES	KING GARAG TANCE OF P ARATION S THAN 2 S THAN 3 S THAN 5	ROJECTIC MINIMUI PROJEC 24 INCH 24 INCH	ON PER FIRE SEPAR M DISTANCE FROM TIONS NOT PERMITES ES + 8 INCHES FOR	RATION DISTA	O DETERMIN	E FSD OND 3 FEET C	R FRACTION T	THEREOF
	X ≥ * OPEN PARI MINIMUM DIS FIRE SEP 0 TO LES 2 TO LES 3 TO LES 5 OR GF	KING GARAG TANCE OF P ARATION S THAN 2 S THAN 3 S THAN 5 REATER	ROJECTIC MINIMUI PROJEC 24 INCH 24 INCH 40 INCH	ON PER FIRE SEPAR M DISTANCE FROM ETIONS NOT PERMIT ES ES + 8 INCHES FOR ES	RATION DISTA	O DETERMIN	E FSD OND 3 FEET C)R FRACTION T	THEREOF

PLUMBING FIXTURE COUNT	AREA	LINEAR INCHES	CALCULATED OCCUPANT LOAD	ACTUAL OCCUPANT OVERRIDE
LEVEL 01				
10 - BUSINESS	4,658.44 SF	0"	81	(
27 - STORAGE	211.76 SF	0"	0	(
	4,870.20 SF	•	81	(

PLUMBING FIXTURE COUN

	MALE	_
MIN.	W.C.	U
REQ.	PROVIDED	PF
2	0	



INT SCHEDULE - SUITE 100:												
WATER C	LOSETS			LAVATORIES				BATH / SHOWER		DRINKING		
	FEMALE SINGL		SINGLE	MALE		FEMALE		SINGLE			FOUN	ITAINS
RINALS	MIN.		USER	MIN.		MIN.		USER	MIN.		MIN.	
ROVIDED	REQ.	PROVIDED	PROVIDED	REQ.	PROVIDED	REQ.	PROVIDED	PROVIDED	REQ.	PROVIDED	REQ.	PROVIDE
0	2	0	5	1	0	1	0	5	0	0	1	*

* DRINKING FOUNTAIN REQUIREMENTS MET BY DEDICATED WATER FILLING STATION; SEE ID DRAWINGS FOR SPECS.





















OCCUPANCY LEGEND



LIFE SAFETY LEGEND



ONE-HOUR RATED FIRE & SMOKE BARRIER TWO-HOUR RATED FIRE & SMOKE BARRIER

THREE-HOUR RATED FIRE & SMOKE BARRIER

LIFE SAFETY GENERAL NOTES

1. REFER TO PARTITION TYPES SCHEDULE FOR PARTITION TYPE DETAILS AND TESTED RATED ASSEMBLY DETAILS.

OCCUPANCY USE SCHEDULE - LEVEL 01											
FUNCTION/USE	AREA	LINEAR INCHES	FACTOR	CALCULATED OCCUPANT LOAD	ACTUAL OCCUPANT OVERRIDE	DESIGN OCCUPANT LOAD					
SUITE 100 BUSINESS											
BUSINESS	3,815.65 SF	0'-0"	150 GROSS	25	0	25					
STORAGE	211.76 SF	0'-0"	500 GROSS	0	0	0					
UNCONCENTRATED	842.79 SF	0'-0"	15 NET	56	0	56					
	4,870.20 SF	0'-0"		81	0	81					
SUITE 200											
MERCANTILE		<u> </u>									
MERCANTILE	3,800.03 SF	0'-0"	30 GROSS	127	0	127					
	3,800.03 SF	0'-0"		127	0	127					
TOTAL OCCUPANT LOAD	8,670.23 SF	0'-0"		208	0	208					



CSC DESIGN, INC.









CALCULATED OCCUPANT LOAD ACTUAL OCCUPANT OVERRIDE DESIGN OCCUPANT LOAD New BUSINESS OCCUPANCY [NON-SPRINKLERED] AS ACCESSORY STORAGE 3ROSS 25 0 25 GROUP B (BUSINESS) OCCUPANCY INO SEPERATION; IBC 508.4 3ROSS 0 0 0 0 0 COMMON PATH 75; LSC 38.2.6.2 3ROSS 0 0 0 0 0 EAD END LIMIT 20; LSC 38.2.5.2.2 3ROSS 0 0 81 0 81 0 81 3ROSTAL: 0.2/OCC STAIRWAY: 0.3/OCC VIN PROVIDED MIN. REQ. PROVIDED MIN. REQ. PROVIDED	IED	ULE -	SUITI	E 100	TRAVEL D	ISTANCE	LIFE SAFET
DRIZONT AL: 0.2/OCC STAIRWAY: 0.3/OCC N. REQ. PROVIDED MIN. REQ. PROVIDED 16" 138" N/A N/A	GROSS GROSS 15 NET	CALCULATED OCCUPANT LOAD 25 0 56 81	ACTUAL OCCUPANT OVERRIDE 0 0 0 0	DESIGN OCCUPANT LOAD 25 0 56 81	NEW BUSINESS OCCUPANCY [NON-SPRINKLERED] LSC CHAPTER 38, IBC CHAPTER 3 GROUP B (BUSINESS) OCCUPANCY TRAVEL DISTANCE 200' MAX; LSC 38.2.6.2 COMMON PATH 75'; LSC 38.2.4.5 DEAD END LIMIT 20'; LSC 38.2.5.2.2		AS - ACCESSORY STORAGE NO SEPERATION; IBC 508.4
N. REQ. PROVIDED MIN. REQ. PROVIDED 16" 138" N/A N/A	ORIZONT	AL: 0.2/OCC	STAIRWA	Y: 0.3/OCC			
16" 138" N/A N/A	N. REQ.	PROVIDED	MIN. REQ.	PROVIDED			
	16"	138"	N/A	N/A			_



D	ULE -	SUIT	E 200	TRAVEL DISTANCE
			DESIGN	NEW MERCANTILE OCC. [NON-SPRINKLERED]
2	LOAD	OVERRIDE	LOAD	LSC CHAPTER 36, IBC CHAPTER 3
				GROUP M (MERCANTILE) OCCUPANCY
SS	127	0	127	TRAVEL DISTANCE
	127	0	127	COMMON PATH 75'; LSC 36.2.5.3
				DEAD END LIMIT 20'; LSC 36.2.5.2.2
<u></u>			V. 0.2/000	
	138"	N/A	N/A	

CSC DESIGN, INC.

05/10/2024

23-060

WN WAY GA 3051

40 HOME BLAIRSVIL



PARTITION TYPES

	PARTITIO	N LEGEND	CSC
URE SIDE EDULED . STUDS H SIDE	A-BC2-D MODIFIER (SEE TABL CORE THICKNESS (N PARTITION TYPE (SE CORE CONSTRUCTION FIRE / SMOKE RATIN	DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DESIGN DE	
SIDE NOR DTH ASSEMBLED TESTED ASSEMBLY	TABLE A - FIRE / SMOKE RATING0NON-RATED CONSTRUCTION\$NON-RATED SMOKE PARTITION; FRAMING & GWB TO STRUCTURE ABOVE & SPACE AROUND PENETRATING ITEMS TO BE FILLED W/ APPROVED MATERIAL TO LIMIT PASSAGE OF SMOKE; COMPLY WITH 2018 IBC SECTION 71011-HOUR FIRE RATED; FRAMING & GWB TO STRUCTURE / THERMAL INSULATION PER UL REQUIREMENTS22-HOUR FIRE RATED; FRAMING & GWB TO STRUCTURE / THERMAL INSULATION PER UL REQUIREMENTS33-HOUR FIRE RATED; FRAMING & GWB TO STRUCTURE / THERMAL INSULATION PER UL REQUIREMENTS4IDUR FIRE RATED; FRAMING & GWB TO STRUCTURE / THERMAL INSULATION PER UL REQUIREMENTS33-HOUR FIRE RATED; FRAMING & GWB TO STRUCTURE / THERMAL INSULATION PER UL REQUIREMENTS	TABLE C - PARTITION TYPEA(1) LAYER GYP. EACH SIDEB(1) LAYER GYP. ONE SIDE; (2) LAYERS OTHER SIDEC(2) LAYERS GYP. EACH SIDED(1) LAYER GYP. ONE SIDEE(2) LAYERS GYP. ONE SIDEF(1) LAYER GYP. ONE SIDE, RESILIENT CHANNELG(1) LAYER GYP. ONE SIDE, (2) LAYERS RESILIENT CHANNEL SIDEH(2) LAYERS GYP. EACH SIDE, RESILIENT CHANNEL SIDEJ(1) LAYER GYP. EACH SIDE, SHEATHINGK(1) LAYER GYP. ONE SIDE, (2) LAYERS SHEATHING SIDEL(2) LAYERS GYP. EACH SIDE, (2) LAYERS SHEATHING SIDEL(2) LAYERS GYP. EACH SIDE, SHEATHINGMEXPOSED CORE	KEVIN B. WHIPPLE 05/10/2024 NO. BROWNIE PROJECT NUMBER: 23-060
URE SIDE EDULED . STUDS SIDE HANNEL @16" O.C. OR 24" O.C. VERT. SE SIDE	TABLE B - CORE CONSTRUCTIONCCONCRETE - CAST-IN-PLACEDDEMISINGLSPECIALMMETALPPRE-CAST CONCRETESSHAFT LINERTSTONEUMASONRY UNITWWOODZZ-FURRING	TABLE D - MODIFIERSAPARTIAL HEIGHTS PARTITION / FRAMING & GWB TO X'-0" A.F.F. (SEE BLDG. DETAILS)BFRAMING & GWB TO FINISHED CEILING / PROVIDE BRACING AS REQUIREDC'B' W/ 3" SOUND ATTENUATION BLANKERS (SAB) & 4' WIDE SAB ABOVE CEILING CENTERED ON PARTITIONDFRAMING & GWB TO 4" ABOVE CEILING / PROVIDE BRACING AS REQ. OR EXTEND STUDS TO STRUCTURE ABOVEE'D' W/ 3" SOUND ATTENUATION BLANKETS (SAB) & 4' WIDE SAB ABOVE CEILING TO STRUCTURE ABOVEFFRAMING & GWB TO ATTENUATION BLANKETS (SAB) & 4' WIDE SAB ABOVE CEILING CENTERED ON PARTITIONFFRAMING & GWB TO STRUCTURE / 3" SOUND ATTENUATION BLANKETS, U.N.O.	REVISIONS NO: DATE: ISSUE:
DTH ASSEMBLED TESTED DTH WIDTH ASSEMBLY URE SIDE EDULED STUDS SIDE SIDE SIDE OR	 CONTRACTOR SHALL ADJUST STUD GUAGE AS NOT TO EXCEED L/240 DESIGN CRITERIA PROVIDE RATED WALLS ACCORDING TO TH NUMBER. PROVIDE IN-WALL BLOCKING FOR MILLWOI STOPS, TOILET ACCESSORIES, GRAB BARS MODULAR OFFICE WALLS, ETC. AT WALLS BEHIND TUBS & SHOWERS, IN LI TYPES, PROVIDE ONE LAYER OF MOISTURE MAXIMUM 16" O.C. WHERE TYPE INDICATED REFER TO STRUCTURE FOR BEARING / NO DISCREPANCY. PROVIDE CONTINUOUS FIRESTOPPPING AT PARTITIONS AND AT ALL PENETRATIONS. PROVIDE RED COLOR IF D REFER TO SHEETS G-400 FOR U.L. RATED A ALL FIRE-RATED WALLS AND SMOKE BARR SIGNS OR STENCILING ABOVE CEILING OR OF 2" HIGH ON A CONTRASTING BACKGROI MINIMUM OF ONE PER WALL OR BARRIER I PREVENTION CODE, 120-3-3 CHAPTER 5 OF SAFETY COMMISIONER. SUGGESTED WORDING: "(#) HOUR FIRE AN APPLY LETTERING TO BOTH SIDES OF WAL REFER TO STRUCTURAL DRAWINGS AND S STRUCTURAL REINFORCEMENT OF WALLS, WALLS, BRACING, REINFORCING, BOND BE AT ALL RESTROOMS, OFFICES AND SIMILAR CEILING W/ SOUND BATT INSULATION A MIN PARTITIONS (TYP.) STAGGER ELECTRICAL OUTLETS 12" MINIM ALL VERTICAL PIPING EXPOSED IN ROOMS ADJACENT WALLS. EXCEPTIONS ARE: MEC 	DN NOTES E AND/OR SPACING AND BRACE AS NECESSARY SO A. HE FULL REQUIREMENTS OF THE INDICATED TEST RK, ARTWORK, FURNISHINGS, HARDWARE, WALL S, CLOSET RODS, HANDRAILS, WALL BUMPERS, IEU OF GYPSUM BOARD INDICATED AT NOTED WALL E-RESISTANT BOARD TYPE X & SPACE STUDS AT D AS FIRE-RATED. IN-BEARING CONDITION WHEN THERE IS T TOP, BOTTOM, AND ENDS OF FIRE-RATED DICTATED BY AUTHORITY HAVING JURISTICTION. ASSEMBLY INFORMATION. RERS SHALL BE PERMANENTLY IDENTIFIED WITH IN CONCEALED SPACES WITH LETTERS A MINIMUM UND SPACED AT A MAXIMUM OF 12' - 0" O.C. WITH A IN ACCORDANCE WITH 2006 STANDARD FIRE T THE RULES AND REGULATIONS OF THE FIRE ID SMOKE BARRIER - PROTECT ALL OPENINGS" LIS. SPECIFICATIONS FOR ADDITIONAL INFORMATION ON ENCLUDING BUT NOT LIMITED TO PARTIAL HEIGHT AMS AND GROUT FILLING OF C.M.U. CORES. R SPACES, PROVIDE BACKLOADED SCHEDULED INMUM OF 4' - 0" ALONG EACH SIDE OF SCHEDULED INMUM OF 4' - 0" ALONG EACH SIDE OF SCHEDULED INMUM OF 4' - 0" ALONG EACH SIDE OF SCHEDULED INMUM OF 4' - 0" ALONG EACH SIDE OF SCHEDULED INMUM OF 4' - 0" ALONG EACH SIDE OF SCHEDULED INMUM OF 4' - 0" ALONG EACH SIDE OF SCHEDULED INMUM OF 4' - 0" ALONG EACH SIDE OF SCHEDULED INMUM AT ALL PARTITIONS.	BLAIRSVILLE DENTISTRY
ASSEMBLED WIDTHTESTED ASSEMBLY6 3/4"UL U314	13. METAL STUD PARTITIONS BEHIND ALL PLUI STRUCTURE WHERE REQUIRED TO SUPPO	WOOD STUD PARTITION TYPES	
			G-230



CSC.2023.01.0	UL Product iQ [®]	
	 Design/System/Construction/Assembly Usage Disclaimer Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials. Authorities Having Jurisdiction should be consulted before construction. Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for 	The second secon
	 compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field. When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction. Only products which bear UL's Mark are considered Certified. 	
	BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States	1. Wood Studs — Nom
	BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States	2. Gypsum Board* — 5/ coated nails 1-7/8 in. lor installed horizontally. CGC INC — Types AR, IP-A
	<u>Design Criteria and Allowable Variances</u> See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada	NATIONAL GYPSUM CO-
	Design Criteria and Allowable Variances Design No. U314	UNITED STATES GYPSUM
		USG BORAL DRYWALL SF
	June 1, 2022	USG MEXICO S A DE C V
	Bearing Wall Rating — 1 HR.	2A. Gypsum Board* — CGC INC — Types AR, IP-A
	This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be	De UNITED STATES GYPSUM
	used — See Guide <u>BXUV</u> or <u>BXUV7</u>	USG MEXICO S A DE C V
	* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.	2B. Gypsum Board* — (described in Item 2. PABCO BUILDING PROD
		2C. Wall and Partition I
		applied vertically only ar
	UL Solutions permits the reproduction of the material contained in Product iQ subject to the following conditions: 1. The Guide Information,	
	Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from Product iQ with permission from UL Solutions" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "©2024 UL LLC."	r
try.rvt		
e Dentis		
lairsvill		
3-060 E		
NRevit/2		
DESIGN		
4\Arch\I		
unty, G/		
ion Col		
sntal_U		
town De		
) Homei		
\23-060		
ف		
Σ		
5:15 PI		
10 3:5		

2



covered with joint compound. e, nom 3/32 in. thick gypsum inforced with paper tape.	ARCHITECTS & ENGINEERS 135 P RICKMAN INDUSTRIAL DR. SUITE 100 CANTON GA 20115
n. high on the back side with two steners applied only to the end or I, max spacing 16 in. OC. Nailed to shall be nailed to top and bottom	© 2023, CSC Design. These drawings are protected by the copyright laws of the United States. These drawings or any part thereof may not be used for any purpose or reproduced in any form or by any means without the written consent of CSC Design.
	STATE OF BEER
2 by 6 in. stud nailed together with 2 by 4 in. stud with 3 in. long 10d he 2 by 4 in. studs. The wall g 10d nails spaced a max. 16 in. all partition stud depth shall be at	★ KEVIN B. WHIPPLE 05/10/2024 PECISTERED ARCHITECT
em 1, Item 2, Item 3, and Item 5. m 2), install RefleXor membrane r in both directions as per	PROJECT NUMBER: 23-060
led over the membrane. The Item 2 except the fastener length 5. G galv steel, spaced vertically 24 in.	
In the second steel screws. Over the long drywall screws and washers banel install the same Gypsum Board a substitute for the required layer(s)	
thick SONOpan panels, secured vall screws spaced 12 in. OC. Over the ned through panels to each stud with ecified in Item 2 with drywall screws.	
ying the UL or cUL Certification	SSUE:
dentified have been manufactured	
	REVISIONS NO: DATE
	TRY
	OWN WAY E, GA 30512
	40 HOMET BLAIRSVILL
	RSV
	3LA



















S	LAB EDGE PL	AN LEG	END	CSC	
	DEPRESSED SLAB AREA		TOPPING SLAB AREA	DESIGN, INC. ARCHITECTS & ENGINEERS 135 P RICKMAN INDUSTRIAL DR. SUITE 100 CANTON GA 30115	
	CURB - SEE BLDG. DETAILS	X	AREA OF SLAB LEAVE-OUT	Phone: (770) 345-2579	
۲	FLOOR DRAIN		AREA OF SLOPE TO DRAIN	© 2023, CSC Design. These drawings are protected by the copyright laws of the United States. These drawings or any part thereof may not be used for any purpose or reproduced in any form or by any means without the written consent of CSC Design.	
	THICKENED SLAB EDGE W/ VENE	EER LEDGE - SEE BL	.DG. DETAILS	A STATE OF THE AREA	
7/7777	SLAB SLOPE	X'-X"	LEVEL CHANGE - BEVELED		
777 <u>X</u> '-X"	LEVEL CHANGE - STEP	X'-X"	LEVEL CHANGE - STEP W/ SLOPE	REGISTERED ARCHITECT	
				PROJECT NUMBER: 23-060	
SLAB EDGE NOTES					
1. ACTUAL REI REFERENCE	1. ACTUAL REFERENCE LEVELS VARY. REFER TO CIVIL PLANS FOR ACTUAL TOP-OF-SLAB REFERENCE ELEVATIONS.				
2. SEE BUILDIN EDGE DETA	2. SEE BUILDING DETAILS AND STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION FOR SLAB EDGE DETAILS.				







NU. 1 U. 62U2. OC





KEY PLAN Image: Image









23-060

40 HOMETOWN WAY 3LAIRSVILLE, GA 30512



) 3:55:23 PM P:\23-060 Hometown Dental_Union County, GA\Arch\DESIGN\Revit\23-060 Blairsville Dentistr









TN **1** RCP - LEVEL 01 A-201 | 1/8" = 1'-0"



(A-301)

3 (A-301)

(A-301)

LIGHTING FIXTURES LEGEND

Ľ	EXTERIOR SCONCE LIGHT - SEE ELECTRICAL DRAWINGS

EXTERIOR WALL PACK - SEE ELECTRICAL DRAWINGS

EXTERIOR SOFFIT LIGHT - SEE ELECTRICAL DRAWINGS







FOR CONSTRUCTION

RCP NOTES

- 1. THIS DRAWING IS FOR GRAPHICAL FIXTURE LOCATION ONLY. SEE ELECTRICAL DRAWINGS FOR FIXTURE SCHEDULE
- CONTRACTOR SHALL REFER TO ELECTRICAL DRAWINGS FOR GENERAL LIGHTING FOR 2. PRICING IN ADDITION TO DECORATIVE LIGHTING AS SHOWN ON THIS PLAN.
- 3. U.N.O. ALL CEILING LIGHT FIXTURES ARE TO BE CENTERED EACH WAY IN CEILING TILES AND SPACES.
- 4. PROVIDE RATED J-BOX AT ALL BEDROOM & LIVING CEILING LIGHT FIXTURE LOCATIONS AND AT ALL LOCATIONS ON PLAN WITH A SCHEDULED FAN (TYP.)
- 5. REFER TO MECHANICAL DRAWINGS FOR ALL AIR TERMINAL INFORMATION FOR GMP PRICING.
- 6. SEE INTERIOR DRAWINGS FOR ALL CEILING FINISHES.



— FIBER CEMENT *OR* STAINED WOOD OUT-RIGGER

— 2X BOX BEAM (NON-STRUCTURAL) FOR FAUX BEAM ATTACHMENT

- FIBER CEMENT OR STAINED WOOD

FAUX BEAM

D.S. ____

D.S. _____



CENTER OF STUD

(B)-

TN 1 REFLECTED SOFFIT PLAN A-202 | 1/8" = 1'-0"









0 3:55:30 PM P:\23-060 Hometown Dental_Union County, GA\Arch\DESIGN\Revit\23-060 Blairsville I

	EXTER	RIOR FINISH LEGEND		
PATTERN	TAG	MATERIAL		
	EIFS-01	EXTERIOR INSULATION FINISH SYSTEM B.O.D.: DRYVIT OUTSULATION SYSTEM COLOR: 628 WHITE HAZE		
	FC-01	FIBER CEMENT BOARD TRIM B.O.D.: NICHIHA NICHIBOARD SMOOTH COLOR: STEEL		
	FC-02	FIBER CEMENT ARCHITECTURAL WALL PANELS B.O.D.: NICHIHA TUFFBLOCK COLOR: STEEL		
	<u>(MT-21</u>)	CONCEALED FASTENER METAL WALL PANELS B.O.D.: MBCI 7.2 PANEL COLOR: SLATE GRAY		
	(WD-10)	STAINED WOOD BOARD SOFFIT DECKING B.O.D.: NICHIHA VINTAGEWOOD COLOR: CEDAR		
	< <u>R-04</u> >	STANDING SEAM METAL ROOF B.O.D.: MBCI DOUBLE-LOK COLOR: BONE WHITE		
E	EXTERIO	OR FINISH KEYNOTES		
TAG	MATERIAL			
CJ-01	CONTROL JOIN ROOF DOWNSF	T - 1/2" TYP. U.N.O., PROVIDE AT ALL INSIDE CORNERS & BEHIND POUTS IN ADDITION TO LOCATIONS INDICATED ON ELEVATIONS (TYP.)		
DR-01	EXTERIOR DOO	R - SEE DOOR SCHEDULE		
DS-01	PREFINISHED ALUMINUM GUTTER AND DOWNSPOUT W/ CONT. DRIP EDGE			
EL-01	EXTERIOR LIGHT FIXTURE - SEE ELECTRICAL SCHEDULE			
LD-01	EXTERIOR LADDER			
SF-01	EXTERIOR STOREFRONT SYSTEM - SEE STOREFRONT ELEVATIONS			
SG-01	SIGNAGE BY OV	WNER		

ELEVATION NOTES

1. COORDINATE BUILDING SIGNAGE LOCATIONS AND SIGNAGE WITH OWNER. REFER TO ELECTRICAL DRAWINGS FOR SCHEDULE AND LOCATION.

 MATERIAL MANUFACTURERS AND COLORS INDICATED ON DRAWINGS ARE SUBJECT TO CHANGE DURING THE CONSTRUCTION PROCESS. ANY DEVIATIONS FROM APPROVED PLANS SHALL BE SUBMITTED FOR APPROVAL.









A-311



	EXTER	RIOR FINISH LEGEND	
PATTERN	TAG	MATERIAL	
	EIFS-0	EXTERIOR INSULATION FINISH SYSTEM B.O.D.: DRYVIT OUTSULATION SYSTEM COLOR: 628 WHITE HAZE	
	FC-01	FIBER CEMENT BOARD TRIM B.O.D.: NICHIHA NICHIBOARD SMOOTH COLOR: STEEL	
	FC-02	FIBER CEMENT ARCHITECTURAL WALL PANELS B.O.D.: NICHIHA TUFFBLOCK COLOR: STEEL	
	MT-21	CONCEALED FASTENER METAL WALL PANELS B.O.D.: MBCI 7.2 PANEL COLOR: SLATE GRAY	
	WD-10	STAINED WOOD BOARD SOFFIT DECKING B.O.D.: NICHIHA VINTAGEWOOD COLOR: CEDAR	
	< <u>R-04</u> >	STANDING SEAM METAL ROOF B.O.D.: MBCI DOUBLE-LOK COLOR: BONE WHITE	
	EXTERIO	OR FINISH KEYNOTES	
TAG	MATERIAL		
CJ-01	CONTROL JOIN ROOF DOWNSF	T - 1/2" TYP. U.N.O., PROVIDE AT ALL INSIDE CORNERS & BEHIND POUTS IN ADDITION TO LOCATIONS INDICATED ON ELEVATIONS (TYP.)	
DR-01	EXTERIOR DOC	PR - SEE DOOR SCHEDULE	
DS-01	PREFINISHED ALUMINUM GUTTER AND DOWNSPOUT W/ CONT. DRIP EDGE		
EL-01	EXTERIOR LIGHT FIXTURE - SEE ELECTRICAL SCHEDULE		
LD-01	EXTERIOR LADDER		
SF-01	EXTERIOR STO	REFRONT SYSTEM - SEE STOREFRONT ELEVATIONS	
SG-01	SIGNAGE BY OV	VNER	

ELEVATION NOTES

COORDINATE BUILDING SIGNAGE LOCATIONS AND SIGNAGE WITH OWNER. REFER TO ELECTRICAL DRAWINGS FOR SCHEDULE AND LOCATION. 1.

MATERIAL MANUFACTURERS AND COLORS INDICATED ON DRAWINGS ARE SUBJECT TO CHANGE DURING THE CONSTRUCTION PROCESS. ANY DEVIATIONS FROM APPROVED PLANS SHALL BE SUBMITTED FOR APPROVAL. 2.



DENTISTRY 40 HOMETOWN WAN 3LAIRSVILLE, GA 305 BLAIRSVILLE ENLARGED ELEVATIONS A-312 FOR CONSTRUCTION



	EXTER	RIOR FINISH LEGEND			
PATTERN	TAG	MATERIAL			
	EIFS-0	EXTERIOR INSULATION FINISH SYSTEM B.O.D.: DRYVIT OUTSULATION SYSTEM COLOR: 628 WHITE HAZE			
	FC-01	FIBER CEMENT BOARD TRIM B.O.D.: NICHIHA NICHIBOARD SMOOTH COLOR: STEEL			
	FC-02	FIBER CEMENT ARCHITECTURAL WALL PANELS B.O.D.: NICHIHA TUFFBLOCK COLOR: STEEL			
	(MT-21)	CONCEALED FASTENER METAL WALL PANELS B.O.D.: MBCI 7.2 PANEL COLOR: SLATE GRAY			
	(WD-10)	STAINED WOOD BOARD SOFFIT DECKING B.O.D.: NICHIHA VINTAGEWOOD COLOR: CEDAR			
	R-04	STANDING SEAM METAL ROOF B.O.D.: MBCI DOUBLE-LOK COLOR: BONE WHITE			
	EXTERIOR FINISH KEYNOTES				
TAG	MATERIAL				
CJ-01	CONTROL JOIN ROOF DOWNSF	T - 1/2" TYP. U.N.O., PROVIDE AT ALL INSIDE CORNERS & BEHIND POUTS IN ADDITION TO LOCATIONS INDICATED ON ELEVATIONS (TYP.)			
DR-01	EXTERIOR DOC	R - SEE DOOR SCHEDULE			
DS-01	PREFINISHED ALUMINUM GUTTER AND DOWNSPOUT W/ CONT. DRIP EDGE				
EL-01	EXTERIOR LIGHT FIXTURE - SEE ELECTRICAL SCHEDULE				
LD-01	EXTERIOR LADDER				
SF-01	EXTERIOR STOREFRONT SYSTEM - SEE STOREFRONT ELEVATIONS				
SG-01	SIGNAGE BY O	WNER			

ELEVATION NOTES

COORDINATE BUILDING SIGNAGE LOCATIONS AND SIGNAGE WITH OWNER. REFER TO ELECTRICAL DRAWINGS FOR SCHEDULE AND LOCATION. 1.

MATERIAL MANUFACTURERS AND COLORS INDICATED ON DRAWINGS ARE SUBJECT TO CHANGE DURING THE CONSTRUCTION PROCESS. ANY DEVIATIONS FROM APPROVED PLANS SHALL BE SUBMITTED FOR APPROVAL. 2.









SC.2023.01.0





WALL SECTION KEYNOTES

1.01	2X6 WD. STUDS @ 16" O.C.
1.02	2X4 WD. STUDS @ 16" O.C.
1.03	5/8" PLYWOOD SHEATHING
1.11	1" RIGID INSULATION
1.12	R-19 BATT INSULATION
1.21	5/8" GYP. BD.
1.22	FIBER CEMENT SIDING; SEE ELEVATIONS
1.23	HORIZONTALLY MOUNTED METAL SIDING; SEE ELEVATIONS
1.24	2" EPS EXTERIOR INSULATION AND FINISH SYSTEM; SEE ELEVATIONS
1.31	SCH. STRUCTURAL FRAMING; SEE STR.
2.01	PRE-ENGINEERED WD. TRUSSES W/ 2X8 OUT-RIGGER @ 24" O.C.; SEE STR.
2.02	PRE-ENGINEERED WD. TRUSSES @ 24" O.C.; SEE STR.
2.03	5/8" PLYWOOD DECKING; SEE STR.
2.04	3/4" PLYWOOD DECKING; SEE STR.
2.04	2X8 OUTRIGGERS @ 16" O.C.; SEE STR.
2.06	STRUCTURAL STEEL BEAM; SEE STR.
2.11	1-1/2" RIGID INSULATION
2.12	R-25 SPRAY FOAM INSULATION
2.21	5/8" COVER BOARD
2.22	EPDM ROOFING MEMBRANE
2.23	STANDING SEAM METAL ROOF
2.24	PREFINISHED ALUM. PARAPET CAP
2.25	FIBER CEMENT SOFFIT; SEE ELEVATIONS
2.31	THRU WALL GUTTER AND DOWNSPOUT
2.32	ALUM. CANOPY W/ TIE RODS
2.33	CONT. FLASHING
2.34	2X FIBER CEMENT FACIA, PTD.
2.35	GUTTER AND DOWNSPOUT
2.36	FIBER CEMENT DROP BEAM OUTRIGGERS @ 48" O.C.; ALIGN WITH TRUSS
2.37	FIBER CEMENT FAUX WOOD SOFFIT
3.01	4" CONC. SLAB ON GRADE; SEE STR.
3.02	CONC. TURN-DOWN SLAB; SEE STR.
3.03	AREA OF SLAB LEAVE-OUT
4.01	SCH. DOOR
4.02	SCH. STOREFRONT SYSTEM
5.01	SCH. LIGHT FIXTURE; SEE ELEC.
5.11	SCH. CEILING; SEE ID
5.21	SCH. DUCTWORK; SEE MECH.
6.01	SIGNAGE; BY OWNER
6.02	HARDSCAPE BY OTHERS





LEVEL 01 0' - 0"







5 WALL SECTION - 5 A-412 | 1/2" = 1'-0"



WALL SECTION KEYNOTES

1.01	2X6 WD. STUDS @ 16" O.C.
1.02	2X4 WD. STUDS @ 16" O.C.
1.03	5/8" PLYWOOD SHEATHING
1.11	1" RIGID INSULATION
1.12	R-19 BATT INSULATION
1.21	5/8" GYP. BD.
1.22	FIBER CEMENT SIDING; SEE ELEVATIONS
1.23	HORIZONTALLY MOUNTED METAL SIDING; SEE ELEVATIONS
1.24	2" EPS EXTERIOR INSULATION AND FINISH SYSTEM; SEE ELEVATIONS
1.31	SCH. STRUCTURAL FRAMING; SEE STR.
2.01	PRE-ENGINEERED WD. TRUSSES W/ 2X8 OUT-RIGGER @ 24" O.C.; SEE STR.
2.02	PRE-ENGINEERED WD. TRUSSES @ 24" O.C.; SEE STR.
2.03	5/8" PLYWOOD DECKING; SEE STR.
2.04	3/4" PLYWOOD DECKING; SEE STR.
2.04	2X8 OUTRIGGERS @ 16" O.C.; SEE STR.
2.06	STRUCTURAL STEEL BEAM; SEE STR.
2.11	1-1/2" RIGID INSULATION
2.12	R-25 SPRAY FOAM INSULATION
2.21	5/8" COVER BOARD
2.22	EPDM ROOFING MEMBRANE
2.23	STANDING SEAM METAL ROOF
2.24	PREFINISHED ALUM. PARAPET CAP
2.25	FIBER CEMENT SOFFIT; SEE ELEVATIONS
2.31	THRU WALL GUTTER AND DOWNSPOUT
2.32	ALUM. CANOPY W/ TIE RODS
2.33	CONT. FLASHING
2.34	2X FIBER CEMENT FACIA, PTD.
2.35	GUTTER AND DOWNSPOUT
2.36	FIBER CEMENT DROP BEAM OUTRIGGERS @ 48" O.C.; ALIGN WITH TRUSS
2.37	FIBER CEMENT FAUX WOOD SOFFIT
3.01	4" CONC. SLAB ON GRADE; SEE STR.
3.02	CONC. TURN-DOWN SLAB; SEE STR.
3.03	AREA OF SLAB LEAVE-OUT
4.01	SCH. DOOR
4.02	SCH. STOREFRONT SYSTEM
5.01	SCH. LIGHT FIXTURE; SEE ELEC.
5.11	SCH. CEILING; SEE ID
5.21	SCH. DUCTWORK; SEE MECH.
6.01	SIGNAGE; BY OWNER

6.02 HARDSCAPE BY OTHERS

6.02







WALL SECTIONS

DENTISTRY

BLAIRSVILLE

WN WAY GA 3051

40 HOME BLAIRSVIL











(1)



WALL SECTION KEYNOTES



LEVEL 01 0' - 0"

T.O. PARAPET 16' - 0"

LOW BEARING 12' - 0"











F



WALL SECTION KEYNOTES



LEVEL 01 0' - 0"

T.O. PARAPET 16' - 0"

LOW BEARING 12' - 0"

DESIGN, INC. ARCHITECTS & ENGINEERS 135 P RICKMAN INDUSTRIAL DR. SUITE 100 CANTON, GA 30115 Phone: (770) 345-2579

CSC











WALL SECTION KEYNOTES

1.01	2X6 WD. STUDS @ 16" O.C.		
1.02	2X4 WD. STUDS @ 16" O.C.		
1.03	5/8" PLYWOOD SHEATHING		
1.11	1" RIGID INSULATION		
1.12	R-19 BATT INSULATION		
1.21	5/8" GYP. BD.		
1.22	FIBER CEMENT SIDING; SEE ELEVATIONS		
1.23	HORIZONTALLY MOUNTED METAL SIDING; SEE ELEVATIONS		
1.24	2" EPS EXTERIOR INSULATION AND FINISH SYSTEM; SEE ELEVATIONS		
1.31	SCH. STRUCTURAL FRAMING; SEE STR.		
2.01	PRE-ENGINEERED WD. TRUSSES W/ 2X8 OUT-RIGGER @ 24" O.C.; SEE STR		
2.02	PRE-ENGINEERED WD. TRUSSES @ 24" O.C.; SEE STR.		
2.03	5/8" PLYWOOD DECKING; SEE STR.		
2.04	3/4" PLYWOOD DECKING; SEE STR.		
2.04	2X8 OUTRIGGERS @ 16" O.C.; SEE STR.		
2.06	STRUCTURAL STEEL BEAM; SEE STR.		
2.11	1-1/2" RIGID INSULATION		
2.12	R-25 SPRAY FOAM INSULATION		
2.21	5/8" COVER BOARD		
2.22	EPDM ROOFING MEMBRANE		
2.23	STANDING SEAM METAL ROOF		
2.24	PREFINISHED ALUM. PARAPET CAP		
2.25	FIBER CEMENT SOFFIT; SEE ELEVATIONS		
2.31	THRU WALL GUTTER AND DOWNSPOUT		
2.32	ALUM. CANOPY W/ TIE RODS		
2.33	CONT. FLASHING		
2.34	2X FIBER CEMENT FACIA, PTD.		
2.35	GUTTER AND DOWNSPOUT		
2.36	FIBER CEMENT DROP BEAM OUTRIGGERS @ 48" O.C.; ALIGN WITH TRUSS		
2.37	FIBER CEMENT FAUX WOOD SOFFIT		
3.01	4" CONC. SLAB ON GRADE; SEE STR.		
3.02	CONC. TURN-DOWN SLAB; SEE STR.		
3.03	AREA OF SLAB LEAVE-OUT		
4.01	SCH. DOOR		
4.02	SCH. STOREFRONT SYSTEM		
5.01	SCH. LIGHT FIXTURE; SEE ELEC.		
5.11	SCH. CEILING; SEE ID		
5.21	SCH. DUCTWORK; SEE MECH.		
6.01	SIGNAGE; BY OWNER		
6.02	HARDSCAPE BY OTHERS		

