Attachment A

Design Concept Drawings

The drawings provided in this attachment are conceptual in nature only, and do not necessarily represent the final design of the project. ECPCAA reserves the right to make any changes it deems necessary in its sole judgement concerning the final design, including size, amenities, building systems and other features, which will be determined during the remaining design phase and partly based upon available budget.



Elizabeth City Regional Airport Terminal Building

Consolidated Rd Elizabeth City, NC 27909

Issue Date 023-031

LIST OF DRAWINGS



ABV. A.F.F. ACT. AC.PL. ADD.	ABOVE ABOVE FINISHED FLOOR ACOUSTICAL CEILING TILE ACOUSTICAL PLASTER ADDENDUM	F.B. F.O.C. F.O.F. F.O.M. F.O.S.
ADH. ADJ. ADJT. AGG. A/C	ADHESIVE ADJACENT ADJUSTABLE AGGREGATE AIR CONDITIONING	FGL. FD. FIN. F.F. F.A.
ALT. ALUM. A.B. ANOD. APPX	ALTERNATE ALUMINUM ANCHOR BOLT ANODIZED APPROXIMATELY APCHITECT((IPAL)	F.C. F.E. F.E.C. F.H.C. FPL.
A.D. ASB. ASPH. A.T. AUTO.	AREA DRAIN ASBESTOS ASPHALT ASPHALT TILE AUTOMATIC	F.RT. FLG. FLX. FLR. F.D.
BSMT. BM. BRG. BJT. BET.	BASEMENT BEAM BEARING BED JOINT BETWEEN	FLOUF F.JT. FT. FTG. FOUNI FR.
BIT. BLK. BLKG. BD. B.S. B.W	BITUMINOUS BLOCK BLOCKING BOARD BOTH SIDES BOTH WAYS	FR.A. F.S. FUR. FUT.
BOT. BRK. BRZ. BLDG. B.U.R.	BOTH WAYS BOTTOM BRICK BRONZE BUILDING BUILT UP ROOFING	GA. GALV. G.C. GL. GL.B. G.C.M.
CAB. C.H. CPT. C.O. CSMT.	CABINET CABINET HEATER CARPET(ED) CASED OPENING CASEMENT	G.S.T. G.B. GD. GRN. GND.
C.I. C.B. CLKG. CLG. CEM.	CAST IRON CATCH BASIN CAULKING CEILING CEMENT	G.F. GYP. GWB.
CTR. CER. C.T. CHBD. CIRC. CLR	CENTER CERAMIC CERAMIC TILE CHALKBOARD CIRCUMFERENCE CLEAR(ANCE)	HDW. HWD. HDR. HTG. H.V.A.(
CL. CLS. C.R. C.W. COL. COMB. COMPO.	CLOSET CLOSURE COLD ROLLED COLD WATER COLUMN COMBINATION COMPOSITION (COMPOSITE)	H.D. HGT. H.C. H.M. HOR. H.B. H.W.H.
COMP. CONC. C.M.U. CX. CONST. CONT. CONTR.	COMPRESS(ED)(ION)(IBLE) CONCRETE CONCRETE MASONRY UNIT CONNECTION CONSTRUCTION CONTINUOUS OR CONTINUE CONTRACT(OR)	HR. INCL. I.D. I.F. INSUL. INT.
C.L.L. C.J. C.P. CONV. CPR.	CONTRACT LIMIT LINE CONTROL JOINT CONTROL PANEL CONVECTOR COPPER	INV. JAN. JT.
C.G. CORR. CTR. CFL. CS. CRS	CORNER GUARD CORRUGATED COUNTER COUNTER FLASHING COUNTERSINK COURSE(S)	KPL. K.O. LBL. LAM.
CR.G. C.FT. C.YD. DPR.	CROSS GRAIN CUBIC FOOT CUBIC YARD DAMPER	L.H. LTG. LW. LTL. L.L.
DP. D.L. DEMO. DEP. DET. DTL. DIAG. DIA. DIA. DIM. DPR. DIV. DR	DAMPROOFING DEAD LOAD DEMOLISH, DEMOLITION DEPRESSED DETERMINE DETAIL DIAGONAL DIAMETER DIMENSION DISPENSER DIVISION DOOR	MH. MFR. MRB. MAS. MAS. MAT'L. MAX. MECH. MBR
D.H. DS. D. D.T. DWG. D.F. DW.	DOUBLE HUNG DOWN SPOUT DRAIN DRAIN TILE DRAWING DRINKING FOUNTAIN DUMBWAITER	MMB. MTL. MWK. MIN. MIR. MISC. MLD.
EA. E.F. ELEC. E.P. E.W.C	EACH EACH FACE ELECTRIC(AL) ELECTRICAL PANEL BOARD ELECTRIC WATER COOLER	M.R. MTD. MOV. MULL.
ELEV. EMER. ENC. EQ. EQUIP.	ELEVATION EMERGENCY ENCLOSE(URE) EQUAL EQUIPMENT	NOM. N.I.C. N.T.S.
EST. EXH. EXIST. E.B. E.J. EXP. EXT	ESTIMATE EXHAUST EXISTING EXPANSION BOLT EXPANSION JOINT EXPOSED EXTERIOR	NO. OBS. O.C. OP. OPG. OPP
E.I.F.S.	EXTERIOR INSULATION FINISH SYSTEM	0.D. 0.A. 0.H.

F.B.	FACE BRICK
F.O.C.	FACE OF CONCRETE
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUDS
FGL.	FIBERGLASS
FD	FIBERGLASS
FIN.	FINISH(ED)
F.F.	FINISH FLOOR
F.A.	FIRE ALARM
F.C.	FIRE CODE
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CAB.
F.H.C.	FIRE HOSE CABINET
FPL.	FIREPLACE
FP.	FIREPROOF
F.RT.	FIRE-RETARDANT
FLG.	FLASHING
FLX.	FLEXIBLE
FLR.	FLOOR(ING)
F.D.	FLOOR DRAIN
FLOUR.	FLUORESCENT
F.JT.	FLUSH JOINT
FT.	FOOT (FEET)
FTG.	FOOTING
FOUND.	FOUNDATION
FR.	FRAME(D), (ING)
FR.A.	FRESH AIR
F.S.	FULL SIZE
FUR.	FURRED(ING)
FUT.	FUTURE
GA.	GAUGE
GALV.	GALVANIZED
G.C.	GENERAL CONTRACT(OR)
GL.	GLASS, GLAZING
GL.B.	GLASS BLOCK
G.C.M.U.	GLAZED CONCRETE
G.S.T. G.B. GD.	MASONRY UNITS GLAZED STRUCTURAL TILE GRAB BAR GRADE, GRADING
GRN.	GRANITE
GND.	GROUND
G.F.	GROUND FACE
GYP.	GYPSUM
GWB.	GYPSUM WALL BOARD
H/C.	HANDICAPPED
HDW.	HARDWARE
HWD.	HARDWOOD
HDR.	HEADER
HTG.	HEATING
H.V.A.C.	HEATING/VENTILATING/
H.D. HGT. H.C.	AIR CONDITIONING HEAVY DUTY HEIGHT HOLLOW CORE
H.M.	HOLLOW METAL
HOR.	HORIZONTAL
H.B.	HOSE BIB
H.W.H.	HOT WATER HEATER
INCL.	INCLUDE(D), (ING)
I.D.	INSIDE DIAMETER
I.F	INSIDE FACE
INSUL.	INSULATE(D), (ING)
INT.	INTERIOR
INV.	INVERT
JAN.	JANITOR
JT.	JOINT
K.O.	
LAM. LAV. L.H. LTG.	LAVATORY LEFT HAND LIGHTING
LTL.	LINTEL
L.L.	LIVE LOAD
LVR.	LOUVER
MH.	MANHOLE
MFR.	MANUFACTURE(ER)
MRB.	MARBLE
MAS	MASONBY
MAC. M.O. MAT'L. MAX. MECH	MASONRY OPENING MATERIAL MAXIMUM MECHANIC(AL)
MECH. MED. MBR. MMB.	MEDIUM MEMBER MEMBRANE
MIL.	METAL
MWK.	MILLWORK
MIN.	MINIMUM
MIR.	MIRROR
MLD.	MOLDING
M.R.	MOP RECEPTOR
MTD.	MOUNT(ED), (ING)
MOV	MOVABLE
MULL.	MULLION
NAT.	NATURAL
N.R.C.	NOISE REDUCTION
NOM. N.I.C. N.T.S.	COEFFICIENT NOMINAL NOT IN CONTRACT NOT TO SCALE
OBS.	OBSCURE
O.C.	ON CENTER(S)
OPG.	OPENING
OPP.	OPPOSITE
O.D.	OUTSIDE DIAMETER
0.H.	OVERHEAD
OZ.	OUNCE

P.B.

P.V.C.

P.C.F.

P.L.FT.

P.S.F.

P.S.I.

P.L.

Q.T.

QTY.

R.C.P.

R.A. REV.

R.D.

RF.H. RFG.

S.F.

U.S.

V.I.F.

W.B. W.PT.

POLY ISO	POLYMERIC ISOMER
PR.	PAIR
PTD.	PAINT(ED)
PAR.	PARALLEL
PTN. PVMT	PARTITION
PED.	PEDESTAL
PERF.	PERFORATE(D)
PERIM.	PERIMETER
PLAS.	PLASTER
P'LAM.	PLASTIC LAMINATE
PI	PLATE
PLY.	PLYWOOD
PT	POINT
P.V.C.	POLYVINYL CHLORIDE
P.C.F.	POUNDS PER CUBIC FOOT
P.L.FT.	POUNDS PER LINEAL FOOT
P.S.F.	POUNDS PER SQUARE FOOT
P.S.I.	POUNDS PER SQUARE INCH
PC.	PRE CAST
PFB.	PREFABRICATE(D)
PFN.	PRE FINISHED
P.L.	PROPERTY LINE
Q.T.	QUARRY TILE
QTY.	QUANTITY
RAD.	RADIATION
R.	RADIUS
R.W.L.	RAINWATER LEADER
REF.	REFERENCE
RFL.	REFLECT(ED,) (IVE), (OR)
REFR. REG.	
R.C.P.	REINFORCED CONCRETE PIPE
REM.	REMOVE
REQ D. RES.	
REV.	REVISION(S), REVISED
R.O.W.	RIGHT OF WAY
R.D. RE H	ROOF DRAIN
RFG.	ROOFING
R.O.	ROUGH OPENING
SF.GL.	SAFETY GLASS
SCHED.	SCHEDULE
SECT.	SECTION
SHTHG.	SHEATHING
SHT.	SHEET
SHELV.	SHELVING
SIM.	SIMILAR
SKYLT.	SKYLIGHT
SL.	SLEEVE
S.C.	SOLID CORE
SP.	SOUNDPROOF
SPK.	SPEAKER
SPEC.	SPECIFICATION(S)
SQ.	SQUARE
S.F.	SQUARE FOOT (FEET)
S.S.	STAINLESS STEEL
STD.	STANDARD
STA.	STATION
STL.	STEEL
STOR.	STORAGE
S.D.	STORM DRAIN
STR.	STRUCTURE
STRL.	STRUCTURAL
S.C.T.	STRUCTURAL CLAY TILE
SUSP. SYM.	SYMMETRY (ICAL)
SYS.	SYSTEM
TK.BD. TKS	TACK BOARD
TEL. T V	TELEPHONE
TEMP.	TEMPORARY, TEMPERED
T.C.	TERRA COTTA
TZ.	TERRAZZO
THK.	THICK(NESS)
THR.	THRESHOLD
T.PTN.	TOILET PARTITION
T&G	TONGUE AND GROOVE
T.O.F.	TOP OF FOUNDATION
T.O.M.	TOP OF MASONRY
T.O.SL.	TOP OF SLAB
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TPO T.B.	THERMOPLASTIC POLYOLEFIN
T	TREAD
TYP.	TYPICAL
UC.	UNDERCUT
UNF.	UNFINISHED
U.N.O.	UNLESS NOTED OTHERWISE
U.S. V B	
VER. VERT	VERIFY
V.G. VIN	VERTICAL GRAIN
V.C.T.	VINYL COMPOSITION TILE
V.B.	VINYL BASE
V.T.	VINYL TILE
V.W.C.	VINYL WALL COVERING
V.I.F.	VERIFY IN FIELD
WSCT.	WAINSCOT
W.C.	WATER CLOSET
WP.	WATERPROOFING
W.R.	WATER RESISTANT
W.S.	WATER STOP
WT.	WEIGHT
vv.vv.F. W/	WELDED WIKE FABRIC WITH WITHOUT
WDW.	WINDOU WINDOW WIRED CLASS
WD. WR	WINED GLASS WOOD WOOD BASE
W.PT.	WORKING POINT

I	LOBBY -
	A
(101
	W1
3	SYM
A0.1	SCALE: 1

30" MIN.	

39"-41" MAX 2'-0" 7"-9"



ABBREVIATIONS A0.1

1. BUILDING CODES

ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH CURRENT APPLICABLE BUILDING CODE WITH LOCAL AMENDMENTS AND WITH ALL OTHER CODES, SHALL BE USED.

ALL WORK RELATING TO THIS CONSTRUCTION SHALL COMPLY WITH U.S. DEPARTMENT OF LABOR, THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS AND ALL RELATED APPLICABLE LOCAL BUILDING CODES AND ORDINANCES.

II) DRAWINGS ARE IN PART DIAGRAMMATIC AND NOT NECESSARILY SHOW COMPLETE DETAILS OF CONSTRUCTION WORK OR MATERIALS, PERFORMANCE OR INSTALLATION, DRAWINGS DO NOT NECESSARILY SHOW HOW CONSTRUCTION DETAILS, OTHER ITEMS OR WORK AND EQUIPMENT MAY EFFECT A PARTICULAR INSTALLATION. CONTRACTOR TO PROVIDE ALL MATERIALS AND CONSTRUCTION AS IS REASONABLY INFERRED AND CUSTOMARY FOR THE WORK AND FINISHED PRODUCT SHOWN ON DRAWINGS.

III) DIMENSIONS

ENTITY.

- (I) INTERIOR DIMENSIONS ARE FROM FACE OF GWB TO FACE OF GWB UNLESS NOTED OTHERWISE.
- DIMENSIONS UNLESS NOTED OTHERWISE. (III) ALL DIMENSIONS ARE TO BE FIELD VERIFIED AND BACK CHECKED FOR
- ARCHITECT FOR VERIFICATION PRIOR TO PROCEEDING WITH THE WORK.
- ARE THE PROPERTY OF LINDSEY ARCHITECTURE FOR USE SOLELY FOR THIS PROJECT AND SHALL NOT BE REPRODUCED. COPIED OR USED FOR OTHER PURPOSES WITHOUT WRITTEN PERMISSION OF LINDSEY ARCHITECTURE.
- V) THE DESIGN PROFESSIONAL WHOSE SEAL APPEARS ON THESE DOCUMENTS IS THE ARCHITECT OF RECORD FOR THIS PROJECT. NO OTHER PARTY MAY REVISE, ALTER OR DELETE THESE CONSTRUCTION DOCUMENTS. FOR THE PURPOSES OF THESE CONSTRUCTION DOCUMENTS THE ARCHITECT OF RECORD AND LINDSEY ARCHITECTURE SHALL BE CONSIDERED THE SAME
- V1) THE CONTRACTOR SHALL NOT ASSUME THAT DIGITAL FILES IN ANY OTHER FORMAT THAN PDF WILL BE MADE AVAILABLE DURING BIDDING OR AFTER AWARD. IF OTHER DIGITAL FILES OR FILE FORMAT ARE REQUESTED, LINDSEY ARCHITECTURE RESERVES THE RIGHT TO SELECTIVELY PROVIDE THEM, AND IF PROVIDED, PRESERVES THE RIGHT TO REQUIRE ADDITIONAL CONSIDERATION FOR THE TIME INCURRED TO PREPARE THEM FOR RELEASE.

GENERAL NOTES

- PERSPECTIVE RENDERINGS OR VIEWS THAT ARE INCLUDED IN THE CONSTRUCTION DRAWING SET.
 - CONSTRUCTION METHODS AND MATERIALS NOT EXPLICITLY INDICATED OR IMPLIED ARE INTENDED TO BE CONTRACTOR DESIGNED. THE ARCHITECT SHALL BE NOTIFIED OF ANY VARIATION FROM THE DIMENSIONS AND/OR CONDITIONS SHOWN ON THESE DOCUMENTS. ANY SUCH VARIATION SHALL BE APPROVED BY THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK OR THE CONTRACTOR SHALL ACCEPT FULL RESPONSIBILITY FOR THE COST TO RECTIFY THE WORK. UNLESS SPECIFICALLY CONTRACTED OTHERWISE, CONTRACTOR DESIGNED WORK IS
 - 6. CONTRACTOR REVIEW AND COORDINATION I) THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL CAREFULLY REVIEW THE DRAWINGS, SPECIFICATIONS, DETAILS, AND NOTES FOR INFORMATION REGARDING THE SCOPE OF THE WORK INTENDED PRIOR TO PROCEEDING WITH THE WORK.

SYSTEMS, SECURITY SYSTEMS, AND LOCKING HARDWARE WITH THE OWNER PRIOR TO INSULATION (SECURITY SYSTEMS EQUIPMENT FURNISHED BY OWNER. ALL CONDUIT BOXES BY ELECTRICAL SUBCONTRACTOR).

III) THE CONTRACTOR REPRESENTS AND WARRANTS THAT IT HAS EXAMINED THE PLANS, DRAWINGS, SPECIFICATIONS, AND ALL CONSTRUCTION CRITERIA OF

IV) THE CONTRACTOR SHALL REVIEW THE CIVIL DOCUMENTS, THE SOILS REPORT, AND THESE DOCUMENTS (ALL IN THEIR ENTIRETY) TO INSURE THAT ALL REQUIRED EARTHWORK, PAVING, CURB AND STRUCTURAL SLAB WORK IS FULLY COVERED IN ARCHITECT AND CIVIL ENGINEER TO INSURE THAT ALL WORK IS FULLY

DISPERSED THROUGHOUT THE PROJECT DOCUMENTS AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE SET OF PROJECT DOCUMENTS. NOTIFY THE ARCHITECT OF ANY CONFLICTING INFORMATION PRIOR TO THE START OF CONSTRUCTION.



TYPICAL MOUNTING HEIGHTS & CLEARANCES

1. ALL DIMENSIONS NOTED ARE ABOVE FINISHED FLOOR. 2. ALL FIXTURES ACCESSIBLE ARE TO BE MOUNTED TO MEET ICC A117.1-2009 ANSI.



tesk Docs://Elizabeth City Terminal Building/ECG Terminal





k Docs://Elizabeth City Terminal Building/ECG Terminal.rvt







c Docs://Elizabeth City Terminal Building/ECG Terminal.rvt

	ARCHITECTURE	324 S. Elm Street, Suite 500 Greensboro, NC 27401	p. 336.617.4402 f. 336.617.4434 www.lindseyarchitecture.com							
ELIZ REGIO	ELIZABETH CITY REGIONAL AIRPORT									
Elizabeth City Regional Airport	Terminal Building	Consolidated Rd	Elizabeth City, NC 27909							
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STAND	DARD DARD	TBD TBD			~~~
IEIGHTS ROVIDED AT ALL LOCATION GLE BOLTS ONLY, UNLESS OF DESIGN. PROVIDE PRO D AS "PROVIDED BY OWNER AS	S TO SUPPORT ACCESSORIES. SECURING FIXTURE TO BLOCKING. DDUCT AS SPECIFIED OR EQUAL. R"SHALL BE PROVIDED AND INSTALLED	D BY CONTRACTOR		City Regional Airport Not FOR CON	Consolidated Rd struction Struction
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AB	ANCHOR BOLT	GB	GRADE BEAM	PT	PRESSURE TREATED	
ACI	AMERICAN CONCRETE	GA. GALV.	GAGE; GAUGE GALVANIZED	PTI PVC	POST-TENSIONING INSTITUTE POLYVINYL CHLORIDE	
	ABOVE FINISHED FLOOR	ЦМ		в		U
130	CONSTRUCTION	HS	HIGH STRENGTH	RD	RADIUS ROOF DRAIN	
ITC	AMERICAN INSTITUTE OF	HEX. HD.	HEXAGONAL HEAD	RAD.	RADIUS	
	TIMBER	HSS	HOLLOW STRUCTURAL SHAPE	REF.	REFERENCE	(
	CONSTRUCTION	HT.	HEIGHT	REINF.	REINFORCE(D); REINFORCING	\sim
LT.	ALTERNATE			REM.	REMAINING; REMAINDER	<
RCH.				REQ'D.	REQUIRED	\sim
5 I W		I.F. INI		\$1	SAWED JOINT	<
VG	AVERAGE	IN. IBC		SS	STAINI ESS STEEL	
WS	AMERICAN WELDING SOCIETY	INT.	INTERIOR	SW	SHORT WAY	
				SCHED.	SCHEDULE	\wedge
LDG.	BUILDING	JST.	JOIST	SECT.	SECTION	
SM	BEAM	JT.	JOINT	SHT.	SHEET	
3P	BEARING PLATE; BASE PLATE	K		SIM.		
SRG.	BEARING	K OF K		SJI		
21			LONG LEGS BACK TO BACK	SLDD SLO	SHORT LEGS DAUR TU DAUR SHORT I EG OLITSTANDING	
JP	COMPLETE JOINT PENETRATION	LLH	LONG LEG HORIZONTAI	SOG	SLAB ON GRADE	
CMU	CONCRETE MASONRY UNIT	LLO	LONG LEG OUTSTANDING	SPEC(S).	SPECIFICATION(S)	
GS	CENTER OF GRAVITY OF STEEL	LLV	LONG LEG VERTICAL	SQ.	SQUARE	
CL.	CENTERLINE	LW	LONG WAY	STD.	STANDARD	
CLG.	CEILING	LB.	POUND	STL.	STEEL	
CLR.	CLEAR	LG.	LONG	STRUCT.	STRUCTURAL	
JOL.		LIN.		SYM.	SYMMETRICAL	
CONC.	- CONNECTION	LL 		- T OC		
CONST.	CONSTRUCTION			TOF	TOP OF FOOTING	
CONT.	CONTINUOUS	MOS	MIDDLE OF SLAB	TOS	TOP OF SLAB; TOP OF STEEL	
CRSI	CONCRETE REINFORCING	MOW	MIDDLE OF WALL	TOW	TOP OF WALL	
	STEEL INSTITUTE	MATL.	MATERIAL	T&B	TOP AND BOTTOM	
CTR.	CENTER	MAX.	MAXIMUM	TEMP.	TEMPORARY	
		MIN.				
).]		MK	MARK	ITF.	TTFICAL	
)S	DOWN SPOUT	WI X		U.L.	UNDERWRITERS LABORATORIES	
DBL.	DOUBLE	N/A	NOT APPLICABLE	UNO	UNLESS NOTED OTHERWISE	
DET.	DETAIL	N.F.	NEAR FACE			
DIA.	DIAMETER	NIC	NOT IN CONTRACT	W/O	WITHOUT	
JIAG.	DIAGONAL	NIS				
))		NCSBC	NORTH CAROLINA STATE	WP		
) N	DOWN	10000	BUILDING CODE	WWF	WELDED WIRE FABRIC	
WG(S).	DRAWING(S)	NO.	NUMBER			
F	FACH FACE	NOM.	NOMINAL	х	BY	
E.S.	EACH SIDE	O/C	ON CENTER	SYMBOLS	WITHIN TEXT	
.W.	EACH WAY	OD	OUTSIDE DIAMETER			
-W	EAST-WEST	0.F.	OUTSIDE FACE	≈	APPROX. EQUAL	
A.		OPNG.	OPENING	2	ANGLE	
LEV.	ELEVATION; ELEVATOR			¢	CENTERLINE	
INGK.				Δ	DELTA	
XIST.	EXISTING	UNIO.		=	IDENTITY/EXACTLY EQUAL	
XP. JT.	EXPANSION JOINT	P/S	PRESTRESSED	≠ #		
EXT.	EXTERIOR	P/T	POST-TENSIONING	# 0		
_		PC	PRECAST CONCRETE			
·D		PCI		<u>SYMBOLS</u>	WITHIN NUMBERS	
UN. IN	FUUNDATION	PEN.		- # ³	-CUBED	
11N. -	FLOOR	FERF. PJP		0	DEGREE(S)	
LG.	FLANGE	PL	PLATE	Ø	DIAMETER	
OB	FACE OF BRICK	PSF	POUNDS PER SQUARE FOOT	-±	PLUS/MINUS	
-T.	FOOT; FEET	PSI	POUNDS PER SQUARE INCH	# -	SQUAKED	
	FOOTING					









CONCRETE

CONCRETE SHALL BE NORMAL WEIGHT CONCRETE UNLESS NOTED OTHERWISE CONCRETE SHALL HAVE THE FOLLOWING MINIMUM 28-DAY COMPRESSIVE STRENGTHS UNLESS NOTED OTHERWISE IN THE PLANS OR SPECIFICATIONS.

•		
Α.	FOOTINGS AND PIERS	3,000 PS
В.	GRADE BEAMS AND FOUNDATION WALLS	3,000 PS
C.	SLABS ON GRADE	3,000 PS
D.	ELEVATED SLABS ON STEEL DECK	4,000 PS

PERM	ANEN	TLY E	EXTE	RIOR	EXP	OSED	000 (NCRE	TE	 . 4,0	000	PSI
ALL O	THER	CON	CRET	ГЕ						 3,0	000	PSI
										-		

- CONCRETE PERMANENTLY EXPOSED TO WEATHER SHALL HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.45 AND SHALL CONTAIN APPROXIMATELY 6% ENTRAINED AIR. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS.
- 3. CONCRETE SHALL BE BATCHED USING MATERIALS AND PROPORTIONS DESIGNATED IN THE APPROVED DESIGN MIXES. THE GENERAL CONTRACTOR SHALL PROVIDE QUALITY CONTROL OF THE CONCRETE MIX.
- 4. CONCRETE SLUMP SHALL BE AS INDICATED IN THE SPECIFICATIONS
- 5. THE ADDITION OF WATER TO INCREASE SLUMPS ABOVE THE LEVEL SPECIFIED OR TO RETEMPER CONCRETE WHICH HAS EXPERIENCED SLUMP LOSS DUE TO EXCESSIVE MIXING OR HEAT BUILD-UP IS NOT PERMITTED.
- 6. CONCRETE SHALL BE HANDLED, PLACED, AND CONSOLIDATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATIONS.
- 7. SEE SPECIFICATIONS FOR CURING AND HOT AND COLD WEATHER REQUIREMENTS FOR CONCRETE.
- 8. PROVIDE PRE-MOLDED EXPANSION-JOINT FILLER AT EDGES OF SLABS ON GRADE AGAINST VERTICAL SURFACES UNLESS NOTED OTHERWISE.
- DOWELS FROM FOOTINGS SHALL BE ACCURATELY LOCATED AND SECURELY TIED IN PLACE PRIOR TO PLACEMENT OF THE CONCRETE. PLACEMENT OF DOWELS IN FRESH CONCRETE AFTER THE CONCRETE HAS BEEN PLACED WILL NOT BE PERMITTED. USE TEMPLATES FOR THE PLACEMENT OF DOWELS IN COLUMNS AND SHEAR WALLS.
- 10. THE CONTRACTOR SHALL USE INSTRUMENTS TO MAINTAIN A CONTINUOUS CHECK OF THE ELEVATIONS OF THE TOP SURFACES OF SLABS DURING THE PLACEMENT AND FINISHING OF THE CONCRETE. ADJUSTMENTS SHALL BE MADE TO MAINTAIN THE SURFACES WITHIN THE SPECIFIED TOLERANCES.
- 11. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING ALL ANCHOR BOLTS, CLIPS, INSERTS, SLEEVES AND OTHER REQUIRED ITEMS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND IN COOPERATION WITH OTHER TRADES PRIOR TO THE PLACING OF CONCRETE.
- 12. CONCRETE FORMWORK SHALL NOT BE REMOVED UNTIL CONCRETE HAS REACHED SUFFICIENT STRENGTH TO NOT BE DAMAGED BY FORMWORK REMOVAL. SEE ALSO SPECIFICATIONS.