LEVEL 01 0' - 0"















WALL SECTION KEYNOTES

1.01	2X6 WD. STUDS @ 16" O.C.
1.02	2X4 WD. STUDS @ 16" O.C.
1.03	5/8" PLYWOOD SHEATHING
1.11	1" RIGID INSULATION
1.12	R-19 BATT INSULATION
1.21	5/8" GYP. BD.
1.22	FIBER CEMENT SIDING; SEE ELEVATIONS
1.23	HORIZONTALLY MOUNTED METAL SIDING; SEE ELEVATIONS
1.24	2" EPS EXTERIOR INSULATION AND FINISH SYSTEM; SEE ELEVATIONS
1.31	SCH. STRUCTURAL FRAMING; SEE STR.
2.01	PRE-ENGINEERED WD. TRUSSES W/ 2X8 OUT-RIGGER @ 24" O.C.; SEE STR.
2.02	PRE-ENGINEERED WD. TRUSSES @ 24" O.C.; SEE STR.
2.03	5/8" PLYWOOD DECKING; SEE STR.
2.04	3/4" PLYWOOD DECKING; SEE STR.
2.04	2X8 OUTRIGGERS @ 16" O.C.; SEE STR.
2.06	STRUCTURAL STEEL BEAM; SEE STR.
2.11	1-1/2" RIGID INSULATION
2.12	R-25 SPRAY FOAM INSULATION
2.21	5/8" COVER BOARD
2.22	EPDM ROOFING MEMBRANE
2.23	STANDING SEAM METAL ROOF
2.24	PREFINISHED ALUM. PARAPET CAP
2.25	FIBER CEMENT SOFFIT; SEE ELEVATIONS
2.31	THRU WALL GUTTER AND DOWNSPOUT
2.32	ALUM. CANOPY W/ TIE RODS
2.33	CONT. FLASHING
2.34	2X FIBER CEMENT FACIA, PTD.
2.35	GUTTER AND DOWNSPOUT
2.36	FIBER CEMENT DROP BEAM OUTRIGGERS @ 48" O.C.; ALIGN WITH TRUSS
2.37	FIBER CEMENT FAUX WOOD SOFFIT
3.01	4" CONC. SLAB ON GRADE; SEE STR.
3.02	CONC. TURN-DOWN SLAB; SEE STR.
3.03	AREA OF SLAB LEAVE-OUT
4.01	SCH. DOOR
4.02	SCH. STOREFRONT SYSTEM
5.01	SCH. LIGHT FIXTURE; SEE ELEC.
5.11	SCH. CEILING; SEE ID
5.21	SCH. DUCTWORK; SEE MECH.
6.01	
0.02	

LEVEL 01 0' - 0"







2.36 2.37

1.11 1.03 1.02

5.01 1.02 - 2.03 - 1.11 - 2.25 4.02 4.01









2

17 A-416

WALL SECTION KEYNOTES

1.01	2X6 WD. STUDS @ 16" O.C.
1.02	2X4 WD. STUDS @ 16" O.C.
1.03	5/8" PLYWOOD SHEATHING
1.11	1" RIGID INSULATION
1.12	R-19 BATT INSULATION
1.21	5/8" GYP. BD.
1.22	FIBER CEMENT SIDING; SEE ELEVATIONS
1.23	HORIZONTALLY MOUNTED METAL SIDING; SEE ELEVATIONS
1.24	2" EPS EXTERIOR INSULATION AND FINISH SYSTEM; SEE ELEVATIONS
1.31	SCH. STRUCTURAL FRAMING; SEE STR.
2.01	PRE-ENGINEERED WD. TRUSSES W/ 2X8 OUT-RIGGER @ 24" O.C.; SEE STR.
2.02	PRE-ENGINEERED WD. TRUSSES @ 24" O.C.; SEE STR.
2.03	5/8" PLYWOOD DECKING; SEE STR.
2.04	3/4" PLYWOOD DECKING; SEE STR.
2.04	2X8 OUTRIGGERS @ 16" O.C.; SEE STR.
2.06	STRUCTURAL STEEL BEAM; SEE STR.
2.11	1-1/2" RIGID INSULATION
2.12	R-25 SPRAY FOAM INSULATION
2.21	5/8" COVER BOARD
2.22	EPDM ROOFING MEMBRANE
2.23	STANDING SEAM METAL ROOF
2.24	PREFINISHED ALUM. PARAPET CAP
2.25	FIBER CEMENT SOFFIT; SEE ELEVATIONS
2.31	THRU WALL GUTTER AND DOWNSPOUT
2.32	ALUM. CANOPY W/ TIE RODS
2.33	CONT. FLASHING
2.34	2X FIBER CEMENT FACIA, PTD.
2.35	GUTTER AND DOWNSPOUT
2.36	FIBER CEMENT DROP BEAM OUTRIGGERS @ 48" O.C.; ALIGN WITH TRUSS
2.37	FIBER CEMENT FAUX WOOD SOFFIT
3.01	4" CONC. SLAB ON GRADE; SEE STR.
3.02	CONC. TURN-DOWN SLAB; SEE STR.
3.03	AREA OF SLAB LEAVE-OUT
4.01	SCH. DOOR
4.02	SCH. STOREFRONT SYSTEM
5.01	SCH. LIGHT FIXTURE; SEE ELEC.
5 11	SCH CEILING: SEE ID





- 5.11 SCH. CEILING; SEE ID
- 5.21 SCH. DUCTWORK; SEE MECH.

6.01 SIGNAGE; BY OWNER

6.02 HARDSCAPE BY OTHERS



1 TYP. LADDER DETAIL A-601 | 1" = 1'-0"



















3 ENLARGED SECTION - EIFS A-611 | 1 1/2" = 1'-0"













9 ENLARGED SECTION - NICHIHA TUFFBLOCK SOFFIT A-611 | 1 1/2" = 1'-0"



5 ENLARGED SECTION - NICHIHA TUFFBLOCK / 7.2 PANEL A-611 | 1 1/2" = 1'-0"















5 TYP. ROOF DRAIN A-620 | NOT TO SCALE





4 SQUARE PENETRATION W/ SQUARE TPO CUSTOM PIPE BOOT A-620 | NOT TO SCALE

INC. ARCHITECTS & ENGINEERS 135 P RICKMAN INDUSTRIAL DR. SUITE 100 CANTON, GA 30115 Phone: (770) 345-2579 J23, CSC Design. These drawings are protected by the copyright laws red States. These drawings or any part thereof may not be used for any states. These drawings or any part thereof may not be used for any states. KEVIN B. WHIPPLE 05/10/2024 PROJECT NUMBER: 23-060 EVISIONS NO: DAT

CSC

DESIGN,





6 COPING DETAIL A-621 | NOT TO SCALE

- GRAVEL STOP PARAPET COPING

- INSTALL ROOF MEMBRANE ATOP OF PARAPET COPING. SEAL PER MANUFACTURER'S DETAILS

- MTL. COPING PIECE (1)

– SEAM (10'-0" O.C., TYP.)

- COVER PLATE

- MTL. COPING PIECE (2)



5 OUTSIDE CORNER A-621 | NOT TO SCALE







FOR CONSTRUCTION

A-621









EVISIONS NO: DAT
										DOC	DR SC	CHED	ULE					
			SIZE		DOOR					FRAME			DETAIL			HARDWARE		
REV. #	MARK	W	H	Т	TYPE	MAT.	FIN	GLZ.	TYPE	MAT.	FIN.	HEAD	JAMB	SILL	FIRE RATING	SET		NOTES
SUITE 10	0 100A	6'-0"	8'-0"	1"	GS	AL	MT-07	GL-01		AL	N/A	H1	J1	S1		1		
	100B 100C	3'-0" 3'-0"	8'-0" 8'-0"	1" 1"	GS GS	AL	MT-07 MT-07	GL-01 GL-01		AL AL	N/A N/A	H1 H1	J1 J1	S1 S1		1		
SUITE 20	0					1		1	1	1	1	1						
	200A 200B	6'-0" 3'-0"	8'-0" 8'-0"	1" 1 3/4"	GS N	AL HM	MT-07 PT-02	GL-01 GL-01	НМ	AL HM	N/A PT-02	H1 H2	J1 J2	S1 S1		1 2		
	200C	3'-0"	8'-0"	1"	GS	AL	MT-07	GL-01		AL	N/A	H1	J1	S1		1		
		PE			ODEDA								DASSA				ACCESSIBILITY	Р
REV. #	HARDWA	RE			OPERA		RDWARE						PASSAG	GE SET F	IANDLES		ACCESSIBILITY FUNCTIONS	P HAR
REV. #	HARDWA 1 2	RE CON	NTINUOU:	S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAP	RDWARE OSER OSER			PUL	L LEVER, L LEVER,	PANIC BA	PASSA(AR AR	GE SET F	IANDLES		ACCESSIBILITY FUNCTIONS	P HAR
REV. #	HARDWA	RE CON CON	NTINUOU:	S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF IDER, CL IDER, CL	RDWARE OSER OSER			PUL PUL	L LEVER, L LEVER,	PANIC BA PANIC BA	PASSA(AR AR	GE SET H	IANDLES		ACCESSIBILITY FUNCTIONS	P HAR
REV. #	HARDWA	RE CON	NTINUOU:	S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF IDER, CLU	RDWARE OSER OSER			PUL PUL	L LEVER, L LEVER,	PANIC BA PANIC BA	PASSAG AR AR	GE SET H	IANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWA 1 2	RE CON CON	NTINUOU: NTINUOU:	S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER			PUL PUL	L LEVER, L LEVER,	PANIC BA PANIC BA	PASSAG AR AR	GE SET H	IANDLES		ACCESSIBILITY FUNCTIONS	P HAR
REV. #	HARDWA	RE CON	NTINUOU:	S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER			PUL PUL	L LEVER, L LEVER,	PANIC BA	PASSA(GE SET H	IANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWA 1 2	RE CON CON	NTINUOU:	S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF IDER, CL IDER, CL	RDWARE OSER OSER			PUL	L LEVER, L LEVER,	PANIC BA	PASSAG AR AR	GE SET F	IANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWA 1 2		NTINUOU:	S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER			PUL PUL	L LEVER, L LEVER,	PANIC BA	PASSA(AR AR	GE SET H	IANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWA 1 2	RE CON	NTINUOUS	<u>S HINGE, F</u> S HINGE, F	OPERA RIM CYLIN RIM CYLIN	Tion Haf Ider, Clu	RDWARE OSER OSER			PUL	L LEVER, L LEVER,	PANIC BA PANIC BA	PASSAG	GE SET F	ANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWA 1 2		NTINUOU:	S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER			PUL PUL	L LEVER, L LEVER,	PANIC BA PANIC BA	PASSAG	GE SET H	ANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWA 1 2		NTINUOU:	S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER			PUL PUL	L LEVER, L LEVER,	PANIC BA PANIC BA	PASSA(GE SET F	ANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWA 1 2		NTINUOU: NTINUOU:	S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER			PUL	L LEVER, L LEVER,	PANIC B/ PANIC B/	PASSAG	GE SET H	ANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWA 1 2		NTINUOU: NTINUOU:	S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER			PUL PUL	L LEVER, L LEVER,	PANIC BA PANIC BA	PASSAG	GE SET H	ANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWA 1 2			<u>S HINGE, F</u> S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER			PUL	L LEVER, L LEVER,	PANIC BA PANIC BA	PASSAG	GE SET F	ANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWAI 1 2			S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER			PUL	L LEVER, L LEVER,	PANIC B/ PANIC B/	PASSAG	GE SET H	ANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWA 1 2		NTINUOU: NTINUOU:	S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER			PUL PUL	L LEVER, L LEVER,	PANIC B/ PANIC B/	PASSAG	GE SET H	ANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWA 1 2		NTINUOU: NTINUOU:	S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER				L LEVER, L LEVER,	PANIC BA PANIC BA	PASSAG	GE SET H	ANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWAI 1 2		NTINUOU: NTINUOU:	S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER				L LEVER, L LEVER,	PANIC B/ PANIC B/	PASSAG	GE SET H	ANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWA 1 2		NTINUOU:	<u>S HINGE, F</u> <u>S HINGE, F</u>	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER				L LEVER, L LEVER,	PANIC BA PANIC BA	PASSAG	GE SET F	ANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWAI 1 2		NTINUOU: NTINUOU:	S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER					PANIC B/ PANIC B/	PASSAG	GE SET H	ANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWA 1 2			S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER					PANIC BA PANIC BA	PASSAG	GE SET H	ANDLES		ACCESSIBILITY FUNCTIONS	PHAR
REV. #	HARDWAI 1 2			S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER				L LEVER, L LEVER,	PANIC BA PANIC BA	PASSAG	GE SET H	ANDLES			PHAR
REV. #	HARDWA 1 2			S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER					PANIC BA PANIC BA	PASSAG	GE SET H	ANDLES			PHAR
REV. #	HARDWA 1 2			S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER					PANIC BA PANIC BA	PASSAG	GE SET H	ANDLES			PHAR
REV. #	HARDWAI 1 2			S HINGE, F S HINGE, F	OPERA RIM CYLIN RIM CYLIN	TION HAF	RDWARE OSER OSER					PANIC B/ PANIC B/	PASSAG	GESETH				PHAR

TES		

		HARDWARE	E SCHEDI	JLE										
PANIC Iardware	DEADBOLT	LOCKSET SEC	CURITY CHAIN	ELECTRIC / POWER	DOOR CARD READER	DOOR HOLDER	DOOR CLOSER	DOOR STOPPER	WEATHER STRIPPING	ADA THRESHOLD	SILENCERS	PEEP HOLE	CONDITION	COMMENTS
	RIM CYLINDER						•		•					
	RIM CYLINDER													KICK PLATE



BLAIRSVILLE DENTISTRY	40 HOMETOWN WAY BLAIRSVILLE, GA 30512
DOOR SCHE	EDULE
A-70	

	C1 DOOR SILL - S1
	• A-705 3" = 1'-0"



		SI	ZE			DETAIL		
EV. #	MARK	L	Н	SILL HEIGHT	HEAD	JAMB	SILL	NOTES
						_	-	
	SF1	11'-7"	10'-0"		H3	J3	S4	
	SF2	12'-0"	12'-0"		VARIES - SEE ELEVATIONS	VARIES - SEE ELEVATIONS	S4	
	SF3	11'-7"	12'-0"		H3	J3	S4	
	SF4	6'-0"	8'-0"	2'-0"	VARIES - SEE ELEVATIONS	VARIES - SEE ELEVATIONS	VARIES - SEE ELEVATIONS	
	SF5	6'-0"	6'-0"	4'-0"	H1	J1	S1	
	SF6	5'-0"	10'-0"		VARIES - SEE ELEVATIONS	VARIES - SEE ELEVATIONS	S1	
	SF7	6'-0"	2'-0"	8'-0"	H1	J1	S1	
	SF8	12'-0"	5'-0"	14'-0"	H1	J1	S1	
	SF9	12'-0"	5'-0"	14'-0"	H2	J2	S2	TOP MULLION SLOPE 1:12











CSC DESIGN, INC.

STOREFRONT GENERAL NOTES



					SIURE	FROM 5	CHEDULE	
		SI	ZE			DETAIL		
REV. #	MARK	L	Н	SILL HEIGHT	HEAD	JAMB	SILL	NOTES
	SF1	11'-7"	10'-0"		H3	J3	S4	
	SF2	12'-0"	12'-0"		VARIES - SEE ELEVATIONS	VARIES - SEE ELEVATIONS	S4	
	SF3	11'-7"	12'-0"		H3	J3	S4	
	SF4	6'-0"	8'-0"	2'-0"	VARIES - SEE ELEVATIONS	VARIES - SEE ELEVATIONS	VARIES - SEE ELEVATIONS	
	SF5	6'-0"	6'-0"	4'-0"	H1	J1	S1	
	SF6	5'-0"	10'-0"		VARIES - SEE ELEVATIONS	VARIES - SEE ELEVATIONS	S1	
	SF7	6'-0"	2'-0"	8'-0"	H1	J1	S1	
	SF8	12'-0"	5'-0"	14'-0"	H1	J1	S1	
	SF9	12'-0"	5'-0"	14'-0"	H2	J2	S2	TOP MULLION SLOPE 1:12





4. FIRE RATED WINDOWS & GLASS TO COMPLY WITH IBC SECTION 716.6.



CSC DESIGN,

INC.



















NOTE: MODIFICATIONS TO THIS SPACE TO ALLOW THE PROPER FIT & FUNCTION OF THE EQUIPMENT SUPPLIED BY DESIGN ERGONOMICS (D/E). IT SHALL BE THE RESPONSIBILITY OF THE OWNER/ TENANT/ LANDLORD/ OR CONTRACTOR IN REGARDS TO CODE COMPLIANCE OF STRUCTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING DISCEPLINES. THIS INCLUDES BUT IS NOT LIMITED TO SUPPORT STRUCTURE FOR EQUIPMENT AND CLEARANCES IN REGARDS TO SPRINKLER HEADS AND/OR ANY DEVICE OR STRUCTURE WHICH MAY IMPEDE OR CONFLICT WITH THE FUNCTION OF D/E SUPPLIED EQUIPMENT. DESIGN ERGONOMICS SHALL NOT BEAR ANY COST TO CORRECT THESE ISSUES. PLEASE CONSULT D/E FOR ASSISTANCE IN EQUIPMENT SUPPORT STRUCTURE AND CLEARANCE QUESTIONS.





CSC

INC.

ARCHITECTS & ENGINEERS 135 P RICKMAN INDUSTRIAL DR. SUITE 100 CANTON, GA 30115

Phone: (770) 345-2579

ted States. These drawings or any part thereof

DESIGN,















- 1. REFER TO DE-4.0 FOR FINISH SCHEDULE
- REFER TO ELEVATIONS FOR WALL TILE PATTERNS AND EXTENTS.
 FLOOR TILE, BASE TILE, AND WALL TILE GROUT JOINTS SHOULD ALIGN.
- FLOOR TILE, BASE TILE, AND WALL TILE GROUT JOINTS SHOULD ALIG
 PROVIDE LEVEL 5 FINISH AT ALL WALLS INDICATING WALLCOVERING

















10' - 0"AFF		10' - 0"AFF	
	╤┛╷╵╟		
0	0		
	<u> </u>		∎
2'X2' ACT 9' - 0"AFF	_		
	2'X2' ACT 9' - 0"AFF		
2'X	2' ACT		
9'-	0"AFF		









24.rvt

Keynote Legend
Keynote Text
ninate custom millwork; Color & spec refer to finish schedule; Supplied & installed by
e shelves; By G.C.
ninate; 4" H built-up platform
ninate; 2" H built-up platform
ninate custom millwork; Color & spec refer to finish schedule; Supplied & installed by gonomics
0+ Gallon Trash Cabinet; Supplied & Installed by Design Ergonomics
ace countertop w/ 2" upstand; Color & spec refer to finish schedule; Supplied & by G.C.
ackets; 287.45.468; Or equal (By millwork)
ne; confirm with doctor before rough-in
ny filtration system is required w/ supplier before rough-in
xact plumbing requirements w/ supplier before rough-in
ap below (by others)
o install owner selected RO system below sink
od supplied by E/P, GC to provide vent to exterior and 120V duplex outlet
e bowl sink ELUH3920; Supplied & installed by G.C.
mo DS50 24" dishwasher; Supplied by owner & installed by G.C.
c Products pulldown units; supplied by owner; Color TBD by owner
c Products "Slat Wall" storage panel by E/P, supplied by owner, installed by Design cs
c Products mobile tech carts; supplied by owner; Color TBD by owner
s (by owner), spec TBD; Installed by supplier
stic tilt bins (by owner)
xact power requirements w/ supplier before rough-in
olugmold strip; 12" O.C.; Supplied and installed by electrician.
nted monitor; By I.T. (Coordinate location of peripherals & CPU with owner)
y I.T. Owner to coordinate peripherals and CPU.
en to bulk storage below counter

	Keynote Legend
Key Value	Keynote Text
110	Plastic laminate custom millwork; Color & spec refer to finish schedule; Supplied & installed by G.C.
113	Adjustable shelves; By G.C.
114	Plastic laminate; 4" H built-up platform
131	Plastic laminate countertop w/ 2" upstand; Color & spec refer to finish schedule; Supplied & installed by G.C.
133	Solid surface countertop w/ 2" upstand; Color & spec refer to finish schedule; Supplied & installed by G.C.
134	Hafele brackets; 287.45.468; Or equal (By millwork)
211	Aux. air line; confirm with doctor before rough-in
452	Lab equipment (by owner); Installed by supplier
520	AL 2000 plugmold strip; 12" O.C.; Supplied and installed by electrician.
620	Leave open to bulk storage below counter

FOR CONSTRUCTION

03:10 AM G:\DesErgo DWG\2023 Desergo\Boulden, Peter - 2023\03 - Interior Design\Drawing Set\Full Set Issuance - 05.08.24\Boulden - Full Set Issuance - 05.0

INTERIOR ELEVATIONS	
DE - 2.6	
FOR CONSTRUCTION	

4.rvt

 P
 DI

 P
 SN

 P
 SN

 P
 GI

 P
 QI

 P</t TC TL PC PH

	Keynote Legend
(ey Value	Keynote Text
30	Chair provided by owner; Installed by owner selected dental technician
10	Confirm exact power requirements w/ supplier before rough-in
1	Confirm exact data/low-voltage requirements w/ supplier before rough-in
31	Electrician to verify Floor Box spec with chair vendor prior to installation
34	Electrician to supply & install 2" conduit from head wall to floor box and 9 oclock wall for foot-controlled tubing (rheostat), as well as any low-voltage wiring
12	Monitor by I.T. Owner to coordinate peripherals and CPU.
4	Owner to supply Accutron digital flow meter nitrous/oxygen connection & remote flow system set-up. Licensed plumber to provide rough-in and any required tubing/sleeving for proper installation, and delivery at chair. Confirm exact plumbing requirements w/ supplier before rough-in

ELECTRICAL	LE	GEND
DUPLEX RECEPTACLE	SA	SMOKE ALARM
SWITCHED DUPLEX RECEPTACLE	æ	CHIMES
GROUND FAULT RECEPTACLE	•	CABLE TV JACK
VATER PROOF GRI RECEPTACLE	×	TELEPHONE JACK
240 RECEPTACLE (RANGE/DRYER)	\square	COMPUTER DATA JACK (CAT5E)
OUPLEX FLOOR RECEPTACLE	Ą	AUDIO JACK 1/8" FEMALE STEREO
QUADRUPLEX OUTLET		PANEL BOX
DUPLEX OUTLET 45" A.F.F.	J	J BOX
OUPLEX OUTLET 72" A.F.F.	T	THERMOSTAT
CEILING FIXTURE	\$	SINGLE POLE SWITCH
RECESSED FIXTURE	\$ ³	THREE WAY SWITCH
VALL MOUNT FIXTURE	\$ ⁴	FOUR WAY SWITCH
FLUORESCENT FIXTURE	\$ ⁵	DIMMER SWITCH
FLUORESCENT FIXTURE (SURFACE MOUNT)	\$ ^D	SWITCH W/ PILOT LIGHT
EXHAUST FAN	\$ ^R	REMOTE EXPOSURE SWITCH (FOR X-RAY)
CEILING MOUNT SPEAKER	EXIT	EXIT SIGN W/ EMERGENCY LIGHTING
TIME CLOCK ACTIVATED LIGHTING FIXTURE	EL1	EMERGENCY BACKUP LIGHTING
PHOTOCELL ACTIVATED LIGHTING FIXTURE		

ELECTRICAL LEGEND 1/4" = 1'-0"

5 C2B1/C1B1 ROOM SECTION 1/2" = 1'-0"

DE - 3.2 FOR CONSTRUCTION

FINISH MATERIAL SCHEDULE						
KEY	DESCRIPTION	MANUFACTURER	STYLE	COLOR	LOCATION	NOTES
ACOUSTICAL CEILING	GTILE					
ACT-1	ACOUSTICAL CEILING TILE	ARMSTRONG	2' X 2' OPTIMA 3250 LAY-IN AND TEGULAR	WHITE	REFER TO RCP	REP CONTACT: LBBARTON@ARMSTRONG.COM
CARPET						
CPT-1	CARPET	BENTLEY MILLS	24" x 24" DOG EARED W/ AFIRMA II HARDBACK (STYLE# 8DG23)	PUBLISHER 800109	REFER TO FINISH PLAN	REP CONTACT: MIKE.SMITH@BENTLEYMILLS.COM
CERAMIC TILE	I					
CT-1	CERAMIC TILE	TILEBAR	PONTO VERDE GREEN 5 X 16 3D POLISHED PORCELAIN TILE	VERDE GREEN (GROUT: LATICRETE - 27 HEMP)	REFER TO ELEVATIONS (CHECK IN/OUT DESK FACE)	REP CONTACT: JDIVONE@TILEBAR.COM
CT-2	CERAMIC TILE	TILEBAR	KENRIDGE CHEVRON MAPLE 24 X 48 MATTE PORCELAIN	MAPLE (GROUT: LATICRETE - 35 MOCHA)	REFER TO FINISH PLAN (RESTROOM FLOOR)	REP CONTACT: JDIVONE@TILEBAR.COM
CT-3	CERAMIC TILE	TILEBAR	PAINT VERDE GREEN 3 X 16 GLOSSY PORCELAIN SUBWAY TILE	GREEN (GROUT: LATICRETE - 27 HEMP)	REFER TO ELEVATIONS (RESTROOM WET WALLS)	REP CONTACT: JDIVONE@TILEBAR.COM
CT-4	CERAMIC TILE	TILE SHOP	GLASS KHAKI GREEN BLEND CARDINE MOSAIC WALL TILE	KHAKI GREEN (GROUT: LATICRETE - 27 HEMP)	REFER TO ELEVATIONS (RESTROOM WET WALLS)	REP CONTACT: ATHAN.TARGONTSIDIS@TILESHOP.
CT-5	CERAMIC TILE	TILE SHOP	GLASS KHAKI GREEN BLEND HEX MOSAIC WALL TILE 2"	KHAKI GREEN (GROUT: LATICRETE - 27 HEMP)	REFER TO ELEVATIONS (RESTROOM WET WALLS)	REP CONTACT: ATHAN.TARGONTSIDIS@TILESHOP.
CT-6	CERAMIC TILE	MSI - HOME DEPOT	DOMINO WHITE BULLNOSE 4" X 16" GLOSSY (MODEL# NWHIGLO4X16BN)	WHITE (GROUT: LATICRETE - 44 BRIGHT WHITE)	REFER TO FNISH PLAN (RESTROOMS)	
PAINT						
PT-1	PAINT	SHERWIN WILLIAMS	EGGSHELL LOW VOC	SW 7035 AESTHETIC WHITE	ALL WALLS, UNO	REP CONTACT: MARK.T.WEINER@SHERWIN.COM
PT-2	PAINT	SHERWIN WILLIAMS	EGGSHELL LOW VOC	SW 7036 ACCESSIBLE BEIGE	ACCENT PAINT - REFER TO FINISH PLAN	REP CONTACT: MARK.T.WEINER@SHERWIN.COM
PT-3	PAINT	SHERWIN WILLIAMS	EGGSHELL LOW VOC	SW 9174 MOTH WING	ACCENT PAINT - REFER TO FINISH PLAN	REP CONTACT: MARK.T.WEINER@SHERWIN.COM
PT-4	PAINT	SHERWIN WILLIAMS	SEMI GLOSS LOW VOC	SW 7757 HIGH REFLECTIVE WHITE	DOORS AND TRIM	REP CONTACT: MARK.T.WEINER@SHERWIN.COM
PT-5	PAINT	SHERWIN WILLIAMS	FLAT LOW VOC	SW 7757 HIGH REFLECTIVE WHITE	CEILINGS	REP CONTACT: MARK.T.WEINER@SHERWIN.COM
PLASTIC LAMINATE	· · · · ·					
PL-1	PLASTIC LAMINATE	STEVENS WOOD	ARTIKA	ARIZONA CYPRESS	REFER TO ELEVATIONS AND DETAILS	REP CONTACT: KYLEG@STEVENSINC.COM
RESILIENT FLOORING	3					
RF-1	RESILIENT FLOORING	KARNDEAN	VAN GOGH RIGID CORE	FRENCH OAK SCB85	ALL FLOORS, UNO	
RF-2	RESILIENT FLOORING	AHF	CONCEPTS OF LANDSCAPE HETEROGENEOUS SHEET	CONCRETE EFFECT TAUPE 78.74IN #1HE2M410	LAB/MODEL, STERILIZATION	
RUBBER BASE	· · · · ·					
RB-1	RUBBER BASE	JOHNSONITE	MANDALAY MW-XX-H3	08 ICICLE	ALL WALLS, UNO	REP CONTACT: JOHN.MCNULTY@TARKETT.COM
SOLID SURFACE	· · · ·					
SS-1	SOLID SURFACE	CAMBRIA	GRANDEUR SERIES	WINDSOR BRASS SATIN RIDGE	COUNTERTOPS: FRONT DESK, REFRESHMENT AREA, PATIENT RESTROOMS, STAFF LOUNGE	REP CONTACT: CHRISTINE.LEWIS@CAMBRIAUSA.C
SS-2	SOLID SURFACE	CORIAN	GLACIER WHITE	GLACIER WHITE	ALL COUNTERTOPS, UNO	REP CONTACT: SDEZIO@ATLANTICPLYWOOD.COM
STONE	·					
ST-1	STONE	ELDORADO STONE	EUROPEAN LEDGE	LINEN	CHECK IN AND LOBBY	REP CONTACT: DDONOVAN@WESTLAKE.COM
WALLCOVERING		· ·				
WC-1	WALLCOVERING	SCHUMAKER	SUWON SISAL	AQUA 5000760	REFER TO FINISH PLAN	REP CONTACT: LPERRY@ESCO.COM

			ACCESSORY SCHEDULE			
KEY	TYPE	MANUFACTURER	MODEL	COLOR/FINISH	LOCATION	PROVIDED BY
		I				
AC-1	CABINET PULLS	TOP KNOBS	HILLMONT PULL 5 1/16" TK905BLK	FLAT BLACK	ALL LOCATIONS, UNO	GC
AC-2	DOOR STOP	HOME DEPOT	DESIGN HOME - FLOOR MOUNT DOME HOME DEPOT DOOR STOP	BLACK	ALL RESTROOMS, UNO	GC
AC-3	GRAB BARS	DELTA	CONTEMPORARY DECORATIVE ADA GRAB BARS 41836-BL & 41842-BL - CODE COMPLIANT SIZES AS REQUIRED	MATTE BLACK	ALL RESTROOMS, UNO	GC
AC-4	TOILET PAPER HOLDER	DELTA - BUILD.COM	TRINSIC SINGLE BAR TISSUE HOLDER 75950-BL	MATTE BLACK	ALL RESTROOMS, UNO	GC
AC-5	NAPKIN DISPOSAL	AMERICAN STADARD INC.	SURFACE MOUNTABLE SANITARY NAPKIN DISPOSAL 0852-40	MATTE BLACK	ALL RESTROOMS, UNO	GC
AC-6	MIRROR	BETTER BEVEL - HOME DEPOT	FRAMELESS RECTANGULAR BATHROOM VANITY MIRROR 24" X 36" - COPPER FREE		ALL RESTROOMS, UNO	GC
AC-7	COAT HOOK	ANGLE SIMPLE - WAYFAIR	WALL MOUNTED ROBE HOOK AE083	BLACK	ALL RESTROOMS, UNO	GC
AC-8	CABINET PULLS	HAFELE	SOHO COLLECTION, 128MM C-C 109.86.002	STAINLESS STEEL	LAB AND STERILIZATION	GC
AC-9	SOAP DISPENSER	DELTA	TRINSIC RP100734AR	ARTIC STAINLESS	LAB AND STERILIZATION	GC
AC-10	SOAP DISPENSER	DELTA	TRINSIC RP100734AR	ARTIC STAINLESS	STAFF LOUNGE	GC
AC-11	MICROWAVE	SAMSUNG	1.1 CU. FT. COUNTERTOP MICROWAVE W/ GRILLING ELEMENT MG11H2020CT/AA	STAINLESS STEEL	STAFF LOUNGE	GC
AC-12	DISHWASHER	BOSCH	300 SERIES DISHWASHER 24" SGE53B55UC	STAINLESS STEEL	STAFF LOUNGE	GC
AC-13	REFRIGERATOR	SAMSUNG	17.5 CU. FT. 3 DOOR FRENCH DOOR COUNTER DEPTH SMART REFRIGERATOR W/TWIN COOLING	STAINLESS STEEL	STAFF LOUNGE	GC
AC-14	UNDER COUNTER FRIDGE	EDGESTAR	15" WIDE 80 CAN BUILT IN BEVERAGE COOLER WITH BLUE LED LIGHTING BCI3640778	STAINLESS STEEL	PATIENT LOUNGE	GC
AC-15	TOWEL DISPENSER	TORK - ULINE	INTUITION AUTOMATIC TOWEL DISPENSER H-5806W	WHITE	ALL RESTROOMS, UNO	GC
AC-16	SWING DOOR HANDLE	SIGNATURE HARDWARE	MABRY PASSAGE SET - LEVER HANDLES 466727	MATTE BLACK	REFER TO DOOR SCHEDULE	GC
AC-17	SWING DOOR HANDLE	SIGNATURE HARDWARE	MABRY ENTRANCE SET - LEVER HANDLES 466717	MATTE BLACK	REFER TO DOOR SCHEDULE	GC
AC-18	POCKET DOOR PULL	SIGNATURE HARDWARE	ELONGATED POP-OUT BRASS POCKET DOOR PULL - PRIVACY 483730	MATTE BLACK	REFER TO DOOR SCHEDULE	GC

			PLUMBING FIXTURE SCHEDULE		
KEY	TYPE	MANUFACTURER	MODEL	COLOR/FINISH	LOCATION
ALL REST	ROOMS				
PF-1	FAUCET	JOSS & MAIN	CONTINENTAL MONOBLOCK SINGLE HOLE BATHROOM FAUCET WITH DRAIN ASSEMBLY KBBB4545	MATTE BLACK	ALL RESTROOMS
PF-2	SINK	KOHLER	VERTICYL 19 1/4" OVAL UNDERMOUNT K-2881-0	WHITE	ALL RESTROOMS
PF-3	TOILET	SLOAN	REFER TO PLUMBING	WHITE TOILET/BLACK HARDWARE	ALL RESTROOMS
LAB					
PF-4	SINK	ELKAY	DAYTON 16-1/2"X18-1/4"X8" SINGLE BOWL UNDERMOUNT DXUH1618	STAINLESS STEEL	LAB
PF-5	FAUCET	WATERSAVER	MIXING FAUCET DECK MOUNTED L2224	CHROME	LAB
PF-6	EYEWASH	GUARDIAN	EYESAFE FAUCET-MOUNTED EYEWASH, ADJUSTABLE AERATED OUTLET HEADS G1100	CHROME	LAB
STAFF LO	UNGE				
PF-7	SINK	ELKAY	CROSSTOWN 24"X18-1/4"X9" SINGLE BOWL UNDERMOUNT HDU24189F	STAINLESS STEEL	STAFF LOUNGE
STAFF LO	UNGE, STER	ILIZATION			
PF-8	FAUCET	DELTA	EMMELINE COLLECTION - SINGLE HANDLE PULL DOWN WITHOUT ESCUTCHEON 9182-AR-PR-DST	LUMICOAT ARTIC STAINLESS	STAFF LOUNGE, STERILIZATION
STERILIZA	ATION				
PF-9	SINK	ELKAY	CROSSTOWN 18 GA 31-1/2"X18-1/2" X 9" EQUAL DOUBLE BOWL UNDERMOUNT ECTRU31179T	STAINLESS STEEL	STERILIZATION

<image/> <text><text><text></text></text></text>
REVISIONS NO: DATE: ISSUE:
BLAIRSVILLE DENTISTRY

SCHEDULES AND

DETAILS

DE - 4.0

FOR CONSTRUCTION

	_
	٦
	7
	_
M	
M	1
	1
	_
	٦
	1
	1
	1
	-
	٦
	٦
	-
	_
1	
]
	-
	٦
	_

							DOOR SCH	EDULE						
		DOO	R			DOOR			FR/	AME				
		NC	MINAL SIZ	E						DETA	L			
DOOR #	TYPE	WIDTH	HEIGHT	THICK NESS	MATERIAL	COLOR REF A1.1	GLAZING	ТҮРЕ	HEAD	JAMB	HARDWARE SET	FRAME	HARDWARE FINISH	Fire Rating
101A	G	3' - 0"	6' - 8"	2"	WOOD	PT-4	FROSTED	TEMPERED	WOOD	WOOD	AC-17	PT-4	MATTE BLACK	j
101B	G	3' - 0"	6' - 8"	2"	WOOD	PT-4	FROSTED	TEMPERED	WOOD	WOOD	AC-17	PT-4	MATTE BLACK	
102	H-POCKET	3' - 0"	6' - 8"	1 1/2"	WOOD	PT-4	FROSTED	TEMPERED	WOOD	WOOD	AC-18	PT-4	MATTE BLACK	
103	G	5' - 8"	6' - 8"	2"	WOOD	PT-4	CLEAR GLASS	TEMPERED	WOOD	WOOD	AC-16	PT-4	MATTE BLACK	
104	Н	3' - 0"	6' - 8"	2"	WOOD	PT-4			WOOD	WOOD	AC-17	PT-4	MATTE BLACK	
106	G	3' - 0"	6' - 8"	2"	WOOD	PT-4	FROSTED	TEMPERED	WOOD	WOOD	AC-16	PT-4	MATTE BLACK	
110	Н	3' - 0"	6' - 8"	2"	METAL	PT-4			WOOD	WOOD	AC-17	PT-4	MATTE BLACK	1 HOUR
118	Н	3' - 0"	6' - 8"	2"	WOOD	PT-4			WOOD	WOOD	AC-17	PT-4	MATTE BLACK	
118A	Н	3' - 0"	6' - 8"	2"	WOOD	PT-4			WOOD	WOOD	AC-17	PT-4	MATTE BLACK	
118B	Н	3' - 0"	6' - 8"	2"	WOOD	PT-4			WOOD	WOOD	AC-17	PT-4	MATTE BLACK	
118C	Н	3' - 0"	6' - 8"	2"	WOOD	PT-4			WOOD	WOOD	AC-16	PT-4	MATTE BLACK	
119	H-POCKET	3' - 0"	6' - 8"	1 1/2"	GLASS	PT-4	FROSTED	TEMPERED	WOOD	WOOD	AC-18	PT-4	MATTE BLACK	
120	Н	3' - 0"	6' - 8"	2"	WOOD	PT-4			WOOD	WOOD	AC-17	PT-4	MATTE BLACK	
122	G	3' - 0"	6' - 8"	2"	WOOD	PT-4	FROSTED	TEMPERED	WOOD	WOOD	AC-16	PT-4	MATTE BLACK	
123	G	3' - 0"	6' - 8"	2"	WOOD	PT-4	FROSTED	TEMPERED	WOOD	WOOD	AC-16	PT-4	MATTE BLACK	
124	Н	3' - 0"	6' - 8"	2"	WOOD	PT-4			WOOD	WOOD	AC-17	PT-4	MATTE BLACK	
124A	H-POCKET	3' - 0"	6' - 8"	1 1/2"	WOOD	PT-4			WOOD	WOOD	AC-18	PT-4	MATTE BLACK	
125	Н	3' - 0"	6' - 8"	2"	WOOD	PT-4			WOOD	WOOD	AC-17	PT-4	MATTE BLACK	
127	G	3' - 0"	6' - 8"	2"	WOOD	PT-4	CLEAR GLASS	TEMPERED	WOOD	WOOD	AC-16	PT-4	MATTE BLACK	
128	Н	3' - 0"	6' - 8"	2"	METAL	PT-4			WOOD	WOOD	AC-17	PT-4	MATTE BLACK	
131	G	3' - 0"	6' - 8"	2"	WOOD	PT-4	FROSTED	TEMPERED	WOOD	WOOD	AC-16	PT-4	MATTE BLACK	
133	G	3' - 0"	6' - 8"	2"	WOOD	PT-4	FROSTED	TEMPERED	WOOD	WOOD	AC-17	PT-4	MATTE BLACK	
								1						
Stulo A		Style B									Chile O			

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

GENERAL NOTES:

1.) THESE DRAWINGS ARE FOR GENERAL GUIDELINES ONLY 2.) REFER TO OWNER SELECTED EQUIPMENT MANUFACTURERS INSTALLATION GUIDE FOR MORE INFORMATION AND EXACT CUT SHEETS.