<u>CONSTRUCTION</u>

- 1. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PROTECTION OF PERSONS AND PROPERTY EITHER ON OR ADJACENT TO THE PROJECT AND SHALL PROTECT SAME AGAINST INJURY, DAMAGE, OR LOSS.
- 2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL SAFETY REGULATIONS PROGRAMS, AND PRECAUTIONS RELATED TO ALL WORK ON THIS PROJECT. SAFETY REGULATIONS SHALL BE STRICTLY FOLLOWED AT ALL TIMES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIALS IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
- 4. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO ORDERING MATERIALS OR PROCEEDING WITH NEW WORK IN AREAS AFFECTED BY EXISTING CONDITIONS. THE DESIGNER SHALL BE INFORMED IN WRITING OF CONFLICTS BETWEEN EXISTING AND PROPOSED NEW CONSTRUCTION.
- 5. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION, AND ANY TEMPORARY BRACING OR SUPPORT REQUIRED TO ACCOMMODATE THE CONTRACTOR'S MEANS AND METHODS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED ON NEW AND/OR EXISTING STRUCTURES. SUCH LOADS SHALL NOT EXCEED THE CAPACITY OF THE STRUCTURE AT ANY TIME.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNING, FURNISHING, ERECTING, AND REMOVING ANY SHORING AND BRACING REQUIRED DURING CONSTRUCTION, INCLUDING BRACING REQUIRED FOR SIDES OF EXCAVATIONS DURING FOUNDATION CONSTRUCTION AND TEMPORARY BRACING FOR WALLS.
- 8. THE CONTRACTOR SHALL INFORM THE DESIGNER. IN WRITING, OF ANY DEVIATION FROM THE CONTRACT DOCUMENTS. CONTRACTOR SHALL NOT BE RELIEVED OF THE RESPONSIBILITY FOR SUCH DEVIATION BY VIRTUE OF THE DESIGNER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC. UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED THE DESIGNER OF SUCH DEVIATION AT TIME OF SUBMISSION, AND THE DESIGNER HAS GIVEN WRITTEN APPROVAL FOR THE SPECIFIC DEVIATION.
- 9. NO OPENINGS NOR ANY CHANGES IN SIZE, DIMENSION OR LOCATION SHALL BE MADE IN ANY STRUCTURAL ELEMENTS WITHOUT WRITTEN APPROVAL OF THE DESIGNER.
- 10. WHERE CONSTRUCTION TOLERANCES ALLOW FOR VARIATIONS IN LOCATION, SIZE, ETC. OF STRUCTURAL ELEMENTS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL MATERIALS AND LABOR NECESSARY TO MODIFY CONNECTION ELEMENTS AS REQUIRED TO PROVIDE A FINISHED PRODUCT WHICH IS IN ACCORDANCE WITH THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. ANY SUCH MODIFICATIONS REQUIRED SHALL BE REVIEWED AND APPROVED BY THE DESIGNER PRIOR TO EXECUTION.
- 11. THE DESIGNER SHALL BE NOTIFIED AT THE PROPER TIME WHEN ITEMS ARE READY FOR FIELD REVIEW. SUFFICIENT NOTICE SHALL BE GIVEN TO ALLOW SCHEDULING OF THE FIELD REVIEW.

DRAWINGS & COORDINATION

- 1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH STRUCTURAL WORK.
- THE CONTRACT DOCUMENTS.
- CONSTRUCTION OF THE AFFECTED WORK MAY PROCEED.
- LOCATIONS WITH SIMILAR CONDITIONS.
- TYPICAL DETAILS APPLY AT ALL LOCATIONS WHERE THE TYPE OF CONSTRUCTION SHOWN IN THE TYPICAL DETAIL OCCURS.

FOUNDATIONS

- OWNER'S GEOTECHNICAL TESTING SERVICE.
- THE STATE WHERE THE BUILDING IS LOCATED.
- THESE SYSTEMS.
- STANDARD PROCTOR DRY DENSITY.
- SEE FOUNDATION PLAN NOTES FOR FURTHER REQUIREMENTS.

<u>GALVANIZING</u>

- LATEST EDITION OF THE FOLLOWING PUBLICATIONS:
- AMERICAN GALVANIZERS ASSOCIATION:
- AMERICAN SOCIETY FOR TESTING AND MATERIALS:
- D. PRODUCTS
- ASTM A 153 ZINC COATING (HOT-DIP) ON IRON AND STEEL HARDWARE
- 2
- THE FOLLOWING ITEMS SHALL BE GALVANIZED:
- CONDITIONS.
- EMBEDDED IN CONCRETE.
- C. ITEMS NOTED ON DRAWINGS TO BE GALVANIZED.
- THE FULL SPECIFIED EXTENT OF ZINC COATING COVERAGE.
- 8 MILS MINIMUM DFT, THREE COATS MINIMUM.

LIGHT GAUGE METAL FRAMING

- MANUFACTURERS ASSOCIATION (SSMA).
- CLARK DEITRICH STUDS @ 16" O/C.
- OTHERWISE INDICATED ON THE DRAWINGS.
- ALL LIGHT STRUCTURAL STEEL MEMBERS INDICATED ON STRUCTURAL DRAWINGS AND GENERAL NOTES ARE MINIMUM REQUIREMENTS. DESIGN OF LIGHT-GAGE METAL FRAMING IS THE RESPONSIBILITY OF THE MANUFACTURER AND SHALL BE IN ACCORDANCE WITH THE LOADS AND CODES AND INDICATING IN THE STRUCTURAL DRAWINGS GENERAL NOTES. SUBMIT DESIGN CALCULATIONS AND SHOP DRAWINGS SHOWING THE NUMBER, TYPE, LOCATION, SPACING AND GAGE OF ALL MEMBERS. SHOP DRAWINGS AND DESIGN CALCULATIONS SHALL BE SIGNED AND SEALED BY A ENGINEER IN THE STATE OF NORTH CAROLINA WITH EXPERIENCE IN THE DESIGN OF LIGHT-GAGE FRAMING SYSTEMS. SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO STRUCTURAL ENGINEER OF RECORD.
- THE REQUIREMENTS OF ASTM A653 G60.

ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS, AND DRAWINGS OF OTHER TRADES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEEING THAT THE WORK OF ALL TRADES IS COORDINATED WITH THE

CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL DIMENSIONS SHOWN ON

ANYTHING WHICH, IN THE OPINION OF THE CONTRACTOR, APPEAR TO BE DEFICIENCIES, OMISSIONS, CONTRADICTIONS OR AMBIGUITIES IN THE PLANS OR SPECIFICATIONS. SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER. CORRECTIONS OR WRITTEN INTERPRETATIONS SHALL BE ISSUED BEFORE

DETAILS ARE MARKED AT THE SPECIFIC LOCATION WHERE THEY APPLY, BUT ALSO INDICATE GENERAL CONSTRUCTION REQUIREMENTS FOR OTHER

DETAILS NOTED AS "TYPICAL" MAY NOT BE REFERENCED ON THE DRAWINGS.

THE CONTRACTOR IS TO REVIEW THE SUBSURFACE EXPLORATION REPORT PERFORMED FOR THIS PROJECT BY TERRACON (PROJECT NO. K5225059) BEFORE COMMENCEMENT OF SITE GRADING TO BECOME GENERALLY FAMILIAR WITH SUBSURFACE CONDITIONS WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION. ALL SUBGRADE PREPARATION SHALL BE PERFORMED AS DEFINED IN THE PLANS AND SPECIFICATIONS AND IN COOPERATION WITH THE

SPECIAL FOUNDATIONS FOR THE SUPPORT OF MECHANICAL, ELECTRICAL, OR OTHER EQUIPMENT INSIDE OR OUTSIDE OF THE BUILDING SHALL BE DESIGNED BY THE EQUIPMENT SUPPLIER(S) AND REVIEWED BY THE STRUCTURAL ENGINEER FOR COMPATIBILITY WITH THE BUILDING FOUNDATION SYSTEM. DRAWINGS OF THE FOUNDATIONS SHALL BE SEALED BY A STRUCTURAL ENGINEER LICENSED IN

FOUNDATION DRAINAGE AND GROUNDWATER CONTROL SYSTEMS MAY BE INDICATED IN PART ON THE STRUCTURAL DRAWINGS TO SHOW APPROXIMATE LOCATIONS RELATIVE TO CERTAIN STRUCTURAL COMPONENTS. FOUNDATION DRAINAGE AND GROUNDWATER CONTROL SYSTEMS ARE NOT A PART OF THE STRUCTURAL DESIGN. SEE OTHER DRAWINGS FOR DESIGN REQUIREMENTS OF

4. ALL FOOTINGS ARE DESIGNED TO BEAR ON RESIDUAL SOIL OR COMPACTED ENGINEERED FILL AND TO HAVE A MINIMUM BEARING CAPACITY AS LISTED UNDER "STRUCTURAL DESIGN DATA" IN THE GENERAL NOTES. FOOTING EXCAVATIONS ARE TO BE INSPECTED BY AN INDEPENDENT TESTING LABORATORY FOR SUITABLE SOILS, BEARING PRESSURE, AND COMPACTION. COMPACTION OF SOIL UNDER FOOTINGS TO BE 100% OF THE MAXIMUM

GALVANIZING OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE

SUGGESTED SPECIFICATION FOR HOT DIP GALVANIZING

ASTM A 123 ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL

ALL STRUCTURAL STEEL MATERIALS AND ACCESSORIES WHICH ARE HOT-DIP GALVANIZED SHALL MEET SPECIFIED SPECIAL MATERIAL REQUIREMENTS.

A. ALL STEEL MATERIAL THAT EITHER SUPPORTS OR IS BUILT INTO EXTERIOR EXPOSED MASONRY CONSTRUCTION, IS OUTSIDE THE BUILDING THERMAL AND MOISTURE BARRIERS, OR IS EXPOSED TO EXTERIOR WEATHER

ALL CONNECTION MATERIALS FOR GALVANIZED MEMBERS AND FOR PRECAST CONCRETE. CONNECTION MATERIALS SHALL INCLUDE, BUT NOT BE LIMITED TO, NUTS, BOLTS, WASHERS, ANCHOR BOLTS, AND ITEMS

GALVANIZED STEEL SHALL BE WELDED IN ACCORDANCE WITH AWS D19 -WELDING ZINC COATED STEEL BY THE AMERICAN WELDING SOCIETY. STEEL SURFACES SHALL BE FREE OF ZINC IN THE AREA TO BE WELDED.

AFTER GALVANIZED MATERIALS ARE INSTALLED. REPAIR DAMAGE AND EXTEND GALVANIZED COATING WITH SPECIFIED ZINC TOUCH-UP MATERIAL TO PROVIDE

GALVANIZED COATING SHALL BE REPAIRED BY CLEANING SURFACE, POWER DISC SANDING TO BRIGHT METAL, AND APPLYING AN ORGANIC COLD GALVANIZING COMPOUND WITH A MINIMUM OF 94% ZINC DUST IN THE DRY FILM,

ALL LIGHT STRUCTURAL STEEL MEMBERS SHALL BE FORMED FROM STEEL SECTIONS THAT CONFORM TO THE SPECIFICATIONS OF THE STEEL STUD

2. ALL LIGHT STRUCTURAL STEEL MEMBERS SHALL HAVE A MINIMUM Fy = 50 KSI. 6" STRUCTURAL WALL STUDS SHALL BE PRICED ON THE BASIS OF 600S162-54

FURNISH AND INSTALL CONTINUOUS MECHANICAL LATERAL BRACING AT 48 C/C OR AS REQUIRED BY THE STRUCTURAL WALL STUD MANUFACTURER UNLESS

ALL MEMBERS SHALL BE CORROSION-RESISTANT STEEL, CORRESPONDING TO

REINFORCING STEEL

- 1. DETAILING, FABRICATION, STORAGE, AND INSTALLATION OF REINFORCING. UNLESS OTHERWISE SHOWN ON THE PLANS, SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318) AND THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES' (ACI 315), BOTH BY THE AMERICAN CONCRETE INSTITUTE.
- REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. REINFORCING 2. STEEL WELDED TO EMBEDDED STEEL PLATES OR SHAPES SHALL CONFORM TO ASTM A706. DO NOT WELD REINFORCING BARS TO EACH OTHER.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
- 4. UNLESS NOTED OTHERWISE ON PLANS OR IN DETAILS, REINFORCING BARS MARKED ON THE PLANS AS BEING CONTINUOUS SHALL BE LAPPED AT SPLICE LOCATIONS AS SHOWN IN SCHEDULE. FOR SPLICES AT CORNERS OR INTERSECTIONS OF WALLS AND BEAMS, SEE TYPICAL DETAILS.
- 5. REINFORCING STEEL SHALL BE CLEAN OF MUD, DEBRIS, LOOSE RUST, CEMENT GROUT, OR ANY OTHER MATERIAL WHICH MAY INHIBIT BOND BETWEEN THE STEEL AND THE CONCRETE.
- 6. REINFORCING SHALL BE SECURELY TIED AND ANCHORED IN PLACE BEFORE CONCRETE PLACEMENT TO PREVENT DISLOCATION.
- 7. UNLESS OTHERWISE NOTED, CONCRETE COVERAGE ON REINFORCING STEEL SHALL BE AS FOLLOWS:

A.	FOOTINGS - ALL FACES	. 3"
В.	GRADE BEAMS - TOP	. 1.5"
C.	GRADE BEAMS - FORMED SURFACES	.2"
D.	GRADE BEAMS - SURFACES AGAINST SOIL	.3"
E.	SLAB-ON-GRADE - TOP	. 1"
F.	SLAB-ON-GRADE - BOTTOM	. 2"
G.	PIERS	2"
Η.	COLUMNS - INTERIOR	. 1-1/2"
Ι.	BEAMS -INTERIOR	1-1/2"
J.	SLABS - INTERIOR	3/4" (TOP)
K.	WALLS - EXPOSED TO SOIL	2"
L.	WALLS - NOT EXPOSED TO SOIL - INTERIOR	3/4"
Μ.	PAN JOISTS	3/4"
N.	COMPOSITE TOPPING	3/4" (TOP)

8. BARS SHALL BE BENT ONLY USING APPROVED METHODS. BARS SHALL NOT BE BENT AFTER PARTIAL EMBEDMENT IN HARDENED CONCRETE.

STRUCTURAL STEEL

- ROLLED STEEL W-SHAPES SHALL CONFORM TO ASTM A992, GRADE 50, FY=50 KSI. STEEL PIPE SHALL CONFORM TO ASTM A53, TYPE-E, GRADE-B, FY=35 KSI. COLD FORMED STEEL TUBING SHALL CONFORM TO ASTM A500, GRADE-B, FY=46 KSI. ALL OTHER ROLLED STEEL SHAPES, PLATES, AND BARS, SHALL CONFORM TO ASTM A36, FY=36 KSI. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554, GRADE 36.
- 2. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH AISC SPECIFICATIONS, COMMENTARY, AND CODE OF STANDARD OF PRACTICE.
- 3. CONNECTIONS NOT DETAILED ON THE PLANS SHALL BE DESIGNED AND DETAILED BY THE FABRICATOR AND APPROVED BY THE DESIGNER. CONNECTION DESIGNS SHALL COMPLY WITH THE REQUIREMENTS OF THE OF THE GOVERNING BUILDING CODE AND "AISC SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS, AISC 341-10 & AISC 341S1-10".