3.) REFER TO COMPRESSOR/VACUUM MANUFACTURER'S GUIDELINES FOR TRUNK LINE SIZING. REFER TO ROOM DETAILS FOR IN-ROOM LINE TERMINATIONS. 4.) NOT ALL REQUIRED EQUIPMENT IS SHOWN, SOME ADDITIONAL COORDINATION MAY BE REQUIRED. 5.) VERIFY THE NECCESSARY DETAILS ADHERE TO ALL LOCAL CODES.

┣─

<u>TIS</u>

Ζ

 \square

>

S

Ľ

_____ \triangleleft

Ω

MECHANICAL

ROOM DETAILS

DE - 5.0

FOR CONSTRUCTION

GENERAL NOTES:

(THESE SPECIFICATIONS ARE IN ADDITION TO AND DO NOT EXCLUDE ANY FOUND IN THE GENERAL SPECIFICATIONS FOR THE PROJECT)

1. THE CONTRACT STRUCTURAL DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION. PROVIDE ALL MEASURES REQUIRED TO PROTECT THE STRUCTURE. WORKMEN. AND OTHER PERSONS DURING CONSTRUCTION; INCLUDING BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, FORMS AND SCAFFOLDING, SHORING OF RETAINING WALLS AND OTHER TEMPORARY SUPPORTS REQUIRED. COMPLY WITH APPLICABLE REQUIREMENTS OF OSHA AND OTHER GOVERNING BODIES HAVING JURISDICTION AT THE SITE.

2. SHOP DRAWINGS FOR STRUCTURAL STEEL, JOIST, DECKING, AND COLD FORMED METAL TRUSSES SUBMITTALS SHALL COMPLY WITH THE FOLLOWING:

A. CONTRACTOR SHALL FURNISH COMPLETE AND DETAILED SHOP DRAWINGS PREPARED UNDER SUPERVISION OF A REGISTERED STRUCTURAL ENGINEER. THESE DRAWINGS SHALL SHOW SIZES, LOCATION, TYPE AND EXTENT OF ALL MEMBERS, BOLTS AND WELDS.

B. INDICATE THE DATE OF THE STRUCTURAL DRAWINGS USED FOR SHOP DRAWING PREPARATION.

C. INDICATE WELDS BY STANDARD AWS SYMBOLS AND SHOW SIZE LENGTH AND TYPE OF EACH WELD.

D. PROVIDE SETTING DRAWINGS, TEMPLATES AND DIRECTIONS FOR INSTALLATION OF ANCHOR BOLTS AND OTHER ANCHORAGES TO BE INSTALLED BY OTHERS.

E. CONTRACTOR SHALL REVIEW AND STAMP ALL SHOP DRAWINGS PRIOR TO SUBMITTAL FOR ENGINEERING REVIEW.

F. CONTRACTOR SHALL HAVE AN APPROVED SET OF STRUCTURAL STEEL SHOP DRAWINGS AND PROOF OF WELDER CERTIFICATION AT THE JOBSITE AT ALL TIMES.

G. COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.

H. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR BUILDING LOCATION AND ORIENTATION. COORDINATE ALL DIMENSIONS WITH ARCH. DRAWINGS. DO NOT SCALE DRAWING.

I. SECTIONS CUTS INDICATED ON THE DRAWINGS APPLY TO ALL LIKE AND SIMILAR CONDITIONS EVEN THOUGH NOT SPECIFICALLY MARKED ON THE PLANS. COORDINATE SIMILAR CONDITIONS WITH ARCHITECTURAL. MECHANICAL, AND CIVIL DRAWINGS.

3. DESIGN LOADS THE BUILDING STRUCTURE DESCRIBED IN THESE PLANS SHALL BE CONSTRUCTED IN COMPLIANCE WITH THE 2018 INTERNATIONAL BUILDING CODE W/ ALL GEORGIA STATE AMENDMENTS. USE ASCE 7-16 CHAPTER 2 FOR ALL LOAD COMBINATIONS AND LOADS NOT INDICATED HEREIN.

A. GRAVITY LOADS DEAD LOADS: 20 PSF ROOF:

LIVE LOADS: ROOF: 20 PSF

B. SNOW LOADS: GROUND SNOW LOAD (Pg): 5 PSF BALANCED ROOF SNOW LOAD (Pf+RAIN): 10 PSF SNOW EXPOSURE FACTOR (Ce): 0.9 SNOW IMPORTANCE FACTOR (Is): 1.0 THERMAL FACTOR (Ct): 1.0

C. WIND LOADS: BASIC WIND SPEED(3 SEC. GUST): 105 MPH WIND IMPORTANCE FACTOR (Iw): 1.0 RISK CATEGORY: II EXPOSURE CATEGORY: B INTERNAL PRESSURE (GCpi): +/-0.18

REFER TO ASCE-7-16 FOR COMPONENT & CLADDING LOADS

D. SEISMIC DESIGN CRITERIA: SEISMIC IMPORTANCE FACTOR (le): 1.0 RISK CATEGORY: II MAPPED SPECTRAL RESPONSE ACCELERATIONS: Ss: 0.3191 S1: 0.1121 SITE CLASS: D

S(DS): 0.310g S(D1): 0.166g SITE COEFFICIENT Fa = 1.46 Fv = 2.22 SEISMIC DESIGN CATEGORY: C

BASIC SEISMIC FORCE RESISTING SYSTEM: LIGHT-FRAMED (WOOD) WALLS SHEATHED w/ WOOD STRUCTURAL PANELS RATES FOR SHEAR RESISTANCE SEISMIC RESPONSE COEFFICIENT (Cs): 0.0476

RESPONSE MODIFICATION FACTORS (R): 6.5 ANALYSIS PROCEDURE: EQUIVALENT LÁTERAL FORCE PROCEDURE

4. WHERE A DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE AND SIMILIAR CONDITIONS EVEN THOUGH NOT SPECIFICALLY MARKED ON THE DRAWINGS.

FOUNDATION NOTES:

1. SEE REINFORCED CONCRETE NOTES FOR CONCRETE STRENGTH REQUIRMENTS. EXTERIOR CONCRETE SHALL BE AIR ENTRAINED TO 6% +/- 1 1/2%

2. SEE ARCHITECTURAL DRAWINGS FOR SIDE WALK EXTENTS, PLANTER, AND PAVER LOCATIONS, CONCRETE PADS STAIRS, SEE ARCH. FOR DIMENSIONS AT INTERIOR MASONRY PARTITIONS, AND DETAILS.

3. COORDINATE FINISHED FLOOR ELEVATIONS (F.F.E.) WITH ARCH. AND CIVIL DRAWINGS.

4. REFERENCE FFE = 0.0'

5. FOUNDATION DESIGN IS BASED UPON AN ASSUMED SOIL BEARING CAPACITY OF 2000 PSF

6. ALL FOUNDATION EXCAVATIONS SHALL BE EVALUATED BY A GEORGIA REGISTERED GEOTECHNICAL ENGINEER OR TESTING AGENCY PRIOR TO PLACING ANY FOUNDATION CONCRETE. CONTACT STRUCTURAL ENGINEER IF THE ALLOWABLE SOIL BEARING PRESSURE IS LESS THAN 2000 PSF.

7. ALL EXTERIOR FOOTINGS SHALL BEAR A MINIMUM OF 1' - 4" BELOW F.F.E. AND A MINIMUM OF 1' - 0" BELOW ADJACENT EXTERIOR FINISH GRADE, UNLESS NOTED OTHERWISE

8. PRIOR TO COMMENCING ANY FOUNDATION WORK, COORDINATE WORK WITH ANY EXISTING OR NEW UTILITIES. LOWER FOUNDATION AS REQUIRED TO AVOID INTERFERENCE WITH UTILITIES, EXCEPT WHERE ZERO LOT LINE FOOTINGS ARE LOCATED PARALLEL TO ADJACENT BUILDINGS. REFER TO THE FOUNDATION FOUNDATION PLAN FOR FOOTING STEPS AT ADJACENT BUILDINGS - CONTACT ARCH./STRUCTURAL ENGINEER IF A CONFLICT OCCURS.

9. CONSULT WITH A GEORGIA REGISTERED GEOTECHNICAL REPORT FOR GENERAL REQUIREMENTS OF EARTHWORK, OVEREXCAVATION, SUBGRADE PREPARATION, FILL AND COMPACTION, WATERPROOFING AND OTHER PERTINENT REQUIREMENTS AND INFORMATION. IF THERE IS A CONFLICT BETWEEN GEOTECHNICAL ENGINEEER AND STRUCTURAL PLANS THEN THE MORE STRINGENT CRITERIA SHALL APPLY UNLESS OTHERWISE DIRECTED BY AN RFI.

11. PROTECT PIPES AND CONDUITS RUNNING THROUGH WALLS AND SLABS WITH 1/2" INCH EXPANSION MATERIAL. LOWER CONTINUOUS FOOTING AND GRADE BEAMS PERPENDICULAR TO PIPE RUNS TO ALLOW PIPES TO PASS ABOVE THE FOOTINGS OR THROUGH THE GRADE BEAMS. ALTERNATIVELY, PROVIDE A CONCRETE JACKET IF PIPES ARE LOW ENOUGH TO BE PLACED BELOW THE FOOTINGS AND GRADE BEAMS PARALLEL TO PIPE RUNS TO AVOID SURCHARGE ONTO ADJACENT TRENCH EXCAVATIONS.

12. ARRANGE FOR OWNER'S INDEPENDENT TESTING AGENCY TO MONTIOR CUT AND FILL OPERATIONS AND PERFORM FIELD DENSITY AND MOISTURE CONTENT TESTS TO VERIFY COMPACTION AND APPROVE FOOTING SUBGRADES PRIOR TO PLACING CONCRETE.

CONCRETE SLAB NOTES:

1. SEE REINFORCED CONCRETE NOTES FOR CONCRETE STRENGTH REQUIREMENTS.

2. WHERE SPECIFIC CONTROL JOINT LOCATIONS ARE NOT INDICATED, PROVIDE CONTROL/CONSTRUCTION JOINTS SUCH THAT NO AREA EXCEEDS 144 SQUARE FEET NOR SHALL THE LENGTH OF ANY PANEL EXCEED 1.5 TIMES THE WIDTH. SEE DETAILS ON S3.1 AND ARCHITECTURAL CONCRETE PLACEMENT PLAN.

3. CONDUITS AND PIPES EMBEDDED IN SLABS: SHALL NOT BE LARGER IN OUTSIDE DIMENSION THAN ONE-THIRD THE OVERALL THICKNESS OF THE SLAB. SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS OR WIDTHS ON CENTER. A MINIMUM SLAB THICKNESS OF 2 1/2" MUST BE MAINTAINED OVER THE EMBEDDED CONDUITS OR PIPES.

4. COORDINATE THE EXACT LOCATION AND EXTENTS OF ALL FLOOR SLOPES, RECESSED AREAS AND DRAIN LOCATIONS WITH ARCHITECTURAL AND PLUMBING DRAWINGS.

SPECIAL INSPECTION NOTES:

A. THE SPECIAL INSPECTOR SHALL BE ENGAGED BY THE OWNER. SPECIAL INSPECTOR SHALL BE FULLY QUALIFIED, APPROVED BY THE BUILDING OFFICIAL, REGISTERED BY APPLICABLE REGISTRATION BOARD IF REQUIRED BY THE LOCAL BUILDING OFFICIAL, AND SHALL BE ACCEPTABLE TO THE ARCHITECT.

B. THE SPECIAL INSPECTOR SHALL PROVIDE VERIFICATION OF CONSTRUCTION QUALITY CONTROL INSPECTIONS AND TESTING. THE SPECIAL INSPECTOR SHALL CERTIFY THAT ALL WORK REQUIRING INSPECTION IS PERFORMED IN COMPLIANCE WITH ALL REQUIREMENTS THE BUILDING CODE REQUIREMENTS AND LOCAL BUILDING DEPARTMENT REQUIREMENTS.

C. SPECIAL INSPECTIONS ARE REQUIRED IN THE 2018 IBC CHAPTER 17. THE CONTRACTOR SHALL NOTIFY THE SPECIAL INSPECTOR WHEN WORK IS READY TO BE INSPECTED.

D. FAILURE TO NOTIFY THE SPECIAL INSPECTOR PRIOR TO OBSCURING AN ITEM REQUIRING INSPECTION MAY RESULT IN THE CONTRACTOR REMOVING OTHER WORK TO ALLOW INSPECTION. THIS WORK WILL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE. FAILURE TO HAVE REQUIRED ITEMS INSPECTED IS REASON FOR REJECTION OF THE WORK.

E. PREMATURE NOTIFICATION FOR INSPECTIONS WILL RESULT IN ADDITIONAL INSPECTION WITH ALL EXPENSES AND FEES PAID FOR BY THE CONTRACTOR.

REINFORCED CONCRETE NOTES

ACCORDANCE WITH ACI318.

2. ALL CONCRETE SHALL HAVE A SLUMP OF 3" TO 5" (+-1") AND A MINIMUM 28 DAY COMPRESSIVE STRENGTH: A. FOOTINGS: 3000 PSI B. WALLS: 3000 PSI

3. ALL STEEL REINFORCEMENT SHALL BE ASTM 615-GRADE 60. ALL WELDED STEEL

B. CONCRETE EXPOSED TO EARTH AND WEATHER: #5 REBAR AND SMALLER: 1 1/2" #6 REBAR AND LARGER: 2"

SLABS, WALLS, AND JOISTS: #14 OR #18 REBARS: 1 1/2" #11 REBAR AND SMALLER: 3/4" BEAMS AND COLUMNS: 1 1/2"

5. UNLESS NOTED OTHERWISE, CAST IN PLACE CONCRETE SHALL HAVE THE FOLLOWING STEEL ADDED AROUND ALL OPENINGS: 2-#5 (LENGTH OF OPENING+ 48") ALONG EACH SIDE OF OPENING AND TWO (2)-#5x5'-0" DIAGONALLY AT EACH CORNER.

6. ALL CONCRETE COMPRESSIVE STRENGTH TESTS SHALL BE AVAILABLE AT JOB SITE. 7. ALL LAP SPLICE LENGTHS SHALL BE AS SHOWN IN TABLE 2 THIS SHEET

FRAMING NOTES:

1. ALL DIMENSIONAL LUMBER (WOOD) FRAMING MEMBERS SHALL BE #2 GRADE OR BETTER.

2. MAXIMUM SPACING FOR JOISTS/STUDS SHALL BE 16" o.c.

3. ROOF SHEATHING SHALL BE 3/4" STRUCTURAL RATED SHEATHING (UNBLOCKED). SHEATHING SHALL BE ATTACHED WITH 8d

COMMON NAILS AT 6" o.c. AT EDGES AND 6" o.c. AT INTERMEDIATE SUPPORTS. 4. ALL SIMPSON JOIST AND BEAM HANGERS TO BE INSTALLED PER THE MANUFACTURES SPECIFICATIONS.

5. ALL PLIES OF MULTI-PLY LVL MEMBERS SHALL BE FASTENED TOGETHER WITH (2) ROWS OF TRUSLOK SCREWS @ 16" o.c. PER THE MANUFACTURES SPECIFICATIONS.

6. ALL BUILT-UP STUD COLUMNS MUST BE (2) STUD MIN. U.N.O. AND MUST BE CONTINUOUS TO TOP OF FOUNDATION. 7. EXTERIOR WALL & SHEAR WALL SHEATHING SHALL BE FULL HEIGHT 7/16" RATED SHEATHING (UNBLOCKED). SHEATHING SHALL BE ATTACHED WITH 8d COMMON NAILS AT 6" o.c. AT EDGES AND 6" o.c. AT INTERMEDIATE SUPPORTS.

8. ALL JOIST, RAFTERS, AND TRUSSES SHALL BE ALIGNED OVER STUDS BELOW

9. ALL FRAMED WALL DIMENSIONS ARE BASED ON 2x4 STUDS UNLESS NOTED OTHERWISE.

EXPANSION ANCHORS AT 32" o.c. (EMBED 3 1/4" MIN.)

11. (2) #2 2x10 BUILT-UP HEADER BEAM OVER ALL NEW DOOR/WINDOW OPENINGS UNLESS NOTED OTHERWISE.

ALLOWABLE DESIGN STRESS:)

MODULUS OF ELASTICITY E = 1.3x10⁶ psi FLEXURAL STRESS F h = 1000 psi

OWABLE DESIGN STRESS:)

SHEAR MODULUS OF ELASTICITY G = 125,000 psi MODULUS OF ELASTICITY E = 2.0x10⁶ psi FLEXURAL STRESS F b = 3100 psi COMPRESSION PERPENDICULAR TO GRAIN PARALLEL TO WIDE FACE OF STANDS Fc perp. = 750 psi HORIZONTAL SHEAR PERPENDICULAR TO THE WIDE FACE OF STANDS F v = 285 psi

SHEAR MODULUS OF ELASTICITY G = 125,000 psi MODULUS OF ELASTICITY E = 1.7x10⁶ psi FLEXURAL STRESS F b = 2650 psi

WOOD MEMBERS: PRESSURE TREATED SOUTHERN PINE NO. 2 GRADE OR EQUIVALENT OWABLE DESIGN STRESS:)

SHEAR MODULUS OF ELASTICITY G = 125,000 psi MODULUS OF ELASTICITY E = 1.3x10⁶ psi FLEXURAL STRESS F b = 1000 psi COMPRESSION PERPENDICULAR TO GRAIN PARALLEL TO WIDE FACE OF STANDS F_{c perp.} = 565 psi HORIZONTAL SHEAR PERPENDICULAR TO THE WIDE FACE OF STANDS $F_v = 175 \text{ psi}$

DEAD LOADS: 20 PSF 10 PSF BOTTOM CHORD:

LIVE LOADS: TOP CHORD:

TOP CHORD:

1. STRUCTURAL MEMBERS OF REINFORCED CONCRETE SHALL BE CONSTRUCTED IN

C. SLAB ON GRADE: 4000 PSI (540 LBS/CUBIC YARD MINIMUM CEMENTITIOUS MATERIAL)

REINFORCEMENT SHALL BE ASTM A706-GRADE 60. WELDED WIRE REINFORCEMNET SHALL BE ASTM A185. ALL WELDED REINFORCEMENT SHALL BE IN ACCORDANCE WITH AWS D1.4.

4. MINIMUM CONCRETE COVER FOR REINFORCING STEEL: (UNO)

A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"

C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH.

10. WALL SOLE PLATE SHALL BE PRESSURE TREATED SOUTHERN PINE AND SHALL BE ATTACHED WITH 1/2" HILTI KWIK BOLT TZ

WOOD MEMBERS: SOUTHERN PINE NO. 2 GRADE OR EQUIVALENT

SHEAR MODULUS OF ELASTICITY G = 125,000 psi

COMPRESSION PERPENDICULAR TO GRAIN PARALLEL TO WIDE FACE OF STANDS F_{c perp.} = 565 psi HORIZONTAL SHEAR PERPENDICULAR TO THE WIDE FACE OF STANDS F_v = 175 psi

WOOD BEAM: BOISE CASCADE VERSE LAM (LVL) 2.0E OR EQUIVALENT

WOOD BEAM: BOISE CASCADE VERSE LAM COLUMN (LVL) 2.0E OR EQUIVALENT (ALLOWABLE DESIGN STRESS:)

COMPRESSION PERPENDICULAR TO GRAIN PARALLEL TO WIDE FACE OF STANDS F_{c perp.} = 750 psi HORIZONTAL SHEAR PERPENDICULAR TO THE WIDE FACE OF STANDS F v = 285 psi

12. PRE-ENGINEERED TRUSS LOADS (BY PRE-ENGINEERED TRUSS SPECIALTY DESIGN ENGINEER)

20 PSF (ROOF)

STEEL NOTES:

STRUCTURAL STEEL A. SHALL CONFORM TO THE LATEST STANDARDS OF ASTM: WIDE FLANGE BEAMS: A992 MISC. STRUCTURAL STEEL SHAPES, PLATES AND BARS: A36 HOLLOW STRUCTURAL STEEL SECTIONS (ROUND AND RECTANGULAR):

A500 GRADE B STRUCTURAL STEEL PIPE: A53 GRADE B

B. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC 360) USING ALLOWABLE STRESS DESIGN.

C. SHOP OR FIELD SPLICES BETWEEN SUPPORTS THAT ARE NOT REQUIRED BY DESIGN WILL NOT BE ALLOWED. ANY MEMBERS CONTAINING SUCH SPLICES FOUND IN THE FIELD SHALL BE REMOVED AND REPLACED WITH UNSPLICED MEMBERS AT THE FABRICATOR'S EXPENSE.

2. STEEL CONNECTIONS A. WHERE BEAM REACTIONS OR DETAILS ARE NOT SHOWN IN THE CONSTRUCTION DOCUMENTS. CONNECTIONS SHALL BE DESIGNED FOR ONE-HALFTHE MAXIMUM (SIMPLE SPAN) UNIFORM LOAD WHICH THE MEMBER WILL SUPPORT FOR THE SPAN SHOWN ON THE DRAWINGS.

B. BOLTS SHALL BE HIGH STRENGTH A-325 BOLTS OF SAME SIZE AND NUMBER AS SHOWN ON DRAWINGS. CONNECTIONS SHALL CONFORM TO THE SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A-325 OR A-490 BOLTS. CONNECTIONS ARE BEARING TYPE. C. BOLTS SHALL BE TIGHTENED TO THE SNUG TIGHT CONDITION UNLESS OTHERWISE NOTED ON THE DRAWINGS. 3. WELDS

A. MINIMUM SIZE OF WELD IS 3/16" AND (E70XX) UNLESS NOTED OTHERWISE.

B. ALL WELDING SHALL CONFORM TO THE LATEST "STRUCTURAL WELDING CODE" BY THE AMERICAN WELDING SOCIETY. ALL WORK SHALL BE PERFORMED BY CERTIFIED WELDERS EXPERIENCED IN THE TYPE OF CONSTRUCTION INVOLVED. PROOF OF WELDER CERTIFICATION SHALL BE AVAILABLE AT THE JOB SITE.

DRAWING INDEX					
Sheet Number	Sheet Name				
S0.1	STRUCTURAL GENERAL NOTES & SCHEDULES				
S1.1	FOUNDATION PLAN				
S2.1	ROOF FRAMING PLAN				
S3.1	FOUNDATION/ FRAMING DETAILS				
S4.1	FRAMING DETAILS				
S5.1	SCHEDULE OF SPECIAL INSPECTIONS				

FOB: FACE OF BRICK	LO: LOW CONDITION
FOA: FACE OF ANGLE	HI: HIGH CONDITION
FOS: FACE OF STUD	TOW: TOP OF WALL
TOB: TOP OF BEAM	SDS: SELF DRILLING SCI
BOC: BOTTOM OF CHANNEL	FOC: FACE OF CHANNEL
T&B: TOP AND BOTTOM	TOF: TOP OF FOOTING
TOA: TOP OF ANGLE	SIM: SIMILAR CONDITION
BOA: BOTTOM OF ANGLE	W.P.: WORKING POINT
LLV: LONG LEG VERTICAL	UNO.: UNLESS NOTED O
LLH: LONG LEG HORIZONTAL	B.P. : BASE PLATE
SW: MASONRY SHEAR WALL	PAF: POWER ACTUATED
TOS: TOP OF SLAB	S.F: STEP FOOTING
T/COL: TOP OF COLUMN	B/COL: BOTTOM OF COL
P.E.M.B: PRE-ENGINEERED	FOT: FACE OF TUBE
METAL BUILDING	TOT. TAGE OF TUBE

<u>COMPONETS & CLADDING WND LOAD SCHEDULES</u>

2. 0.6h = 13 FT

1. LOADS BASED ON ASCE 7-16

ZONE	AREA (SF)	MAX (+) (PSF)	MAX (-) (PSF)	REMARKS
ZONE 1'	10	+16.0	-16.2	
	100	+16.0	-16.2	
ZONE 1	10	+16.0	-28.1	
	100	+16.0	-22.0	
ZONE 2	10	+16.0	-37.1	
	100	+16.0	-29.2	
ZONE 3	10	+16.0	-50.6	
	100	+16.0	-34.7	
COMPO		AND CLA	DDING (V	VALLS)
ZONE	AREA (SF)	MAX (+) (PSF)	MAX (-) (PSF)	REMARKS
ZONE 4	10	+18.0	-19.6	
	100	+16.0	-16.8	
ZONE 5	10	+18.0	-24.2	

-18.7

D FASTENERS LUMN

REW THERWISE

REINFORCED CONCRETE TENSION LAP SPLICE LENGTHS TABLE 2 (INCHES)							
BAR SIZE	f`c=3000 PSI	f`c=4000 PSI					
#3	25	21.3					
#4	33	29					
#5	41	36					
#6	49	43					
#7	72	62					

Keystone Structural Engineering Professional Consultants 531 Roselane Street Suite 150 Marietta, GA 30060 (404) 483 6921 RGI REVISIONS PROJECT BLAIRSVILLE DENTISTRY ADDRESS 40 Hometown Way Blairsville, GA 30512 CLIENT CSC DESIGN

135 P. Rickman Industrial Dr.

Suite 100, Canton, GA 30115

STRUCTURAL

GENERAL

SCHEDULES

04-17-2024

24129

PROJECT NUMBER

SHEET NUMBER

ADDRESS

SHEET TITLE

Date:

4/17/2024 12:27:38 PM C:\Users\BRENDAN\OneDrive - Keystone Structural Engine P C\Documents\94129 R24 crowleybrendan.nd

4/17/2024 12:27:56 PM C:\Users\BRENDAN\OneDrive - Keystone Structural Enginet P C\Documents\24129 R24 crowlevbrendan nt

		<u> </u>				MATERIAL / ACTIVITY	SERVICE						SERVICE			
SCHEDULE	OF SPECI		INSPECT		DERVICES	7. Inspection of concrete and shotcrete placement for proper application	Shop (3) and field inspection	Y/N	Continuous	TA AGENT		1705.11.3 Cold-formed Steel Light-		Y/N	EXIENI	AGENT [®] DATE COMPLETED
MATERIAL / ACTIVITY	SERVICE	Y/N	EXTENT	O THIS PRO AGENT*	DATE COMPLETED	techniques 8. Inspection for maintenance of specified	Shop (3) and field inspection	Y	Periodic	ТА		for Seismic Resistance				
1704.2.5Inspection of FabricatorsVerify fabrication/quality control procedures	In-plant review (3)	Y	Periodic	T/A		9. Inspection of prestressed concrete:	Shop (3) and field inspection		-			elements of the seismic-force-resisting system	Shop (3) and field inspection	N	Periodic	N/A
1705.1.1 Special Cases (work unusual in		+				 a. Application of prestressing force b. Grouting of bonded prestressing tendons in the seismic-force-resisting 		N Continuous N/A		N/A		2. Inspections for screw attachment, bolting, anchoring and other fastening of components within the seismic-force-	Shop (3) and	N	Periodic	N/A
materials and systems, unusual design applications, materials and systems with special manufacturer's requirements)	Submittal review, shop (3) and/or field inspection	N	N/A	N/A		system 10. Erection of precast concrete members						resisting system 1705.11.4 Designated Seismic Systems				
1705 2 Steel Construction						a. Inspect in accordance with construction documents	Field inspection	N	In accordance with construction documents	N/A		Verification Inspect and verify that that the component label anchorage or mounting conforms to				
1. Fabricator and erector documents (Verify reports and certificates as listed in AISC	Submittal Review		Each submittal	T/A		b. Perform inspections of welding and bolting in accordance with Section 1705.2	Field inspection	N	In accordance with Section 1705.2	N/A		the certificate of compliance in accordance with Section 1705.12.3	Field inspection	N	Periodic	N/A
compliance with construction documents)		Y				11. Verification of in-situ concrete strength, prior to stressing of tendons in post						1705.11.5 Architectural Components Special Inspections for Seismic Resistance				
 Material verification of structural steel Embedments (Verify diameter, grade, 	Shop (3) and field inspection	Y	Periodic	T/A		tensioned concrete and prior to removal of shores and forms from beams and structural slabs	Review field testing and laboratory reports	N	Periodic	N/A		1. Inspection during the erection and fastening of exterior cladding and interior	Field inspection	N	Periodic	N/A
type, length, embedment. See 1705.3 for anchors)		Y	Periodic	T/A		12. Inspection of formwork for shape, lines, location and dimensions	Field inspection	Y	Periodic	ТА		and exterior veneer 2. Inspection during the erection and factoring of interior and exterior	Field increation	N	Dariadia	
4. Verify member locations, braces, stiffeners, and application of joint details at each connection comply with construction	Field inspection	Y	Periodic	T/A		13. Concrete strength testing and verification of compliance with construction	Field testing and review of laboratory reports	Y	Periodic	ТА		nonbearing walls		N	Periodic	N/A
5. Structural steel welding:						1705.4 Masonry Construction						floors	Field inspection	N	Periodic	N/A
a. Inspection tasks Prior to Welding (Observe, or perform for each welded joint or member, the QA tasks listed in	Shop (3) and field inspection	Y	Observe or Perform as noted (4)	T/A		(A) Level A, B and C Quality Assurance:1. Verify compliance with approved	Field inspection	N	Periodic	N/A		Components Special Inspections for Seismic Resistance				
AISC 360, Table N5.4-1) b. Inspection tasks During Welding						submittals (B) Level B Quality Assurance:						 1. Inspection during the anchorage of electrical equipment for emergency or standby power systems 	Field inspection	N	Periodic	ТА
joint or member, the QA tasks listed in AISC 360, Table N5.4-2)	Shop (3) and field inspection	Y	Observe (4)	T/A		1. Verification of f'm and f'AAC prior to construction	Testing by unit strength method or prism test method	N	Periodic	N/A		2. Inspection during the anchorage of other electrical equipment	Field inspection	N	Periodic	ТА
c. Inspection tasks After Welding (Observe, or perform for each welded joint or member, the QA tasks listed in	Shop (3) and field inspection	Y	Observe or Perform as noted (4)	T/A		1. Verification of f'm and f'AAC prior to construction and for every 5,000 SF	Testing by unit strength method	N	Periodic	N/A		3. Inspection during installation and anchorage of piping systems designed to carry bazardous materials and their	Field inspection	Y	Periodic	ТА
AISC 360, Table N5.4-3) d. Nondestructive testing (NDT) of welded						during construction 2. Verification of proportions of						associated mechanical units				
1) Complete penetration groove	Shop (3) or field ultrasonic	N	N/A	Ν/Δ		materials in premixed or preblended mortar, prestressing grout, and grout other than self-consolidating grout, as	Field inspection	N	Periodic	N/A		anchorage of HVAC ductwork that will contain hazardous materials	Field inspection	N	Periodic	N/A
category III or IV	testing - 100% Shop (3) or field ultrasonic					delivered to the project site 3. Verify placement of masonry units	Field increation	N	Dariadia			5. Inspection during the installation and anchorage of vibration isolation systems	Field inspection	N	Periodic	N/A
2) Complete penetration groove welds 5/16" or greater in risk category II	testing - 10% of welds minimumShop (3) and field inspection	Y	Periodic	T/A		(D) Levels B and C Quality Assurance:		IN	Penduc	N/A		1705.11.7 Storage Racks Special Inspections for Seismic Resistance				
3) Thermally cut surfaces of access holes when material t > 2"	Shop (3) or field magnetic Partical or Penetrant testing	N	N/A	N/A		1. Verification of Slump Flow and Visual Stability Index (VSI) of self- consolidating grout as delivered to the	Field testing	N	Continuous	N/A		Inspection during the anchorage of storage racks 8 feet or greater in height	Field inspection	N	Periodic	ТА
4) Welded joints subject to fatigue when required by AISC 360, Appendix 3, Table A-3.1	Shop (3) or field radiographic or Ultrasonic testing	N	N/A	N/A		2. Verify compliance with approved	Field inspection	N	Poriodio	NI/A		1705.11.8 Seismic Isolation Systems Inspection during the fabrication and				
5) Fabricator's NDT reports when fabricator performs NDT	Verify Reports	Y	Periodic	T/A		submittals3. Verify proportions of site-mixed		IN .	Fellouic			installation of isolator units and energy dissipation devices used as part of the seismic isolation system	Shop and field inspection	N	Periodic	N/A
6. Structural steel bolting: a. Inspection tasks Prior to Bolting	Shop (3) and field inspection					mortar, grout and prestressing grout for bonded tendons	Field inspection	N	Periodic	N/A		1705.12.1 Concrete Reinforcement Testing and Qualification for Seismic				
(Observe, or perform tasks for each bolted connection, in accordance with QA tasks listed in AISC 360. Table		Y	Observe or Perform as noted (4)	T/A		reinforcement and anchor bolts, and prestressing tendons and anchorages	Field inspection	N	Periodic	N/A		Resistance 1. Review certified mill test reports for				
N5.6-1)						5. Verify construction of mortar joints	Field inspection	N	Periodic	N/A		each shipment of reinforcement used to resist earthquake-induced flexural and axial forces in reinforced concrete special	Review certified mill test reports	N	Each shipment	N/A
(Observe the QA tasks listed in AISC 360, Table N5.6-2)		Y	Observe or Perform as noted (4)	T/A		 Verify placement of reinforcement, connectors, and prestressing tendons ar anchorages 	nd Field inspection	N	Level B - Periodic	N/A		and coupling beams connecting special structural walls, and coupling beams connecting special structural walls				
1) Pre-tensioned and slip-critical joints		N	N/A	N/A		7. Verify grout space prior to grouting	Field inspection		Level C - Continuous Periodic			2. Verify reinforcement weldability of ASTM A615 reinforcement used to resist				
a) Turn-of-nut with matching markings		N	N/A	N/A		8. Verify placement of grout and prestressing grout for bonded tendons	Field inspection	N N	Continuous N/A	N/A N/A		earthquake-induced fiexural and axial forces in reinforced concrete special moment frames, special structural walls,	Review test reports	N	Each shipment	N/A
c) Twist-off type tension control		N	N/A N/A	N/A		9. Verify size and location of structural masonry elements	Field inspection	N	Periodic	N/A		structural walls				
d) Turn-of-nut without matching markings		N	N/A	N/A		 10. Verify type, size, and location of anchors, including details of anchorage of masonry to structural members, 	Field inspection	N	Level B - Periodic	N/A		1705.12.2 Structural Steel Testing and Qualification for Seismic Resistance				
e) Calibrated wrench 2) Snug-tight ioints		N Y	N/A Observe (4)	N/A T/A		frames, or other construction.			Level C - Continuous		-	Test in accordance with the quality assurance requirements of AISC 341		N	Per AISC 341	N/A
c. Inspection tasks After Bolting (Perform tasks for each bolted						11. Verify welding of reinforcement (see 1705.2.2)	Field inspection	N	Continuous	N/A		1705.12.3 Seismic Certification of Nonstructural Components		N		
connection in accordance with QA tasks listed in AISC 360, Table N5.6-3)		Y	Perform (4)	T/A		12. Verify preparation, construction, and protection of masonry during cold weather (temperature below 40-F) or bet weather (temperature below 20 F)	Field inspection	N	Periodic	N/A		Review certificate of compliance for designated seismic system components.	Certificate of compliance review	N	Each submittal	N/A
7. Inspection of steel elements of composite construction prior to concrete placement in		N	N/A	N/A		not weather (temperature above 90-F)						1705.12.4 Seismic Isolation Systems Test seismic isolation system in accordance with ASCE 7 Section 17.8	Prototype testing	N	Per ASCE 7	N/A
Table N6.1						13. Verify application and measurement of prestressing force	Field inspection	N	Continuous	N/A		1705.15 Exterior Insulation and Finish Systems (EIFS)				
Than Structural Steel 1. Material verification of cold-formed steel						units and construction of thin-bed mortar joints (first 5000 SF of AAC masonry)	Field inspection	N	Continuous	N/A		1. Verify materials, details and installations are per the approved construction	Field inspection	N	Periodic	ТА
deck: a. Identification markings	Field inspection	Y	Periodic	T/A		15. Verify placement of AAC masonry units and construction of thin-bed mortar		N	Level B - Periodic	N/A		documents 2. Inspection of water-resistive barrier	Field inspection	N	Periodic	ТА
b. Manufacturer's certified test reports	Submittal Review	Y	Each submittal	T/A		joints (after the first 5000 SF of AAC masonry)	Field inspection	N	Level C - Continuous	N/A	-	* INSPECTION AGENTS				
2. Connection of cold-formed steel deck to supporting structure:	Shop (3) and field inspection	v	Periodic	Τ/Δ		16. Verify properties of thin-bed mortar for AAC masonry (first 5000 SF of AAC masonry)	Field inspection	N	Continuous	N/A		1. TO BE DETERMINED			ADDRESS	
b. Other fasteners (in accordance with AISC 360.Section N6)			renouic			17. Verify properties of thin-bed mortar forAAC masonry (after the first 5000 SF	Field inspection	N	Level B - Periodic	N/A		3.				
1) Verify fasteners are in conformance with approved submittal		Y	Periodic	T/A		18. Prepare grout and mortar specimens	Field testing	N	Level C - Continuous	N/A		4. NOTES: 1. The inspection and testing ager	nt(s) shall be engaged l	by the Owne	er or the Owner's Agent, and r	not by the Contractor or Subcontractor whose work is to be
2) Verify fastener installation is in						19. Observe preparation of prisms	Field inspection		Level B - Periodic		-	inspected or tested. Any conflic Inspector(s) and/or testing ager 2 The list of Special Inspectors m	ct of interest must be d ncies may be subject to nay be submitted as a s	isclosed to to the approv	the Building Official prior to co al of the Building Official and/ sument_if noted so above	mmencing work. The qualifications of the Special or the Design Professional.
conformance with approved submittal and manufacturer's recommendations		Y	Periodic	T/A		1705.6 Soils		N	Level C - Continuous	N/A		 3. Special Insepctions as required 4. Observe on a random basis, op 	by Section 1704.2.5 a perations need not be d	re not requir elayed pend	red where the fabricator is ap ding these inspections. Perform	proved in accordance with IBC Section 1704.2.5.2 n these tasks for each welded joint, bolted connection,
3. Reinforcing steel	Shop (3) and field inspection		Captinuous	NI/A		1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	Field inspection	Y	Periodic	TA		or steel element. 5. NDT of welds completed in an a	approved fabricator's sl	hop may be	performed by that fabricator v	vhen approved by the AHJ. Refer to AISC 360, N7.
a. Verification of weldability of steel other than ASTM A706 1705.3 Concrete Construction		Y	Continuous			 Verify excavations are extended to proper depth and have reached proper material. 	Field inspection	Y	Periodic	ТА		Are Requirements for Seismic Resistance in	cluded in the Statemen	t of Special	Inspections? Yes	
1. Inspection of reinforcing steel installation (see 1705.2.2 for welding)	Shop (3) and field inspection	Y	Periodic	ТА		 Perform classification and testing of controlled fill materials. 	Field inspection	Y	Periodic	TA		Abbreviations:	aed in the Statement o	r Special Ins	spections? NO	
2. Inspection of prestressing steel installation 3. Inspection of anchors cast in concrete	Shop (3) and field inspection	N	Periodic	N/A		4. Verify use of proper materials, densities, and lift thicknesses during placement and compaction of controlled	Field inspection	Y	Continuous	ТА		IA = Testing Agency EOR = Engineer of Record AOR = Architect of Record				
where allowable loads have been increased per section 1908.5 or where strength design is used	Shop (3) and field inspection	N	Periodic	N/A		fill 5. Prior to placement of controlled fill.										
4. Inspection of anchors and reinforcing steel post-installed in hardened concrete:						observe subgrade and verify that site has been prepared properly	Field inspection	Y	Periodic	TA						
Per research reports including verification of anchor type, anchor dimensions, hole dimensions, hole cleaning procedures,	Field inspection	Y	Periodic or as required by the research report issued by an approved source	ТА		1/05.11.1 Structural Steel Special Inspections for Seismic Resistance			In accordance with AISC			-				
ancnor spacing, edge distances, concrete minimum thickness, anchor embedment and tightening torque						with AISC 341	Shop (3) and field inspection	Y	341	N/A						
5. Verify use of approved design mix 6. Fresh concrete sampling, porform cluster	Shop (3) and field inspection	Y	Periodic	TA		-										
and air content tests and determine temperature of concrete	Shop (3) and field inspection	Y	Continuous	ТА												