WELDS:

- A. ALL WELDS SHALL BE MADE IN ACCORDANCE WITH AWS D1.1 STRUCTURAL WELDING CODE - STEEL BY THE AMERICAN WELDING SOCIETY FOR THE MATERIAL BEING WELDED. WELDS SHALL BE MADE USING E70XX LOW-HYDROGEN ELECTRODES UNLESS OTHERWISE NOTED.
- GALVANIZED STEEL SHALL BE WELDED IN ACCORDANCE WITH AWS D1.9 -WELDING ZINC COATED STEEL BY THE AMERICAN WELDING SOCIETY. STEEL SURFACES SHALL BE FREE OF ZINC IN THE AREA TO BE WELDED. WELDS SHALL BE MADE BY WELDERS WHO HAVE BEEN QUALIFIED BY С
- TESTS AS PRESCRIBED IN AWS D1.1 BY THE AMERICAN WELDING SOCIETY TO PERFORM THE TYPE OF WORK REQUIRED. D. ALL SHOP WELDS SHALL BE A MINIMUM 3/16" AND ALL FIELD WELDS SHALL
- BE A MINIMUM 1/4", UNLESS NOTED OTHERWISE. INDICATED WELDING OF CONNECTED PARTS SHALL BE "CONTINUOUS" OR "ALL AROUND" AS APPLICABLE, UNLESS NOTED OTHERWISE. WELDS SHALL BE CLEANED AND TOUCHED UP WITH THE APPROPRIATE
- PAINT OR ZINC COATING. PROVIDE SEAL WELDS ON ALL WELDED STEEL JOINTS EXPOSED TO VIEW.
- MOISTURE, OR CORROSIVE CONDITIONS WHICH WOULD NOT OTHERWISE BE WELDED FOR STRENGTH.
- 5. BOLTED CONNECTIONS SHALL BE MADE USING HIGH-STRENGTH BOLTS, 3/4" DIAMETER CONFORMING TO ASTM A325N, UNLESS OTHERWISE NOTED ON PLAN. SEE SPECIFICATIONS FOR BOLT TIGHTENING METHODS.
- 6. SPLICES FOR ALL STEEL MEMBERS NOTED AS "CONTINUOUS" SHALL OCCUR OVER SUPPORTING MEMBERS.
- 7. PROVIDE ADEQUATE SEPARATION BETWEEN STRUCTURAL STEEL AND ALUMINUM AND OTHER DISSIMILAR METALS TO PREVENT GALVANIC CORROSION. SEPARATION MATERIALS SHALL BE ADEQUATE TO TRANSFER LOADS.
- 8. ALL STEEL WHICH IS PERMANENTLY EXPOSED TO NORMAL VIEW BY PEDESTRIANS OR OCCUPANTS SHALL BE CLASSIFIED AS ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) AS DEFINED BY THE AISC CODE OF STANDARD PRACTICE.

9. SEE ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.

SUBMITTAL NOTES

SHOP DRAWINGS HAVE BEEN COMPLETED AND CHECKED BY THE SUPPLIER PRIOR TO SUBMISSION. 2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS IN ELECTRONIC FORMAT. SHOP DRAWINGS SUBMITTALS REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE STRUCTURAL SPECIFICATIONS. CHANGES OR ADDITIONS MADE ON RESUBMITTED SHOP DRAWINGS SHALL BE CLEARLY INDICATED, AND THE PURPOSE OF THE RESUBMITTAL SHALL BE NOTED ON THE TRANSMITTAL. REVIEW OF THE RESUBMITTED SHOP DRAWINGS SHALL BE LIMITED SPECIFICALLY TO THE ITEMS NOTED FOR CORRECTION ON THE PREVIOUS SUBMITTAL THE GENERAL CONTRACTOR SHALL SUBMIT THE FOLLOW SHOP DRAWINGS FOR STRUCTURE ENGINEER AND ARCHITECT REVIEW: CONCRETE MIX DESIGN REINFORCING STEEL STRUCTURAL STEEL (A) STEEL STAIRS/LADDERS (A)(C) COLD FORMED METAL FRAMING (A)(C) 5. THE NOTATIONS FOLLOWING SUBMITTAL ITEMS INDICATE THE FOLLOWING: A. INCLUDE A CERTIFICATE OF COMPLIANCE WITH CONTRACT DOCUMENTS

SIGNED AND SEALED BY THE PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA RESPONSIBLE FOR THE DESIGN. SUBMIT ONE COPY FOR INFORMATION AND RECORD ONLY. CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER THAT IS REGISTERED IN THE STATE WHERE THE BUILDING IS LOCATED. MANUFACTURER'S LITERATURE: SUBMIT ELECTRONIC COPIES OF 6.

THE ENGINEERS'S REVIEW OF SHOP DRAWINGS IF FOR GENERAL CONFORMANCE OF THE DESIGN CONCEPT. CONTRACTOR SHALL SUBMIT A SCHEDULE OF SHOP DRAWINGS SUBMITTALS THAT IS ACCEPTABLE TO BOTH CONTRACTOR AND ENGINEER. AFTER THE CONTRACTOR HAS REVIEW THE SHOP DRAWINGS, PROMPT REVIEW BY THE ENGINEER WILL BE MADE OF ALL SUBMITTALS FOR LARGE SUBMITTALS, REASONABLE REVIEW TIME SHALL BE ALLOW AND MAY EXCEED TWO WEEKS. THE CONCURRENT SUBMITTAL OF MULTIPLE SHOP DRAWINGS ("DUMPING") WILL FURTHER EXTEND THE REVIEW PROCESS AND TIME FRAME NECESSARY TO PROPERLY REVIEW EACH SUBMITTAL.

THE CONTRACTOR IS RESPONSIBLE FOR PROPER CHECKING AND 8. COORDINATION OF DETAILS, DIMENSIONS, SIZES AND QUANTITIES AS REQUIRED TO FACILITATE COMPLETE AND ACCURATE FABRICATION AND ERECTION.

9.

1. CODES AND STANDARDS: 2018 N. C. REVISIONS TO THE 2015 INTERNATIONAL BUILDING CODE MIN. DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE 7-10. BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 318-14. BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES, ACI 530-13. SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AISC 360-10. AF&PA - NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. 2. FOUNDATIONS: A. FOOTINGS - ALLOWABLE SOIL BEARING PRESSURE 2,000 PSF 3. GRAVITY LOADS: A. FLO

WIND LOADS: UL RISł IMP EXP INTE CON

5. EARTHQU

MA

1. ALL SHOP DRAWINGS MUST BE REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL. SUBMITTAL WITHOUT CONTRACTOR REVIEW WILL RESULT IN DELAYS. THE CONTRACTOR SHALL CONFIRM THAT

MANUFACTURER'S LITERATURE FOR ALL MATERIALS AND PRODUCTS USED IN CONSTRUCTION OF PROJECT.

REPRODUCTION OF THESE CONTRACT DOCUMENTS FOR USE IN SHOP DRAWINGS IS NOT PERMITTED.

STRUCTURAL DESIGN DATA

FI (OOR LIVE LOADS.	
1.	OFFICES	50 PSF
2.	CORRIDORS	80 PSF
3.	ALL OTHER	
	(INC. 15 PSF FOR MOVEABLE PARTITIONS)	50 PSF
RO	OF LIVE LOAD (MINIMUM)	20 PSF
RO	OF SNOW LOADS:	
1.	GROUND SNOW LOAD	10 PSF
2.	FLAT ROOF SNOW LOAD	10 PSF
3.	RISK CATEGORY	II
4.	IMPORTANCE FACTOR	1.0
5.	Ce	0.9
6	Ct	1 0

D. OTHER DEAD LOADS: PER CONSTRUCTION SHOWN ON DWGS

	ULTIN RISK IMPO EXPC INTEI COMI 1. 2. 3. 4. 5.	MATE WIND SPEED. CATEGORY. RTANCE FACTOR. SURE CATEGORY. NAL PRESSURE COEFFICIENT. PONENTS & CLADDING DESIGN PRESSURES (MIN. ZONE 1 - ROOF. ZONE 2 - ROOF EDGE. ZONE 2 - ROOF EDGE. ZONE 3 - ROOF CORNER. ZONE 4 - WALL. ZONE 5 - WALL CORNER.	123 MPH II 1.0 D +/- 0.18 TRIBUTARY AREAS): -51.1 PSF -80.3 PSF -109.4 PSF -109.4 PSF -34.9/+34.9 PSF -64.1/+34.9 PSF
27	THQUA	AKE LOADS:	
	MAPF 1. 2. DESIU 1. 2. SITE RISK IMPO SEISI SEISI	PED SPECTRAL RESPONSE ACCELERATION: SHORT PERIOD SECOND PERIOD GN SPECTRAL RESPONSE ACCELERATION: SHORT PERIOD SECOND PERIOD CLASS CATEGORY RTANCE FACTOR WIC DESIGN CATEGORY WIC FORCE RESISTING SYSTEM	SS = 0.091 S1 = 0.048 SDS = 0.097 SD1 = 0.077 D II 1.0 B
	1.	BEARING WALLS - ORDINARY PLAIN MASONRY SH	HEAR WALLS
	2. 3. 4	SYSTEM OVERSTRENGTH FACTOR (ΩO)	3
	<u></u> . 5.	SEISMIC RESPONSE COEFFICIENT (Cs)	0.032

H. ANALYSIS PROCEDURE - EQUIVALENT LATERAL FORCE



	SLAB-ON-GRADE NOTES	b
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AB-ON-GRADE NOTES	SPF	READ FO
UNLESS OTHERWISE NOTED, THE CONCRETE SLAB-ON-GRADE SHALL COMPLY WITH THE FOLLOWING:	1.	COLL

	WIII	H THE FOLLOWING:		2
	•	THICKNESS: REINFORCING:	4" 6 x 6 - W2.9 x W2.9 W.W.F. IN MATS, NOT ROLLS, PLACED	2.
	•	VAPOR BARRIER: STONE BASE:	SEE ARCHITECTURAL DRAWINGS 4" COMPACTED WASHED STONE	3.
2.	SEE USE	CONCRETE FRAMING D ON THIS PLAN:	PLAN SYMBOLS LEGEND ON SHEET S0.1 FOR SYMBOLS	4. 5.
3.	SEE SCH	MATERIALS AND SYMI EDULED ITEMS USED	BOL LEGEND ON SHEET S0.1 FOR SCHEDULE KEY FOR ALL ON THIS PLAN:	
4.	JOIN	ITS:		
	A. B.	SLAB CONSTRUCTIO JOINT LOCATIONS. A COORDINATE ALL SL FLOOR FINISHES TO	N JOINTS SHALL BE LOCATED AT INDICATED CONTROL LL CONSTRUCTION JOINTS SHALL HAVE DOWELS. AB JOINT LOCATIONS WITH JOINTS IN ARCHITECTURAL ASSURE THAT ALIGNMENT IS APPLICABLE.	
5.	SLAE ESTI DEP DRA	B DEPRESSIONS: DEP IMATING PURPOSES O RESSIONS SHALL BE E WINGS.	RESSED AREAS ARE SHOWN ON THE PLAN FOR NLY. LOCATIONS AND DEPTHS OF ALL SLAB DETERMINED IN ACCORDANCE WITH ARCHITECTURAL	
6.	SLAE DRA SLO	B SLOPES: SEE ARCHI INS AND SLOPED SLAE PED SLABS WHICH PO	TECTURAL DRAWINGS FOR LOCATIONS OF FLOOR 3 AREAS. SLOPE SURFACE UNIFORMLY TO DRAIN. ND WATER SHALL BE REPLACED.	
7.	SEE GRA	ALL TYPICAL DETAILS DE INCLUDING THOSE	SHOWING CONSTRUCTION RELATED TO SLABS-ON- INDICATED BELOW:	
	"SLA "SLA "DEF	B-ON-GRADE JOINTS" B-ON-GRADE REINFOF PRESSION AT SLAB-ON	RCING" I-GRADE"	6.
				7.

	FOOTING SCHEDULE									
				BOT	T. RE	INFORCING	TO	P REIN	FORCING	
MARK	WIDTH	H	DEPTH	QU A.	SIZ E	SPACING	QUA.	SIZE	SPACING	S
F25	2'-6"	2'-6"	1'-0"	(3)	#5	EA. WAY				
F35	3'-6"	3'-6"	1'-0"	(4)	#5	EA. WAY				
F55	5'-6"	5'-6"	1'-0"	(6)	#5	EA. WAY				
F65	6'-6"	6'-6"	1'-0"	(7)	#5	EA. WAY				
F70	7'-0"	7'-0"	2'-0"	(9)	#6	EA. WAY	(5)	#6	EA. WAY	
F95	9'-6"	9'-6"	2'-0"	(12)	#6	EA. WAY	(6)	#6	EA. WAY	
F60100	6'-0"	10'-0"	1'-0"	(6) (10)	#5 #5	SHORT WAY/ LONG WAY				



FOOTING SCHEDULE NOTES

GENERAL NOTES:

FOOTING MARKS "F__ DESIGNATE THE PLAN SIZE OF THE FOOTING IN TENTHS OF A FOOT. RECTANGULAR FOOTINGS ARE NOTED WITH A DUAL DESIGNATION. VARIATIONS OF FOOTINGS WITH

THE SAME PLAN DIMENSIONS ARE IDENTIFIED WITH A SUFFIX IN PARENTHESIS (-).

SEE DETAIL: "TYPICAL COLUMN FOOTING AND ISOLATION JOINT". UNLESS NOTED OTHERWISE, CENTER FOOTING BELOW COLUMN OR COLUMN PIER.

REMARKS:

2.

3.

NONE.





OOTING NOTES

JMN FOOTINGS: SEE FOOTING SCHEDULE.

SEE CONCRETE FRAMING PLAN SYMBOLS LEGEND ON SHEET**S0.1** FOR SYMBOLS USED ON THIS PLAN:

SEE MATERIALS AND SYMBOL LEGEND ON SHEET**S0.1** FOR SCHEDULE KEY FOR ALL SCHEDULED ITEMS USED ON THIS PLAN:

WALL FOOTINGS: SEE FOUNDATION PLAN.

FOOTING ELEVATIONS SHOWN ON PLAN ARE FOR ESTIMATING PURPOSES AND MAY BE VARIED TO SUIT SITE, SOIL, OR UNDERGROUND UTILITY CONDITIONS AS FOLLOWS:

A. THE TOP OF ALL EXTERIOR FOOTINGS ARE TO BE A MINIMUM OF 1'-0" BELOW THE FINISH GRADE. COORDINATE WITH SITE PLAN. IN NO CASE SHALL TOP OF FOOTING ELEVATIONS BE HIGHER THAN INDICATED ON PLAN. PRIOR TO CONSTRUCTION, NOTIFY THE ENGINEER OF ALL FOOTING ELEVATIONS THAT VARY FROM THOSE SHOWN ON THE PLAN. COORDINATE FOOTING ELEVATIONS WITH UNDERGROUND UTILITIES. UNDERGROUND UTILITIES WHICH CROSS WALL FOOTINGS SHALL CROSS AT AN ANGLE OF NO MORE THAN 45 DEGRESS FROM PERPENDICULAR. UNLESS OTHERWISE SHOWN OR APPROVED BY THE DESIGNER, THE MINIMUM CLEARANCE OF UNDERGROUND PIPES AND UTILITIES WHICH CROSS BELOW WALL FOOTINGS SHALL BE 8", OTHERWISE THE FOOTING SHALL BE STEPPED DOWN SO THAT THE PIPES MAY PASS ABOVE THE FOOTING AND THROUGH THE WALL. ANY PIPES WHICH MUST PASS UNDERNEATH A WALL FOOTING ARE TO BE INSTALLED PRIOR TO THE CONSTRUCTION OF THE FOOTING AND THE TRENCH BACKFILLED AND COMPACTED AS REQUIRED.

C. UNLESS OTHERWISE APPROVED BY THE DESIGNER, NO EXCAVATION SHALL OCCUR BELOW A SPREAD FOOTING WITHIN A ZONE DEFINED BY A PLANE SLOPING DOWNWARD AT A 1:1 SLOPE FROM THE BOTTOM EDGES OF THE FOOTING ON ALL SIDES.

ALL FOOTING REINFORCING SHALL BE SUPPORTED ON THE SPECIFIED CHAIRS ON THE SOIL AND SHALL BE SECURED AGAINST LATERAL MOVEMENT.

IF RAINFALL OR GROUNDWATER INTRUSION IS IMMINENT BEFORE PLACEMENT OF CONCRETE IN FOOTING EXCAVATIONS, A 2" THICK "MUD MAT" OF LEAN CONCRETE SHALL BE PLACED IN THE EXCAVATION AFTER OVEREXCAVATING 2" IN DEPTH. FOR LIGHT PRECIPITATION CONDITIONS, PROTECT BOTTOM AND SIDES OF EXCAVATION WITH TEMPORARY 6 MIL POLYETHYLENE LINING. ANY SOIL WHICH IS SOFTENED DUE TO MOISTURE EXPOSURE SHALL BE UNDERCUT TO FIRM SOIL AND THE DEPTH OF THE FOOTING SHALL BE INCREASED TO REPLACE THE SOFT SOIL THAT WAS REMOVED.

SEE ALL TYPICAL DETAILS SHOWING CONSTRUCTION RELATED TO FOOTINGS INCLUDING THOSE INDICATED BELOW:

"COLUMN BASE & ISOLATION JOINT" "STEPPED FOOTING DETAIL"

"WALL FOOTING CONSTRUCTION JOINT"

CONCRETE FLOOR SLAB NOTES

- 1. THE FLOOR SLAB SHALL BE 2-1/2" THICK NORMAL WEIGHT CONCRETE PLACED ON A 1.5" DEEP, 20 GAUGE, GALVANIZED, COMPOSITE STEEL FORM DECK (4" TOTAL THICKNESS).
- 2. SEE ALL TYPICAL DETAILS SHOWING CONSTRUCTION RELATED TO ELEVATED CONCRETE FLOOR SLABS INCLUDING THOSE INDICATED BELOW:
 - A. "SLAB REINFORCING SECTION" "SECTION THROUGH COMPOSITE SLABS AND BEAMS"
 - "SLAB EDGE PLATE" D. "OPENING IN FLOOR SLAB"
- 3. FLOOR DECK:
 - A. NO SHORES ARE REQUIRED FOR THE DECK UNLESS NOTED OTHERWISE. THE DECK SHALL BE CONTINUOUS OVER A MINIMUM OF 3 SPANS. WHERE FRAMING CONDITIONS DO NOT PERMIT THREE SPAN DECK INSTALLATION, ADD SHORES AT MIDSPAN OF DECK.
 - B. THE DECK SHALL BE FASTENED TO THE STEEL SUPPORTS WITH WELDED STUDS OR 5/8" DIA. PUDDLE WELDS AT A MAX. SPACING OF 12" O/C ALL SIDELAPS BETWEEN DECK UNITS SHALL BE CONNECTED TO PREVENT DIFFERENTIAL DEFLECTION OF ADJACENT UNITS DURING THE CONCRETE POUR. ALL EDGES OF THE DECK SHALL BE CONTINUOUSLY SUPPORTED; INSTALL MISCELLANEOUS STEEL AS REQUIRED.
- 4. SLAB REINFORCING: SEE TYPICAL DETAILS FOR SLAB REINFORCING. SEE FLOOR PLAN FOR SPECIAL REINFORCING REQUIREMENTS. SEE TYPICAL DETAILS FOR ADDITIONAL SLAB REINFORCING AT OPENINGS.
- CONDUIT AND PIPES PLACED HORIZONTALLY WITHIN FLOOR SLAB SHALL MEET 5. THE, SIZE, SPACING, AND PLACEMENT REQUIREMENTS SPECIFIED FOR CONCRETE REINFORCING STEEL. DO NOT CUT OR RELOCATE REINFORCING BARS FOR PIPE OR CONDUIT INSTALLATION. NOTIFY ENGINEER OF CONDITIONS WHERE CONDUIT AND REINFORCING BARS ARE IN CONFLICT. (COORDINATE ABOVE NOTE WITH THE P. M. E. & FP DOCUMENTS.)
- SUSPENDED LOADS: ANCHORS FOR SUSPENDED LOADS SHALL BE INSTALLED IN 6. THE BOTTOM RIB. DO NOT CUT REINFORCING STEEL TO INSTALL ANCHORS.
- SLAB DEPRESSIONS: DEPRESSED AREAS ARE SHOWN ON THE PLAN FOR 7. ESTIMATING PURPOSES ONLY. LOCATIONS AND DEPTHS OF ALL SLAB DEPRESSIONS SHALL BE DETERMINED IN ACCORDANCE WITH ARCHITECTURAL DRAWINGS.
- SLAB SLOPES: SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FLOOR 8. DRAINS AND SLOPED SLAB AREAS. SLOPE SURFACE UNIFORMLY TO DRAIN. SLOPED SLABS WHICH POND WATER SHALL BE REPLACED.
- 9. SLAB OPENINGS:
 - A. THE FRAMING PLANS DO NOT SHOW ALL FLOOR OPENINGS. COORDINATE THE REQUIREMENTS FOR SLAB OPENINGS WITH DRAWINGS OF OTHER TRADES. LOCATE ALL OPENINGS BETWEEN FRAMING MEMBERS. DO NOT CUT FRAMING MEMBERS TO INSTALL OPENINGS.
 - B. FLOOR PENETRATIONS 6" OR LESS IN DIAMETER MAY BE CORE DRILLED PROVIDED SLAB REINFORCING STEEL IS NOT CUT. PRIOR TO CUTTING, LOCATE SLAB REINFORCING STEEL BY PROBE DRILLING ON PERIMETER OF PROPOSED CORE LOCATION WITH SMALL DIAMETER DRILL BIT. IF REINFORCING IS ENCOUNTERED, OFFSET CORE LOCATION TO AVOID CUTTING REINFORCING STEEL.
- C. SLAB PENETRATIONS SHALL BE SPACED NO CLOSER THAN 3 X LARGER OPENING DIMENSION ON CENTER. FLOOR PENETRATIONS LARGER THAN 6" SHALL BE FORMED. FLOOR
- PENETRATIONS LARGER THAN 12" SHALL BE RECEIVE STEEL FRAME PER TYPICAL DETAIL.





1'' = 1'-0'

S0.3

ROOF FRAMING PLAN NOTES

1. ELEVATIONS:

- A. THE REFERENCE ELEVATION (0'-0") FOR ALL ELEVATIONS SHOWN ON THE ROOF PLANS SHALL BE THE TOP OF THE FIRST FLOOR SLAB-ON-GRADE. SEE SITE PLAN FOR SPECIFIED ELEVATION OF FIRST FLOOR.
- 2. SEE CONCRETE FRAMING PLAN SYMBOLS LEGEND, JOISTS FRAMING SYMBOLS LEGEND AND STEEL FRAMING CONNECTIONS SYMBOLS LEGEND ON SHEET**S0.1** FOR SYMBOLS USED ON THIS PLAN:
- 3. SEE MATERIALS AND SYMBOL LEGEND ON SHEET**S0.1** FOR SCHEDULE KEY FOR ALL SCHEDULED ITEMS USED ON THIS PLAN.
- 4. SUSPENDED LOADS:
 - A. ALL LOADS SUSPENDED FROM THE ROOF FRAMING SHALL BE CONNECTED TO THE MAIN FRAMING MEMBERS ONLY. NO LOADS SHALL BE SUSPENDED FROM THE ROOF DECK OR BAR JOIST BRIDGING. SEE TYPICAL DETAIL FOR ATTACHMENT OF SUSPENDED LOADS TO BAR JOISTS.
 - B. SUSPENDED LOADS SHALL BE EVENLY DISTRIBUTED TO THE STRUCTURE ABOVE BY HANGER ASSEMBLY. C. PRIOR TO INSTALLING SUSPENDED EQUIPMENT WEIGHING MORE THAN 500
 - POUNDS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL THE WEIGHT, LOCATION, AND HANGER POINT LOCATIONS.
- 5. ROOF DECK:
 - A. UNLESS OTHERWISE NOTED, ROOF DECK SHALL BE 1-1/2", 22 GA., TYPE-B, WIDE RIB. ALL ROOF DECK SHALL BE GALVANIZED. SEE ROOF DECK PLAN AND TYPICAL ROOF DECK FASTENER LAYOUT FOR DECK ATTACHMENT.
 - SEE ALL TYPICAL DETAILS SHOWING CONSTRUCTION RELATED TO ROOF DECKING INCLUDING THOSE INDICATED BELOW:
 - "ROOF DECK FASTENER LAYOUT" a.
 - "FRAMED ROOF OPENING DETAIL" C. WHEREVER POSSIBLE, DECK SHALL BE CONTINUOUS OVER A MINIMUM OF 3 SPANS.
 - D. ALL EDGES OF ROOF DECK SHALL BE CONTINUOUSLY SUPPORTED,
 - INSTALL MISCELLANEOUS STEEL AS REQUIRED. COORDINATE WITH RELATED DRAWINGS THE SIZE AND LOCATION OF ANY OPENINGS REQUIRED THROUGH ROOF DECK. WHETHER SHOWN ON THE STRUCTURAL PLAN OR NOT. FRAME ALL OPENINGS GREATER THAN 6", INCLUDING ROOF DRAINS, WITH ANGLE FRAME. SEE TYPICAL DETAIL.

6. ROOF BEAMS:

- A. SEE ALL TYPICAL DETAILS SHOWING CONSTRUCTION RELATED TO STEEL BEAMS INCLUDING THOSE INDICATED BELOW:
- "FRAMED BEAM CONNECTION" •
- "THROUGH PLATE CONNECTION DETAIL" •
- "MOMENT CONNECTION" "STEEL BEAM CONTINUOUS OVER COLUMN"



- 1. ELEVATIONS: THE REFERENCE ELEVATION (0'-0") FOR ALL ELEVATIONS SHOWN ON THE FOUNDATION PLANS SHALL BE AT THE TOP OF THE FIRST FLOOR SLAB-ON-GRADE. SEE SITE PLAN FOR SPECIFIED ELEVATION OF FIRST FLOOR.
- 2. SEE CONCRETE FRAMING PLAN SYMBOLS LEGEND, JOISTS FRAMING SYMBOLS LEGEND AND STEEL FRAMING CONNECTIONS SYMBOLS LEGEND ON SHEET**S0.1** FOR SYMBOLS USED ON THIS PLAN:
- 3. SEE MATERIALS AND SYMBOL LEGEND ON SHEET **S0.1** FOR SCHEDULE KEY FOR ALL SCHEDULED ITEMS USED ON THIS PLAN:
- 4. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR EXTERIOR CONCRETE PADS, DRIVEWAYS, AND SIDEWALKS NOT SHOWN ON THIS DRAWING.
- 5. WALL PROJECTIONS, CHASES, PIERS, AND SIMILAR DETAIL ITEMS MAY NOT BE SHOWN; SEE ARCHITECTURAL DRAWINGS FOR THESE ITEMS.

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S1.2

FOR ROOF FRAMING PLAN NOTES SEE SHEET **S0.3**

	324 S. Elm Street, Suite 500 Greensboro, NC 27401 p. 336.617.4402 f. 336.617.4434 www.lindseyarchitecture.com
SKA Consulting Engineers, Inc.	7900 Triad Center Drive, Suite 200 Greensboro, NC 27409-9075 t: 336 855 0993 www.skaeng.com NC License No. F-0508 SKA Project Number230304 Plotted:
ECG Terminal Building	Elizapeth City, NC
	SCRIPTION
CANOPY FOUNDATION & SUCCESSION STATE	FRAMING PLANS
DATE 7/ DRAWN BY HA CHECK BY M JOB NO. 02 SHEET SHEET	12/2024 JS TM 23-031

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T\Revit Backup Files\24221 Elizabeth City Airport Terminal-MPFP-rv24_mbiddleY5GXC.rvt

VIT\Revit Backup Files\24221 Elizabeth City Airport Terminal-MPFP-rv24_mbiddleY5GX

MECHANICAL NOTES

-DO NOT SCALE DRAWING. ROUGH FROM EQUIPMENT MANUFACTURER AND ARCHITECTURAL DRAWINGS.

-DIMENSIONS NOTED ON PLANS ARE IN INCHES UNLESS OTHERWISE NOTED. -DUCT SIZES NOTED ON PLANS ARE INTERIOR DIMENSIONS.

-PROVIDE BALANCING DAMPERS AT ALL RETURN AIR TAKE OFFS.

-ROUTE COPPER INSULATED CONDENSATE DRAIN LINES TO ROOF DRAINS, GUTTERS, FLOOR DRAINS, FRENCH DRAIN OR AS SHOWN ON DRAWINGS.

-MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EQUIPMENT VOLTAGES, ELECTRICAL REQUIREMENTS AND DISCONNECTS WITH THE ELECTRICAL CONTRACTOR PRIOR TO RELEASING EQUIPMENT FROM MANUFACTURER.