I. GENERAL PROVISIONS

1. ALL WORK DONE UNDER THIS CONTRACT SHALL COMPLY WITH ALL STATE AND LOCAL CODES HAVING JURISDICTION AND WITH THE REQUIREMENTS OF THE UTILITY COMPANIES WHOSE SERVICES MAY BE USED. ALL MODIFICATIONS REQUIRED BY THESE CODES SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL CHARGES. WHERE CODE REQUIREMENTS ARE LESS THAN THOSE SHOWN ON

- THE PLANS OR IN THE SPECIFICATIONS, THE PLANS AND SPECIFICATIONS SHALL BE FOLLOWED. WHERE APPLICABLE, NFPA REQUIREMENTS SHALL BE MET. 2. IN CASE OF ANY CONFLICTS BETWEEN CONTRACT DOCUMENTS, THE STRICTER/MORE STRINGENT SHALL
- 3. THE CONTRACTOR SHALL OBTAIN ALL PERMITS, INSPECTIONS, AND APPROVALS AS REQUIRED BY ALL AUTHORITIES HAVING JURISDICTION AND DELIVER CERTIFICATES OF APPROVAL TO THE ENGINEER. ALL FEES AND COSTS OF ANY NATURE WHATSOEVER INCIDENTAL TO THESE PERMITS, INSPECTIONS AND
- APPROVALS MUST BE ASSUMED AND PAID BY THE CONTRACTOR. 4. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF O.S.H.A. 5. THE WORKMANSHIP AND MATERIALS COVERED BY THESE SPECIFICATIONS SHALL CONFORM TO ALL
- ORDINANCES AND REGULATIONS OF THE CITY, COUNTY AND/OR OTHER AUTHORITIES HAVING JURISDICTION. 6. CONTRACTOR SHALL VISIT THE SITE AND EXAMINE EXISTING CONDITIONS BEFORE SUBMITTING BID. NO
- ALLOWANCE WILL BE MADE FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS WHEN SUCH CONDITIONS CAN BE DETERMINED BY OBSERVATION. 7. PRIOR TO SUBMITTING DATA FOR OR PURCHASING EQUIPMENT REQUIRING ELECTRICAL SERVICE, THE
- CONTRACTOR SHALL VERIFY THAT ELECTRICAL CHARACTERISTICS OF EQUIPMENT SUBMITTALS COMPLY WITH ELECTRICAL SERVICE PROVIDED FOR THE SPECIFIED ITEMS OF EQUIPMENT. 8. UPON RECEIPT OF THE CONTRACTOR OF REVIEWED SUBMITTALS FOR EQUIPMENT PROVIDED UNDER 'HIS DIVISION, THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL SERVICE REQUIREMENTS, I.E.,
- MOTOR HORSEPOWER AND FULL LOAD AMPS, ELECTRICAL SERVICE CHARACTERISTICS (VOLTAGE AND PHASE). AND NUMBER OF SERVICES FOR EACH ITEM OF EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS WITH THE ELECTRICAL DRAWINGS AND SPECIFICATIONS. 9. ITEMS ON OR PROJECTING THROUGH THE CEILING SHALL BE COORDINATED WITH OTHER TRADES.

B. OPERATION AND MAINTENANCE INSTRUCTIONS

- THE CONTRACTOR SHALL PROVIDE TWO OPERATION AND MAINTENANCE MANUALS. THE MANUALS SHALL BE COMPILED IN HARD BACK, THREE RING NOTEBOOKS. O&M MANUALS SHALL HAVE PERMANENT LABELS ON FRONT AND SIDE. THE FOLLOWING INFORMATION SHALL APPEAR IN EACH MANUAL
- 2. PROVIDE MANUFACTURER'S PRINTED OPERATING PROCEDURES TO INCLUDE START-UP. BREAK-IN. ROUTINE AND NORMAL OPERATING INSTRUCTIONS; REGULATION, CONTROL, STOPPING, SHUTDOWN AND EMERGENCY INSTRUCTIONS; AND SUMMER AND WINTER OPERATING INSTRUCTIONS. PROVIDE MAINTENANCE PROCEDURES FOR ROUTINE PREVENTATIVE MAINTENANCE AND TROUBLESHOOTING DISASSEMBLY, REPAIR AND REASSEMBLY; ALIGNING AND ADJUSTING INSTRUCTIONS. SERVICING INSTRUCTIONS AND LUBRICATION CHARTS AND SCHEDULES.

C. INSTRUCTIONS OF OWNER PERSONNI

. BEFORE FINAL INSPECTION, AT A TIME DESIGNATED BY THE DESIGNER, PROVIDE A COMPETENT REPRESENTATIVE TO INSTRUCT OWNER'S DESIGNATED PERSONNEL IN OPERATION, ADJUSTMENT AND MAINTENANCE OF PRODUCTS, EQUIPMENT AND SYSTEMS UNDER THIS DIVISION OF THE SPECIFICATIONS. FOR EQUIPMENT REQUIRING SEASONAL OPERATIONS, PERFORM INSTRUCTIONS FOR OTHER SEASONS WITHIN SIX MONTHS UNLESS REQUESTED OTHERWISE.

- 1. THE PRODUCTS OF PARTICULAR MANUFACTURERS HAVE BEEN USED AS THE BASIS OF DESIGN IN PREPARATION OF THESE DOCUMENTS. ANY MODIFICATIONS TO THE MECHANICAL SYSTEMS AND THEIR COMPONENTS, THE ELECTRICAL SYSTEMS, THE BUILDING STRUCTURE AND ARCHITECTURE, OR ANY OTHER PORTION OF THE BUILDING THAT RESULT FROM THE USE OF ANY OTHER THAN THAT BASIS OF DESIGN EQUIPMENT SHALL BE COORDINATED WITH ALL OTHER TRADES. SUCH COORDINATION SHALL OCCUR BEFORE PURCHASE OR DELIVERY OF PRODUCTS FROM THE MANUFACTURER DRAWINGS OR NSTALLED ACCORDINGLY. ANY RELATED MODIFICATIONS SHALL BE PERFORMED WITHOUT ANY ADDITIONAL COST TO THE CONTRACT.
- 2. RESIDENTIAL GRADE HVAC COMPONENTS SHALL NOT BE PERMITTED WITHOUT SPECIFIC OWNER INSTRUCTION AND ENGINEER APPROVAL. E. <u>EXECUTION</u> 1. THE PLANS DO <u>NOT</u> GIVE EXACT ELEVATIONS OR LOCATIONS OF LINES, NOR DO THEY SHOW ALL THE 1. THE CONTRACTOR SHALL CAREFULLY L
- OFFSETS, CONTROL LINES, OR OTHER INSTALLATION DETAILS. THE CONTRACTOR SHALL CAREFULLY LAY OUT HIS WORK AT THE SITE TO CONFORM TO THE STRUCTURAL CONDITIONS, TO PROVIDE PROPER GRADING OF LINES, TO AVOID ALL OBSTRUCTIONS, TO CONFORM TO DETAILS OF INSTALLATION SUPPLIED BY THE MANUFACTURERS OF THE EQUIPMENT TO BE INSTALLED, AND TO THEREBY PROVIDE AN INTEGRATED, COORDINATED AND SATISFACTORY OPERATING INSTALLATION. DO NOT SCALE DRAWINGS.
- 2. IF THE CONTRACTOR PROPOSES TO INSTALL EQUIPMENT, INCLUDING PIPING AND DUCTWORK, REQUIRING SPACE CONDITIONS OTHER THAN THOSE SHOWN, OR TO REARRANGE THE EQUIPMENT, HE SHALL ASSUME FULL RESPONSIBILITY FOR THE REARRANGEMENT OF THE SPACE AND CONNECT ARRANGEMENT AT NO ADDITIONAL COST TO THE OWNER. AND SHALL HAVE THE ENGINEER REVIEW THE CHANGE BEFORE PROCEEDING WITH THE WORK. THE REQUEST FOR SUCH CHANGES SHALL BE ACCOMPLISHED BY SHOP DRAWINGS OF THE SPACE IN OUESTION. 3. TEMPORARY FILTERS SHALL BE PROVIDED FOR FANS THAT ARE USED DURING CONSTRUCTION. AT THE
- TIME OF STARTING THE BALANCING OF THE AIR DISTRIBUTION SYSTEM, NEW FILTERS SHALL BE INSTALLED. 4. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER LOCATION AND SIZE OF ALL SLOT, HOLES OR
- OPENINGS IN THE BUILDING STRUCTURE PERTAINING TO HIS WORK, AND FOR THE CORRECT LOCATION OF SLEEVES INSERTS CORES ETC 5. THE CONTRACTOR SHALL SO COORDINATE THE WORK OF THE SEVERAL VARIOUS TRADES THAT IT MAY BE INSTALLED IN THE MOST DIRECT AND WORKMANLIKE MANNER WITHOUT HINDERING OR
- HANDICAPPING THE OTHER TRADES. PIPING INTERFERENCES SHALL BE HANDLED BY GIVING PRECEDENCE TO PIPE LINES WHICH REOUIRE A STATED GRADE FOR PROPER OPERATION. FOR EXAMPLE SEWER LINES AND CONDENSATE PIPING SHALL TAKE PRECEDENCE OVER WATER LINES IN DETERMINATION OF ELEVATIONS. WHERE THERE IS INTERFERENCE BETWEEN SEWER LINES AND ONDENSATE LINES. THE SEWER LINES SHALL HAVE PRECEDENCE AND PROVISIONS SHALL BE MADE IN THE CONDENSATE LINES FOR LOOPING THEM AROUND THE SEWER LINES. IN ALL CASES, LINES REQUIRING A STATED GRADE FOR THEIR PROPER OPERATION SHALL HAVE PRECEDENCE OVER FLECTRICAL CONDUIT AND DUCTWORK.
- 6. ALL PIPING AND DUCTWORK IN FINISHED AREAS- EXCEPT WHERE NOTED TO THE CONTRARY- SHALL BE INSTALLED IN A CHASE, FURRED SPACE, OR ABOVE CEILINGS, ETC. IN ALL CASES, PIPES AND DUCTS SHALL BE INSTALLED AS HIGH AS POSSIBLE. RUNS OF PIPING SHALL BE GROUPED WHENEVER IT IS FEASIBLE TO DO SO. 7. PIPING SHALL BE INSTALLED TO PASS INSPECTIONS BY LOCAL PLUMBING INSPECTION DEPARTMENT.
- STATE AND FEDERAL AUTHORITIES AND INSURANCE COMPANY HAVING JURISDICTION. ANY CHANGES OR ADDITIONS WHICH MAY BE NECESSARY TO OBTAIN SUCH INSPECTIONS AND APPROVAL SHALL BE MADE BY THE CONTRACTOR AS PART OF THIS CONTRACT AND WITHOUT ADDITIONAL COST TO THE 8. PIPING, DUCTWORK OR EQUIPMENT SHALL NOT BE INSTALLED IN ELECTRICAL EQUIPMENT ROOMS OR
- ELEVATOR MACHINE ROOMS EXCEPT AS SERVING ONLY THOSE ROOMS. OUTSIDE OF ELECTRICAL EQUIPMENT ROOMS, DO NOT RUN PIPING OR DUCTWORK OR LOCATE EQUIPMENT, WITH RESPECT TO SWITCHBOARDS, PANEL BOARDS, POWER PANELS, MOTOR CONTROL CENTERS, DRY TYPE TRANSFORMERS OR ROOF TOP AIR CONDITIONING UNIT ELECTRICAL PANELS.
- 9. PROVIDE ACCESS TO EQUIPMENT AND APPARATUS REQUIRING OPERATION, SERVICE OR MAINTENANCE WITHIN THE LIFE OF THE SYSTEM. INCLUDING, BUT NOT LIMITED TO, MOTORS, VALVES, FILTERS, DAMPERS, SHOCK ABSORBERS, ETC. EQUIPMENT LOCATED ABOVE LAY-IN TYPE CEILINGS IS CONSIDERED ACCESSIBLE. 10.DAMAGED EQUIPMENT SHALL BE REPAIRED OR REPLACED AT THE OPTION OF THE ARCHITECT.

- 1. ALL ELECTRICAL EQUIPMENT PROVIDED UNDER THIS DIVISION SHALL COMPLY WITH THE ELECTRICAL SYSTEM CHARACTERISTICS INDICATED ON THE ELECTRICAL DRAWINGS AND SPECIFIED IN DIVISION 16. 2. EQUIPMENT UNIT MOTOR SPEED CONTROLS. STARTERS, SYSTEM CONTROLS, PILOT LIGHTS PUSH-BUTTONS, ETC., SHALL BE FURNISHED COMPLETE AS A PART OF THE MOTOR APPARATUS WHICH IT OPERATES. ALL COMPONENTS SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND DIVISION 16. ALL MOTOR STARTERS SHALL BE PROVIDED WITH AN H-O-A SWITCH AND CONTROL TRANSFORMER. ALL STARTERS AND DISCONNECT SWITCHES SHALL BE FURNISHED UNDER DIVISION 15. COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR PRIOR TO HIS WIRING OF EQUIPMENT
- 3. CONTROL WIRING (120V AND LESS) SHALL BE PROVIDED UNDER DIVISION 15 AND EXTENDED FROM THE STARTERS, CONTROL TRANSFORMERS OR 120V POWER CIRCUITS INDICATED ON THE ELECTRICAL DRAWINGS. ALL WIRING FOR 120 VOLTS SHALL BE DONE BY A LICENSED ELECTRICIAN. 4. ALL ELECTRICAL CHARACTERISTICS SHALL BE TAKEN FROM THE ELECTRICAL DRAWINGS AND

- G. <u>CUTTING AND PATCHING</u> 1. THE CONTRACTOR SHALL ASSUME ALL COST OF, AND BE RESPONSIBLE FOR, ARRANGING FOR ALL CUTTING AND PATCHING REQUIRED TO COMPLETE THE INSTALLATION OF HIS PORTION OF THE WORK. ALL CUTTING SHALL BE CAREFULLY AND NEATLY DONE SO AS NOT TO DAMAGE OR CUT AWAY MORE THAN IS NECESSARY OF ANY EXISTING PORTIONS OF THE STRUCTURE.
- 2. ALL SURFACES SHALL BE PATCHED TO THE CONDITION OF THE ADJACENT SURFACES 3. THE CONTRACTOR SHALL MAKE SUITABLE PROVISIONS FOR ADEOUATELY WATERPROOFING AT HIS FLOOR PENETRATIONS OF WATER PROOF MEMBRANE FLOORS. THIS SHALL INCLUDE BUT NOT BE LIMITED TO FLOOR DRAINS, OPEN SIGHT DRAINS, HUB DRAINS, CLEANOUTS, AND SLEEVES FOR THE

SPECIFICATIONS AND COORDINATED BEFORE EQUIPMENT IS ORDERED OR PURCHASED.

- VARIOUS PIPING. THIS ALSO APPLIES TO MEMBRANE ROOFING SYSTEMS. 4. ALL PENETRATIONS AND WATER PROOFING OF PENETRATIONS IN MEMBRANE ROOFING SYSTEMS SHALL BE COORDINATED WITH AND PERFORMED BY THE MANUFACTURER/INSTALLER.
- 5. THE CONTRACTOR SHALL INSTALL, AS REQUIRED, IN CONCRETE, CARPENTRY OR MASONRY CONSTRUCTION, ALL NECESSARY HANGERS, SLEEVES, EXPANSION BOLTS, INSERTS AND OTHER FIXTURES AND APPURTENANCES NECESSARY FOR THE SUPPORT OF PIPE, DUCT, EQUIPMENT AND DEVICES FURNISHED UNDER EACH SECTION OF THE SPECIFICATION.
- 6. FOR WALLS BETWEEN INTERIOR AND BELOW GRADE AREA, THE LINK-SEAL SYSTEM AS MANUFACTURED BY THUNDERLINE CORPORATION SHALL BE USED TO SEAL PIPE TO WALL PENETRATIONS. INSTALL SYSTEM IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. 7. ESCUTCHEONS SHALL BE INSTALLED ON ALL PIPES WHERE THEY PASS THROUGH FLOORS, CEILINGS,
- WALLS OR PARTITIONS IN FINISHED AREAS WHERE EXPOSED TO VIEW. 8. WHERE AND HVAC OR PLUMBING REPLACEMENT SCOPE IS INDICATED, MECHANICAL CONTRACTOR SHALL PROVIDE FOR THE DEMOLITION OF EXISTING SYSTEMS THAT ARE BEING REPLACED OR

ABANDONED

- H. ACCESS DOORS

 1. FURNISH AND INSTALL ACCESS DOORS AT EACH POINT REQUIRED TO PROVIDE ACCESS TO CONCEALED VALVES, CLEANOUTS AND OTHER DEVICES REQUIRING OPERATION, ADJUSTMENT OR MAINTENANCE. ACCESS DOORS SHALL BE 16 GAUGE STEEL, PRIME COAT FINISH, WITH MOUNTING STRAPS, CONCEALED HINGES AND SCREWDRIVER LOCKS. DESIGNED FOR THE DOORS TO OPEN 180 DEGREES 2. ACCESS DOORS INSTALLED IN FIRE WALLS OR PARTITIONS SHALL BE UL LABELED TO MAINTAIN THE FIRE RATING OF THE WALL OR PARTITION. I. FLAME SPREAD AND SMOKE DEVELOPED PROPERTIES OF MATERIALS
 - 1. MATERIALS AND ADHESIVES USED THROUGHOUT THE MECHANICAL AND ELECTRICAL SYSTEMS FOR INSULATION, AND JACKETS OR COVERINGS OF ANY KIND, OR FOR PIPING OR CONDUIT SYSTEM COMPONENTS, SHALL HAVE A FLAME SPREAD RATING NOT OVER 25 WITHOUT EVIDENCE OF CONTINUED COMBUSTION AND WITH A SMOKE DEVELOPED RATING NOT HIGHER THAN 50. IF SUCH MATERIALS ARE TO BE APPLIED WITH ADHESIVES, THEY SHALL BE TESTED AS APPLIED WITH SUCH ADHESIVES, OR THE ADHESIVES USED SHALL HAVE A FLAME SPREAD RATING NOT OVER 25 AND A SMOKE DEVELOPED RATING NOT HIGHER THAN 50.

II. INSULATION

- A. GENERAL PIPE INSULATION 1. FIBERGLASS SHALL BE ACCEPTABLE FOR INDOOR HOT & COLD DOMESTIC: HYDRONIC PI INSULATED DRAINAGE PIPING, PROVIDE PREFABRICATED FITTINGS FOR ELBOWS AND T PREFAB PVC FITTINGS OR WHITE ALL SERVICE (INTEGRAL TO PREFAB PIPING ELBOW) PIP JACKETING. PROVIDE PIPE LABELING FOR ALL INSULATED. JACKETED INDOOR PIPING. PV SHALL NOT BE PERMITTED IN RETURN PLENUM AREAS. ALL JACKEING SEAMS SHALL BE S AIR-TIGHT FOR CONTINUOUS VAPOR BARRIER 2. FITTINGS AND VALVES SHALL BE INSULATED WITH PRE-FORMED FITTINGS, FABRICATED S INSULATION, TANK INSULATION, BLANKET INSULATION, OR INSULATING CEMENT. THICKNESS SHAL ADJACENT PIPE INSULATION. FINISH SHALL BE WITH PRE-FORMED PVC FITTING COVERS OR AS OTHE SPECIFIED ON CONTRACT DRAWINGS. 3 FLANGES COUPLINGS AND VALVE BONNETS SHALL BE COVERED WITH AN OVERSIZED P SECTION SIZED TO PROVIDE THE SAME INSULATION THICKNESS AS ON THE MAIN PIPE SE OVERSIZED INSULATION SECTION SHALL BE USED TO FORM A COLLAR BETWEEN THE TW SECTIONS WITH LOW-DENSITY BLANKET INSULATION BEING USED TO FILL GAPS. JACKET
 - MATCH THAT USED ON STRAIGHT PIPE SECTIONS. ROUGH CUT ENDS SHALL BE COATED WEATHER OR VAPOR RESISTANT MASTIC AS DICTATED BY THE SYSTEM LOCATION AND S HOT SYSTEMS WHERE FITTINGS ARE TO BE LEFT EXPOSED, INSULATION ENDS SHOULD BE AWAY FROM BOLTS FOR EASY ACCESS.
- 1. DOMESTIC COLD WATER INSULATION SHALL BE 1" MINIMUM OR AS REQUIRED BY LOCA CODES 2. FOR MEDIA BELOW 60 DEGREES INSULATION SHALL BE 1" UP TO 1-4" PIPE SIZE; 1.5" THI
- PIPE SIZE; AND 2" THICK BEYOND 3" PIPE SIZE 3. CHILLED WATER PIPING INSULATION SHALL BE 1" UP TO 1-1/4" PIPE SIZE, 1.5" UP TO 3". FIBERGLASS PIPE INSULATION ONE PIECE FIBROUS GLASS PIPE INSULATION WITH FACTORY APPLIED ALUMINUM FOIL
- KRAFT PAPER FLAME RETARDANT VAPOR BARRIER JACKET. 2. PROVIDE SELF_SEALING LONGITUDINAL JACKET LAPS AND BUTT STRIPS. AVERAGE THERI CONDUCTIVITY: 0.23 BTU/IN. PER SQUARE FOOT PER DEGREES F PER HOUR AT 75 DEGRE TEMPERATURE
- 3. PROVIDE INSULATION CEMENT, FIBERGLASS REINFORCEMENT FABRIC, VAPOR BARRIER C CONTINUOUS, AIR-TIGHT INSULATION WITH VAPOR BARRIER.

D. FOAMGLASS PIPE INSULATION 1. FOAM GLASS TYPE PIPE INSULATION SHALL HAVE MAXIMUM K_FACTOR OF 0.38 AT 50 D

- TEMPERATURE. MINIMUM DENSITY SHALL BE 8 LB/CU. FT., 1 1/2" THICK MINIMUM. PRO FIBERGLASS REINFORCED STRAPPING TAPE TO ASSURE AIR-TIGHT MOISTURE-PROOF INSI PROVIDE WITH ALUMINUM JACKETING THAT SHALL BE 0.016" THICK WITH FITTING COVE THICK. PROVIDE WITH 5 WATT/FT HEAT TRACING BELOW INSULATION FOR OUTDOOR, A INSTALLATION.
- 2. PROVIDE FOAM GLASS INSERTS AT PIPE HANGERS, CLAMPS, OR OTHER SUPPORTS IN FIB ELASTOMERIC PIPE INSULATION INSTALLATIONS INSERTS SHALL BE SAME THICKNESS AS A INSULATION. VAPOR SEAL SHALL BE AS HEREINBEFORE SPECIFIED. ALUMINUM JACKETIN BE REQUIRED FOR INDOOR INSERTS (PVC OR WHITE ALL-SERVICE FOIL/KRAFTJACKETING BE USED).

E. ELASTOMERIC (CLOSED CELL FOAM) PIPE INSULATION . ELASTOMERIC SHALL BE PROVIDED FOR ALL REFRIGERANT PIPING AND OUTDOOR INSUL

AND MAY BE USED FOR INDOOR DOMESTIC OR CONDENSATE PIPING. PIPING WILL REQU ALUMINUM FOR OUTDOOR PIPING OR FOIL/WHITE KRAFT MEDIA OR PVC FOR INDOOR F WITH FULL ADHESIVE ADHERING SEAMS AND JOINTS FOR CONTINUOUS VAPOR BARRIEF SHALL BE FORMED BY CUTTING SEGMENTS AT 30 DEGREE ANGLES (3 SEGMENTS AT EACH BEND) WITH MASTIC AT ALL SEAMS. PROVIDE PREFORMED JACKETING ELBOWS AT ALL

F. FIBERGLASS BLANKET INSULATION FOR DUCTWORK (INDOOR DUCT ONLY) 1. INSULATION SHALL BE BLANKET TYPE FIBERGLASS INSULATION WITH AVERAGE THERMA CONDUCTIVITY NOT EXCEEDING 0.29 BTU IN. PER SQUARE FEET PER DEGREES F PER HO

- TEMPERATURE OF 75 DEGREES F. WITH A MINIMUM DENSITY OF 1 LB/CU. FT., 2" THICK FOIL INSULATION FACE. PROVIDE FIRE RETARDANT ADHESIVE OR FOIL REINFORCED KRAI WIDE AT ALL SEAMS. SECURE INSULATION TO DUCT WITH 18 GAUGE TIE-WIRE OR 1/2" > GALVANIZED STEEL STRAPS. PROVIDE COMPLETE AIR-TIGHT VAPOR BARRIER FOR ALL DU STAPLES SHALL NOT BE PERMITTED FOR ANY INSULATION ATTACHMENT. PROVIDE GRAY SEALING JOINTS. PENETRATION AND PUNCTURES. 2. CONTINUE INSULATION THROUGH WALL AND CEILING OPENINGS AND SLEEVES, EXCEPT
- DUCT INSULATION AT FIRE DAMPERS AND AT FLEXIBLE DUCT CONNECTIONS AT AIR HAN 3. PROTECT INSULATION FROM PHYSICAL DAMAGE AT POINTS OF SUPPORT WHERE INSULA CARRY LOAD IMPOSED BY SUPPORT. COORDINATE THIS REQUIREMENT WITH TYPES OF I SUPPORT USED. HANGERS THAT PENETRATE INSULATION SHALL BE SEALED WITH MASTI CONTINUOUS VAPOR BARRIER.

ELASTOMERIC (CLOSED CELL FOAM) DUCT LINER INSTALL INSIDE OF DUCT WITH FULL ADHESIVE COVERAGE ATTACHMENT TO THE SURFAC

IS APPLIED; 1" FOR INDOOR AND 1-1/2" FOR OUTDOOR. R VALUES SHALL BE R-4.2 FOR : 1-1/2". FIBERGLASS DUCT LINER SHALL NOT BE PERMITTED UNDER ANY CIRCUMSTANCE WITH ANTIMICROBIAL PROTECTION. PROVIDE MASTIC AT ALL INTERIOR SEEMS FOR COM VAPOR BARRIER. PROVIDE DUCT LINER AT FIRST FIVE FEET OF SUPPLY DUCT FOR REERIGERATION/COOLING AIR HANDLING FOUIPMENT, UPSIZING INDICATED DUCT SIZE FOR INSULATION THICKNESS. FIBERGLASS DUCT LINER OR DUCT BOARD SHALL NOT BE PI

VIBRATION ISOLATION

- A. ALL MOTORIZED AIR MOVING AND FLUID MOVING EQUIPMENT PIECE SHALL BE PROVIDED WITH ISOLATION MOUNTING OR SUPPORTS B. PAD-TYPE ISOLATORS SHALL BE NEOPRENE IN-SHEAR ISOLATION PADS WITH CROSSED DOUBLE SHIM PLATE SHALL BE PROVIDED BETWEEN THE TWO LAYERS. PADS SHALL BE MOLDED USING 25,000 PSI TENSILE STRENGTH NEOPRENE
- C. HANGING ISOLATORS FOR ITEMS 300 LBS OR LESS SHALL BE BRIDGE-BEARING NEOPRENE MOUN SHALL HAVE A MINIMUM STATIC DEFLECTION OF 0.2" AND ALL DIRECTIONAL SEISMIC CAPABILI ELEMENTS SHALL PREVENT THE CENTRAL THREADED SLEEVE AND ATTACHMENT BOLT FROM CO CASTING DURING NORMAL OPERATION. THE SHOCK ABSORBING NEOPRENE MATERIALS SHALL
- COMPOUNDED TO BRIDGE-BEARING SPECIFICATIONS. MASON HD, KINETICS D. HANGING ISOLATORS FOR EQUIPMENT ABOVE 300 LBS SHALL BE STEEL SPRING-TYPE INCORPORA HOUSING, NEOPRENE OR LDS RUBBER SPRING CUP SIZED FOR 1" DEFLECTION. INSTALL SPRING I CONFIGURATION WITH MAXIMUM 1" DEFLECTION FROM ANY HORIZONTAL DISTORTION. THE E PREVENT THE CENTRAL THREADED SLEEVE AND ATTACHMENT BOLT FROM CONTACTING THE CAS
- NORMAL OPERATION. CONTRACTOR SHALL SELECT SPRING COLOR/RATING BASED ON EQUIPME AMBER BOOTH SH, KINETICS SH, MASON 30 OR EQUIVALENT.