- REFRIGERANT PIPIING SHALL BE TYPE L-ACR COPPER TUBING. THE PIPING SHALL BE CHARGED WITH DRY NITROGEN WHILE CONSTRUCTING SILVER SOLDER JOINTS. PROVIDE 1-1/2" THICK ARMAFLEX INSULATION.

-SOME REFRIGERANT LINE LENGTHS AND/OR VERTICAL LIFTS MAY EXCEED MANUFACTURER'S RECOMMENDATIONS, MECHANICAL CONTRACTOR IS RESPONSIBLE FOR INSURING THE EQUIPMENT MANUFACTURER SIZES ALL REFRIGERANT LINES FOR THESE PIECES OF EQUIPMENT.

-PROVIDE ALL UNSECURED EQUIPMENT WITH LOCKING REFRIGERANT CAPS PER IMC 1101.10

-ALL DUCTWORK SHOWN ON DRAWING IS DIAGRAMMATIC. ACTUAL RUN SHALL BE SHORTEST POSSIBLE WITHOUT SHARP BENDS. ALL DUCTWORK SHALL BE GALVANIZED STEEL INSTALLED PER SMACNA, INTERNATIONAL AND LOCAL CODES WITH 2-1/4" THICK FIBERGLASS DUCT WRAP INSULATION AND/OR AS OUTLINED IN SPECIFICATIONS.

-ALL DUCTWORK SHALL BE SEALED AIRTIGHT WITH MASTIC. NO HEAT SENSITIVE, PRESSURE SENSITIVE OR DUCT TAPE ALLOWED ON PROJECT.

-LOW PRESSURE DUCTWORK SHALL BE TESTED AND NOT EXCEED 3% AIRFLOW LOSS AT 2" PRESSURE CLASS.

-ALL DUCTWRAP INSULATION SHALL BE SEALED PER MANUFACTURER'S RECOMMENDATIONS FOR GLASS FABRIC AND MASTIC INSTALLATIONS. NO PRESSURE SENSITIVE TAPE SHALL BE ALLOWED.

-FLEXIBLE DUCTWORK WILL BE ALLOWED AT THE END OF GALVANIZED STEEL RUN OUTS; MAXIMUM LENGTH OF FLEXIBLE DUCT SHALL NOT EXCEED 8'-0". REFER TO TYPICAL RUN OUT DETAIL.

-ENTIRE MECHANICAL SYSTEMS SHALL BE INSTALLED PER 2018 NORTH CAROLINA STATE BUILDING CODES AND THE 2020 NATIONAL ELECTRICAL CODE WITH NORTH CAROLINA AMENDMENTS. ALSO, ALL LOCAL CODES & AUTHORITY HAVING JURISDICTION SHALL APPLY.

-COORDINATION OF ALL MECHANICAL SYSTEMS WITH OTHER DISCIPLINES IS THE RESPONSIBILITY OF THE CONTRACTOR. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO INSTALLING. CONTRACTOR SHALL NOT PROCEED WITH UNCERTAINTY.

-PROVIDE PLASTIC NAMEPLATES FOR ALL EQUIPMENT SPECIFIED ON PROJECT. LABELING TAG SHALL BE SAME AS EQUIPMENT NUMBER.

-ALL PIPING SUPPORT SPACING SHALL BE PER MSS-SP69 AND WITHIN 18" OF CHANGE IN DIRECTION.

-ALL EQUIPMENT, PIPE AND DUCT SHALL BE SEISMICALLY RESTRAINED PER 2018 NCBC. SEISMIC RESTRAINT SYSTEMS AS MANUFACTURED BY MASON INDUSTRIES, AMBER/BOOTH OR APPROVED EQUAL WHO MUST BE A MEMBER OF VISCMA. CONTRACTOR TO PROVIDE SEISMIC CALCULATIONS AND DRAWINGS CERTIFIED AND STAMPED BY AN ENGINEER EMPLOYED BY THE MANUFACTURER. CALCULATIONS TO MEET ICC, IBC, NFPA, ASCE/SEI 7-10, SMACNA AND AUTHORITY HAVING JURISDICTION (AHJ).

-PROVIDE TESTING AND BALANCING OF ALL SYSTEMS BY A THIRD PARTY AABC OR NEBB CERTIFIED T&B CONTRACTOR. SUBMIT T&B FORMS PRIOR TO PERFORMING WORK FOR APPROVAL.

-GENERAL AND MECHANICAL CONTRACTOR SHALL REVIEW AND APPROVE ALL SHOP DRAWINGS PRIOR TO SUBMITTING TO ENGINEER/ARCHITECT WITH "APPROVED" OR "APPROVED AS NOTED" STAMPS FOR ENGINEER'S 10 CALENDAR DAY REVIEW.

	AIR DISTRIBUTION SCHEDULE										
YMBOL	MBOL TYPE MANUFACTURER MODEL NUMBER FINISH DAMPER REMARKS										
Α	LAY-IN DIFFUSER	PRICE	ASPD-31	OFF-WHITE	W/OBD						
В	LAY-IN RETURN	PRICE	APDDR-3	OFF-WHITE		FLAT BLACK PLENUM					
С	SURF. MTD. DIFFUSER	PRICE	ASPD-31	OFF-WHITE	W/OBD	12"x12" PANEL FOR 6" & 8" W/ PLASTER FRAME					
D	SURF. MTD. RETURN	PRICE	APDDR-1	OFF-WHITE		16"x16" PANEL FOR 6", 8" & 10" W/ PLASTER FRAME					
	LINEAR BAR GRILLE	PRICE	LBP-16A-1000	ALUMINUM	W/OBD	COLOR PER ARCHITECT: SURF. INSUL. PLENUM					
	DUCT AIR EXTRACTOR	PRICE	AE-1S			BLADES PARALLEL TO SHORT DIM.					
	BACK DRAFT DAMPER	RUSKIN	NMS-2	MILL							
	LOUVER	RUSKIN	EME520DD	KYNAR 500		COLOR PER ARCHITECT					
FD	FIRE DAMPER	RUSKIN	IBD2 "STYLE B"	MILL							
RFD	ROUND FIRE DAMPER	RUSKIN	IBD2 "STYLE CR"	MILL							
	MANUAL DAMPER	RUSKIN	MD-35/MDRS-25	MILL							
M	MOTORIZED DAMPER	RUSKIN	CD-60/CDRS-25	MILL							
<u>EMARKS:</u>											

ALTERNATE AIR DISTRIBUTION SUPPLIERS SHALL INSURE THAT "NC" AND PERFORMANCE DATA MATCHES SPECIFIED DEVICES.

COORDINATE ALL AIR DISTRIBUTION STYLES AND LOCATIONS WITH ARCHITECTURAL CEILING GRID AND ELECTRICAL LIGHT LAYOUT PRIOR TO SUBMITTING SHOP DRAWINGS OR ORDERING

MINI-

<u> </u>				—	
MANUFACTUREF	{	TRANE / MITSUBISHI			
	SYMBOL	DHP-1A	DHP-2A		
	MODEL NUMBER	0.75 TON	2.5 TON		
	TYPE	CASSETTE	WALL MOUNT		
	SUPPLY AIRFLOW				
	EXTERNAL S.P. (IN.)				
	FAN MOTOR WATTS				
UNIT	DRY BULB (°F)				
UNIT .	WET BULB (°F)				
	UNIT VOLTAGE	FROM DHP-1	FROM DHP-2		
	WEIGHT (LBS.)				
	SYMBOL	DHP-1	DHP-2		
	MODEL NUMBER	0.75 TON	2.5 TON		
	TYPE	SLAB	SLAB		
OUTDOOR	FAN QNTY / WATTS				
UNIT	COMP. QUANTITY				
	M.C.A.	9	19		
	M.O.C.P.	15	26		
	UNIT VOLTAGE	208/1/60	208/1/60		
	WEIGHT (LBS.)				
	AMBIENT (°F)	95	95		
	T.C. RANGE (BTUH)				
CAPACITY	S.C. RANGE (BTUH)				
INTEGRATED HT	G. CAP. @ 17°F				
SEER / EER RAT	ING @ AHRI				
HSPF / COP RAT	ING @ 47°F				
			•		

REMARKS:

-PRIOR TO ORDERING, CONTRACTOR SHALL VERIFY VOLTAGE AND ALL ELECTRICAL REQUIREMENTS. INDOOR UNIT RECEIVES POWER AND COMMUNICATION FROM OUTDOOR UNIT THROUGH FIELD SUPPLIED INTERCONNECTED WIRING BY ELECTRICAL CONTRACTOR.

-PROVIDE UNITS WITH LOW AMBIENT COOLING OPERATION DOWN TO 0°F WITH WIND BAFFLE ACCESSORY, R-410A VARIABLE REFRIGERANT FLOW, DC INVERTER-DRIVEN COMPRESSOR, WIRED REMOTE CONTROLLER, REFCO CONDENSATE PUMP MODEL GOBI II, AND DPLS1 SOLID STATE DRAIN PAN LEVEL SENSOR.

|--|

FAN SCHEDULE										
SYMBOL EF-115 & 205 EF-113 EF-106 & 211										
MANUFACTURER		C	OOK							
MODEL NUMBER										
AIRFLOW (C.F.M.)	100	125	300							
STATIC PRESSURE (IN.)	0.3	0.25	0.35							
DRIVE TYPE	DRIVE TYPE									
DAMPER SIZE (IN)										
SONES										
MOTOR POWER (W)	38	46	93							
FAN R.P.M.										
VOLTAGE	115/1/60	115/1/60	115/1/60							
WEIGHT (EXCLUDING CURB) (LBS.)	17	17	32							
REMARKS:										
*PRIOR TO ORDERING, CONTRACTOR SHALL VERIFY VOLTAGE AND ALL ELECTRICAL REQUIREMENTS.										

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CAB / JNM Designed: PPC Approved: 24221 Job No.: 08/13/2024 Plot Date:

	D								
MANUFACIURE	SYMBOL	VRF-101, 103, & 109	VRF-102, 105, 106, 110, 117A, & 117B	VRF-104, 112, & 113	VRF-108	SYMBOL	WANDFACTORER		
	MODEL NUMBER	15 MBH	12 MBH	5 MBH	18 MBH	MODEL NUMBER	_		
	SUPPLY AIRFLOW					SUPPLY AIRFLOW	_		
	EXTERNAL S.P. (IN)					EXTERNAL S.P. (IN)	_		
NDOOR	NET TOTAL CAP. (BTUH)					NET TOTAL CAP. (BTUH)	INDOOR		
JNIT	NET SENS. CAP. (BTUH)					NET SENS. CAP. (BTUH)	UNIT		
	NOM. HEAT. BTUH					NOM. HEAT. BTUH	_		
		0.35	0.29	0.24	0.5				
	WEIGHT (LBS.)	208/1/60 32	32	208/1/60	32	WEIGHT (LBS.)			
	SYMBOL		VRF	-BC-1		SYMBOL			
BRANCH CONTROLLER	MCA		16 F 1	.6		MODEL NUMBER	BRANCH CONTROLLER		
			208	/1/60					
	SYMBOL SYSTEM MODEL		VF 1(RF-1 D T		SYMBOL SYSTEM MODEL			
	COMP. TYPE / QTY.		-			COMP. TYPE / QTY			
	COMP. R.L.A. FAN QTY. / F.L.A.					COMP. R.L.A FAN QTY. / F.L.A			
	M.C.A. (FLA)		5	50		M.C.A. (FLA)			
	M.F.S. (OPD)		٤ 208	30 /3/60		M.F.S. (OPD)	_		
	WEIGHT (LBS.)		6	00		WEIGHT (LBS.)			
			ç	95					
SEER / EER RA	TING @ ARI		-			SEER / EE	ER RATING @ ARI		
HSPF / COP @ 4	47°F		-			H	SPF / COP @ 47°F		
<u>REMARKS:</u>				-PROVIDE UNITS WITH R-410A VARIABLE REF	H LOW AMBIENT COC FRIGERANT FLOW (VI)LING OPERATION DOWN T RF). DC INVERTER / DRIVEI	O 23°F, N SCROLL /		
-PRIOR TO OR ELECTRICAL F	RDERING, CONTRACTOR SH REQUIREMENTS.	IALL VERIFY VOLTAGE	AND ALL	HERMETIC COMPRES UNIT, CONDENSATE F	SOR, AND WIRED RE PUMP, AND SOLID ST	MÓTE CONTROLLER FOR I ATE DRAIN PAN LEVEL SEN	EACH INDOOR ISOR.		
-DHP-3A INDO			N FROM OUTDOOR	-PROVIDE FACTORY F	FURNISHED BC CONT	ROLLER AND PIPING BRAN	ICH JOINTS.		
		UNINEUTED WIRING DT	ELECTRICAL	ENTIRE INSTALLATION	N SHALL DE IN STRIC	ACCORDANCE WITH STO			
UNIT THROUG	R.			MANUFACTURER'S RE	ECOMMENDED INSTA	ALLATION INSTRUCTIONS.			
UNIT THROUG CONTRACTOR	R.			MANUFACTURER'S RE	ECOMMENDED INSTA	ALLATION INSTRUCTIONS.			
UNIT THROUG CONTRACTOR				MANUFACTURER'S RE	ECOMMENDED INSTA	ALLATION INSTRUCTIONS.			
UNIT THROUG			VR	MANUFACTURER'S RE	ECOMMENDED INSTA	ULE			
UNIT THROUG CONTRACTOR	R SYMBOL	VRF-200A	VRF-200B, 202, & 211	MANUFACTURER'S RE F HEAT PUN TRA VRF-201	ECOMMENDED INSTA	ULE VRF-204 & 213	VRF-208 & 209	M. SYMBOL	ANUFACTURE
UNIT THROUG CONTRACTOR	R SYMBOL	VRF-200A	<u>VR</u> VRF-200B, 202, & 211	MANUFACTURER'S RE	ECOMMENDED INSTA ANE VRF-203, 207, & 210	ULE VRF-204 & 213	VRF-208 & 209	M. SYMBOL	ANUFACTURE
UNIT THROUG CONTRACTOR	R SYMBOL MODEL NUMBER TYPE	VRF-200A 5 MBH CASSETTE	VRF-200B, 202, & 211 8 MBH CASSETTE	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC	ECOMMENDED INSTA AP SCHEDU NE VRF-203, 207, & 210 12 MBH CASSETTE	ULE VRF-204 & 213 18 MBH CASSETTE	VRF-208 & 209 15 MBH CASSETTE	MODEL NUMBER TYPE	ANUFACTURE
UNIT THROUG CONTRACTOR	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW	VRF-200A 5 MBH CASSETTE 	VRF-200B, 202, & 211 8 MBH CASSETTE 	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 	ECOMMENDED INSTA AP SCHEDI NE VRF-203, 207, & 210 12 MBH CASSETTE 	ULE VRF-204 & 213 18 MBH CASSETTE 	VRF-208 & 209 15 MBH CASSETTE 	MODEL NUMBER TYPE SUPPLY AIRFLOW	ANUFACTURE
UNIT THROUG CONTRACTOR	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS	VRF-200A 5 MBH CASSETTE 	VRF-200B, 202, & 211 8 MBH CASSETTE 	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 	ANE VRF-203, 207, & 210 12 MBH CASSETTE 	ULE VRF-204 & 213 18 MBH CASSETTE 	VRF-208 & 209 15 MBH CASSETTE 	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS	ANUFACTURE
UNIT THROUG CONTRACTOR MANUFACTURE	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH)	VRF-200A 5 MBH CASSETTE 	VRF-200B, 202, & 211 8 MBH CASSETTE 	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 	ECOMMENDED INSTA	ULE VRF-204 & 213 18 MBH CASSETTE 	VRF-208 & 209 15 MBH CASSETTE 	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH)	ANUFACTURE
UNIT THROUG CONTRACTOR MANUFACTURE	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E A T. (DB/WB) °E	VRF-200A 5 MBH CASSETTE 	VRF-200B, 202, & 211 8 MBH CASSETTE 	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 	ECOMMENDED INSTA AP SCHEDU ANE VRF-203, 207, & 210 12 MBH CASSETTE 	ULE VRF-204 & 213 18 MBH CASSETTE 	VRF-208 & 209 15 MBH CASSETTE 	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E A T. (DB/M/B) °E	ANUFACTURE
UNIT THROUG CONTRACTOR MANUFACTURE	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH	VRF-200A 5 MBH CASSETTE 	VRF-200B, 202, & 211 8 MBH CASSETTE 	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC -	ECOMMENDED INSTA ANE VRF-203, 207, & 210 12 MBH CASSETTE 	ULE VRF-204 & 213 18 MBH CASSETTE 	VRF-208 & 209 15 MBH CASSETTE 	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH	ANUFACTURE
UNIT THROUG CONTRACTOR MANUFACTURE	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA	VRF-200A 5 MBH CASSETTE 0.24 208/1/60	VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60	ECOMMENDED INSTA AP SCHEDU ANE VRF-203, 207, & 210 12 MBH CASSETTE 0.29 208/1/60	ULLATION INSTRUCTIONS. ULE VRF-204 & 213 18 MBH CASSETTE 0.5 208/1/60	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA	ANUFACTURE
UNIT THROUG CONTRACTOR MANUFACTURE	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.)	VRF-200A 5 MBH CASSETTE 0.24 208/1/60 29	VRF-200B, 202, & 211 VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60 29	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60 84	ECOMMENDED INSTA	ALLATION INSTRUCTIONS. ULE VRF-204 & 213 18 MBH CASSETTE 0.5 208/1/60 32	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60 32	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.)	ANUFACTURE
	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL	VRF-200A 5 MBH CASSETTE 0.24 208/1/60 29	VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60 29	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60 84 VRF-	ECOMMENDED INSTA	ULLATION INSTRUCTIONS. ULE VRF-204 & 213 18 MBH CASSETTE 0.5 208/1/60 32	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60 32	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL	ANUFACTURE
UNIT THROUG CONTRACTOR MANUFACTURE	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER MCA	VRF-200A 5 MBH CASSETTE 0.24 208/1/60 29	VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60 29	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60 84 VRF- 16 PC 1.	ECOMMENDED INSTA ANE VRF-203, 207, & 210 12 MBH CASSETTE 0.29 208/1/60 32 BC-2 ORT 6	ULLATION INSTRUCTIONS. ULE VRF-204 & 213 18 MBH CASSETTE 0.5 208/1/60 32	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60 32	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER RLA	ANUFACTURE
UNIT THROUG CONTRACTOR MANUFACTURE	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER MCA UNIT VOLTAGE	VRF-200A 5 MBH CASSETTE 0.24 208/1/60 29	VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60 29	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60 84 VRF- 16 PC 1. 208/	ECOMMENDED INSTA ANE VRF-203, 207, & 210 12 MBH CASSETTE 0.29 208/1/60 32 BC-2 ORT 6 1/60	ALLATION INSTRUCTIONS. ULE VRF-204 & 213 18 MBH CASSETTE 0.5 208/1/60 32	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60 32	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER RLA UNIT VOLTAGE	ANUFACTURE
UNIT THROUG CONTRACTOR MANUFACTURE INDOOR UNIT BRANCH CONTROLLER	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER MCA UNIT VOLTAGE SYMBOL SYSTEM MODEL	VRF-200A 5 MBH CASSETTE 0.24 208/1/60 29	VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60 29	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60 84 VRF- 16 PC 1. 208/ VRF- 12	ECOMMENDED INSTA AP SCHEDU ANE VRF-203, 207, & 210 12 MBH CASSETTE 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T	ALLATION INSTRUCTIONS. ULE VRF-204 & 213 18 MBH CASSETTE 0.5 208/1/60 32	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60 32	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER RLA UNIT VOLTAGE SYMBOL SYSTEM MODEL	ANUFACTURE
UNIT THROUG CONTRACTOR MANUFACTURE	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER MCA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY.	VRF-200A 5 MBH CASSETTE 0.24 208/1/60 29	VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60 29	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60 84 VRF- 16 PC 16 PC 17 208/1/20 12	ECOMMENDED INSTA AP SCHEDU ANE VRF-203, 207, & 210 12 MBH CASSETTE 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T	ALLATION INSTRUCTIONS. ULE VRF-204 & 213 18 MBH CASSETTE 0.5 208/1/60 32	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60 32	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER RLA UNIT VOLTAGE SYMBOL SYSTEM MODEL SYSTEM MODEL COMP. TYPE / QTY.	ANUFACTURE
	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER MCA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. EAN OTY / E L A	VRF-200A 5 MBH CASSETTE 0.24 208/1/60 29	VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60 29	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60 84 VRF- 16 PC 1. 208/ VRF- 16 PC 1. 208/ VRF- 16 PC	ECOMMENDED INSTA	ALLATION INSTRUCTIONS.	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60 32	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER RLA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. EAN OTY / EL A	ANUFACTURE
UNIT THROUG CONTRACTOR MANUFACTURE	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER MCA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA)	VRF-200A 5 MBH CASSETTE 0.24 208/1/60 29	VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60 29	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60 84 VRF- 16 PC 1. 208/ VRF- 16 PC 1. 208/ 12	ECOMMENDED INSTA AP SCHEDU ANE VRF-203, 207, & 210 12 MBH CASSETTE 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T 0	ALLATION INSTRUCTIONS.	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60 32 0.35 208/1/60 32 	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER RLA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA)	ANUFACTURE INDOO UNI BRANC CONTROLLE
UNIT THROUG CONTRACTOR MANUFACTURE	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER MCA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA) M.F.S. (OPD)	VRF-200A 5 MBH CASSETTE 0.24 208/1/60 29	VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60 29	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60 84 VRF- 16 PC 16 PC 11 208/ VRI -	ECOMMENDED INSTA ANE VRF-203, 207, & 210 12 MBH CASSETTE 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T 0.29	ALLATION INSTRUCTIONS.	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60 32	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER RLA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA) M.F.S. (OPD)	ANUFACTURE INDOO UNI BRANC CONTROLLE
UNIT THROUG CONTRACTOR MANUFACTURE	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER MCA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA) M.F.S. (OPD) UNIT VOLTAGE WEIGHT (LBS.)	VRF-200A 5 MBH CASSETTE 0.24 208/1/60 29	VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60 29	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60 84 VRF- 16 PC 16 PC 17 PC 16 PC 16 PC 16 PC 16 PC 16 PC 16 PC 16 PC 17 PC 16 PC 17 PC 16 PC 1	ECOMMENDED INSTA ANE VRF-203, 207, & 210 12 MBH CASSETTE 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0	ALLATION INSTRUCTIONS.	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60 32 1000 100	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER RLA UNIT VOLTAGE SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA) M.F.S. (OPD) UNIT VOLTAGE WEIGHT (LBS.)	ANUFACTURE INDOO UN BRANC CONTROLLE
UNIT THROUG CONTRACTOR MANUFACTURE	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER MCA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA) M.F.S. (OPD) UNIT VOLTAGE WEIGHT (LBS.) AMBIENT (°F)	VRF-200A 5 MBH CASSETTE 0.24 208/1/60 29	VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60 29	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60 84 VRF- 16 PC 16 PC 16 PC 16 PC 17 208/2 10 12 16 PC 10 10 208/2 10 10 208/2 10 10 208/2 10 10 208/2 10 10 208/2 10 10 208/2 10 10 208/2 10 10 208/2 10 10 208/2 10 10 208/2 10 10 10 208/2 10 10 10 10 10 10 10 10 10 10	ECOMMENDED INSTA AP SCHEDU NE VRF-203, 207, & 210 12 MBH CASSETTE 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T 	ALLATION INSTRUCTIONS.	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60 32	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER RLA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA) M.F.S. (OPD) UNIT VOLTAGE WEIGHT (LBS.)	
UNIT THROUG CONTRACTOR MANUFACTURE	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER MCA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA) M.F.S. (OPD) UNIT VOLTAGE WEIGHT (LBS.) AMBIENT (°F) TOTAL (NOM BTUH) TING @ ARI	VRF-200A 5 MBH CASSETTE 0.24 208/1/60 29	VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60 29 () () () () () () () () () ()	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60 84 VRF-16 PC 16 PC 11 208/2 VRF-16 PC 16 PC 11 208/2 0 12 12 12 12 12 12 12 12 12 12	ECOMMENDED INSTA AP SCHEDU NE VRF-203, 207, & 210 12 MBH CASSETTE 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T 0 0 0 3/60 0 5 	ALLATION INSTRUCTIONS.	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60 32	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER RLA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA) M.F.S. (OPD) UNIT VOLTAGE WEIGHT (LBS.) AMBIENT (°F) (NOM BTUH) TOTAL	
UNIT THROUG CONTRACTOR MANUFACTURE	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER MCA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA) M.F.S. (OPD) UNIT VOLTAGE WEIGHT (LBS.) AMBIENT (°F) TOTAL (NOM BTUH) TING @ ARI 47°F	VRF-200A 5 MBH CASSETTE 0.24 208/1/60 29	VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60 29 () () () () () () () () () ()	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60 84 VRF- 16 PC 16 PC 16 PC 16 PC 17 208/ VRF- 16 PC 16 PC 10 208/ VRF- 16 PC 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ VRF- 10 10 208/ 10 10 10 10 10 10 10 10 10 10	ECOMMENDED INSTA AP SCHEDU ANE VRF-203, 207, & 210 12 MBH CASSETTE 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T 0.0 3/60 00 3/60 00 5 	ALLATION INSTRUCTIONS.	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60 32	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER RLA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA) M.F.S. (OPD) UNIT VOLTAGE WEIGHT (LBS.) AMBIENT (°F) (NOM BTUH) TOTAL SEER / EEF	ANUFACTURE INDOO UN BRANC CONTROLLE OUTDOO UN COOLIN CAPACIT R RATING @ AI PF / COP @ 470
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UNIT THROUG CONTRACTOR MANUFACTURE	R R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER MCA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA) M.F.S. (OPD) UNIT VOLTAGE WEIGHT (LBS.) AMBIENT (°F) TOTAL (NOM BTUH) TING @ ARI 47°F	VRF-200A 5 MBH CASSETTE 0.24 208/1/60 29 0.24 208/1/60 29 0.24 208/1/60 29	VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60 29 0.28 208/1/60 29 0.28 208/1/60 29 208	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60 84 VRF- 16 PC 16 PC 10 PC	ECOMMENDED INSTA AP SCHEDU NE VRF-203, 207, & 210 12 MBH CASSETTE 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T 	ALLATION INSTRUCTIONS.	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60 32 TION DOWN TO 23 DRIVEN SCROLL / H R EACH INDOOR U VEL SENSOR.	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER RLA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA) M.F.S. (OPD) UNIT VOLTAGE WEIGHT (LBS.) AMBIENT (°F) (NOM BTUH) TOTAL SEER / EEF HSF	ANUFACTURE INDOC UN BRANC CONTROLLE OUTDOC UN CAPACIT R RATING @ A PF / COP @ 47
UNIT THROUG CONTRACTOR MANUFACTURE	R SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER MCA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA) M.F.S. (OPD) UNIT VOLTAGE WEIGHT (LBS.) AMBIENT (°F) TOTAL (NOM BTUH) TING @ ARI 47°F	VRF-200A 5 MBH CASSETTE 0.24 208/1/60 29 0.24 208/1/60 29 0.24 208/1/60 29	VRF-200B, 202, & 211 8 MBH CASSETTE 0.28 208/1/60 29	MANUFACTURER'S RE F HEAT PUN TRA VRF-201 30 MBH MID-STATIC 4.25 208/1/60 84 VRF- 16 PC 16 PC 16 PC 17 208/2 VRI 12 60 10 208/2 VRI 12 60 10 208/2 -	ECOMMENDED INSTA AP SCHEDU ANE VRF-203, 207, & 210 12 MBH CASSETTE 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T 0.29 208/1/60 32 BC-2 ORT 6 1/60 F-2 T 	ALLATION INSTRUCTIONS.	VRF-208 & 209 15 MBH CASSETTE 0.35 208/1/60 32 208/1/60 32 TION DOWN TO 23 DRIVEN SCROLL / H R EACH INDOOR U VEL SENSOR. D PIPING BRANCH J	M SYMBOL MODEL NUMBER TYPE SUPPLY AIRFLOW EXTERNAL S.P. (IN) FAN MOTOR AMPS NET TOTAL CAP. (BTUH) NET SENS. CAP. (BTUH) E.A.T. (DB/WB) °F NOM. HEAT. BTUH MCA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER RLA UNIT VOLTAGE WEIGHT (LBS.) SYMBOL MODEL NUMBER RLA UNIT VOLTAGE SYMBOL SYSTEM MODEL COMP. TYPE / QTY. COMP. R.L.A. FAN QTY. / F.L.A. M.C.A. (FLA) M.F.S. (OPD) UNIT VOLTAGE WEIGHT (LBS.) AMBIENT (°F) (NOM BTUH) TOTAL SEER / EEF HSF	ANUFACTURE INDOC UN BRANC CONTROLLE OUTDOC UN COOLIN CAPACIT R RATING @ A PF / COP @ 47