IV DUCTWORK AND FITTING ERIAL AND T

L. DUCT CONSTRUCTION SHALL CONFORM TO THE RECOMMENDATIONS OF THE SMACNA H CONSTRUCTION MANUAL DUCTBOARD SHALL NOT BE PERMITTED. 2. RIGID, SQUARE DUCTWORK SHALL BE CONSTRUCTED OF LOCK FORMING QUALITY GALV. SHEETS PER ASTM A527. GALVANIZED COATING SHALL BE NOT LESS THAN 1.25 OUNCES BOTH SIDES) PER SQUARE FOOT OF SHEET. DUCTWORK SHALL BE CLASSIFIED AND CONS SMACNA PRESSURE CLASSES: +2 FOR SUPPLY AND -2 FOR RETURN AND EXHAUST. DUCT SHALL BE 26 GAUGE UP TO 30" AND 22 GAUGE ABOVE 30" IN CROSS SECTIONAL HEIGHT

3. CONCEALED ROUND DUCTS UP TO 12" IN DIAMETER IN PRESSURE CLASSES 2" AND LOWI LONGITUDINAL SEAM CONSTRUCTION. 4. EXPOSED ROUND DUCTWORK OR ROUND ABOVE 12" SHALL BE SPIRALLOCK SEAM CON ROUND FITTINGS SHALL BE FUSION WELDED BUT SEAM TYPE WITH ALL WELDS CONTINU

- SEAMS. ALL DIVIDED FLOW FITTINGS SHALL BE MANUFACTURED AS SEPARATE FITTINGS WELDED INTO SPIRAL DUCT SECTIONS WILL NOT BE PERMITTED. ALL DIVIDED FLOW FIT DIAMETER AND SMALLER SHALL HAVE RADIUSED ENTRANCE PRODUCED BY MACHINE OF FORMING; ALL DIVIDED FLOW FITTINGS 14" AND LARGER SHALL HAVE CONICAL ENTRAN BY MACHINE OR PRESS FORMING. ALL DIVIDED FLOW ENTRANCES SHALL BE FREE OF WE BURRS AND IRREGULARITIES. FITTINGS SHALL BE OF THE SAME MANUFACTURER AS THE 5. DUCT SEALANT SHALL BE POLYMERIC RUBBER BASE MASTIC, MINERAL IMPREGNATED W TAPE WITH ADHESIVE, OR HEAT SHRINK WITH ADHESIVE. TAPE THICKNESS UP TO 10" =
- 3": OVFR 20" = 4" 6. INSULATED FLEXIBLE DUCT SHALL BE CLASS 1 AIR DUCT IN ACCORDANCE WITH UL 181 AM COMPLY WITH NFPA 90A AND 90B. INSULATED FLEXIBLE DUCT SHALL CONSIST OF AN INI FOR MINIMUM WORKING PRESSURE OF 6" WATER GAUGE BONDED TO A STEEL OR ALL WIRE HELIX. FIBERGLASS INSULATION, AND A VAPOR BARRIER JACKET. INSULATION SHA MAXIMUM U VALVE OF .23 BTU/HR/SQFT/DEG F AT 75 DEGREES F MEAN TEMPERATURE. VAPOR BARRIER JACKET SHALL HAVE A MAXIMUM VAPOR TRANSMISSION RATE OF 0.1 GRAINS/SQ. FT./HR/INCH

HG (PERM). THE ASSEMBLY SHALL HAVE A MAXIMUM FLAME AND SMOKE RATING OF 25/50 PER ASTM E84 AND NFPA 255. FLEXIBLE DUCTS SHALL BE INSTALLED IN AN EXTENDED CONDITION FREE OF SAGS AND KINKS, USING ONLY THE MINIMUM LENGTH REQUIRED TO MAKE THE CONNECTION. ABRUPT BENDS AND TURNS THAT CRIMP THE DUCT AND RESTRICT AIR FLOW SHALL NOT BE PERMITTED. HORIZONTAL SUPPORTS SHALL BE 3/4" WIDE, 22 GAUGE FLAT GALVANIZED STEEL SHEET BANDING

- MATERIAL. FLEXIBLE DUCTS SHALL BE SUPPORTED ON 36" CENTERS. MAXIMUM LENGTH OF FLEXIBLE DUCT IN PRESSURE CLASS 2" AND BELOW SHALL BE 12 FEET. FLEXIBLE DUCT SHALL NOT BE USED ABOVE INACCESSIBLE CEILINGS. 7. GREASE DUCT SHALL BE 16 GAUGE BLACK IRON OR 18 GAUGE STAINLESS STEEL WELDED WITH AIR
- TIGHT SEAM. PROVIDE DUCT CLEANOUTS AT ALL CHANGES OF DIRECTION. FOR INSTALLATIONS THAT WILL RESULT IN A DUCT OR SECTION OF DUCT WITHIN 18" OF COMBUSTIBLE MATERIAL, PROVIDE FIRF-RATED INSULATION AS REQUIRED FOR A ZERO INCH CLEARANCE TO COMBUSTIBLE INSTALLED PER MANUFACTURER'S AND/OR RATING AGENCY REQUIREMENTS COMPLETE WITH ALL REQUIRED PENETRATION TREATMENTS. NUMBER IF INSULATING LAYERS AND APPROVED PREFABRICATED. RATED

ACCESS PANELS. DO NOT PROVIDE VENTED ROOF CURBS FOR FIRE WRAPPED GREASE EXHAUST DUCTS. 1. DAMPERS SHALL BE SINGLE BLADE BUTTERFLY TYPE IN DUCTS UP TO AND INCLUDING 18" X 12" SIZE; FOR DUCTS LARGER THAN 18" X 12", IN EITHER OR BOTH DIMENSIONS, THE DAMPERS SHALL BE THE MULTI BLADE TYPE. SINGLE BLADE BUTTERFLY DAMPER SHALL BE CONSTRUCTED OF NOT LESS THAN 16_GAUGE GALVANIZED STEEL BLADE MOUNTED IN A GALVANIZED STEEL FRAME. FOR RECTANGULAR

- DAMPERS, THE TOP AND BOTTOM EDGES OF THE BLADE SHALL BE CRIMPED TO STIFFEN THE BLADE. DAMPER SHALL BE PROVIDED WITH AN EXTENDED ROD TO PERMIT INSTALLATION OF A DAMPER REGULATOR. 2. MULTI_BLADE DAMPERS SHALL BE THE OPPOSED BLADE TYPE, CONSTRUCTED OF NOT THAN 16_GAUGE GALVANIZED STEEL BLADES MOUNTED IN GALVANIZED STEEL CHANNEL FRAME. BLADE SPACING SHALL NOT EXCEED 6 INCHES AND THE TOP AND BOTTOM EDGES OF THE BLADES SHALL BE CRIMPED TO
- STIFFEN THE BLADES. DAMPER BLADES SHALL BE INTERCONNECTED BY RODS AND LINKAGES TO PROVIDE SIMULTANEOUS OPERATION OF ALL BLADES. DAMPERS SHALL BE PROVIDED WITH EXTENDED RODS TO PERMIT INSTALLATION OF DAMPER OPERATORS. 3. DUCT MOUNTED DIAL REGULATORS WITH OPERATING HANDLE SHALL BE PROVIDED OR DAMPERS WHICH ARE LOCATED ABOVE HARD CEILINGS OR INACCESSIBLE LOCATIONS. CONCEALED CEILING
- MOUNTED DIAL REGULATORS SHALL BE PROVIDED ON VOLUME CONTROL DAMPERS WHICH ARE LOCATED ABOVE HARD CEILINGS. CONCEALED REGULATORS SHALL BE PROVIDED WITHIN DIFFUSER FACE WITH SCREW ADJUSTMENT. 4. PROVIDE DAMPERS AT ALL SUPPLY AND RETURN DUCT RUN OUTS TO EACH AIR DISTRIBUTION DEVICE

	WITH ACCESSIBLE ADJUSTMENT LEVER OR DIAL-TYPE REGULATOR ACTUATOR. C. <u>DUCT FITTINGS</u>	HAVE A 1 INCH WIDE BY 1/4 INCH THICK FOAM RUBBER GASKET FACTORY APPLIED TO UNDI PERIMETER OF CURB CAP. AN INTERNAL POWER WIRING POST SHALL EXTEND FROM MOTO
	SPIN_IN COLLARS SHALL BE GALVANIZED STEEL FOR USE WITH RECTANGULAR OR SQUARE SHEET METAL DUCTWORK SPIN-IN COLLARS SHALL HAVE AIR SCOOP (FOR SUPPLY DUCTS) AND DAMPER (SUPPLY AND	COMPARTMENT THROUGH CURB CAP. WHERE WIRING POST PENETRATES HOUSING AND C
PING; AND	RETURN).	3. FAN WHEEL SHALL BE FORWARD CURVED OR BACKWARD INCLINED CENTRIFUGAL TYPE OF
EE'S. PROVIDE	 TURNING VANES SHALL BE INSTALLED IN ALL 90 DEGREES SQUARE AND RECTANGULAR ELBOWS AND AT OTHER LOCATIONS SHOWN ON THE DRAWINGS WITH THE EXCEPTION OF KITCHEN EXHAUST 	CONSTRUCTION. FAN WHEEL SHALL BE STATICALLY AND DYNAMICALLY BALANCED. ON BEI LINITS, SHAFT BEARINGS SHALL BE SELF-ALIGNING, PILLOW BLOCK BALL TYPE, BEARINGS NO
/C JACKETING	3. CURVED ELBOWS SHALL HAVE A CENTERLINE RADIUS NOT LESS THAN 1 1/2 TIMES THE DUCT WIDTH.	PERMANENTLY SEALED AND LUBRICATED SHALL HAVE EXTENDED GREASE FITTINGS FOR EAS
SEALED	4. DISSIMILAR METALS SHALL BE ISOLATED TO PREVENT GALVANIC CORROSION. JOINTS NOT PROVIDED	 MOTOR AND DRIVE SHALL BE LOCATED IN A VENTILATED COMPARTMENT OUTSIDE OF THE EAN SHALL HAVE EACTORY INSTALLED DISCONNECT SWITCH PRE-WIRED TO MOTOR AND M
SECTIONS OF	BUILDING PAPER.	WITHIN MOTOR COMPARTMENT. MOTOR AND DRIVE SHALL BE MOUNTED ON VIBRATION
	5. PROVIDE DAMPERS AT RETURN DUCT AND OUTSIDE AIR DUCT CONNECTIONS DOWNSTREAM OF ANY	5. KITCHEN EXHAUST FANS SHALL BE UL 762 RATED AND PROVIDED WITH POWER/CONTROL V
ERWISE	6. FLEXIBLE DUCT CONNECTIONS SHALL BE NON-COMBUSTIBLE GLASS FABRIC DOUBLE COATED WITH	FAN BASE TO ROOF /FLASHING AND DISCHARGE HEIGHT A MINIMUM OF 40" ABOVE ROOF S
	NEOPRENE 30 OZ. PER SQUARE YARD.	SIDE INLET FANS SHALL BE PROVIDED WITH INLET HEIGHT SUCH THAT ALL ROOF MOUNTED
ECTION. AN	FIRE DAMPERS SHALL BE THE FOLDING BLADE FUSIBLE LINK TYPE CONFORMING TO UL 555 AND LABELED FOR INSTALLATION IN FIRE RATED WALLS AND FLOORS. DAMPERS IN FLOOR SHALL HAVE	HORIZONTAL DUCT CAN BE MOUNTED 20" ABOVE ROOF. PROVIDE NON-VENTED CURB FOR APPLICATIONS AND VENTED CURB FOR ENCLOSURE SHAFT APPLICATIONS.
VOINSULATION	SPRING OPERATOR. DAMPERS, EXCEPT FOR LOWER SECTIONS OF A MULTIPLE SECTION ASSEMBLY, AND	6. LOCATE EXHAUST FAN DISCHARGE 10' FROM ANY INTAKE OR BUILDING OPENING OR 2' ABC
TING SHALL WITH SUITABLE	THOSE INSTALLED BEHIND GRILLES AND REGISTERS, SHALL HAVE BLADES OUT OF THE AIR STREAM WHEN DAMPER IS IN THE OPEN POSITION DAMPERS IN WALLS OR FLOORS RATED 2 HOURS OR LESS	OPENINGS IF CODE ALLOWS.
SERVICE. ON	SHALL BE RATED FOR 1 1/2 HOURS; DAMPERS IN WALLS RATED 3 OR 4 HOUR SHALL BE RATED FOR 3	J. IN-LINE/CEILING FANS
BE BEVELED	HOURS. DAMPERS SHALL BE CONSTRUCTED OF GALVANIZED STEEL. PROVIDE AT EACH FIRE RATED	1. FAN SHALL BE IN-LINE CENTRIFUGAL TYPE WITH SQUARE OR RECTANGULAR HOUSING AND
	8. SMOKE DAMPERS SHALL BE THE MULTI-BLADE TYPE CONFORMING TO UL 555S WITH AN ASSEMBLY	COOK GN/GC.
	TEMPERATURE RATING OF 250 DEGREES F. DAMPER SHALL BE CONSTRUCTED OF GALVANIZED STEEL,	2. FAN HOUSING SHALL BE STEEL WITH FACTORY APPLIED BAKED ENAMEL PAINT ON EXTERIOR
	AND SHALL BE PROVIDED WITH A FACTORY-MOUNTED ELECTRIC DAMPER OPERATOR, SUITABLE FOR OPERATION ON 120V. 60 HZ SUPPLY. PROVIDE AT EACH SMOKE BARRIER LOCATION (REFER TO ARCH	SHALL BE INTERNALLY INSULATED WITH 1/2" THICK (MINIMUM) COATED FIBERGLASS INSUL INSULATION SHALL COMPLY WITH ASTM E84 AND NEPA 255 FOR MAXIMUM RATINGS OF FL
IICK UP TO 3"	DRAWINGS).	SPREAD RATING OF 25 AND SMOKE DEVELOPED RATING OF 50. HOUSING SHALL HAVE MOU
	DUCT-TO-DUCT JOINTS IN ROUND DUCT UP TO AND INCLUDING 60" IN DIAMETER SHALL BE MADE BY USING SLEEVE COUPLINGS, REINFORCED BY ROLLED BEADS, DUCT-TO-FITTING JOINTS IN ROUND DUCT	BRACKETS AT EACH CORNER. 3. FAN WHEEL SHALL BE BACKWARD INCLINED CENTRIFUGAL TYPE OF ALUMINUM CONSTRUC
	UP TO AND INCLUDING 60" IN DIAMETER SHALL BE MADE BY SLIP_FIT OF THE PROJECTING COLLAR ON	BELT DRIVE UNITS, SHAFT BEARINGS SHALL BE SELF-ALIGNING, PILLOW BLOCK BALL TYPE. B
AND WHITE	THE FITTING INTO THE DUCT. SLEEVE SHALL BE THE SAME GAUGE GALVANIZED STEEL AS THE DUCT; INSERTION LENGTH OF SLEEVE COUPLING AND FITTING COULAR SHALL BE NOT LESS THAN 2" AFTER	NOT PERMANENTLY LUBRICATED AND SEALED SHALL HAVE EXTENDED GREASE FITTINGS.
RMAL	THE JOINT IS SLIPPED TOGETHER, SHEET METAL SCREWS SHALL BE INSTALLED FOR MECHANICAL	INSTALLED DISCONNECT SWITCH MOUNTED ON EXTERIOR OF HOUSING AND PRE-WIRED TO
EES F MEAN	STRENGTH; SCREWS SHALL BE EQUALLY SPACED, NO MORE THAN 12" ON CENTERS AND WITH A	MOTOR.
COATING, FOR	DUCT-TO-DUCT JOINTS IN DUCTS UP TO AND INCLUDING 12" IN DIAMETER FOR PRESSURE CLASS 2" AND	CAP OR LOUVER SIZED AT 800 FPM OUTLET AIRSPEED.
	BELOW MAY BE THE BEADED-CRIMP TYPE AND EACH JOINT SHALL BE FASTENED WITH SHEET METAL	
	SCREWS, EQUALLY SPACED, NOT MORE THAN 12" ON CENTERS AND WITH A MINIMUM OF 3 SCREWS IN EACH JOINT. THE BEADED-CRIMP JOINT SHALL PROVIDE AT LEAST A 1" LAP TO ACCOMMODATE THE	VI. PIPING A. USE DIFLECTRIC UNIONS WHERE DISSIMILAR METALS ARE JOINED TOGETHER.
DEGREES F MEAN	SHEET METAL SCREWS.	B. DOMESTIC WATER & PUMPED CONDENSATE
SULATION.	10.ALL DUCT JOINTS (LONGITUDINAL, TRANSVERSE) AND DUCT PENETRATIONS SHALL BE SEALED USING METHODS OUTLINED IN SMACNA HVAC AIR DUCT LEAKAGE TEST MANUAL	 UNDERGROUND WATER SERVICE PIPING 3" IN SIZE AND LARGER SHALL BE CLASS 50 DUCTIL AWWA C151 WITH HUB AND SPIGOT PUSH ON JOINTS AND CLASS 50 OR GREATER MECH
/ERS 0.024"	11.DUCT COLLARS SHALL BE PROVIDED WHERE DUCTS PASS THROUGH MASONRY WALLS AND PARTITIONS	JOINT DUCTILE IRON FITTINGS ALL CEMENT LINED PER AWWA C104. MECHANICAL JOINTS F
ABOVE-GROUND	WHICH EXTEND FULL HEIGHT TO THE UNDERSIDE OF THE STRUCTURE AND SHALL BE FABRICATED FROM	IRON PIPE SHALL BE MADE WITH A FOLLOWER GLAND, GASKET, BOLTS AND NUTS. PUSH-ON
BERGLASS OR	AND PARTITIONS, EXCEPT COLLAR SHALL BE OMITTED ON THAT SIDE OF THE WALL ON WHICH	AWWA C111.
ADJOINING PIPE	REGISTERS AND GRILLES ARE INSTALLED. FLANGES SHALL BE INSTALLED TIGHT AGAINST THE WALL. THE	2. UNDERGROUND STEEL PIPE AND FITTINGS INCLUDING THE PORTION THROUGH THE FLOOR
MEDIA SHALL	12.DUCT HANGERS AND SUPPORTS SHALL BE IN ACCORDANCE WITH FIBERGLASS BLANKET INSULATION.	AND FITTINGS SHALL BE CLEANED OF ALL RUST. SCALE. DIRT AND OIL. PIPES AND FITTINGS
	STANDARDS. IN ADDITION, HANGERS SHALL BE SPACED NOT OVER 8'_0" ON CENTERS. FOR	GIVEN TWO COATS OF A COAL-TAR BASE BITUMINOUS PROTECTIVE COATING, EACH HAVING
	RECTANGULAR DUCTS, WITH LONGEST DIMENSIONS UP THROUGH 60" HANGERS, THE HANGERS SHALL BE GALVANIZED STEEL STRAP TYPE: WITH LONGEST DIMENSION 61" AND LARGER. HANGERS SHALL BE	THICKNESS OF 7-9 MILS. THE COMBINED THICKNESS OF BOTH COATS COMBINED SHALL BE LINDERGROUND WATER SERVICE PIPING 2 1/2" IN SIZE AND SMALLER (TO A POINT 1'-0" ARI
LATED PIPING	TRAPEZE TYPE CONSTRUCTED OF GALVANIZED STEEL ANGLES WITH ROUND HANGERS RODS. SIZES FOR	FINISHED FLOOR) SHALL BE. TYPE "K" HARD DRAWN COPPER TUBING, ASTM B88, WITH BRA
UIRE JACKETING-	STRAP HANGERS AND TRAPEZE ANGLES AND RODS SHALL BE BASED ON DUCT SIZE AS SCHEDULED IN THE SMACNA HVAC DUCT CONSTRUCTION STANDARDS	AND WROUGHT COPPER, ANSI B16.22, OR CAST BRONZE, ANSI B16.18, SOCKET FITTINGS E
R. ELBOWS	13.FOR ROUND DUCTS; THE HANGERS SHALL BE THE GALVANIZED STEEL STRAP HANGERS. SIZES AND	 ABOVE-GROUND WATER PIPING - 4" AND SMALLER SHALL BE. TYPE "L" HARD DRAWN COPP
CH 90 DEGREE	NUMBER FOR STRAP HANGERS SHALL BE BASED ON DUCT SIZE AS SCHEDULED IN THE SMACNA HVAC	ASTM B88, WITH SOLDERED JOINTS AND WROUGHT COPPER, ANSI B16.22, OR CAST BRONZ
PIPING ELBOWS.		(NO-LEAD SOLDER) WITH A COMPATIBLE FLUX.
	D. ROOF CAPS	5. UNDERGROUND WATER PIPING TO TRAP PRIMERS OR HVAC CONDENSATE PUMP DISCHARG
AL DUR AT MEAN	GAUGE SPUN-ALUMINUM WITH CONTINUOUSLY WELDED CURB CAP. PROVIDE WITH MANUFACTURER'S	6. FLANGED JOINT SHALL BE MADE WITH RING TYPE NON-METALLIC GASKETS, BOLTS AND NU
MINIMUM AND	ROOF CURB. PROVIDE SLOPED CURB FOR PITCHED ROOFS. EXHAUST ROOF HOODS PROVIDED WITH	7. THREADED JOINTS AT EQUIPMENT CONNECTIONS SHALL BE MADE UP WITH TEFLON TAPE.
AFT TAPE, 3" X 0 015"	WHEN EQUIPMENT SERVED IS POWERED DOWN UNLESS INDIVIDUAL MOTORIZED DAMPER TO CLOSE	8. GROOVED MECHANICAL JOINTS: GROOVED JOINTS FOR COPPER AND GALVANIZED STEEL PI
UCTWORK.	INDICATED AT EQUIPMENT BRANCHES.	BE INSTALLED USING BOLTED MECHANICAL COUPLING, PRESSURE-RESPONSIVE GASKET ALC
Y SEALER FOR	E. LOUVERS 1. LOUVERS SHALL BE STATIONARY ALUMINUM, 4" DEEP WITH DRAINABLE BLADES, HIDDEN MULLION, ALL	GROOVED AND FITTINGS. LAYOUT BASIS SHALL BE ANVIL GRUV-LOCK, 9. DIFLECTRIC ADAPTERS SHALL BE PROVIDED BETWEEN COPPER AND IRON PIPE CONNECTION
T TERMINATE	0.081" ALUMINUM WALL THICKNESS, AND KYNAR FINISH TO BE COORDINATED WITH ARCHITECT FOR	BETWEEN FERROUS AND NONFERROUS PIPING OR EQUIPMENT.
NDLING UNITS.	COLOR. LOUVER SIZED FOR 50% FREE AREA FOR 800 FPM AIRSPEED TO PREVENT WATER ENTRAINMENT. PROVIDE FACH LOUVER WITH A MINIMUM 18" DEEP FULL SIZE PLENUM WITH DUCT CONNECTION SIZED	10.UNDERGROUND WATER PIPING SHALL HAVE A MINIMUM COVER OF 3'- 0" TO THE TOP OF T
HANGER AND	AS INDICATED. PROVIDE OUTDOOR AIR SUPPLY LOUVERS INLET PLENUMS WITH ELASTOMERIC LINER	SERVING A BATTERY OF FIXTURES; ON THE COLD WATER BRANCH LINES SERVING INDIVIDUA
IC TO PRESERVE	AND PROVIDE MOTORIZED DAMPER AT CONNECTED DUCT. LAYOUT BASIS IS RUSKIN ELF375DX. PROVIDE WITH INSECT SCREENING AT LOLIVER FACE	VALVE WATER CLOSETS AND URINALS; AND ELSEWHERE AS INDICATED ON THE DRAWINGS.
	V.HVAC EQUIPMENT	12. VACUUM BREAKERS SHALL BE PROVIDED ON ALL HOSE OUTLETS, HOSE BIBS AND HYDRANT
CE TO WHICH IT	A. CONTRACTOR SHALL VERIFY REASONABLE OPERATION OF EXISTING UNIT TO REMAIN IN USE AND MAKE ANY	THE DRAWINGS INDICATE THAT A BACKFLOW PREVENTER IS TO BE PROVIDED ON THE PIPIN
1" AND R-6.2 FOR	AND EXTERIOR DAMAGE SHOULD BE REPAIRED AND PAINTED. A TECHNICIAN'S REPORT SHOULD BE ATTAINED	13.INSTALL 1/2" CW LINE FROM NEAREST CW MAIN OR BRANCH LINE TO ALL FLOOR DRAINS W
NTINUOUS	AND DELIVERED TO THE OWNER FOR APPROVAL FOR EXISTING EQUIPMENT REPAIRS.	PRIMER FOR TRAP PRIMING. UNDERGROUND PIPING FROM TRAP PRIMER TO FLOOR DRAIN
	B. ALL NEW AND REUSED UNIT ACCESS AND CONNECTION OPENINGS SHALL BE SEALED WITH PROVIDED GROMMETS, GASKETS FOR AIR TIGHT CONSTRUCTION WITH CONTINUOUS CASE INSULATION, CONTRACTOR TO	INSTALLED WITHOUT FITTINGS. TRAP PRIMERS SHALL BE PROVIDED FOR ALL FLOOR DRAINS DRAINS.
PERMITTED.	REPAIR OR REPLACE DAMAGED DOORS, SEALS, GASKETS, GROMMETS ETC THAT PREVENT AIR-TIGHT CASING.	14. CONNECT HOT AND COLD WATER PIPING SYSTEM TO EQUIPMENT AS INDICATED, AND COM
	C. ALL EXHAUST SHALL BE DUCTED FROM UNIT OUTLET TO ROOF CAP INLET OR LOUVER WITH CONTINUOUSLY SEALED DUCTING, NO EXHAUST SHALL BE OPENED INTO THE BUILDING EXTERIOR, PROVIDE ENCLOSED DUCT	EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE SHUT-OFF BALL VA
	TRANSITION TO EACH ROOF CAM OR WALL LOUVER.	SHUTOFF BALL VALVE FOR HEADERS SERVING HOT OR COLD WATER TO MULTIPLE FIXTURES
	D. ALL AIR MOVING EQUIPMENT SHALL BE PROVIDED WITH VIBRATION ISOLATION AND FLEXIBLE DUCT CONNECTIONS	SINGLE WALL OR CHASE. PROVIDE ACCESS PANEL FOR VALVES INSTALLED ABOVE HARD CEIL
RIBS. A STEEL	E. CONTRACTOR SHALL PROVIDE GRAVITY DRAINAGE FOR ALL CONDENSATE-PRODUCING HEATING/COOLING	DISINFECTED WITH CHLORINE BEFORE IT IS PLACED INTO OPERATION. THE CHLORINATING
	EQUIPMENT VIA GRAVITY DRAINAGE OR CONDENSATE PUMP IF GRAVITY DRAINAGE CANNOT BE ACHIEVED.	SHALL BE LIQUID CHLORINE CONFORMING TO FED. SPEC. BB-C-120 AND SHALL BE INTRODU
NTINGS AND	JUST BEFORE TEST AND BALANCE AND AGAIN AT TURN OVER TO OWNER. ALL AIR INLETS AND OUTLETS SHALL BE	SECTIONS OR SYSTEM SHALL CONTAIN AT LEAST FIFTY PARTS PER MILLION OF AVAILABLE C
IT THE	SEALED WITH FILTER MEDIA DURING GENERAL CONSTRUCTION PRIOR TO TEST AND BALANCE.	AND SHALL REMAIN IN THE SECTIONS OR SYSTEM FOR A PERIOD OF NOT LESS THAN SIXTEE
BE	G. ROOFTOP UNITS	TIMES. AT THE END OF THE RETENTION PERIOD, NO LESS THAN 50 PPM OF CHLORINE SHAL
ATING STEEL	1. PROVIDE PACKAGED DX ROOFTOP UNITS MANUFACTURED BY TRANE, LENNOX, AAON, CARRIER, OR	PRESENT IN THE EXTREME END OF THIS SYSTEM. AFTER THE DISINFECTION PERIOD THE CHI
IN PLUMB	ROOF CURBS FOR ROOFS WITH GREATER THAN 2% SLOPE. PROVIDE VIBRATION ISOLATION TYPE ROOF	CONTENT IS NOT GREATER THAN TWO-TENTHS - (0.2) - PARTS PER MILLION. THE CONSTRU
ELEMENTS SHALL	CURBS FOR UNITS DIRECTLY OVER MUSIC REHEARSAL, PERFORMANCE OR OTHER ASSEMBLY AREAS. ALL	MANAGER SHALL SUBMIT TO THE ARCHITECT WRITTEN CERTIFICATION THAT THE SYSTEM V
ENT WEIGHT.	UNITS SHALL BE PROVIDED WITH A MOTORIZED OA DAMPER OR ECONOMIZER, COIL GUARDS, HINGED ACCESS PANELS. SUPPLY AND RETURN SMOKE DETECTORS. STAINLESS STEEL DRAIN PAN AND BURNER	DISINFECTED. CERTIFICATION SHALL INCLUDE NAME OF PROJECT, NAME OF OWNER, NAME OPERATORS, DATE OF DISINFECTION, TIMES OF DISINFECTION PERIOD, MAXIMUM CHLORIN
	(FOR GAS UNITS). PROVIDE EACH RTU WITH CONVENIENCE RECEPTACLE (SEPARATE CIRCUIT) AND	AND RESIDUAL CHLORINE LEVEL.
	DISCONNECT. OTHERWISE COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR FIELD-MOUNTED	C. NATURAL GAS
	LOCALLY APPROVED LOCATION WITH THE REQUIRED AIR GAP. NO PIPING SHALL SIT ON THE ROOF	WITH STANDARD WEIGHT WROUGHT STEEL SOCKET-WELD FITTINGS PER ASTM A234 OR TH
TIVAC DUCI	SURFACE. SHIFT EXISTING OR NEW VENTS OR EXHAUST TERMINATIONS OR SHIFT UNITS AS NEEDED TO ASSURE 10' BETWEEN ANY EXHAUST OR FILLE AND THE RTIL INTAKE	CONNECTIONS. PIPE SIZES 3" AND UP OR WITH PRESSURE ABOVE 5PSI SHALL ONLY BE PERM
ANIZED STEEL	2. ADAPTER CURBS MAY BE USED WITH SPECIFIC ENGINEER APPROVAL OF SPECIFICALLY SUBMITTED ROOF	2. STEEL GAS PIPING TO BE INSTALLED UNDERGROUND SHALL BE FURNISHED WITH A FACTOR'
STRUCTED	CURBS (MAXIMUM OF 18" CURB HEIGHT). CONTRACTOR SHALL BE RESPONSIBLE FOR STRUCTURAL	COATING WHICH SHALL CONSIST OF A RESILIENT, EXTRUDED, POLYETHYLENE SLEEVE WHICH
WORK GAUGE	ANALISIS OF LAISTING CONDU AND UNIT SUFFORTS FOR ADAPTER CORD CONNECTIONS.	WITH A HOT APPLIED ADHESIVE WHICH RETAINS ITS ELASTICITY IN HOT AND COLD ENVIRON
I, WIDTH, OR	G. SPLIT SYSTEMS	3. FIELD APPLIED WRAPPING TAPE FOR FITTINGS AND JOINTS SHALL BE COAL TAR WITH HEAVY
/ER SHALL BE	DRAINAGE AND REFRIGERANT PIPE CONNECTIONS THAT DO NOT BLOCK EQUIPMENT SERVICE OR FILTER	OR JT JOINT COATINGS, INC., WITH PRIMER, APPLICATION PROCEDURES AND HEATING IN A
	ACCESS. PROVIDE CONDENSERS WITH ANTI-SHORT CYCLE TIMER, CRANKCASE HEATER, LOW AMBIENT	WITH THE TAPE MANUFACTURER'S RECOMMENDATIONS.
UOUS ALONG	CONTROLS, COLL GUARDS. INDOOR AND OUTDOOR PIECES SHALL BE BY IDENTICAL MANUFACTURER LISTED BY THE MANUFACTURE AS COMPATIBLE. CASED COOLING COLLS SHALL BE SPECIFICALLY LISTS	4. AKKANGE WITH THE UTILITY COMPANY TO PROVIDE GAS SERVICE TO INDICATED LOCATION SHUTOFF AT TERMINATION MAKE ALL ARRANGEMENTS WITH LITULITY AS TO THE EXTENT O
S _ TAP COLLARS	AND WITH MATCHING SIZE WHEN USED WITH A FURNACE. FURNACES SHALL BE HIGH EFFICIENCY FOR	AND PAY ALL COSTS, FEES AND SECURE PERMITS INVOLVED TO OBTAIN SERVICE FOR THE BI
DR PRESS	USE WITH PVC FLUE AND INTAKE REQUIRING FLUE CONDENSATE NEUTRALIZER AND DRAIN. 2. REFRIGERANT PIPING SHALL BE RUN PARALLEL TO RUILIDING WALLS IN WHICH INSTALLED UNLESS	5. PROVIDE SHUTOFF IN GAS SERVICE PIPE AT ENTRY IN BUILDING, EXT/END PIPE TO GAS METI
	OTHERWISE INDICATED ON THE DRAWINGS WITH CONTINUOUS ELASTOMERIC INSULATION AND	6. PROVIDE VALVE AND UNION SHALL BE PROVIDED AT EACH CONNECTION TO A PIECE OF EQU
E DUCTWORK.	JACKETING INDOOR AND OUT. PROVIDE WITH AIR TIGHT VAPOR ENCAPSULATION BY USE OF MASTIC	EQUIPMENT PROVIDED WITH A FLANGED INLET SHALL HAVE A FLANGED CONNECTION.
VOVEN FIBER	TYPE L OR K (UNDERGROUND) COPPER TUBING INTENDED FOR ACR APPLICATIONS- DEHYDRATED,	7. DRIF LEGS, D-INCHES LONG, SHALL BE PROVIDED IN GAS PIPING AT ENDS OF HORIZONTAL R BASE OF RISERS AND AT CONNECTIONS TO EQUIPMENT. DRIP LEG CAP SHALL BE RFMOVARI
= 2"; UP 10 20" =	CHARGED WITH NITROGEN, AND PLUGGED BY THE MANUFACTURER. PROVIDE FORMED FITTINGS, SUCH	MINIMUM 4" BETWEEN CAP AND WALL OR ROOF.
ND SHALL	AS ELDOWS (SHALL BE LOWG SWEEP) AND TEES, ALL JUINTS SHALL BE BRAZED WITH OXY-ACETYLENE TORCHES BY A QUALIFIED TECHNICIAN. SOFT COPPER TUBING SHALL NOT BE ALLOWED UNLESS NOTFD	8. GAS PIPING WITHIN THE BUILDING SHALL BE RUN ABOVE FLOOR SLAB. 9. PRESSURE REGULATORS ARE TO BE PROVIDED ON ALL EOUIPMENT IF NOT PROVIDED AS PA
INER FILM LAYER	ON THE DRAWINGS.	EQUIPMENT. COORDINATE INLET/OUTLET PRESSURES WITH ACTUAL DELIVERED PRESSURE
ALL HAVE A	5. PROVIDE INDOOR UNITS LOCATED ABOVE CEILINGS WITH SLOPED SECONDARY DRAIN PAN WITH A CAPPED VALVE AND THREADED HOSE OLITET TINIT AND EXTERIOR DRAIN PAN SLIPPORT SHALL RE	EQUIPMENT INLET PRESSURES. CONTRACTOR SHALL ARRANGE FOR ADJUSTMENT OF GAS PI

- PROVIDED WITH FLEXIBLE INLET/OUTLET CONNECTIONS. 3. FAN WHEELS SHALL BE STATICALLY AND DYNAMICALLY BALANCED. 4. FANS SHALL BE DIRECT DRIVE WITH SPEED CONTROLLER, DIRECT DRIVE ECM. FANS SHALL NOT BE BELT DRIVE UNLESS SPECIFICALLY NOTED ON PLANS. V-BELT DRIVES SHALL BE DESIGNED FOR NOT LESS THAN 150% OF CONNECTED DRIVING CAPACITY AND MOTOR SHEAVES SHALL BE ADJUSTABLE TO PROVIDE NOT LESS THAN 20% SPEED VARIATION. SHEAVES SHALL BE SELECTED TO DRIVE THE FAN AT A SPEED TO PRODUCE THE SCHEDULED CAPACITY INDICATED ON THE DRAWINGS WHEN SET AT THE APPROXIMATE MIDPOINT OF THE SHEAVE ADJUSTMENT. MOTORS WITH V-BELT DRIVES SHALL BE PROVIDED WITH 5. SAFETY/DISCONNECT SWITCHES (UNLESS SCHEDULED AS UNIT-INTEGRAL) AND STARTERS SHALL BE
- PROVIDED 6. BY ELECTRICAL CONTRACTOR AND SHALL CONFORM TO REQUIREMENTS OF ELECTRICAL DRAWINGS AND SPECIFICATIONS. MECHANICAL CONTRACTOR SHALL COORDINATE MOUNTING LOCATION TO MAINTAIN MAINTENANCE CLEARANCES. ALL THREE PHASE FANS SHALL BE PROVIDED WITH STARTER AND/OR CONTACTORS AS REQUIRED TO CONTROL FANS AND AUXILIARY DEVICES SUCH AS CONTROLS SYSTEM TIE-IN OR DAMPER ACTUATION. CENTRIFUGAL ROOF FAN

INDEPENDENT SUCH THAT DRAIN PAN CAN BE REMOVED WITHOUT AFFECTING AIR HANDLING UNIT

4. THE PREFERENCE SHALL BE A FLOAT SWITCH IN THE EXTERNAL DRAIN PAN TO SHUT THE UNIT DOWN. IF

NOT ALLOWED BY CODE OR INSPECTOR, ROUTE THE CONDENSATE TO A CONSPICUOUS LOCATION-

5. FOR LONG REFRIGERANT LINE LENGTHS ABOVE 100', PROVIDE ALL ACCESSORIES, ACCUMULATORS,

6. FLOOR MOUNTED VERTICAL UNITS SHALL BE MOUNTED ON A 24" TALL, FULL SIZE RETURN PLENUM

2. ALL FANS SHALL BE SUPPORTED INDEPENDENT OF CONNECTED DUCT OR CEILING SUPPORTS AND

RESIZED PISTONS AND LINE SETS PER MANUFACTURER REQUIREMENTS.

1. FANS SHALL BE TESTED AND RATED IN ACCORDANCE WITH AMCA 210.

WITH METAL GAUGE SUFFICIENT TO SUPPORT UNIT WEIGHT.

INSTALLATION.

ADJUSTABLE BASES.

OVER A MOP SINK OR SERVICE SINK IF POSSIBLE

- FANS SHALL BE CENTRIFUGAL ROOF EXHAUSTERS WITH WATERPROOF DESIGN SO THAT WATER CANNOT ENTER THE BUILDING THROUGH FAN HOUSING WHETHER OR NOT FAN IS OPERATING. FAN SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER ON INLET. A BIRD SCREEN ON OUTLET AND A FACTORY FABRICATED ROOF CURB. GENERAL EXHAUST LAYOUT BASIS (NON- KITCHEN APPLICATIONS)-COOK ACED
- 2. FAN SHALL HAVE A ONE-PIECE ALUMINUM HOUSING ENCLOSING THE MOTOR AND DRIVE. AN ALUMINUM SHROUD ENCLOSING THE FAN WHEEL, AND AN ALUMINUM CURB CAP. CURB CAP SHALL
- ITH HUB AND SPIGOT PUSH ON IOINTS AND CLASS 50 OR GREATER MECHANICAL RON FITTINGS ALL CEMENT LINED PER AWWA C104, MECHANICAL JOINTS FOR DUCTUE BE MADE WITH A FOLLOWER GLAND, GASKET, BOLTS AND NUTS, PUSH-ON JOINTS FOR ALL BE MADE WITH A ONE PIECE LUBRICATED COMPRESSION RUBBER GASKET AS PER STEEL PIPE AND FITTINGS INCLUDING THE PORTION THROUGH THE FLOOR SHALL BE VINST CORROSION BY APPLICATION OF PROTECTIVE COATINGS. PRIOR TO COATING. PIPE IALL BE CLEANED OF ALL RUST. SCALE, DIRT AND OIL, PIPES AND FITTINGS SHALL BE TS OF A COAL-TAR BASE BITLIMINOUS PROTECTIVE COATING, EACH HAVING A DRY FILM 9 MILS. THE COMBINED THICKNESS OF BOTH COATS COMBINED SHALL BE 15-18 MILS. WATER SERVICE PIPING 2 1/2" IN SIZE AND SMALLER (TO A POINT 1'-0" ABOVE THE) SHALL BE, TYPE "K" HARD DRAWN COPPER TUBING, ASTM B88, WITH BRAZED JOINTS COPPER, ANSI B16.22, OR CAST BRONZE, ANSI B16.18, SOCKET FITTINGS. . BRAZED MADE USING BCUP-5 BRAZING ALLOY WITH A COMPATIBLE FLUX. WATER PIPING - 4" AND SMALLER SHALL BE. TYPE "L" HARD DRAWN COPPER TUBING, SOLDERED JOINTS AND WROUGHT COPPER, ANSI B16.22, OR CAST BRONZE, ANSI ITTINGS. SOLDER JOINTS SHALL BE MADE USING A 95-5 TIN-ANTIMONY SOLDER R) WITH A COMPATIBLE FLUX. WATER PIPING TO TRAP PRIMERS OR HVAC CONDENSATE PUMP DISCHARGE SHALL BE RAWN COPPER TUBING, ASTM B88, WITHOUT FITTINGS. HALL BE MADE WITH RING TYPE NON-METALLIC GASKETS, BOLTS AND NUTS. IS AT EQUIPMENT CONNECTIONS SHALL BE MADE UP WITH TEFLON TAPE. AFTER RIOR TO THREADING, PIPE SHALL BE REAMED AND SHALL HAVE BURRS REMOVED. ANICAL JOINTS: GROOVED JOINTS FOR COPPER AND GALVANIZED STEEL PIPES SHALL SING BOLTED MECHANICAL COUPLING, PRESSURE-RESPONSIVE GASKET ALONG WITH ITTINGS. LAYOUT BASIS SHALL BE ANVIL GRUV-LOCK. PTERS SHALL BE PROVIDED BETWEEN COPPER AND IRON PIPE CONNECTIONS AND OUS AND NONFERROUS PIPING OR EQUIPMENT. WATER PIPING SHALL HAVE A MINIMUM COVER OF 3'- 0" TO THE TOP OF THE PIPE. HAMMER ARRESTORS ABOVE CEILING ON THE HOT AND COLD WATER BRANCH LINES ERY OF FIXTURES: ON THE COLD WATER BRANCH LINES SERVING INDIVIDUAL FLUSH LOSETS AND URINALS; AND ELSEWHERE AS INDICATED ON THE DRAWINGS. PROVIDE OR WHA LOCATED ABOVE HARD CEILINGS. ERS SHALL BE PROVIDED ON ALL HOSE OUTLETS. HOSE BIBS AND HYDRANTS UNLESS NDICATE THAT A BACKFLOW PREVENTER IS TO BE PROVIDED ON THE PIPING SERVING LINE FROM NEAREST CW MAIN OR BRANCH LINE TO ALL FLOOR DRAINS WITH TRAP P PRIMING. UNDERGROUND PIPING FROM TRAP PRIMER TO FLOOR DRAINS SHALL BE OUT FITTINGS. TRAP PRIMERS SHALL BE PROVIDED FOR ALL FLOOR DRAINS AND HUB ND COLD WATER PIPING SYSTEM TO EQUIPMENT AS INDICATED, AND COMPLY WITH NUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE SHUT-OFF BALL VALVE AND CONNECTION. PROVIDE DRAIN VALVE ON DRAIN CONNECTIONS. PROVIDE SINGLE ALVE FOR HEADERS SERVING HOT OR COLD WATER TO MULTIPLE FIXTURES WITHIN A CHASE, PROVIDE ACCESS PANELEOR VALVES INSTALLED ABOVE HARD CELLINGS. NATER SERVICE AND SUPPLY PIPING INSTALLED UNDER THIS DIVISION SHALL BE I CHLORINE BEFORE IT IS PLACED INTO OPERATION. THE CHLORINATING MATERIAI CHLORINE CONFORMING TO FED. SPEC. BB-C-120 AND SHALL BE INTRODUCED TO THE RIENCED OPERATORS ONLY. THE CHLORINE SOLUTION APPLIED TO THE PIPING TEM SHALL CONTAIN AT LEAST FIFTY PARTS PER MILLION OF AVAILABLE CHLORINE AIN IN THE SECTIONS OR SYSTEM FOR A PERIOD OF NOT LESS THAN SIXTEEN (16) THE DISINFECTION PERIOD ALL VALVES SHALL BE OPENED AND CLOSED AT LEAST FOUR END OF THE RETENTION PERIOD, NO LESS THAN 50 PPM OF CHLORINE SHALL BE EXTREME END OF THIS SYSTEM. AFTER THE DISINFECTION PERIOD THE CHLORINATED E FLUSHED FROM THE SYSTEM WITH CLEAR WATER UNTIL THE RESIDUAL CHLORINE GREATER THAN TWO-TENTHS - (0.2) - PARTS PER MILLION. THE CONSTRUCTION L SUBMIT TO THE ARCHITECT WRITTEN CERTIFICATION THAT THE SYSTEM WAS RTIFICATION SHALL INCLUDE NAME OF PROJECT. NAME OF OWNER, NAME OF TE OF DISINFECTION, TIMES OF DISINFECTION PERIOD, MAXIMUM CHLORINE LEVEL CHLORINE LEVEL. D MAXIMUM 2-1/2" GAS PIPING SHALL BE BLACK STEEL PIPE, .SCHEDULE 40, ASTM A53 D WEIGHT WROUGHT STEEL SOCKET-WELD FITTINGS PER ASTM A234 OR THREADED PIPE SIZES 3" AND UP OR WITH PRESSURE ABOVE 5PSI SHALL ONLY BE PERMITTED WITH JOINTS (NO THREADED CONNECTIONS). G TO BE INSTALLED UNDERGROUND SHALL BE FURNISHED WITH A FACTORY APPLIED SHALL CONSIST OF A RESILIENT, EXTRUDED, POLYETHYLENE SLEEVE WHICH IS SEALED E PLASTIC COATING SHALL BE NOT LESS THAN 25 MILS THICK AND SEALED TO THE PIPE LIED ADHESIVE WHICH RETAINS ITS ELASTICITY IN HOT AND COLD ENVIRONMENTS. RAPPING TAPE FOR FITTINGS AND JOINTS SHALL BE COAL TAR WITH HEAVY VINYL OR BACKING MEETING FEDERAL SPECIFICATION HH-T-30A, TAPECOAT CT OR TAPECOAT 20 TINGS, INC., WITH PRIMER, APPLICATION PROCEDURES AND HEATING IN ACCORDANCE MANUFACTURER'S RECOMMENDATIONS THE UTILITY COMPANY TO PROVIDE GAS SERVICE TO INDICATED LOCATION WITH MINATION. MAKE ALL ARRANGEMENTS WITH UTILITY AS TO THE EXTENT OF ITS WORK, STS, FEES AND SECURE PERMITS INVOLVED TO OBTAIN SERVICE FOR THE BUILDING. FF IN GAS SERVICE PIPE AT ENTRY IN BUILDING, EXT/END PIPE TO GAS METER LOCATION VIDE PARTS AND ACCESSORIES REQUIRED BY UTILITY TO CONNECT TO METER. AND UNION SHALL BE PROVIDED AT EACH CONNECTION TO A PIECE OF EQUIPMENT OVIDED WITH A FLANGED INLET SHALL HAVE A FLANGED CONNECTION. CHES LONG, SHALL BE PROVIDED IN GAS PIPING AT ENDS OF HORIZONTAL RUNS, AT THE AND AT CONNECTIONS TO EQUIPMENT. DRIP LEG CAP SHALL BE REMOVABLE WITH TWEEN CAP AND WALL OR ROOF. HIN THE BUILDING SHALL BE RUN ABOVE FLOOR SLAB. ATORS ARE TO BE PROVIDED ON ALL EQUIPMENT IF NOT PROVIDED AS PART OF THE ORDINATE INLET/OUTLET PRESSURES WITH ACTUAL DELIVERED PRESSURE AND T PRESSURES. CONTRACTOR SHALL ARRANGE FOR ADJUSTMENT OF GAS PRESSURE TO SIVE OR INSUFFICIENT GAS PRESSURE TO ALL EQUIPMENT PIECES. 10.PROVIDE FLEX HOSE CONNECTION TO ALL INDOOR APPLIANCES NOT SUPPLIED WITH THE EQUIPMENT PIECE BY THE OWNER OR EQUIPMENT PROVIDER. 11. THREADED JOINTS SHALL BE MADE WITH A MIXTURE OF GRAPHITE AND OIL APPLIED TO MALE THREADS ONLY. AFTER CUTTING AND PRIOR TO THREADING, PIPE SHALL BE REAMED AND SHALL HAVE BURRS REMOVED 12. WELDED JOINTS SHALL BE FUSION WELDED IN ACCORDANCE WITH ANSI B31, SECTION 6. 13.FLANGED JOINTS SHALL BE FACED TRUE, PROVIDED WITH GASKET AND MADE SQUARE AND TIGHT. 14.BRAZED JOINTS SHALL BE MADE UP USING BCUP-5 BRAZING ALLOY WITH A COMPATIBLE FLUX. 15. ALL STEEL FITTINGS AND JOINTS IN UNDERGROUND PIPING SHALL BE FIELD-COATED USING A PRIMER AND FLEXIBLE POLYETHYLENE TAPE AND THE SAME MANUFACTURER AS THE PIPE COATING. DAMAGED COATING SHALL BE REPAIRED WITH PRIMER AND TAPE AS SPECIFIED FOR FITTINGS AND JOINTS. D. SANITARY WASTE &VENT, STORM, GREASE WASTE UNDERGROUND SANITARY, WASTE AND VENT PIPING, AND STORM DRAINAGE PIPING, AND INDOOR PIPING ABOVE 8" IN SIZE SHALL BE SERVICE WEIGHT (COATED) CAST IRON SOIL PIPE AND FITTINGS, ASTM A74, WITH GASKET HUB AND SPIGOT JOINTS, ASTM C564. GASKET JOINTS FOR CAST IRON PIPE SHALL BE MADE WITH LUBRICATED NEOPRENE COMPRESSION GASKETS. PVC SHALL BE PERMITTED IF ALLOWED BY LOCAL CODE. UNDERGROUND PVC PIPING SHALL BE SCHEDULE 40 PVC WITH SOLVENT WELD JOINTS MEETING ASTM D-1785 AND ASTM D-2665. 2. ABOVE-GROUND SANITARY, WASTE AND VENT AND STORM DRAINAGE PIPING 8" AND SMALLER SHALL BE SERVICE WEIGHT CAST IRON SOIL PIPE AND FITTINGS, ASTM A888 AND CISPI 301, WITH STANDARD NO-HUB COUPLINGS. PVC SHALL BE PERMITTED OUTSIDE OF RETURN AIR PLENUMS WITH OWNER APPROVAL. NEOPRENE RUBBER GASKET AND MINIMUM 24 GAUGE TYPE 304 STAINLESS STEEL SHIELD AND FOUR STAINLESS STEEL BANDS FOR SIZES 1 1/2" THROUGH 4". SIX BANDS MINIMUM FOR SIZED 5" AND LARGER, 6" PIPE AND UP: NEOPRENE FLASTOMERIC GASKET AND SERIES 300 STAINLESS STEEL SHIFLD AND MULTIPLE DRAW BANDS AND SCREW CLAMPS CONFORMING TO ASTM C-564 AND CISPL STANDARD 310-90. ABOVE-GROUND SANITARY PIPING. LOCATED OUTSIDE OF RETURN AIR PLENUMS MAY ALSO BE SCHEDULE 40 PVC WITH SOLVENT WELD JOINTS MEETING ASTM D-1785 AND ASTM D-2665 PER OWNER APPROVAL 3. ALL WASTE PIPING 1" IN SIZE AND SMALLER SHALL BE TYPE "L" HARD DRAWN COPPER TUBING, ASTM B88 WITH SOLDERED JOINTS AND WROUGHT COPPER ANSI B16 22 OR CAST BRONZE ANSI B16 18 SOCKET FITTINGS. SOLDERED JOINTS FOR TYPE 'L' COPPER TUBING AND CAST DMV BRONZE PIPE SHALL BE MADE WITH 95-5 TIN-ANTIMONY (NO LEAD) SOLDER AND COMPATIBLE FLUX.

/IDE BY 1/4 INCH THICK FOAM RUBBER GASKET FACTORY APPLIED TO UNDERSIDE
URB CAP. AN INTERNAL POWER WIRING POST SHALL EXTEND FROM MOTOR
THROUGH CURB CAP. WHERE WIRING POST PENETRATES HOUSING AND CURB CAP,
IALL BE SEALED.
L BE FORWARD CURVED OR BACKWARD INCLINED CENTRIFUGAL TYPE OF ALUMINUM
FAN WHEEL SHALL BE STATICALLY AND DYNAMICALLY BALANCED. ON BELT DRIVE
ARINGS SHALL BE SELF-ALIGNING, PILLOW BLOCK BALL TYPE. BEARINGS NOT
EALED AND LUBRICATED SHALL HAVE EXTENDED GREASE FITTINGS FOR EASY ACCESS.
VE SHALL BE LOCATED IN A VENTILATED COMPARTMENT OUTSIDE OF THE AIR STREAM.
FACTORY INSTALLED DISCONNECT SWITCH PRE-WIRED TO MOTOR AND MOUNTED
COMPARTMENT. MOTOR AND DRIVE SHALL BE MOUNTED ON VIBRATION ISOLATORS.
T FANS SHALL BE UL 762 RATED AND PROVIDED WITH POWER/CONTROL WIRING
HOUSING AND CURB. FANS SHALL BE MOUNTED WITH 18" MINIMUM HEIGHT FROM
OF /FLASHING AND DISCHARGE HEIGHT A MINIMUM OF 40" ABOVE ROOF SURFACE.

CT CAN BE MOUNTED 20" ABOVE ROOF. PROVIDE NON-VENTED CURB FOR FIRE-WRAP FAN DISCHARGE 10' FROM ANY INTAKE OR BUILDING OPENING OR 2' ABOVE SAID

LINE CENTRIFUGAL TYPE WITH SQUARE OR RECTANGULAR HOUSING AND BACKDRAFT SHALL BE DESIGNED FOR HORIZONTAL OR VERTICAL MOUNTING. LAYOUT BASIS IS

- HALL BE STEEL WITH FACTORY APPLIED BAKED ENAMEL PAINT ON EXTERIOR. HOUSING NALLY INSULATED WITH 1/2" THICK (MINIMUM) COATED FIBERGLASS INSULATION.
- LL COMPLY WITH ASTM F84 AND NEPA 255 FOR MAXIMUM RATINGS OF FLAME OF 25 AND SMOKE DEVELOPED RATING OF 50. HOUSING SHALL HAVE MOUNTING L BE BACKWARD INCLINED CENTRIFUGAL TYPE OF ALUMINUM CONSTRUCTION. ON 5, SHAFT BEARINGS SHALL BE SELF-ALIGNING, PILLOW BLOCK BALL TYPE. BEARINGS
- ITLY LUBRICATED AND SEALED SHALL HAVE EXTENDED GREASE FITTINGS. IVE SHALL BE MOUNTED ON VIBRATION ISOLATORS. FAN SHALL HAVE A FACTORY INNECT SWITCH MOUNTED ON EXTERIOR OF HOUSING AND PRE-WIRED TO FAN NUM GRILLE OPTION FOR CEILING MOUNTED FANS. FANS SHALL BE ROUTED TO ROOF
- WATER SERVICE PIPING 3" IN SIZE AND LARGER SHALL BE CLASS 50 DUCTILE IRON PIPE.

- SCREWED BRACKET (WOOD STRUCTURE). PROVIDE HANGER OUTSIDE OF INSULATION WITH RIGID FOAM GLASS INSULATION SECTION AT HANGERS. PROVIDE 16 GAUGE PIPING SADDLE AT EACH HANGER. NO WELDING OR CUTTING OF STEEL STRUCTURAL MEMBERS SHALL BE PERMITTED. LAYOUT BASIS SHALL BE ANVIL 260. 2. PROVIDE SEISMIC HANGERS PER DRAWING REQUIREMENTS.
- 3. HANGER INSTALLATION FOR HOT WATER PIPING SHALL NOT PREVENT MOVEMENT FOR PIPING EXPANSION. 4. SPACING AS FOLLOWS:
- STEEL PIPE: 1/2" TO 1-1/4" 7' ; 1-1/2" TO 2-1/2" 9' ; 3"&4" 12' ; 6"&8" 17' ; 10" AND UP- 22' <u>COPPER PIPE:</u> 1/2" TO 1" - 5' ; 1-1/4" TO 2" - 7' ; 2-1/2" AND UP - 9'
- CAST IRON: 10' WITH SUPPORT AT EACH JOINT, TAKEOFF, AND FITTING.
- PVC DRAINAGE (140 DEG F SERVICE UP TO 6"- 80 DEG F ABOVE 6"): UP TO 3" 3' ; 4" TO 6" 4' ; ABOVE 6" -
- PVC VENT (80 DEG F SERVICE): UP TO 1-1/2" 5' ; 2"-3" 6' ; ABOVE 3" 7'
- VII. VALVES/PUMPS
- VALVES SHALL HAVE THE NAME OR TRADEMARK OF THE MANUFACTURER AND THE WORKING PRESSURE STAMPED OR CAST ON THE VALVE BODY.
- 2. ALL VALVES IN EACH SYSTEM, EXCEPT FOR SPECIAL TYPES SHALL BE THE PRODUCT OF A SINGLE MANUFACTURER.
- 3. ALL VALVES REQUIRING PACKING SHALL BE DESIGNED AND CONSTRUCTED SUCH THAT THEY CAN BE REPACKED UNDER PRESSURE.
- 4. VALVE HAND WHEELS/ ACTUATOR SHALL BE MALLEABLE IRON EXCEPT WHERE SPECIFIED OTHERWIS 5. ALL VALVES INSTALLED IN HORIZONTAL LINES SHALL BE INSTALLED WITH THE STEMS HORIZONTAL OR ABOVE. VALVE ACTUATOR SHALL BE ORIENTED, WHEN INSTALLED, TO PROVIDE MAXIMUM ACCESSIBILITY FOR OPERATION.
- 6. PROVIDE ACCESS PANELS FOR VALVES LOCATED IN WALLS OR ABOVE HARD CEILINGS. B. VALVES FOR HYDRONIC / DOMESTIC WATER SYSTEM 1. BALL VALVES (FOR PIPING 3" AND SMALLER) SHALL HAVE BRONZE BODY. STAINLESS STEEL BALL, LEVER
- HANDLE, FOR SYSTEMS UP TO 125 PSIG. GATE VALVES SHALL NOT BE PERMITTED FOR PIPES 3" AND SMALLER, VALVE LAYOUT BASIS SHALL BE WATTS B6000-SS 2. GATE VALVES (FOR DOMESTIC PIPING 4" IN SIZE AND LARGER): VALVE SHALL HAVE IRON BODY, BRONZE TRIM, NON-RISING STEM, SOLID WEDGE AND FLANGED ENDS FOR 200 POUND W.O.G. LAYOUT BASIS
- FOR VALVE SHALL BE NIBCO F-619. 3. BUTTERFLY VALVES (FOR HYDRONIC PIPING 4" AND LARGER): VALVE SHALL HAVE DUCTILE IRON BODY, EXTENDED NECK, GEOMETRIC DRIVE MOLDED-IN SEAT LINER, EPDM LINER AND ALUMINUM BRONZE DISC - INSTALL BETWEEN STD. ANSI CLASS 125/150 FLANGES - CONFORMING TO
- MSS-SP67/MSS-SP25/API-609 LAYOUT BASIS SHALL BE NIBCO WD 2000 4. CHECK VALVES (4" IN SIZE AND LARGER): VALVE SHALL BE HORIZONTAL SWING TYPE WITH IRON BODY.
- BRONZE TRIM AND FLANGED ENDS FOR 200 POUND W.O.G. VALVE LAYOUT BASIS SHALL BE NIBCO F-918-B 5. CHECK VALVES (3" IN SIZE AND SMALLER): VALVE SHALL BE HORIZONTAL SWING TYPE WITH BRONZE
- BODY, COMPOSITION DISC AND SOLDER ENDS FOR 200 POUND W.O.G. LAYOUT BASIS SHALL BE NIBCO 6. HOSE END DRAIN VALVES: VALVE SHALL BE 3/4" IN SIZE WITH BRONZE BODY, NON-RISING STEM, SOLID WEDGE, THREADED INLET AND HOSE OUTLET WITH CAP AND CHAIN FOR 200 POUND W.O.G.
- 7. UNDERGROUND GATE VALVES AND VALVE BOXES: GATE VALVES (4" IN SIZE AND LARGER) SHALL BE AWWA APPROVED WITH IRON BODY, BRONZE TRIM, NON-RISING STEM, PARALLEL SEAT DOUBLE DISC. SQUARE OPERATING NUT AND MECHANICAL JOINT ENDS FOR 200 POUND W.W.P. VALVE BOXES SHALL BE PROVIDED OVER EACH UNDERGROUND GATE VALVE. VALVE BOXES SHALL BE ADJUSTABLE CAST IRON ROADWAY TYPE WITH BELLED LOWER SECTION AND REMOVABLE LID AT GRADE. LID SHALL BE LABELED "WATER" AND BOXES NOT IN PAVED AREAS SHALL BE SET IN A 12" X 12" X 6" CONCRETE PAD. VALVE BOXES LAYOUT BASIS SHALL BE MUELLER H-10360 PROVIDE ONE T-WRENCH FOR EACH SIZE OPERATING NUT.
- C. VALVES FOR NATURAL GAS SYSTE
- PLUG VALVES (3" IN SIZE AND LARGER): VALVES SHALL BE THE SEMI-STEEL TYPE WITH CAST IRON BODY, LUBRICATED CAST IRON PLUG, FLANGED ENDS AND WRENCH OPERATED FOR 175 POUND W.O.G. VALVES LAYOUT BASIS SHALL BE WALWORTH1797F 2. PLUG VALVES (2 1/2" IN SIZE AND SMALLER): VALVES SHALL HAVE BRONZE BODY AND PLUG, THREADED
- ENDS AND SQUARE HEAD FOR 175 POUND W.O.G. VALVE LAYOUT BASIS SHALL BE: WALWORTH NO. 3. BALL VALVES (1/2", 3/4", AND 1" UP TO 1/2 PSI FOR APPLIANCE CONNECTION): VALVE SHALL BE LEVER HANDLE, 600 PSI CWP RATED - 1/2 PSI FOR INDOOR APPLIANCE CONNECTIONS PER ANSI Z21.15 & CGA 9.1A. LAYOUT BASIS SHALL BE NIBCO GB1A.
- 4. LUBRICATED PLUG VALVES SHALL BE LUBRICATED AT THE FACTORY AND SEALANT SHALL BE DESIGNED FOR NATURAL GAS. PROVIDE SIX (6) STICKS OR TUBES OF SEALANT UTILIZED AND TURN SUCH OVER TO THE OWNER. PROVIDE ONE (1) VALVE WRENCH FOR EACH SIZE AND TYPE OF VALVE HEAD AND TURN SUCH WRENCHES OVER TO THE OWNER
- 5. PRESSURE REGULATING VALVE: VALVE SHALL HAVE INTERCHANGEABLE ALUMINUM ORIFICE, MOLDED DEEP CONVOLUTION DIAPHRAGM WITH O-RING SEAL, PLATED STEEL DIAPHRAGM PLATE, STAINLESS STEEL LEVER PIN, ONE PIECE MOLDED BUNA-N VALVE SEAT, DIE CAST ZINC VALVE STEM, DELRINFI VENT VALVE WITH BUNA-N SEAT, SPRING LOADED INTERNAL RELIEF VALVE ASSEMBLY, 1" AND 3/4" THREADED VENT WITH STAINLESS STEEL SCREEN, FIBERGLASS REINFORCED POLETHELYNE SEAL CAP WITH INTEGRAL RELIEF VALVE STOP, AND FIELD INTERCHANGEABLE ADJUSTMENT SPRING, CSA 6-18
- APPROVED. PROVIDE THREE SPRINGS AT RATED OUTLET PRESSURE PLUS SPRING FOR NEXT HIGHES AND LOWEST PRESSURE RATING FOR BALANCING PURPOSES. PROVIDE ALL VENTING REQUIRED BY THE MANUFACTURER FOR ALL INDOOR MOUNTED REGULATORS. LAYOUT BASIS SHALL BE ACTARIS B42N. 6. CONTRACTOR SHALL PROVIDE REGULATORS AT ALL APPLIANCE CONNECTIONS REGARDLESS OF SUPPLY PRESSURE UNLESS THE REQUIRED EQUIPMENT DELIVERY PRESSURE CAN BE DELIVERED WITHOUT THE USE OF A REGULATOR.
- 7. CONTRACTOR TO COORDINATE INLET/OUTLET PRESSURES WITH DRAWINGS AND GAS EQUIPMENT MANUFACTURERS REQUIREMENTS. 8. INSTALL ALL REGULATORS CLEAR OF ANY EQUIPMENT ACCESS SUCH THAT VALVE SPRINGS AND ORIFICE CAN BE ACCESSED WITHOUT REMOVING VALVE.
- D. <u>CLOSE-COUPLED, IN-LINE CENTRIFUGAL PUMPS</u> DESCRIPTION: FACTORY-ASSEMBLED AND -TESTED, CENTRIFUGAL, OVERHUNG-IMPELLER, CLOSE-COUPLED, IN-LINE PUMP; DESIGNED FOR INSTALLATION WITH PUMP AND MOTOR SHAFTS MOUNTED HORIZONTALLY OR VERTICALLY, PUMP SHALL BE SUPPORTED INDEPENDENT OF PIPING. INSTALL A CHECK VALVE AT ALL PUMP OUTLETS. MOTOR: SINGLE SPEED, AND RIGIDLY MOUNTED TO PUMP CASING. LAYOUT BASIS FOR HOT WATER RECIRCULATION PUMPS SHALL BE GRUNDFOS UP15-18 OR UP-15-29 FOR PIPING RUNS IN EXCESS OF 100'.
- 2. CASING: RADIALLY SPLIT, CAST IRON, WITH REPLACEABLE BRONZE WEAR RINGS, THREADED GAGE TAPPINGS AT INLET AND OUTLET, AND FLANGED OR THREADED (HOT WATER RECIRCULATION PUMPS) CONNECTIONS. 3. IMPELLER: ASTM B 584, CAST BRONZE; STATICALLY AND DYNAMICALLY BALANCED, KEYED TO SHAFT,
- AND SECURED WITH A LOCKING CAP SCREW. TRIM IMPELLER TO MATCH SPECIFIED PERFORMANCE. 4. PUMP SHAFT: STAINLESS STEEL. 5. IN SUBPARAGRAPH BELOW, SELECT FIRST OPTION FOR TEMPERATURE RATING OF 225 DEG F (107 DEG
- C): SELECT SECOND OPTION FOR 250 DEG F (121 DEG C) 6. MECHANICAL SEAL: CARBON ROTATING RING AGAINST A CERAMIC SEAT HELD BY A STAINLESS-STEEL SPRING, AND EPT BELLOWS AND GASKET. INCLUDE WATER SLINGER ON SHAFT BETWEEN MOTOR AND
- 7. PACKING SEAL: STUFFING BOX, WITH A MINIMUM OF FOUR RINGS OF GRAPHITE-IMPREGNATED BRAIDED YARN WITH BRONZE LANTERN RING BETWEEN CENTER TWO GRAPHITE RINGS, AND BRONZE
- PACKING GLAND. 8. PUMP BEARINGS: PERMANENTLY LUBRICATED BALL BEARINGS UP THROUGH 5 HP. LARGER MOTORS HAVE GREASE-LUBRICATED BALL BEARINGS.

- 1. PROVIDE CLEVIS SUPPORTS WITH BEAM CLAMP, CONCRETE ANCHORS (CONCRETE STRUCTURE),

MECHANICAL GENERAL NOTES:

- 1. COORDINATE LOCATIONS WHERE NEW DUCTWORK CROSSES EXISTING CONDUITS, ETC. PROVIDE OFFSETS AS REQUIRED.
- INSTALL FIRE DAMPERS AS REQUIRED WHENEVER NEW OR EXISTING DUCTWORK PASSES THROUGH FIRE RATED WALLS OR FLOORS. RETURN AIR OPENING IN FIRE RATED WALLS SHALL BE EQUIPPED WITH FIRE DAMPERS. SEE ARCH. DRAWINGS FOR RATED WALLS.
- CONTRACTOR TO VERIFY FIELD CONDITIONS PRIOR TO BEGINNING WORK. NOTIFY ENGINEER WITH ANY DISCREPANCIES BETWEEN DRAWINGS AND EXISTING CONDITIONS COORDINATE EXACT LOCATIONS OF EQUIPMENT ON ROOF. PROVIDE DUCTED OUTSIDE AIR INTAKE DUCTS TO MAINTAIN 10'-0" CLEARANCE FROM EXHAUST OR FLUE
- DISCHARGE OPENINGS COORDINATE ALL WORK WITH ALL OTHER TRADES, RESOLVE CONFLICT PRIOR TO INSTALLATION OF EQUIPMENT. COORDINATE NEW DIFFUSER LOCATIONS WITH LIGHT FIXTURES, SPRINKLER HEADS AND PIPING, CEILING GRID LOCATION PRIOR TO INSTALLATION.
- 6. ALL NEW HVAC EQUIPMENT INCLUDING FANS, AND RTU SHALL BE PROPERLY SUPPORTED FROM THE STRUCTURE. MOUNT ALL ROOFTOP UNITS ON CURBS. PROVIDE VIBRATION ISOLATORS ON ALL EQUIPMENT. ALL EQUIPMENT SHALL BE APPROVED FOR ITS SPECIFIC INTENDED INSTALLATION AND OPERATION.
- DIFFUSER PER SCHEDULE. EACH SHALL BE PROVIDED WITH BALANCING DEVICE AT DIFFUSER RUNOUT WHERE POSSIBLE AND DEVICE FACE-MOUNTED DAMPER OTHERWISE.
- THERMOSTATS FOR NEW RTU'S SHALL BE PROGRAMMABLE STYLE BY HONEYWELL. SUBMIT SHOP DRAWINGS AND VERIFY MODEL NUMBER PRIOR TO PURCHASE. THERMOSTATS MOUNTED AT 48" AFF
- PROVIDE ROOF TOP AIR HANDLING UNIT AS INDICATED ON DRAWINGS. VERIFY EXACT LOCATION WITH ROOF PLAN AND STRUCTURAL DRAWINGS. PROVIDE GAS PIPING CONNECTION AND COORDINATE ELECTRICAL CONNECTION. MOUNT ALL UNITS ON 14" ROOF CURB.
- 10. PROVIDE NEW GAS SERVICE FROM NEW METER UP TO RTU'S AND EQUIPMENT GAS PIPING TO BE SCHEDULE 40 BLACK STEEL. PROVIDE METER AND PIPING CONNECTION TO ALL AHU'S DUCT FURNACES, HOT WATER HEATER, MAKE UP AIR UNITS AND KITCHEN COOKING EQUIPMENT, GAS PIPING FOR KITCHEN COOKING EQUIPMENT TO BE EQUIPPED WITH A SOLENOID SHUT-OFF VALVES CONNECTED TO HOOD FIRE SUPPRESSION SYSTEM DUCTWORK FOR GRILL HOOD (TYPE I) SHALL BE WELDED 16 GAGE BLACK IRON, OR STAINLESS STEEL.
- 11. ROOFTOP UNIT FANS AND OUTDOOR AIR DAMPERS SHALL BE INTERLOCKED WITH EXHAUST FANS.
- 12. ALL MECHANICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LOCALLY ADOPTED MECHANICAL CODE WITH ALL CURRENTLY APPLICABLE ERRATA AND AMENDMENTS
- 13. CONTRACTOR SHALL COORDINATE MECHANICAL WORK WITH ALL OTHER TRADES PRIOR TO FABRICATION AND INSTALLATION. DO NOT SCALE FROM DRAWINGS FOR ANY EXACT DIMENSION. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF DOORS, WINDOWS, AIR DISTRIBUTION DEVICES.
- 14. COORDINATE THE SIZE OF ALL WALL OPENINGS, ROOF OPENINGS AND EQUIPMENT PADS WITH ACTUAL EQUIPMENT PURCHASED. ALL MECHANICAL ITEMS EXTENDING THRU WALL & ROOF SHALL BE FLASHED AND COUNTER FLASHED. ALL ROOF CURBS FOR MECHANICAL EQUIPMENT SHALL BE BY MECHANICAL CONTRACTOR.
- 15. ROUTE FULL SIZE CONDENSATE DRAINS WITH P-TRAP AND VENT ON OUTLET SIDE. PIPE
- 12" AWAY FROM UNIT. SPILL ON CONCRETE SPLASH BLOCK WHERE ROUTED TO ROOF. 16. DUCT SMOKE DETECTORS IN SUPPLIES AND RETURNS PER LOCALLY ADOPTED CODE
- SHALL BE FURNISHED & WIRED BY DIV 16, INSTALLED BY DIV. 15. 17. ALL DUCTWORK SIZES ARE INSIDE CLEAR FREE AREA. INCREASE SIZE WHERE
- REQUIRED TO INCLUDE INTERNAL INSUALTION 18. MOTOR STARTERS AND DISCONNECTS SHALL BE FURNISHED UNDER DIVISION 15 AND
- INSTALLED BY THE ELECTRICAL CONTRACTOR. COORDINATE ELECTRICAL CHARACTERISTICS OF HVAC EQUIPMENT AND CONTROL SYSTEM REQUIREMENTS (VOLTAGE/PHASE, SIGNAL TYPE, AUXILIARY CONTACTS ETC...) PRIOR TO PURCHASING. 19. CONTRACTOR SHALL NOTE THAT THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT INDICATE ALL OFFSETS, TRANSITIONS, OR OTHER APPURTENANCES REQUIRED FOR A COMPLETE HVAC SYSTEM. PROVIDE ALL EQUIPMENT NECESSARY FOR A
- COMPLETE SYSTEM. 20. ALL PIPING AND DUCTWORK SHALL RUN CONTINUOUSLY THROUGH FLOORS, ROOFS AND PARTITIONS. ENGINEER WILL REVIEW DUCT/PIPING SHOP DRAWINGS AT THE REQUEST OF THE CONTRACTOR. NO EXHAUST HOOD SHALL BE LEFT OPEN INTO
- BUILDING SPACE. 21. THIS CONTRACTOR SHALL PROVIDE & INSTALL ALL MISCELLANEOUS STEEL AS
- REQUIRED FOR INSTALLATION OF ALL MECHANICAL ITEMS. 22. ALL DIFFUSERS LOCATED IN CEILINGS WITH A NON-RETURN AIR PLENUM SHALL BE
- INSULATED AIR TIGHT WITH FOIL FACES 1 INCH FIBERGLASS INSULATION. 23. CONTRACTOR SHALL PURCHASE AIR FILTERS FROM THE OWNER-APPROVED AIR FILTER VENDOR WHERE OWNER HAS A SUPPLIER. ALL FILTERS SHALL BE REPLACED IMMEDIATELY PRIOR TO SUBSTANTIAL COMPLETION.
- 24. CONTRACTOR SHALL SUBMIT THE TAB AGENCY, 2 WEEKS PRIOR TO SCHEDULE TESTING AND BALANCING OF THE SYSTEM, AN UP-TO-DATE SET OF HVAC DRAWINGS, AND RELATED PRODUCT DATASUBMITTALS SUCH AS HVAC UNITS, FANS, DIFFUSERS, and CONTROL DIAGRAMS.
- 25. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT A COMPLETE MECHANICAL SYSTEM IS PROVIDED WITH ALL NECESSARY EQUIPMENT AND CONTROLS.
- REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL SYSTEM REQUIREMENTS. TESTING AND BALANCE: CONTRACTOR SHALL CONTRACT AN INDEPENDENT TESTING 27. AND BALANCING COMPANY TO TEST THE EQUIPMENT AND ADJUST THE HVAC SYSTEM TO OBTAIN THE DESIGN AIR FLOWS AS SHOWN ON PLANS. THE TAB AGENCY SHALL BE
- NEBB CERTIFIED AND SHALL SUBMIT TAB REPORT AS REQUIRED BY THE NEBB. 28. ALL SUPPLY, RETURN AND OUTSIDE AIR DUCTWORK SHALL BE INSULATED. DUCT LINER SHALL BE 1-1/2" ELASTOMERIC RUBBER (ARMAFLEX OR EQ.); EXTERNAL INSULATION SHALL BE 2" THICK, 1 LB.CU.FT. DENSITY, FIBERGLASS TYPE, FOIL-FACED DUCT WRAP, COMMERCIAL GRADE. ALL EXPOSED DUCTWORK SHALL BE LINED. R-VALUE SHALL BE ADJUSTED PER LOCAL ENERGY CODE REQUIREMENTS. EXPOSED DUCT SHALL BE PROVIDED WITH APINT GRIP FINISH.
- 29. DUCTWORK SHALL BE GALVANIZED STEEL FABRICATED PER SMACNA STANDARDS. VOLUME DAMPERS SHALL BE INSTALLED AT ALL DUCT BRANCHES AND DIFFUSER TAKE OFFS TO BE ABLE TO BALANCE THE AIR SYSTEM. DUCT SHALL BE HUNG WITH 1" WIDE DUCT STRAPS
- 30. EACH AC UNIT SHALL BE CONTROLLED WITH A WALL MOUNTED 7-DAY PROGRAMMABLE THERMOSTAT WITH AUTO CHANGE OVER TO PROVIDE OCCUPIED/UNOCCUPIED MODES OF OPERATION. PROVIDE CLEAR PLASTIC COVER WITH LOCKING KEY ALL THERMOSTATS.
- 31. ALL PIPING SHALL BE INSULATED COMPLETELY AIR TIGHT WITH NO EXPOSED INSULATION MATERIAL. PROVIDE INSULATION OUTSIDE OF PIPING HANGERS OR SUPPORTS WITH RIGID INSULATION AND PIPING SADDLES AT SUPPORTS SUFFICIENT TO PREVENT DEFORMATION OF INSULATION.
- PROVIDE SIESMIC FITTINGS AND SUPPORTS AS REQUIRED BY THE LOCAL BUILDING 32. CODE AND SIESMIC CHARACTERISTICS FOR THE CONSTRUCTION LOCATION.

DEVICE NECK SIZE TO MATCH RUN OUT

AIR TO 45 DEGREES LEFT

(3) FOR SUPPLY REGISTERS 16'-0" & HIGHER, ADJUST THROW OF HORIZONTAL BLADES FOR 1/2 OF AIR STRAIGHT AND 1/2 OF AIR TO 22.5 DEGREES DOWN.

SIDEWALL DIFFUSER DETAIL

SEE PLANS FOR AIRFLOW DIRECTION.

SLOT DIFFUSER DETAIL

CABLE OPERATED DAMPER

5020 CC

DOWNFLOW ROOF FAN DETAIL

YOUNG REGULATOR MODEL

-EXTRACTOR

-DUCT MOUNTED SUPPLY DIFFUSER

DIFFUSER / RETURN DETAIL

CEILING FAN DETAIL

2								No.							e7
							MIN		FAN	COC	OLING	HEAT	ING		
			NOM	UNIT	QTY	FAN	OA	FAN	MOTOR	TOTAL	SENSIBLE	HEAT PUMP	AUX HEA	THEATING	VOLTS/
MARK	SERVES	MODEL	TONS	CONFIGURATION	COMPR.	CFM	CFM	ESP	HP	MBH	MBH	MBH	KW	STAGES	PHASE
RTU-1	ADMIN	TRANE WSC060	5	DOWNFLOW	1	1750	250	0.5	STD	60	45	30	13	2	208/3
RTU-2	ENTRY AREA	TRANE W SC036	3	DOWNFLOW	1	1050	150	0.5	STD	36	27	18	9	2	208/3
RTU-3	STAFF	TRANE WSC036	3	DOWNFLOW	1	1050	150	0.5	STD	36	27	18	9	2	208/3
RTU-4	EXAM ROOMS	TRANE W SC060	5	DOWNFLOW	1	1750	250	0.5	STD	60	45	30	13	2	208/3
NOTE 1: INDOOR CO	IL EAT = 80/67 COOLING; 60 H	EATING	0												
NOTE 2 OUTDOOR (COILEAT = 95 FOR COOLING,	17 FOR HEATING.													
NOTE 3: ESP DOES N	NOT INCLUDE FILTERS . FAN F	PERFORMANCE FOR DI	RECT DR	IVE UNITS IS AT H	IIGH SPEED.										
NOTE 4: PROVIDE HI	NGED ACCESS DOORS, UNIT	MOUNTED DISCONNE	CT AND U	NPOWERED RECE	EPTACLE, CON	DENSER	COIL GU	ARDS,	STAINLES	SS STEEL	HEAT EXC	HANGER.			
NOTE 5: RTU-1,4: EC	ONOMIZER WITH COMP ENTH	ALPY CONTROL MODU	JLE. POW	ER EXHAUST FOR		E 2000 CF	M, BARO	METRIC	RELIEF	FOR 2000	CFM AND	LOWER.			
NOTE 6: PROVIDE M	ANUFACTURER ACCESSORY	ROOF CURB. CURB AD.	APTORS	SHALL REQUIRE S	SPECIFIC ENG	INEER AF	PROVAL.								
NOTE 7: PROVIDE 7	DAY PROGRAMMABLE THER	MOSTAT WITH REMOTE	E SENSOR	٦.											
NOTE & COORDINAT	E VOLTAGES WITH ELECTRIC	CAL DRAWINGS PRIOR	TO ORDE	RING SUBMITTAI	S SHALL BE F	FOURE	D TO HAV		TRICAL F	NG APP	BOVAL				

EXHAUST/VENTILATION FAN SCHEDULE

			VOLTS/	FAN		
RPM	SONES	DRIVE	PHASE	INTERLOCK	NOTES	
1,100	4.0	DIRECT	120/1	WALL SWITCH	ALL	
1,100	6.0	DIRECT	120/1	WALL SWITCH	ALL	
Y ROOF	CAP AT	SIZE INDIC	ATED ON DR	AWINGS.		
					F	NΓ

PACKAGED ROOFTOP UNIT SCHEDULE

AIR DEVICE SCHEDULE

					DESIGN					
MARK	LAYOUT BASIS	TYPE	FACE SIZE	MOUNTING	FINISH	MATERIAL	NOTES			
S-1	TITUS OMNI	PLAQUE-FACE CEILING DIFFUSER	24X24/12X12	T-BAR	WHITE	ALUMINUM	1,2,4			
S-2	TITUS 301	SIDEWALL DIFFUSER	14X8	DUCT	PRIMED	ALUMINUM	3,5			
S-3	TITUS ML-37	3 FT 4 SLOT LINEAR DIFFUSER	APPX 36X8	GYP	WHITE	ALUMINUM	1,2,4			
R-1	TITUS 50 F	1/2" EGGCRATE RETURN	24X24/12X12	T-BAR	WHITE	ALUMINUM	1,2,4			
R-2	TITUS 300-S	SNGL DEFLECTION SIDEWALL RETURN	PER PLANS	WALL	PRIMED	ALUMINUM	4			
NOTES										
1	1 NECK SIZE TO MATCH DUCT RUN OUT SIZE AS SHOWN ON MECHANICAL PLANS.									
2	2 PROVIDE MANUFACTURER'S ACCESSORY INSULATED PLENUM WITH RUN OUT SIZED CONNECTION.									
3	.BALANCING DEV	VICE AT AIR DEVICE FACE								
4	BALANCING DE	VICE AT RUN OUT TAKEOFF								
5	5. DIVERT BLADES TO 45 DEGREE LATERALLY AND 35 DEGREES BELOW HORIZONTAL.									

NOTE: REFER TO GENERAL NOTE 4, CEILING THIS SHEET FOR CONDENSATE DRAIN REQUIREMENTS.

RTU INSTALLATION DETAIL

CABLE OPERATED DAMPER DETAIL

M002 FOR CONSTRUCTION

PROCDURE UTILTIES PLAN

1/4" = 1'-0"

PLUMBING GENERAL NOTES

- 1. THE EQUIPMENT ROUGH-IN ITEMS AND THEIR DIMENSIONED LOCATIONS FOR ALL CONNECTIONS ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE. IN SOME INSTANCES THE OWNER OR SUPPLIER MAY MAKE SUBSTITUTIONS OR THE EQUIPMENT ITEMS MAY VARY FROM WHAT IS SHOWN. THEREFORE, THESE ITEMS AND DIMENSIONS SHALL BE VERIFIED WITH THE EQUIPMENT SUPPLIER, OWNER AND/OR EQUIPMENT ROUGH-IN DRAWINGS. THE ARCHITECT/ENGINEER SHALL BE IMMEDIATELY NOTIFIED, PRIOR TO CONSTRUCTION, OF ANY DEVIATIONS FROM WHAT IS SHOWN OR IMPLIED ON THESE DRAWINGS. FAILURE OF THE APPROPRIATE CONTRACTOR TO VERIFY ROUGH-INS OR THEIR LOCATIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT RELOCATION AND/OR ADDITIONAL ROUGH-INS DIRECTLY UPON THE CONTRACTOR.
- 2. CONTRACTOR SHALL SUPPLY TO THE ARCHITECT SIX COPIES OF SHOP DRAWINGS FOR APPROVAL SO THE QUALITY OF INTENDED MATERIALS OR 9. THE WATER PIPING SYSTEM SHALL BE FLUSHED AND STERILIZED IN EQUIPMENT CAN BE REVIEWED BEFORE INSTALLATION. THERE WILL BE NO DRAW UNTIL SHOP DRAWINGS HAVE BEEN SUBMITTED AND REVIEWED BY ARCHITECT/ENGINEER.
- DO NOT SCALE THIS DRAWING. REFER TO ARCHITECTURAL FLOOR PLANS FOR BUILDING DIMENSIONS.
- 4. THE SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED HIMSELF WITH THE PLANS AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO THE PROPOSAL FOR MATERIALS AND LABOR BECAUSE OF DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED, IF THEY COULD HAVE BEEN FORESEEN HAD PROPER EXAMINATION BEEN MADE.
- 5. VERIFY SERVICE POINTS AND METERING LOCATIONS FOR PROJECT WITH LOCAL UTILITIES AND/OR LANDLORD (DOMESTIC WATER, SANITARY SEWER, GAS, ETC.)
- 6. THE CONTRACTOR SHALL COOPERATE FULLY AMONG THE TRADES. 7. ALL ROOF PENETRATIONS FOR ROOF DRAINS AND PLUMBING/GAS/ REFRIGERANT PIPING SHALL BE MADE IN ACCORDANCE WITH ROOF SYSTEM MANUFACTURER'S GUIDELINES. COORDINATE WITH ARCHITECTURAL 13. FURNISH & INSTALL 1/2" (MIN.) FIBERGLASS INSULATION WITH DETAILS AND/OR LANDLORD FOR ROOF SYSTEM USED.
- 14. WATER PIPE AND FITTINGS SHALL BE COPPER OR BRASS PER CODE. ABOVE GROUND SHALL BE TYPE L RIGID COPPER. BELOW GROUND SHALL BE TYPE K SOFT COPPER WITH NO JOINTS PERMITTED BELOW GROUND. ALL JOINTS SHALL BE MADE WITH 95-5 SOLDER OR EQUAL.
- 15. BARRIER FREE LAVATORY P-TRAP AND ANGLE STOP ASSEMBLIES SHALL BE INSULATED WITH TRAP WRAP PROTECTIVE KIT 500R BY BROCAR (1-800-827-1207) OR EQUAL. ABRASION RESISTANT EXTERIOR COVER SHALL BE SMOOTH AND HAVE 1/8" MIN. WALL OVER CUSHIONED FOAM INSERT. FASTENERS SHALL REMAIN SUBSTANTIALLY OUT OF SIGHT.
- 16. VERIFY MOUNTING HEIGHTS OF ALL BARRIER FREE FIXTURES WITH ARCH. PLANS 17. INSTALL 1" FIBERGLASS INSULATION W/ALL-SERVICE JACKET ON ALL
- ROOF LEADERS ABOVE CEILING. 18. FURNISH AND INSTALL CONDENSATE LINES FROM ANY MECHANICAL
- EQUIPMENT AS REQUIRED. ANY CONDENSATE LINE RUN ABOVE THE CEILING OR IN A LOCATION WHERE THE PIPE'S SWEATING COULD CAUSE DAMAGE, SHALL BE INSULATED. RUN FULL SIZE TO DRAIN OR AS INDICATED ON PLANS. TURN DOWN WITH REQUIRED AIR GAP.
- 19. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL COPPER INDIRECT WASTE PIPING REQUIRED FROM EQUIPMENT TO FLOOR DRAINS, OPEN RECEPTACLES, OR FLOOR SINKS. PIPING SHALL COMPLY WITH STATE AND 28. LOCAL CODES. COORDINATE WITH ALL EQUIPMENT SUPPLIERS AND SIZE AS REQUIRED BY PIECE OF EQUIPMENT SERVED. HOLD PIPING TIGHT TO WALL WHERE APPLICABLE. PROPERLY SECURE AS REQUIRED. COORDINATE WITH CASEWORK SUPPLIER FOR MAXIMUM CLEARANCE UNDER CABINETS.
- 20. ALL EXPOSED GAS PIPING SHALL BE PAINTED TO MATCH ADJACENT WALL. 21. ALL VENT PIPE TO BE COMPATIBLE WITH STRUCTURE, MECHANICAL
- EQUIPMENT AND DUCTWORK, ELECTRICAL EQUIPMENT AND LIGHTING. 22. THE NATURAL GAS TO THE EQUIPMENT SHALL BE LOW PRESSURE. THE REGULATOR OUTLET PRESSURE SHALL BE 7" WATER COLUMN. IF THE GAS COMPANY IS UNABLE TO PROVIDE THIS PRESSURE, IMMEDIATELY CONTACT THE A/E OR OWNER FOR INSTRUCTIONS. GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL, U.O.N.
- 23. PROVIDE CHROME PLATED ESCUTCHEONS AT ALL WALL PENETRATIONS.

HANGERS, CARRIERS, SUPPORTS, ETC. INCLUDING PROVISIONS FOR BARRIER FREE USE, IF REQUIRED. WHERE FIXTURES ARE ACCESSIBLE, THEY MUST COMPLY WITH ALL FEDERAL A.D.A. REGULATIONS.

- 32. CONTRACTOR SHALL GUARANTEE ALL WORK FOR WHICH MATERIALS ARE FURNISHED, FABRICATED OR FIELD ERECTED, ALL FACTORY ASSEMBLED EQUIPMENT FOR WHICH NO SPECIFIC MANUFACTURER'S GUARANTEE IS FURNISHED AND ALL WORK IN CONNECTION WITH THE INSTALLATION OF MANUFACTURER'S GUARANTEED EQUIPMENT. THIS CONTRACTOR'S GUARANTEE SHALL EXIST FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL OWNER ACCEPTANCE OF THE WORK AND SHALL APPLY TO ALL DEFECTS IN MATERIALS AND/OR WORKMANSHIP OF ANY KIND.
- 33. BIDDERS SHALL BE LICENSED CONTRACTORS IN ACCORDANCE WITH LOCAL AND AND STATE LAWS.
- 34. ALL PERMITS AND FEES REQUIRED FOR THE WORK SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR AND INCLUDED IN THE BID PRICE.
- 35. ALL PLUMBING FIXTURES AND PIPING SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF STATE AND/OR LOCAL CODES COOPERATE AS REQUIRED WITH ALL AUTHORITIES HAVING JURISDICTION TO INSURE THAT PROPER MATERIALS AND WORKMANSHIP ARE USED. REQUIREMENTS OF STATE AND LOCAL CODES AND AUTHORITIES TAKE PRECEDENCE OVER ANY INFORMATION WHICH IS INDICATED OR IMPLIED ON THESE DRAWINGS
- 36. THIS SYMBOL $\overline{\langle 000}$ INDICATES ITEM TO BE FURNISHED BY OWNER OR KITCHEN EQUIPMENT SUPPLIER. COORDINATE INSTALLATION AND FINAL CONNECTION REQUIREMENTS WITH SUPPLIER. FIELD VERIFY SIZES AND LOCATIONS OF ALL SUPPLIER. FIELD VERIFY SIZES AND LOCATIONS OF ALL WATER, WASTE, INDIRECT WASTE, GAS AND/OR ELECTRICAL CONNECTIONS PRIOR TO INSTALLATION (TYPICAL ALL PLUMBING EQUIPMENT).
- 37. SEE PLUMBING ROUGH-IN DRAWINGS PROVIDED BY KITCHEN EQUIPMENT SUPPLIER FOR MORE INFORMATION.
- 38. ALL INDIRECT WASTE, WASTE PIPING OR FIXTURE WHICH RECEIVES THE DISCHARGE FROM A DISHWASHER, STEAMER OR SIMILAR PIECE OF EQUIPMENT WHICH PRODUCES SIMILAR PIECE OF EQUIPMENT WHICH PRODUCES WATER AT A TEMPERATURE HIGHER THAN 125°F SHALL BE DWV COPPER OR CAST IRON A MINIMUM OF 10'-0" DOWNSTREAM FROM THE OUTLET PRODUCING SUCH DISCHARGE. COORDINATE WITH KES.
- 39. ALL INDIRECT WASTE PIPING FROM EQUIPMENT TO ABOVE FLOOR RECEPTOR SHALL BE 1" (MIN.) COPPER UNLESS LARGER SIZE IS INDICATED BY EQUIPMENT OPENING OR KES.

PLUMBING CONTRACTOR SHALL VERIFY WITH THE LOCAL HEALTH DEPARTMENT AND/OR WATER COMPANY AS TO THE METER AND VALVING ARRANGEMENT OF THE DOMESTIC WATER SERVICE LINE WHICH ENTERS THE BUILDING. SHOULD A BACKFLOW PREVENTER ASSEMBLY AND/OR PRESSURE REDUCING VALVE ASSEMBLY BE REQUIRED, THE PLUMBER SHALL FURNISH AND INSTALL SAME PER LOCAL AND STATE REQUIREMENTS. THE BACKFLOW ASSEMBLY SHALL BE A "WATTS" SERIES #909 OR APPROVED EQUAL MEETING ASSE STANDARDS 1013, 1015 AND 1020. IF BACKFLOW PREVENTER IS INSTALLED, PROVIDE PROPERLY SIZED THERMAL EXPANSION TANK IN SUPPLY PIPING OF WATER HEATER. IF WATER PRESSURE IS 65 PSI OR GREATER, A PRESSURE REDUCING VALVE ASSEMBLY SHALL BE A "WATTS" SERIES #25AUB-Z3 OR APPROVED EQUAL SET AT 50 LBS. DELIVERY PRESSURE UNLESS OTHERWISE NOTED.

- ACCORDANCE WITH LOCAL REGULATIONS.
- THE POTABLE WATER SUPPLY SHALL BE PROTECTED AGAINST BACKFLOW AND SIPHONAGE BOTH NATURAL AND INDUCED. ALL EQUIPMENT CONNECTED TO THE POTABLE WATER SYSTEM BEING CAPABLE OF POLLUTING OR CONTAMINATING THE POTABLE WATER DISTRIBUTION SYSTEM OR ANY PART THEREOF BY MEANS OF A REVERSAL OF FLOW, PRESSURE DROP, PRESSURE LOSS, INDUCED VACUUM OR BY INJECTION BECAUSE OF ANY PRIMARY OR AUXILIARY PUMPING SYSTEM CONNECTED THERETO MUST BE ISOLATED AND CONTAINED BY MEANS OF APPROVED BACKFLOW DEVICES, CHECK VALVES, AIR GAPS OR VACUUM BREAKERS. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL THESE DEVICES PER LOCAL CODE REQUIREMENTS.
- THE HOT AND COLD WATER SUPPLY BRANCHES FOR ALL EQUIPMENT HAVING QUICK CLOSING VALVES OF ANY TYPE SHALL HAVE WATER HAMMER ARRESTORS INSTALLED AT THE HIGH POINT ON THE END OF EACH BRANCH.
- FURNISH AND INSTALL SHUTOFF OR BALL VALVE AND DIELECTRIC UNION 12 ON ALL EQUIPMENT HOT AND COLD WATER LINES. PLUMBING CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO EQUIPMENT. COORDINATE WITH EQUIPMENT SUPPLIER FOR EXACT REQUIREMENTS.
- ALL-SERVICE JACKET ON ALL HOT, COLD, RECIRCULATING WATER LINES ABOVE SLAB AND ALL CONDENSATE FROM MECHANICAL UNITS.
- WASTE AND VENT PIPING SHALL BE CAST IRON. CONTRACTOR MAY USE 24. SCHEDULE 40 OR 80, TYPE 1, GRADE 1, POLYVINYL CHLORIDE COMPOUNDS AS DEFINED AND DESCRIBED IN TENTATIVE SPECIFICATIONS FOR RIGID
- WASTE AND VENT PIPING SHALL BE CAST IRON. CONTRACTOR MAY USE SCHEDULE 40 OR 80, TYPE 1, GRADE 1, POLYVINYL CHLORIDE COMPOUNDS AS DEFINED AND DESCRIBED IN TENTATIVE SPECIFICATIONS FOR RIGID PVC (ASTM DESIGNATION: D 2665, D 2949, F891 OR SCHEDULE 40 OR 30 ACRYLONITRILE-BUTADIENE-STYRENE COMPOUND AS DEFINED AND DESCRIBED IN STANDARD SPECIFICATIONS FOR ABS (ASTM DESIGNATION: D2661 OR F 628) IN LIEU OF CAST IRON WASTE AND VENT PIPING IF PERMITTED BY CODE. INSTALL PVC OR ABS PIPING PER CODE. PLUMBING CONTRACTOR SHALL INSTALL 4" SOIL, WASTE AND GREASE WASTE PIPING WITH A MINIMUM SLOPE OF 1/8" PER FOOT OR AS REQUIRED BY CODE.
- ALL FLOOR SINKS AND TRENCH DRAINS SHALL HAVE MEMBRANE CLAMPS. SEE ARCH. 26 SHEETS FOR FLOOR SLOPES AROUND DRAINS. (IF REQ'D)
- 27 ALL NEW V.T.R'S SHALL BE EXTENDED TO A MINIMUM OF 12" ABOVE PARAPET HEIGHT AND MAINTAINED 10'-0" MINIMUM FROM ALL OUTSIDE AIR INTAKES.
- MATERIALS, EQUIPMENT, ASSEMBLIES AND SYSTEMS SHALL MEET ALL PERTINENT REQUIREMENTS OF NATIONALLY RECOGNIZED TESTING ORGANIZATION SUCH AS THE UL, ASTM, ASSE, AWWA, AGA AND NFPA AS WELL AS THE MOST CURRENT VERSION OF THE STATE CODE AND LOCAL AMENDMENTS.
- ALL INSTALLED SYSTEMS, DEVICES AND RELATED ITEMS SHALL BE TESTED 29. IN PLACE ON SITE PER LOCAL CODE REQUIREMENTS. REPLACE ANY AND ALL CONTRACTOR SUPPLIED DEFECTIVE DEVICES, ITEMS OR SYSTEMS AT CONTRACTOR'S OWN EXPENSE BEFORE COMPLETION OF PROJECT.
- WHERE JOB CONDITIONS REQUIRE CHANGES FROM THE CONTRACT 30 DOCUMENTS THAT DO NOT CHANGE THE SCOPE OR NATURE OF THE WORK REQUIRED, THE CONTRACTOR SHALL MAKE SUCH CHANGES WITHOUT ADDITIONAL COST TO THE OWNER. NO OTHER CHANGES MAY BE MADE WITHOUT WRITTEN PERMISSION OF THE OWNER.
- ALL EQUIPMENT, FIXTURES AND MATERIALS SHALL BE NEW AND UNUSED, AND INSTALLED IN STRICT CONFORMANCE TO MANUFACTURER'S RECOMMENDATIONS (U.O.N.). PROVIDE COMPLETE WITH ALL TRIM, STOPS,

PLUMBING FIXTURE SCHEDULE FIXTURE SPECIFICATION FIXTURE TAG DRAIN VENT CW HW FIXTURE DESCRIPTION MANSFIELD ELONGATED PRESSURE ASSIST TANK-TYPE TOILET. CENTOCO 500 STSCCSS, EXTRA HE WC-1 1-1/2" 3/4" WHITE, COVER WITH SLOW CLOSE SNAP-OFF HINGES. TANK COVER LOCK. ADA COMPL ADA WATER CLOSET - TANK QUANTUM 1.28 148-155 1.5 | 1.25 | 0.5 | KOHLER BROOKLINE VITREOUS CHINA, 19" DIAMETER" SELF RIMMING WITH OVERFLOW & GRID DRAIN, 4" CE LV-1 STOP, P-TRAP, ESCUTCHEON AND SUPPLIES. INSTALLED PER ADA ACCESSIBILITY. COUNTER MT LAVATORY K-2202 VITREOUS CHINA, 20"X18" WALL HUNG 4" CENTERS, WITH OVERFLOW AND GRID DRAIN 1.5 | 1.25 | 0.5 | 0.5 | KOHLER GREENWICH LV-2 CHROME PLATED LOOSE KEY ANGLE STOP, ESCUTCHEON, P-TRAP AND SUPPLIES . INS WALL LAVATORY K-2030 UNDERSINK PROTECTIVE COVERS FOR P-TRAP AND ANGLE VALVE ASSEMBLIES MODEL 3 1.5 0.75 0.75 FIAT ONE PIECE SERVICE BASIN; AND 3.0 GPM FLOW RESTRICTOR; DELTA 28T910 STAINLES MS-1 REINFORCED HOSE, BRASS COUPLING, STAINLESS STEEL HANGER BRACKET, W/RUBBE MOP SERVICE BASIN MSB-2424 MULTI-FIXTURE MIXING VALVE, SOLID BRASS WITH INTEGRAL CHECK. THREADED UNION MXV-1 .75(X2) POWERS MIXING VALVE LM490 CAST IRON CLEANOUT; NICKEL BRONZE 6" ROUND ADJUSTABLE SCORIATED VANDAL PR FCO JAY R. SMITH TO RECEIVE 1/2" BAR STOCK. ARFCO- ACID RESITANT OPTION. FLOOR CLEAN OUT 4020S JAY R. SMITH 5000 SERIE STAINLESS STEEL PRESSURIZED COMPRESSION CHAMBER; THREADED NIPPLE CONNEC WHA WATER HAMMER ARRESTOR JOSAM SOLIDS/PLASTER INTERCEPTOR - ATTACHES TO EXIT PIPING. BOTTOM ACCESS. PIPE JOSAM SI-1 PLASTER INTERCEPTOR SIZE 6100 1.5 | 1.25 | 0.5 | 0.5 ELKAY 23X17 DBL COMPARTMENT, 20-GAUGE 304 STAINLESS STEEL SELF-RIMMING, FULLY COA SK-1 INSTALL PER ADA ACCESSIBILITY. VERIFY EXISTING COUNTER OPENING FIT PRIOR TO (BREAKROOM SINK **BPSR2317** SEE ARCH. EQUIPMENT SCHEDULE SK-2 SEE ARCH DENTAL ROOM SINK QUIPMENT SCHDULE SINGLE COMPARTMENT, 20-GAUGE 304 STAINLESS STEEL SELF-RIMMING, FULLY COATE 1.5 1.25 0.5 0.5 SK-3 ELKAY LAB SINK INSTALL PER ADA ACCESSIBILITY. BCR15 2 1.5 0.5 0.5 ELKAY 304 18 GAUGE STAINLESS STEEL 3 COMPARTMENT SINK SK-4 3-COMP SINK LGR4322 WOODFORD RB67 CHROME ROUND BOX FINISH, AUTOMATIC DRAINING G W/NICKEL 37HA, 3/4" MALE HOSE THREAD DOUBLE CHECK BACKFLOW PREVENTER, FIELD WHD-1 0.75 WALL HYDRANT TESTABLE, LOOSE KEY.

ALL FIXTURES, EQUIPMENT, TRIM, FITTINGS, ETC. SHALL COMPLY WITH LOCAL, STATE AND/OR FEDERAL REGULATIONS AND THE AMERICANS WITH DISABILITIES ACT (ADA). THE SCHEDULE REFLECTS FIXTURES AND EQUIPMENT WHICH ARE MINIMUM CRITERIA AND SHALL BE THE BASIS FOR CONTRACTORS BASE BID. WHERE SPECIFIED FIXTURES AND/OR EQUIPMENT ARE NOT IN COMPLIANCE WITH GOVERNING CODES AND REGULATIONS, THE CONTRACTOR SHALL PROVIDE AN ALTERNATE BID FOR THE SUBSTITUTIONS OF COMPLYING FIXTURES, EQUIPMENT, FITTINGS, ETC. THE ABSENCE OF AN ALTERNATE BID SHALL BE CONSTRUED TO MEAN THAT THE CONTRACTORS BASE BID INCLUDES ALL COSTS NECCESSARY TO MEET ALL BEGULATIONS AND CODES.

			١	NATER	HEATER S	CHEDULE				
		BASIS	STORAGE	GAS INPUT	OUTPUT	ELECTRICAL	GP M	TEMP	ELEC	EXPANSION TANK
MARK	TYPE	AO SMITH	GALLONS	MBH	MBH	CAPACITY (KW)	@40 DEG RISE	SETTING	VOLT/PHASE	ACCPETANCE (GAL)
WH-1	ELECTRIC TANK	DEN-50	50			9.0	1	110	208/1	5
1. PROVIDE ARMSTRONG LST EXP TANK AND T&P SET AT 150 PSI DISCHARGE PER PLANS. DO NOT ROUTE INTO DRAIN PAN.										
2. PRO V IDE 2" D	EEP DRAIN PAN BENEATH STOP	R A GE TYPE WATER HE	ATER TO ENC	ASE ENTIRE W	ATER HEATER FOOT	PRINT.				
3. PROVIDE CON	PROVIDE CONDENSATE NUETRALIZER AND CONDENSATE TRAP FOR WATER HEATER. ROUTE CONDENSATE TO FLOOR SINK. SEAL PENETRATION AT PAN WITH CAULKING.									
4. PROVIDE 1/15 HP RECIRCULATION PUMP ROUTED TO COLD WATER INLET.										
5. PROVIDE REG	5. PROVIDE REGULATOR FOR WATER HEATER SERVED BY GAS PIPING PRESSURE GREATER THAN 10" WC. PROVIDE GAS SHUTOFF AT EACH WATER HEATER									
6. PROVIDE INDI	3. PROVIDE INDIVIDUAL FIXTURE MIXING VALVES SET TO 110 DEGREES FOR HAND WASHING FIXTURES.									
7. PROVIDE PVC	. PROVIDE PVC FLUE AND COMBUISTION AIR VENT ITH WITH ACCESSORY TERMINATION KIT PER MFG INSTRUCTION.									

GRUNDFOS UP 15-18 RECIRC PUMP. 2 GPM@12' HEAD.

HOT WATER CIRCULATION PUMP DETAIL

CW LINE TO WATER HEATER

INSTALL ALL FITTINGS AT FULL LINE SIZE WITH CLEAR ACCESS TO ALL ACCESS PORTS AND FITTING HANDLE SWING CLEARANCES.

STRAINER

COPPER PIPE: 1/2" TO 1" - 5' ; 1-1/4" TO 2" - 7' ; 2-1/2" AND UP - 9'

PIPING HANGERS

SPACING AS FOLLOWS:

PVC DRAINAGE (140 DEG F SERVICE UP TO 6"- 80 DEG F ABOVE 6"): UP TO 3" - 3'; 4" TO 6" - 4'; ABOVE 6" - 8' PVC VENT (80 DEG F SERVICE): UP TO 1-1/2" - 5' ; 2"-3" - 6' ; ABOVE 3" 7'

1. PROVIDE CLEVIS SUPPORTS WITH BEAM CLAMP, CONCRETE ANCHORS (CONCRETE STRUCTURE), SCREWED

SECTION AT HANGERS. PROVIDE 16 GAUGE PIPING SADDLE AT EACH HANGER. NO WELDING OR CUTTING OF

2. HANGER INSTALLATION FOR HOT WATER PIPING SHALL NOT PREVENT MOVEMENT FOR PIPING EXPANSION.

STEEL PIPE: 1/2" TO 1-1/4" - 7'; 1-1/2" TO 2-1/2" - 9'; 3"&4" - 12'; 6"&8" - 17'; 10" AND UP- 22'

BRACKET (WOOD STRUCTURE). PROVIDE HANGER OUTSIDE OF INSULATION WITH RIGID FOAM GLASS INSULATION

STEEL STRUCTURAL MEMBERS SHALL BE PERMITTED. LAYOUT BASIS SHALL BE ANVIL 260. ROD SIZE PER CLEVIS HANGER DIMENSIONS FOR EACH PIPE SIZE: 3/8" FOR 2" PIPE OR LESS, 1/2" UP TO 3" PIPE AND 5/8" FOR 4" PIPE

PIPE HANGER DETAIL

CAST IRON: 10' WITH SUPPORT AT EACH JOINT, TAKEOFF, AND FITTING.

GAUGE

	VALVE/FACUET SPECIFICATION
AVY DUTY SOLID PLASTIC, ELONGATED OPEN FRONT SEAT, IANT.	INTEGRAL PRESSURE ASSIST
NTERS; PROVIDE CHROME PLATED LOOSE KEY ANGLE	ZURN Z86500
	TWO-KNOB METERING FACUET
JAY R. SMITH 0700-M31 SERIES CARRIER. PROVIDE TALLED PER ADA ACCESSIBILITY; TRUEBRO LAV GUARD	ZURN Z86500
. 102	TWO-KNOB METERING FACUET
S STEEL MOP HOLDER; 28T911 HEAVY DUTY 31" LONG	DELTA 28T9
R GRIP.	WITH INTERGRAL VACUUM BREAKER
N CONNECTIONS. ASSE 1017	
ROOF TOP; GASKET SEAL ABS THREADED PLUG WITH SLOT	
CTION; SIZE AS INDICATED ON DRAWINGS	
ATED UNDERSIDE, 3-HOLE SWIVEL GOOSENECK SPOUT, ORDERING.	DELTA 26C3944 - 1.5 GPM AERATOR 6" WRIST HANDLES- 6" GOOSENECK
D UNDERSIDE; , 2-HOLES, SWIVEL GOOSENECK SPOUT,	ELKAY BCR152
	4" CENTERS- 2-HANDLE, 4" WRSTBLDS

INDIVIDUAL FIXTURE MIXING VALVE

VALVE, ASSE 1016 & 1070 APPROVED. SET DISCHARGE TO 110°.

ENTIST \square Ш AIRSVII Ш

1/8" = 1'-0"

DOMESTIC WATER PLAN

DOMESTIC WATER PLAN **P200** FOR CONSTRUCTION
	ELECTR		EGEND	
	FLUORESCENT TROFFER, TYPE AS NOTED	-€/00	DUPLEX RECEPTACLE 18" AFE OR AS NOTED NEMA 5 20R	NOTICE TO CONTRACTORS:
	FLUORESCENT TROFFER, TYPE AS NOTED	WP	WEATHER PROOF DUPLEX RECEPTACLE	
	FLUORESCENT TROFFER. TYPE AS NOTED		WEATHER PROOF DUPLEX RECEPTACLE	ALL CONTRACTORS PRIOR TO BID SUBMISSION PROCESS SHALL VISIT PROPOSED WORK SITE AND FIELD VERIFY ALL EXISTING CONDITIONS. ANY CONDITIONS THAT DIFFER FROM THAT SHOWN ON THESE DRAWINGS SHALL BE REPORTED TO ARCHITECT/ENGINEER SO THAT REVISED BID
	FLUORESCENT TROFFER, TYPE AS NOTED		DUPLEX RECEPTACLE	DRAWINGS OR INFORMATION MAY BE ISSUED. MODIFICATIONS TO SCOPE OF WORK WHICH RESULTS FROM CONTRACTORS NEGLECT TO VISIT THE SITE PRIOR TO SUBMITTING BID, SHALL BE
	PROVIDE WITH EMERGENCY BALLAST	<u> </u>	ABOVE COUNTER OR AS NOTED, NEMA 5-20R QUAD RECEPTACLE	THE CONTRACTOR'S SOLE RESPONSIBILITY.
0	RECESSED CAN FIXTURE, TYPE AS NOTED		18" AFF OR AS NOTED, NEMA 5-20R	
•	PROVIDE WITH EMERGENCY BALLAST	=	18" AFF OR AS NOTED, NEMA 5-20R	
	FLUORESCENT STRIP FIXTURE	P	SPECIAL PURPOSE RECEPTACLE 18" AFF OR AS NOTED, SEE SCHEDULE	GENERAL NUTES
· · ·	WALL MOUNTED FIXTURE, TYPE AS NOTED	ю/0/D	WALL / CEILING MOUNTED JUNCTION BOX / FLOOR	1. ELECTRICAL CONTRACTOR SHALL VERIFY ALL VOLTAGES OF MECHANICAL EQUIPMENT WITH
\$	PENDANT FIXTURE, TYPE AS NOTED	60/3/1	UNFUSED DISCONNECT SWITCH RATING/POLES/NEMA RATING	MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
•	PENDANT FIXTURE, TYPE AS NOTED	60/3/3R/40		THE CIRCUIT.
* * *	TRACK LIGHT FIXTURE, TYPE AS NOTED		MOTOR	3. THE TERM "PROVIDE" MEANS TO FURNISH AND INSTALL.
			GROUND	4. CONTRACTOR SHALL HAVE LAMPS BURNING IN ALL LIGHT FIXTURES AT COMPLETION OF PROJECT ALL LIGHT FIXTURES SHALL BE CLEAN AND FREE OF ANY DEFECTS OR BROKEN COMPONENTS.
		ייך >>		5. ALL 15 AND 20 AMP RECEPTACLES LOCATED IN THE KITCHEN AND RESTROOMS SHALL BE GFCI
	EXIT/EMERGENCY LIGHT COMBINATION	<u>\$</u> ₹		6. ELECTRICAL CONTRACTOR SHALL USE CONDULET SEALING FITTINGS WITH APPROVED SEALING
<u> </u>	CEILING MOUNTED EXIT SIGN	<u>(w)</u>	UTILITY GRADE METER	COMPOUND ON ALL CONDUITS PASSING FROM INTERIOR TO EXTERIOR OF A BUILDING AND AT PENETRATIONS OF COOLER AND REFRIGERATORS AND ANY EQUIPMENT WITH DIFFERENT SPACE
+⊗ +⊗ł + <u>©</u>	WALL MOUNTED EXIT SIGN	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR	7. PROVIDE TYPED PANELBOARD DIRECTORIES FOR ALL PANELBOARDS.
\$	SINGLE POLE SWITCH, 44" AFF	•	TELEPHONE OUTLET, PROVIDE 4" BOX SINGLE GANG PLASTER RING, 3/4" C ABOVE CEILING	
\$ \$	TWO SINGLE POLE SWITCHES GANGED TOGETHER	▽	DATA OUTLET, PROVIDE 4" BOX SINGLE GANG PLASTER RING, 3/4" C ABOVE CEILING	
\$\$\$	THREE SINGLE POLE SWITCHES GANGED TOGETHER		TELEVISION/CABLE OUTLET	
\$1	THREE WAY SWITCH. 44" AFF	6	TELEPHONE OUTLET, PROVIDE 4" BOX	1. SECTION 16010 - BASIC ELECTRICAL REQUIREMENTS
€_	TWO THREE WAY SWITCHES GANGED TOGETHER		FLUSH IN FLOOR, 3/4" C ABOVE CEILING DATA OUTLET, PROVIDE 4" BOX	A. THE WORK OF EACH OF THE ELECTRICAL SECTIONS INCLUDES FURNISHING AND INSTALLIN THE MATERIAL EQUIPMENT, AND SYSTEMS COMPLETE AS SPECIFIED AND/OR INDICATED O
D3.D3	FOR INNER/OUTER CONTROL OF LAMPS, 44" AFF		FLUSH IN FLOOR, 3/4" C ABOVE CEILING	THE DRAWINGS. THE ELECTRICAL INSTALLATIONS, WHEN FINISHED, SHALL BE COMPLETE AND COORDINATED, READY FOR SATISFACTORY SERVICE.
\$ 4	FOUR WAY SWITCH, 44" AFF		DOOR HOLD-OPEN DEVICE	B. THE WORK UNDER THIS CONTRACT SHALL BE DONE IN STRICT ACCORDANCE WITH ALL APPLICABLE MUNICIPAL STATE AND OTHER LOCAL CODES
\$0	44" AFF	T	TRANSFORMER, SEE ONE LINE	C. THE CONTRACTOR SHALL MAKE APPLICATION AND PAY FOR ALL PERMITS, LICENSES AND
\$ _{wp}	WEATHER PROOF SWITCH, 44" AFF	54	SPEAKER STROBE	INSPECTIONS AS REQUIRED UNDER THE ABOVE CODES.
\$⊾	MOTOR RATED SWITCH, 44" AFF OR AS NOTED	Ø 4	HORN	IDENTIFIED ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE SITE, STRUCTURAL, AND FINISH CONDITIONS AFFECTING HIS WORK AND
\$os	COMBINATION SWITCH AND OCCUPANCY SENSOR, 44" AFF TYPE WSD OR EQUAL	Ø	PULL STATION	SHALL ARRANGE SUCH WORK ACCORDINGLY, PROVIDING SUCH FITTINGS AND ACCESSORI AS MAY BE REQUIRED TO MEET SUCH CONDITIONS.
\$r	DIGITAL TIMER SWITCH, 44" AFF	$\Theta \Theta$	FIRE ALARM STROBE, MIN 75 CANDELA	E. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND SERVICES NECESSARY FOR AND REASONABLY INCIDENTAL TO THE COMPLETE INSTALLATI
<u> </u>	CEILING MOUNTED OCCUPANCY SENSOR		DUCT MOUNTED SMOKE DETECTOR	OF THE ELECTRICAL WORK AND RELATED SYSTEMS AS INDICATED ON THE DRAWINGS OR A NECESSARY TO PROVIDE A COMPLETE SYSTEM.
Â B	WALL MOUNTED OCCUPANCY SENSOR, 44" AFF	ß	SMOKE DETECTOR	F. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY WIRING, LIGHTING AND CONSTRUCTION POWER FOR ALL TRADES AS REQUIRED TO COMPLETE THE PROJECT.
			HEAT DETECTOR	G. 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 SIMILAI NATIONALLY ACCEPTED TESTING AGENCY SUCH AS ETL TESTING LABORATORIES.
				H. 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
©	PHOTO CELL	(FS)	FLOW SWITCH	CONTRACT FOR ANY ERROR OR NEGLIGENCE IN THE CONTRACTOR'S PART.
S	8° CONE SPEAKER IN CEILING EC TO PROVIDE BLACK SPEAKER		RACEWAY CONCEALED IN WALL OR ABOVE CEILING	I. I HE CONTRACTOR SHALL SUBMIT DETAILED DIMENSIONED SHOP DRAWINGS, TOGETHER WITH WIRING DIAGRAMS, SPECIFICATIONS, OPERATING DATA, AND/OR CATALOG CUTS FOR ALL EQUIPMENT.
S S	8" CONE SPEAKER IN WALL EC TO PROVIDE BLACK SPEAKER		RACEWAY EXPOSED	J. A THOROUGH TEST SHALL BE MADE PRIOR TO ENERGIZING THE SYSTEM TO DEMONSTRAT
Ŷ	VOLUME CONTROL		RACEWAY CONCEALED IN FLOOR SLAB, BELOW SLAB OR GRADE BELOW SLAB OR GRADE, OR UNDER RAISED ACCESS FLOOR	THAT THE SYSTEM IS ENTIRELY FREE FROM GROUND FAULTS, SHORT CIRCUITS, AND OPEN CIRCUITS; THAT THE RESISTANCE TO GROUND ALL NON-GROUNDED CIRCUITS, BEFORE AN AFTER CONNECTION OF FOLIPMENT MEETS THE REOLIDEMENTS OF THE NATIONAL
		o	DENOTES CONDUIT TURNING UP IN PLAN VIEW	ELECTRICAL CODE AND IEEE STANDARDS/RECOMMENDATIONS.
	CLOSED CIRCUIT TELEVISION CAMERA		DENOTES CONDUIT TURNING DOWN IN PLAN VIEW	K. 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
XXXX	SHORT CIRCUIT AVAILABLE CURRENT	1	STUB UP	CONTROL CENTERS, CONTROL PANELS, METERING AND INSTRUMENT PANELS SHALL BE 3/4 HIGH.
			1	L. THE MATERIAL AND WORKMANSHIP OF ALL PARTS OF THE ELECTRICAL INSTALLATION

(NOTE: ALL SYMBOLS SHOWN MAY NOT APPEAR ON DRAWINGS AND ARE USED AS APPLICABLE TO THIS PROJECT)

FLA

GND

GALV

GRS

GFCI

GFI

HD

IMC

ISC

INST

KAIC

KCMIL

κv

KVA

κw KWH

LFMC

MCB

MCM

MLO

NEC

NESC

NIGHT LIGHT

MCCB

ABBREVIATIONS

A, AMPS A/C AC AF AFF AFG AIC AL ANSI AWG BC BKBD C CB CKT CU DIST DN DP DWG EB EC EEW EGC ELR EWC	AMPERES AIR CONDITIONER ALTERNATING CURRENT AMPERE FRAME ABOVE FINISHED FLOOR ABOVE FINISHED GRADE AMPERE INTERRUPTING CURRENT ALUMINUM AMERICAN NATIONAL STANDARDS INSTITUTE AMERICAN WIRE GAUGE BARE COPPER BACKBOARD CONDUIT CIRCUIT BREAKER CIRCUIT COPPER DISTRIBUTION DOWN DISTRIBUTION PANEL DRAWING ENCASED BURIAL EMPTY CONDUIT ENERGIZED ELECTRICAL WORK EQUIPMENT GROUNDING CONDUCTOR END-OF-LINE RESISTOR ELECTRIC WATER COOLER
ELR	END-OF-LINE RESISTOR
EWC	ELECTRIC WATER COOLER
<e></e>	EXISTING
<er></er>	EXISTING TO REMAIN
< EX>	
FACP	FIRE ALARM CONTROL PANEL

FULL LOAD AMPERES	
GROUND	
GALVANIZED	
GALVANIZED RIGID STEEL	
GROUND FAULT	
CIRCUIT INTERRUPTER	
GROUND FAULT INTERRUPTER	
HORSEPOWER	
KILO (THOUSAND) AMPERES	
KILO (THOUSAND)	
CIRCULAR MILS	
KILO (THOUSAND) VOLTS	
KILO (THOUSAND)	
VOLT-AMPERES	
KILO (THOUSAND) WATTS	
KILO (THOUSAND) WATT-HOURS	
LIQUID-TIGHT FLEXIBLE	
METAL CONDUIT	
THOUSAND CIRCULAR MILS	

NO	NORMALLY OPEN,
	NUMBER
NTS	NOT TO SCALE
PNL	PANELBOARD
PVC	POLYVINYL CHLORIDE
RGS	RIGID GALVANIZED
	STEEL CONDUIT
RMC	RIGID METALLIC
	CONDUIT (GALVANIZED)
RMS	ROOT-MEAN-SQUARE
RNC	RIGID NON-METALLIC
	CONDUIT
SCA	SHORT CIRCUIT
	AVAILABLE
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TBD	TO BE DETERMINED
TCP	TEMPERATURE CONTROL
	PANEL
IEL	TELEPHONE
TVSS	TRANSIENT VOLTAGE
	SURGE SUPPRESSION
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS OTHERWISE
	UNDERGROUND PULLBOX
V	VOLTS
VA	VOLT-AMPERES
VFD	VARIABLE
	FREQUENCY DRIVE
WH	WATER HEATER
WP	WEATHERPROOF
WT	WATERTIGHT
XFMR	TRANSFORMER

	SHALL BE CONTROL HIGH.
L.	THE MATE SPECIFIE YEAR FRO
M.	UPON CO TO THE O BE LEGIBI OF THE IN FOR USE
N.	THE CON MANUAL. THE FOLL 1) 2) 3) 4) 5) 6)
	7)
Ο.	EXACT LC PROTRUS FOLLOWS
	SWITCHE
	RECEPTA

EXIT LIGHT DISCONNE

OTICE TO CONTRACTORS:

GENERAL NOTES

ELECTRICAL SPECIFICATIONS

> ERIAL AND WORKMANSHIP OF ALL PARTS OF THE ELECTRICAL INSTALLATION D HEREIN SHALL BE GUARANTEED UNCONDITIONALLY FOR A PERIOD OF ONE (1) OM DATE OF ACCEPTANCE.

MPLETION OF THE ELECTRICAL INSTALLATION, THE CONTRACTOR SHALL DELIVER WNER ONE (1) SET OF PRINTS OF ELECTRICAL CONTRACT DRAWINGS WHICH SHALL LY MARKED IN RED PENCIL TO SHOW ALL ADDITIONS, CHANGES AND DEPARTURES NSTALLATION AS COMPARED WITH THE ORIGINAL DESIGN. THEY SHALL BE SUITABLE IN PREPARATION OF RECORD DRAWINGS.

TRACTOR SHALL PREPARE THREE (3) COPIES OF A RECORD AND INFORMATION THE MANUAL SHALL BE BOUND IN A THREE-RING LOOSE-LEAF BINDER. PROVIDE OWING DATE IN THE BOOKLET: CUTS OF ALL EQUIPMENT WITH TECHNICAL SPECIFICATIONS. OPERATION AND MAINTENANCE PROCEDURES.

SERVICING INSTRUCTIONS. COPIES OF PANELBOARD DIRECTORIES.

COPIES OF WARRANTIES. LIST OF LAMPS SHOWING QUANTITY, TYPE, WATTAGE, MANUFACTURER, CATALOG NUMBER, ETC., FOR EACH FIXTURE TYPE. COPIES OF TEST REPORTS.

OCATIONS OF OUTLETS SHALL BE COORDINATED WITH DOOR SWINGS AND VARIOUS IONS. MOUNTING HEIGHTS OF THE VARIOUS ELECTRICAL DEVICES SHALL BE AS

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 CONDUIT WITH GROUND CONDUCTOR FOR UNDERGROUND OUTSIDE OF BUILDING (SITE) INSTALLATION.

- 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. USED 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 SHERARDIZED OR GALVANIZED STAMPED 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 USED. FOR BRANCH CIRCUITS TYPE MC (METAL CLAD) CABLE MAY BE USED WHERE PERMITTED BY THE NEC AND LOCAL CODES. OTHERWISE, ALL BRANCH CIRCUITS SHALL UTILIZE HARD CONDUIT
- 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: SYSTEMPHASE APHASE BPHASE CNEUTRALGROUNDISOLATED GROUND120/208VBLACKREDBLUEWHITEGREENGREEN/YELLO 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 1 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
- 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 1 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 1 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 COOPER (ARROW HART), GENERAL ELECTRIC, P & S, LEVITON OR HUBBELL:

1) WALL SWITCHES: HUBBELL CS1221I OR EQUAL. THREE AND FOUR-WAY SWITCHES SHALL BE OF THE SAME MANUFACTURER AND GRADE. ALL DEVICE PLATES SHALL BE STAINLESS STEEL.

2) RECEPTACLES: HUBBELL HBL5262I OR EQUAL FOR 20 AMPERES. GFCI SHALL BE #GF15IL RATED 20 AMPERE, 120 VOLT. ALL DEVICE PLATES SHALL BE STAINLESS STEEL 3) DIMMERS: 600/1000/1500/2000 WATTS AS REQUIRED BY JOB CONDITIONS. LUTRON 'NOVA' SERIES OR EQUAL.

- 4) DEVICE PLATES: HUBBELL SWITCH PLATES S1 SERIES OR EQUAL. HUBBELL RECEPTACLE PLATES S8 SERIES OR EQUAL. HUBBELL TELEPHONE BLANK PLATES S13 SERIES OR EQUAL. ALL PLATES SHALL BE STAINLESS STEEL.
- 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 DISTURBED TO OTHER RECEPTACLES ON THE SAME MULTI-WIRE CIRCUIT IF RECEPTACLE IS REMOVED.

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, FOR FLUORESCENT 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, MAIN CIRCUIT BREAKER WITH AIC RATING AS SHOWN EMPLOYING SERIES-RATED BREAKERS MINIMUM 10,000 SYMMETRICAL A.I.C.. FURNISH

PANEL BOARDS AS INDICATED

CLASS RKI TIME-DELAY TYPE.

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

CONDUITS LEFT EMPTY.

SUPPLIER.

120/208V NQOD NUFACTURER GENERAL ELECTRIC AC CUTLER-HAMMER POW-R-LINE I D. PANELBOARDS SHALL BE FACTORY ASSEMBLED WITH BOLT-ON TYPE CIRCUIT BREAKERS. BUSS SHALL BE ALUMINUM. PANELS 600 AMPS OR LARGER SHALL BE SQUARE-D I-LINE TYPE OR EQUAL. 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.

G. PROVIDE ENERGY EFFICIENT, NEMA TP-1, SELF-COOLED, DRY TYPE TRANSFORMERS OF KVA, PHASE, "K" SHALL BE RATED 55 DB. TRANSFORMER SHALL BE HEVI-DUTY ELECTRIC COMPANY, GENERAL ELECTRIC,

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 SORGEL, ACME OR HOWARD INDUSTRIES.

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. EACH FIXTURE SHALL BE COMPLETELY EQUIPPED WITH LAMPS OF THE SIZE, TYPE, WATTAGE AND SHAPE INDICATED AND SPECIFIED. ALL LAMPS SHALL BE MANUFACTURED BY THE GENERAL ELECTRIC CO... PHILIPS LIGHTING CO., VENTURE LIGHTING INTERNATIONAL OR SYLVANIA/OSRAM CORPORATION. LUMEN OUTPUT AND LIFE OF LAMPS SHALL BE EQUIVALENT TO THE GENERAL ELECTRIC LAMP OF THAT TYPE AND WATTAGE. EXACT VOLTAGE SHALL BE CHECKED BEFORE ORDERING LAMPS.

C. FLUORESCENT LAMPS SHALL BE GENERAL ELECTRIC RAPID START ENERGY SAVER 32 WATT F32T8/SP41/RS/2850 INITIAL LUMENS UNLESS OTHERWISE SPECIFIED. ALL INCANDESCENT LAMPS SHALL BE INSIDE FROSTED, 125-130 VOLT, UNLESS OTHERWISE SPECIFIED.

D. FLUORESCENT FIXTURES SHALL GENERALLY HAVE TWO, THREE, AND/OR FOUR LAMP BALLASTS. BALLASTS SHALL BE ELECTRONIC SOLID STATE TYPE CBM AND UL CERTIFIED, HIGH POWER FACTOR (>90%) TYPE WITH SOUND RATING "A", DISCRETE TYPE AND PROVIDE PARALLEL OPERATION. BALLAST THD SHALL NOT EXCEED 20%. BALLASTS SHALL CARRY A ONE YEAR WARRANTY WHICH INCLUDES BOTH PRODUCT REPLACEMENT AND INSTALLATION COST. BALLASTS SHALL BE MAGNETEK TRIAD OR APPROVED EQUAL OF ADVANCE, VALMONT, OR GE/MOTOROLA.

E. 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.

G. 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.

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

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

J. 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

C. E.C TO RUN CAT5 CABLING IN ALL PHONE & FAX CONDUITS FROM D-MARK LOCATION TO THE OFFICE AND TERMINATE TO ALLOW PHONE SYSTEM TO PLUG IN. COORDINATE PLUG TYPE WITH PHONE SYSTEM











GFCI NOTE:

ALL 125-VOLT THROUGH 250-VOLT RECEPTACLES SUPPLIED BY SINGLE-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 50 AMPERES OR LESS, AND ALL RECEPTACLES SUPPLIED BY THREE-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 100 AMPERES OR LESS IN KITCHENS AND FOOD PREP AREAS SHALL USE GFCI BREAKER TYPE. GFCI BREAKERS SHALL BE INSTALLED IN ACCORDANCE WITH 2020 NEC ARTICLE 210.8.

ALL 125-VOLT THROUGH 250-VOLT RECEPTACLES SUPPLIED BY SINGLE-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 50 AMPERES OR LESS, AND ALL RECEPTACLES SUPPLIED BY THREE-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 100 AMPERES OR LESS IN RESTROOMS OR ON EXTERIOR SHALL BE INSTALLED IN ACCORDANCE WITH 2020 NEC ARTICLE 210.8 AND BE READY ACCESSIBLE. FOR EQUIPMENT THAT WOULD HAVE TO BE MOVED TO RESET THE RECEPTACLE PER THE RECEPTACLE PER THE NEC DEFINITION. A GFCI BREAKER SHALL BE UTILIZED IN LIEU OF A RECEPTACLE.

POWER AND SYSTEMS NOTES:

- 1. FIELD COORDINATE EXACT LOCATION OF RECEPTACLES WITH OWNER PRIOR TO ROUGH-IN. COORDINATE RECEPTACLES' HEIGHT WITH ARCHITECTURAL DRAWINGS.
- 2. PROVIDE 3' X 4' X 3/4" FIRE RESISTANT PLYWOOD BACKBOARD PAINTED WHITE FOR TELEPHONE SYSTEM WITH ELEVATION STARTING AT 65"AFF. CONNECT #6 AWG, INSULATED, STRANDED, COPPER GROUND WIRE FROM TELEPHONE SYSTEM TO GROUND BUS AT MAIN PANEL.
- 3. PROVIDE GFI BREAKER.
- 4. SUGGESTED TRENCH.
- 5. PROVIDE HOSPITAL GRADE MC CABLE (WHICH PROVIDES A SEPARATE SECOND GROUNDING PATH AS REQUIRED PER NEC 517.13) IN PATIENT TREATMENT AREAS. CONNECT THESE CABLES AND RECEPTACLES TO PROVIDE A REDUNDANT GROUND PATH AS REQUIRED PER NEC 517.13. UTILIZE METAL CONDUIT AND WET LOCATION LISTED CONDUCTORS BELOW GRADE WHERE NECESSARY.
- 6. COORDINATE ALL RECEPTACLE LOCATIONS WITH OWNER PRIOR TO INSTALLATION. PORTS INSTALLED EVOLUTION SERIES EFB45 FLOOR BOX SURFACE STYLE COVER WITH SOLID LID OR APPROVED EQUAL.
- PROVIDE DISCONNECT SWITCH UP HIGH AT SIGN FOR SIGNAGE CIRCUITS AS REQUIRED BY NEC 600. REFER TO PLANS FOR NUMBER OF CIRCUITS REQUIRED. ROUTE THROUGH PHOTOCELL.
- 8. PROVIDE WORKING CLEARANCE IN FRONT OF PANELS PER N.E.C.



ELECTRICAL POWER PLAN 1/8" = 1'-0"



LIGHTING NOTES:

- 1. PROVIDE NON-CONTACTED, NON-SWITCHED HOT CONDUCTOR OF SAME CIRCUIT TO EACH EMERGENCY LIGHTING FIXTURE, EXIT SIGN AND NIGHT LIGHT. LABEL CIRCUITS IN PANELBOARD AS "EMERGENCY LIGHTING CIRCUIT".
- 2. PROVIDE SWITCHBANK FOR LIGHTING. PROVIDE DIMMERS FOR DINING FIXTURES, TOGGLES FOR NOT DIMMER FIXTURES. GC TO PROVIDE KEY BOX FOR SWITCHBANK. COORDINATE FINAL LOCATION WITH OWNER PRIOR INSTALLATION.
- 3. PROVIDE NEW TIME CLOCK AND PHOTOCELL. COORDINATE WITH OWNER PRIOR TO INSTALLATION.

	LIGHTING SCH	EDULE	
SYMBOL	DESCRIPTION	MODEL	WATTS
© _A	6" LED RECESSED CAN DIMMER RECOMMENDED PROVIDED BY GC	TDB	13
D ^a	SCONE CLINICAL CORRIDORS DIMMER RECOMMENDED PROVIDED BY GC	TDB	18
ထို့ဝ	RESTROOM VANITY SCONE DIMMER RECOMMENDED PROVIDED BY GC	TDB	12
X	2x4' TROFFER LIGHT DIMMER RECOMMENDED PROVIDE BY GC	TDB	40
OE	PENDANT RECEPTION DESK DIMMER RECOMMENDED PROVIDE BY GC	TDB	15
<u> </u>	TRACK LIGHTING WAITING ROOM DIMMER RECOMMENDED PROVIDE BY GC	TDB	10
	FASTTRACK LIGHT STAINLESS STEEL PROVIDE BY DESIGN ERGONOMICS	L2A1	10
<u>P</u> '	EXTERIOR SCONE LIGHT	TDB	15
Пı	EXTERIOR WALL PACK	TDB	12
0	CANOPY LIGHTS	TDB	25
⊕™	CHANDELIER	CHADELIER INDUSTRIAL LOFT RUSTIC LIGHTING G7-B48B/3428/66	150
OL	PENDANT	LENI SINGLE LIGHT CERAMIC PENDANT #IDEK2043	15
Ø	2' X 2' TROFFER LIGHT	TDB	32
EM	2 HEAD EMERGENCY UNIT, BLACK HOUSING	EXITRONIX LED-90	>5
A	LED EXIT SIGN, BLACK, RED LETTERS W/ BATTERY BACK UP	EXITRONIX VLED-90	>5
D EX2	EXTERIOR REMOTE EMERGENCY HEAD	NORA #NE932	>5



Missing or invalid reference File: ..\..\OneDrive\Documents\Converge Engineering\2024\241060-US-CSC-Blairesville Dentistry, GA\Drawings\compliance-report-20240327_122302_406.pdf Sheet: 1

1/8" = 1'-0"



MECHANICAL NOTES:

- 1. PROVIDE JUNCTION BOX AND CONDUIT THROUGH SEALED OPENING FOR CONTROL WIRING/POWER WIRING TO MECHANICAL UNITS ON THE ROOF. COORDINATE EXACT LOCATIONS WITH MECHANICAL DRAWINGS PRIOR TO INSTALLATION.
- 2. EXTERIOR RECEPTACLE SHALL BE "WEATHER RESISTANT" TYPE AND LABELED ACCORDINGLY BY THE MANUFACTURER. WEATHER PROOF COVER SHALL BE PROVIDED THAT IS WEATHER PROOF WHILE IN USE. THE RECEPTACLE SHALL BE GCFI TYPE.

3. CONNECT TO LIGHT SWITCH.

	MECHANICAL EQUIPMENT SCHEDULE																
														DISCONNECT (NOTE 1)			
EQUIPMENT NAME	VOLTAGE	PHA SE	HP	KW	KW / POLE	FLA	MCA	MOCP	BREAKER AMPACITY	PANEL		FEEDER	SIZE	POLES	FUSE SIZE	ENCLOSURE	CONTROL
RTU-1	208	3			9.25	64.2	77.0	80	80	A -1,3,5	3 # 3	,1# 8 G- 1 1/4 "C.	100	3	NF	NEMA 3R	BY DIVISION 23
RTU-2	208	3			7.57	52.5	63.0	70	70	A-7,9,11	3#4	,1# 8 G- 11/4 "C.	100	3	NF	NEMA 3R	BY DIVISION 23
RTU-3	208	3			7.57	52.5	63.0	70	70	A-13,15,17	3#4	,1# 8 G- 11/4 "C.	100	3	NF	NEMA 3R	BY DIVISION 23
RTU-4	208	3			9.25	64.2	77.0	80	80	A-2,4,6	3#3	,1# 8 G- 11/4 "C.	100	3	NF	NEMA 3R	BY DIVISION 23
RTU-5 (FUTURE)	208	3			9.25	64.2	77.0	80	80	A-8,10,12	3#3	,1# 8 G- 1 1/4 "C.	100	3	NF	NEMA 3R	BY DIVISION 23
RTU-6 (FUTURE)	208	3			9.25	64.2	77.0	80	80	A-14,16,18	3#3	,1# 8 G- 11/4 "C.	100	3	NF	NEMA 3R	BY DIVISION 23
F-1/F-2	120	1			0.20		0.0	15	15	A-20	2 # 12	,1# 12 G- 1/2 "C.			DIRE	T	BY DIVISION 26
F-1/F-2/F-3	120	1			0.16		0.0	15	15	A-22	2 # 12	,1# 12 G- 1/2 "C.			DIRE	CT	BY DIVISION 26
WH-1	208	1			5.50			60	60	A-19,21	2#4	,1# 10 G- 1 "C.	60	2	NF	NEMA 1	BY DIVISION 26
NOTES:																	

1. DISCONNECT SWITCH IS NOT REQUIRED IF UNIT IS PROVIDED WITH DISCONNECT OR IF UNIT HAS CORD/PLUG AND RECEPTACLE.



MECHANICAL POWER PLAN

1/8" = 1'-0"





LOAD SUMM	IARY			
			208	Y/ 120V
CIRCUIT DESCRIPTION	PANEL A	PANEL B	CONNECTED	DEMAND
LIGHTING	0.0	5.2	5.23	6.54
RECEPTACLE	17.0	81.2	98.22	54.11
MOTOR	0.4	0.0	0.38	0.90
HEATING	0.0	0.0	0.00	156.34
COOLING	156.3	0.0	156.34	
KITCHEN	0.0	0.0	0.00	0.00
MISCELLANEOUS	11.0	7.4	18.39	18.39
		NEW TOTA	L DIVERSIFIED KVA	236
		NEW TOTAL	DIVERSIFIED AMPS	656

PANEL NAME			LOCATION:			VOLTAGE:	20	08 Y/ 120V	3 PHA SE		MOUNTING/ ENC
	А		вон				600A	MCB			
AMPS	POLES	TYPE	CIRCUIT DESCRIPTION	KVA	CKT	А	B	C	CKT	KVA	CIRCUIT DESCRIPTION
1111110	TOPPE	AC		9.25	1	18 49	5		2	9.25	
80	3	AC	RTU-1	9.25	3	10115	18 49		4	9.25	TRTU-4
	_	AC	4	9.25	5		10.12	18.49	6	9.25	
		AC		7 57	7	16.81			8	9.25	
70	3	AC	RTU-2	7.57	9	10101	16.81		10	9.25	RTU-5 (FUTURE)
		AC		7.57	11		10101	16.81	12	9.25	
		AC		7.57	13	16.81			14	9.25	
70	3	AC	RTU-3	7.57	15		16.81		16	9.25	RTU-6 (FUTURE)
		AC	1	7.57	17			16.81	18	9.25	
				5.50	19	5.72			20	0.22	F-1/F-2
60	2		WH-1	5.50	21		5.66		22	0.16	F-1/F-2/F-3
20	1	R	DESK	1.20	23			1.80	24	0.60	DESK
20	1	R	GENERAL RECEP.	1.80	25	2.80			26	1.00	DESK
20***	1	R	DISHWASHER	0.60	27		1.60		28	1.00	DESK
20	1	R	GENERAL RECEP.	1.20	29			1.80	30	0.60	REFRIGERATOR
20	1	R	GENERAL RECEP.	1.50	31	2.10			32	0.60	BATHROOM RECEP.
20	1	R	PANEL RECEP	0.60	33		1.50		34	0.90	BATHROOM RECEP.
20	1	R	PHONEBOARD	1.20	35			2.40	36	1.20	DESK
20	1	R	PHONEBOARD	1.20	37	1.20			38	0.00	SPARE
20	1	R	DESK	1.20	39		1.20		40	0.00	SPARE
20	1	R	DESK	0.60	41			0.60	42	0.00	SPARE
***PROVID	E GFCI BR	EAKER		PHASE	TOTAL	63.9	62.1	58.7	KVA		

** PROVIDE LOCK ON BREAKERS IN THE OPEN POSITION *PROVIDE HACR TYPE CIRCUIT BREAKER

	LIGHTING	0.0		0.0
٤	RECEPTACLE	17.0		13.5
М	MOTOR	0.4	2.4	1.0
ł	HEATING	0.0		156.3
ЧС	AC	156.3		
Κ	KITCHEN	0.0	65%	0.0
	MISCELLANEOUS	11.0		11.0
-	TRANSFORMED OR SUB PANEL	0.0		0.0

FILL IN KVA OF LARGEST MOTOR

AND DIVERSITY FACTOR FOR KITCHEN

CLOSURE: SURFACE / NEMA 1 NEW TYPE POLES AMPS AC AC 80 AC ACAC 80 AC ACAC 80 AC Μ - 20 1 R 1 20 R 1 20 R 1 1 20 R I R 1 20*** 1 20*** R R 1 20 1 20 1 20 1 20 185 KVA 513 A 182 KVA 505 A

TOTAL CONNECTED LOAD

TOTAL DEMAND LOAD

PANEL NAME		ſΕ	LOCATION:			VOLTAGE:	208	8 Y/ 120V	3 PHAS	SE	MOUNTING/ENCLOSURE:	SURFACE	/	NEMA 1
В вон		ВОН				225A	MCB			NEW				
AMPS	POLES	TYPE	CIRCUIT DESCRIPTION	KVA	CKT	A	В	С	CKT	KVA	CIRCUIT DESCRIPTION	Түре	POLES	AMPS
20	1	R	DENTAL SEATING	1.80	1	3.60	2		2	1.80	DENTAL SEATING	R	1	20
20	1	R	DENTAL SEATING	1.80	3		3.60		4	1.80	DENTAL SEATING	R	1	20
20	1	R	DENTAL SEATING	1.80	5		2100	3.60	6	1.80	DENTAL SEATING	R	1	20
20	1	R	DENTAL SEATING	1.80	7	3.60			8	1.80	DENTAL SEATING	R	1	20
20	1	R	DENTAL SEATING	1.80	9		3.60		10	1.80	DENTAL SEATING	R	1	20
20	1	R	DENTAL SEATING	1.80	11			3.60	12	1.80	DENTAL SEATING	R	1	20
20	1	R	DENTAL SEATING	1.80	13	3.60			14	1.80	DENTAL SEATING	R	1	20
20	1	R	MEDIA CABINET / RECEP.	1.20	15		2.40		16	1.20	MEDIA CABINET / RECEP.	R	1	20
20	1	R	MEDIA CABINET / RECEP.	1.20	17			2.40	18	1.20	MEDIA CABINET / RECEP.	R	1	20
20	1	R	MEDIA CABINET / RECEP.	1.20	19	2.40			20	1.20	MEDIA CABINET / RECEP.	R	1	20
20	1	R	MEDIA CABINET / RECEP.	1.20	21		1.29		22	0.09	FASTTRACK LIGHT	L	1	20
20	1	L	LIGHTING	0.60	23			0.89	24	0.29	LIGHTING	L	1	20
20	1	L	CORRIDOR LIGHTING	0.25	25	0.61			26	0.36	LIGHTING	L	1	20
20	1	L	FASTTRACK LIGHT	0.05	27		0.35		28	0.30	EXTERIOR LIGHTING	L	1	20
20	1	L	LIGHTING	1.50	29			2.10	30	0.60	TC		1	20
20	1		PC	0.60	31	1.20			32	0.60	OFFICE	R	1	20
20	1	R	DESK	1.20	33		1.50		34	0.30	MONITOR	R	1	20
20	1	R	DESK	1.20	35			2.40	36	1.20	GENERAL RECEP.	R	1	20
20	1	R	DESK	0.60	37	1.20			38	0.60	ROOF RECEP.	R	1	20
20	1	R	HEADWALL	1.80	39		3.60		40	1.80	HEADWALL	R	1	20
20	1	R	HEADWALL	1.80	41			3.60	42	1.80	HEADWALL	R	1	20
20	1	R	HEADWALL	1.80	43	3.60			44	1.80	HEADWALL	R	1	20
20	1	R	HEADWALL	1.80	45		3.60		46	1.80	HEADWALL	R	1	20
20	1	R	HEADWALL	1.80	47			3.60	48	1.80	HEADWALL	R	1	20
20	1	R	HEADWALL	1.80	49	3.60			50	1.80	HEADWALL	R	1	20
20	1	R	HEADWALL	1.80	51		3.60		52	1.80	HEADWALL	R	1	20
25***	1	R	AUTOCLA VES	1.73	53			2.94	54	1.21	STATIM	R	1	25***
25***	1	R	AUTOCLAVES	1.73	55	4.86			56	3.13	DISHWASHER	R	2	40***
20***	1	R	HOOD	1.20	57		4.33		58	3.13		R	-	10
30	2		DRVFR	2.50	59			3.70	60	1.20	MICROWAVE	R	1	20***
	-			2.50	61	3.70			62	1.20	MICROWAVE	R	1	20***
20	1		WASHER	1.20	63		2.40		64	1.20	FUTURE SIGN	L	1	20
20***	1	R	GENERAL RECEP.	1.60	65			2.20	66	0.60	FUTURE SIGN	L	1	20
20***	1	R	STERILIZATION AREA	0.60	67	0.60			68	0.00	SPARE		1	20
20	1		SPARE	0.00	69				70	0.00	SPARE		1	20
20	1		SPARE	0.00	71				72	0.00	SPARE	<u> </u>	1	20
***PROVID	E GFCI BR	EAKER		PHASE	TOTAL	32.6	30.3	31.0	_ KVA					
** PROVIDE	E LOCK ON	BREAKER	S IN THE OPEN POSITION								TOTAL CONNECTED LOAD	94	KVA	260 A
*PROVIDE F	IACR TYP	E CIRCUIT I	BREAKER								ITOTAL DEMAND LOAD	1 60) KVA	1165 A

5.2 81.2 0.0 2. 0.0 0.0 LIGHTING RECEPTACLE MOTOR HEATING KITCHEN MISCELLANEOUS TRANSFORMED OR SUB PANEL 0.0 65% 7.4 0.0

FILL IN KVA OF LARGEST MOTOR AND DIVERSITY FACTOR FOR KITCHEN

GENERAL NOTES:

- 1. PROVIDE PULL STRINGS IN ALL EMPTY CONDUITS.
- 2. ALL JUNCTION BOXES, CONDUITS, AND WIRES SHALL BE SIZED PER NEC.
- 3. PROVIDE A CONSTANT HOT FORM PANEL BOARD DIRECTLY TO ALL EMERGENCY BATTERY PACKS/BALLASTS IN ALL EMERGENCY LIGHTING FIXTURES.
- 4. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION & MOUNTING HEIGHTS OF ALL LIGHTING FIXTURES SHOWN ON THIS DRAWING.
- 5. REFER TO DETAIL SHEET FOR SYMBOLS, SPECIFICATIONS AND ABBREVIATIONS.
- 6. ALL DEVICES AND EQUIPMENT OUTSIDE THE SCOPE OF WORK ARE EXISTING TO REMAIN U.O.N.
- 7. ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY, EXISTING CONDITIONS OR LOAD CAPACITY PRIOR TO COMMENCEMENT OF WORK.

RISER DIAGRAM NOTES:

1. COORDINATE WITH THE LOCAL UTILITY AND PROVIDE AN APPROVED 800A NEMA 3R METERBASE.





ISSUE:	PR	OJECT NUMBER:							23-	060
ISSUE:										
		ISSUE:								



NA 305

ЧĞ

40 HO BLAIRS



E-4.0

FOR CONSTRUCTION