/AN	UFACTURER		TRANE	
	SYMBOL		DOAS-1A & 2A	
	MODEL NUMB	ER		
	AIRFLOW (CFN	/ TO SPACE)	700	
		TYPE		
		NOMINAL HORSEPOWER		
F	SUPPLY FAN	BRAKE HORSEPOWER		
N		E.S.P. (IN.)		
SR		TOTAL STATIC PRESS. (IN.)		
ŏ		TOT. CAP. (BTUH)		
IN		SENS. CAP. (BTUH)		
	COULING	E.A.T. (DB/WB °F)	95 / 81	
	COL	L.A.T. (DB/WB/DP °F)		
		ROWS		
	HOT GAS	EAT (DB/WB °F)		
	REHEAT	LAT (DB/WB/DP °F)		
	MCA		3	
	MOP		15	
	UNIT VOLTAGE	Ξ	208/3/60	
	WEIGHT		220	
_ H	SYMBOL		DOAS-BC-1 & 2	
NCH Soll	MODEL NUMB	ER		
BRA NTF	MCA		0.38	
- 8	UNIT VOLTAGE		208/1/60	
	SYMBOL		DOAS-1 & 2	
	MODEL NUMB	ER	8 TON	
Ē	FAN QUANTITY	Y / kW		
N	COMPRESSOF	RQUANTITY		
0R	RLA			
ŏ	MCA		44	
E F	MOP		70	
D	UNIT VOLTAGE	<u> </u>	208/3/60	
	WEIGHT			
	AMBIENT(°F)		95	

- PROVIDE UNIT WITH HORIZONTAL DISCHARGE CONFIGURATION, 1"-MERV 8 PLEATED FILTERS, HINGED ACCESS DOORS, HAIL GUARD, ECM FAN, NON-FUSED DISCONNECT, 1" DOUBLE-WALL PANELS AND ACCESS DOORS.
- PROVIDE UNIT WITH MODULATING HOT GAS REHEAT AND 439 STAINLESS STEEL DRAIN PAN.
- PROVIDE UNIT WITH SUPPLY DISCHARGE SENSOR, DISCHARGE AIR CONTROL WITH BACNET W/ DISPLAY AND PROGRAMMABLE CONTROLLER (UC600)

2330 Main St. Columbia, South Carolina 29201 Phone: (803) 765-9421 www.mecainc.com

CAB / JNM Designed: PPC Approved: 24221 Job No.: 08/13/2024 Plot Date:

1	\triangleleft
L	N
	D LIGHTING FIXTURE, POLE MOUNTED, TYPE AS INDICATED.
	NO. OF TIEADS AS SHOWIN ON FEANS.
LIGF	
<u></u>	LIGHTING FIXTURE, 1X4 WALL WRAP -
	SURFACE MOUNTED
L	LIGHTING FIXTURE, OUTDOOR WALL PACK
	MOUNTED
	UIGHTING FIXTURE, STRIP – SURFACE
	MOUNTED
POW	ER DEVICE LEGEND
	FLOOR MOUNTED BOX. CONTAINED DEVICES ARE MOUNTED IN THE FLOOR
E	POWER CONNECTION
φ	RECEPTACLE, DUPLEX, NEMA 5–20R, WALL MOUNTED
Φ^{AC}	RECEPTACLE, DUPLEX, NEMA 5–20R, WALL MOUNTED; AC–ABOVE COUNTER
∳ ^{AC}	RECEPTACLE, (GFI—GROUND FAULT INTERRUPTING; AC—ABOVE COUNTER
₽ ^{₩₽}	RECEPTACLE, (GFI—GROUND FAULT INTERRUPTING; WP—WEATHERPROOF
#	RECEPTACLE, DOUBLE DUPLEX
	ELECTRICAL PANELBOARD
	LJA1 HOME RUN (BUILDING NUMBER PANEL "LJA", CIRCUIT "3,5", ETC.) THE TICK MARKS
	INDICATE NUMBER OF CONDUCTORS AND ONE NEUTRAL CONDUCTOR. EQUIPMENT GROUND CONDUCTOR IS NOT SHOWN BUT SHALL BE PROVIDED. UNLESS NOTED OTHERWISE PROVIDE DOUBLE NEUTRAL FOR ALL CIRCUITS SERVED FROM "C" SERIES
<u>C</u> 	ALL CIRCUIT NUMBER ON ENDED OF
L	- PANEL DESIGNATION
ELE	TRICAL SYSTEMS LEGEND
∇	COMMUNICATION OUTLET — (1) RJ45 JACK — DATA
൭	'R' – NEXT TO THE SYMBOL = "RED PHONE" (PROVIDE LABEL) SMOKE DETECTOR, OBSCURATION TYPE, AT CEILING
9	
SWI	
\$_	SWITCH, DIMMER
ں ہ	SWITCH, SINGLE POLE, 20 AMP, 120/277 VOLT
\$ ³	SWITCH, 3 WAY-RED HANDLE FOR EM. CIRCUITS
\$ _T	SWITCH, IN-WALL TIMER, SPST
\$ _{OS}	SWITCH, OCCUPANCY SENSING, WALL MOUNTED (DUAL TECHNOLOGY)
	, OCCUPANCY SENSOR, CEILING MOUNTED (DUAL TECHNOLOGY) # DENOTES OCCUPANCY SETTING TYPE:
¥	 1 = MANUAL ON, AUTO OFF 2 = AUTO ON 100%, AUTO DIM TO 50% 3 = AUTO ON, AUTO OFF
AB	BREVIATIONS
AB	ABOVE CL CENTER LINE FAAP FIRE ALARM ANNUNCIATOR PANEL PL

ARC-FAULT INTERRUPTER

AMPERE INTERRUPTING CAPACITY

AUTOMATIC TELLER MACHINE

ABOVE FINISHED GRADE

— ВОТТОМ

ATM

— CONTACTOR

SWITCHING EQUIPMENT

CTR

CTS

DSS

GENERAL ELECTRICAL NOTES

- CODES, LATEST EDITIONS.

- DESCRIPTION OF EACH CIRCUIT.

- 7. ALL CONDUIT RUNS SHALL BE CONCEALED UNLESS SPECIFICALLY NOTED OTHERWISE.

- TESTING AND SERVICE CONSIDERATIONS.
- 15. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

- SPLICE BOXES LOCATED AT THE LIGHT POLES.
- FACILITY OPERATIONS AT ALL TIMES.

GENERAL DEMOLITION NOTES

- 4. THE ELECTRICAL PLANS DO NOT INDICATE ALL EXISTING INSTALLATIONS.

- OR RELOCATED.

FIRE ALARM CONTROL PANEL	SCP	 SECURITY CONTROL PANEL	BKR	 BREA
FIRE ALARM TRANSPONDER CABINET	SSTC	 SOUND SYSTEM TERMINAL CABINET	С	 COND
GROUND FAULT INTERRUPTER	STR	 STARTER	CCTV	 CLOS
GROUND	SEC	 SECURITY PANEL	CEDB	 CONC
HIGH INTENSITY DISCHARGE	Т	 ТОР	СН	 COUN
INTERCOM TERMINAL CABINET	TBA	 TELEPHONE BACKBOARD "A"	СКТ	 CIRCL
INFORMATION TECHNOLOGY	TBD	 TO BE DETERMINED		

1. ALL ELECTRICAL WORK SHALL COMPLY WITH NATIONAL ELECTRICAL CODE, THE NATIONAL FIRE CODES, AND LOCAL BUILDING

2. THE CONTRACTOR SHALL THOROUGHLY REVIEW THE PROJECT TO ENSURE THAT ALL WORK SHALL MEET OR EXCEED THE ABOVE REQUIREMENTS. ANY ALLEGED DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION.

3. THE CONTRACTOR IS DIRECTED TO OBTAIN COPIES OF ALL RELATED PLANS, SPECIFICATIONS, SHOP DRAWINGS AND ADDENDUMS TO COORDINATE THE RELATED WORK AND SCHEDULING.

4. ALL PANELBOARDS SHALL BE PROVIDED WITH A TYPEWRITTEN SCHEDULE SHOWING CIRCUIT NUMBERS AND A COMPLETE

5. MINIMUM TRADE SIZE FOR HOME RUN CONDUIT (EMT) PERMITTED SHALL BE 3/4 INCH UNLESS NOTED OTHERWISE.

6. ALL CONDUCTOR SHALL BE COPPER WITH 600 VOLT INSULATION TYPE THWN (MINIMUM SIZE SHALL BE #12AWG). CONTRACTOR SHALL ADJUST WIRE AND CONDUIT SIZES IF OTHER INSULATION TYPES ARE USED.

8. ALL PANELBOARDS, SWITCHES, AND CIRCUIT BREAKERS SHALL BE SQUARE D, EATON, OR APPROVED EQUAL.

9. ALL CONDUITS SHALL HAVE A SEPARATE GREEN GROUND CONDUCTOR INSTALLED FOR GROUNDING.

11 ANY EXISTING UTILITIES LOCATED IN THE AREA OF CONSTRUCTION WHICH REQUIRE RELOCATION BY THE OWNER SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE A MINIMUM OF TEN DAYS IN ADVANCE.

12. ALL EMPTY CONDUITS SHALL CONTAIN JET LINE #232 POLYOFIN 200 LB. TEST.

13. ALL WORK SHOWN ON THE ELECTRICAL PLANS SHALL BE PERFORMED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

14. EQUIPMENT INSTALLED WITHIN CONCEALED SPACES SHALL HAVE REASONABLE ACCESS PANELS PROVIDED NEARBY FOR INSPECTION,

16. EXTERIOR BURIED CONDUIT RUNS SHALL BE MINIMUM 24" BELOW FINISHED GRADE. PROVIDE CAUTION TAPE 12" BELOW GRADE.

17. THE CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF ALL MODIFICATIONS TO EXISTING SYSTEMS AND SHALL DELIVER "AS-BUILT" DRAWINGS ON CD-ROM TO THE OWNER UPON COMPLETION OF THE WORK.

18. CABLE RUNS SHALL BE CONTINUOUS AND UNBROKEN/UNSPLICED BETWEEN PULL BOXES. SPLICES SHALL ONLY BE MADE AT

19. THE AIRPORT IS A VERY BUSY FACILITY WITH 7 DAY WEEKLY OPERATIONS. THE CONTRACTOR SHALL CLOSELY COORDINATE ALL WORK WITH THE FACILITY PERSONNEL PRIOR TO ANY WORK ACTIVITIES. CARE SHALL BE TAKEN TO MINIMIZE INTERRUPTION TO

1. THE CONTRACTOR SHALL VISIT THE SITE TO DETERMINE EXISTING CONDITIONS PRIOR TO SUBMITTING BID.

2. THE OWNER HAS THE FIRST RIGHT OF REFUSAL FOR ANY REMOVED EXISTING ITEM. COORDINATE WITH THE OWNER & A/E.

3. THE CONTRACTOR SHALL ENSURE THAT THERE IS NO INTERRUPTION OF SERVICES TO EXISTING BUILDINGS DURING CONSTRUCTION. ALL OUTAGES SHALL BE SCHEDULED WITH THE OWNERS REPRESENTATIVE.

5. THE INSTALLER IS RESPONSIBLE FOR ALL FEES, PERMITS AND INSPECTIONS WITHOUT ADDITIONAL CHARGE TO THE OWNER.

6. THESE DRAWINGS WERE DEVELOPED JULY 2024. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING A THOROUGH SITE SURVEY AND NOTIFYING THE ENGINEER OR OWNER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.

7. THE REUSE OF EXISTING ELECTRICAL COMPONENTS SHALL COMPLY WITH THE **2023** VERSION OF THE NEC.

8. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ELECTRICAL CONDUIT AND WIRES SERVING EQUIPMENT TO BE REMOVED

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MK DATE DESCRIPTION REVISIONS

NC PE NO. 034060 | NC COA NO. P-1143

DATE 07/12/24 DRAWN BY JM CHECK BY MAM JOB NO. 023-031 SHEET

E-001

	AIRFIELD ELEC	CTRICAL LE	GEND
	EXISTING		
	EXISTING L-861T OMNIDIRECTIONAL (360° BLUE) BASE MOUNTED MEDIUM INTENSITY ELEVATED TAXIWAY EDGE LIGHT, WITH ISOLATION TRANSFORMER.	\$	PROPOSED L-861 NEW BASE, L-867
		·	PROPOSED CABLE LEGEND NOTE 2 .
		2W4"	PROPOSED CONCR
0	EXISTING EQUIPMENT TO BE REMOVED		
	CIRCUIT DESIGNATIONS AND CALLOUTS		LIGHT TAG
	CKT 'REG #4' 2" CKT 'REG #4' 2" CKT 'REG #4' 2"	Т	- 01 LIGHT
-1	CKT 'REG #4' 2" CIRCUIT CALLOUT – DENOTES ONLY ONE CIRCUIT CONDUCTOR PRESENT		LIGHT DESIGN
<i>•</i>	CONDUIT SIZE – EX DENOTES EXISTING CONDUIT – DB DENOTES DIRECT BURY CABLE		

LEGEND NOTES

1. PROPOSED ELEVATED TAXIWAY LIGHTS SHALL BE TYPE L-861T(L), OMNIDIRECTIONAL BLUE COLUMN MOUNTED ON A L-867B, 24" DEEP BASE CAN WITH A "CORTEN," GALVANIZED/ ENAMEL FINISH, OR APPROVED EQUAL BASE PLATE AND PROPERLY SIZED L-830 ISOLATION TRANSFORMER AND L-823 CONNECTORS. THE OVERALL HEIGHT SHALL BE 14". SEE SHEET XXX.

2. PROPOSED CONDUIT SHALL BE 2" SCHEDULE 40 PVC. NUMBER OF HASH MARKS INDICATE NUMBER OF NEW L-824, TYPE C 5KV #8 AWG CABLES INSTALLED IN DUCT. ALL CONDUIT WORK WITHIN EXISTING PAVEMENT SHALL BE DIRECTIONAL BORE. COST OF DIRECTIONAL BORE IS INCIDENTAL TO L-110 PAY ITEM. NO OPEN CUTTING OF EXISTING PAVEMENT IS PERMITTED. ALL 1-WAY CONDUIT INSTALLED UNDER STRUCTURAL PAVEMENT IS CONCRETE ENCASED. ALL OTHER CONDUITS ARE DIRECT BURIED EXCEPT AS NOTED ON PLANS. EXTEND CONCRETE ENCASEMENT 10' BEYOND EDGE OF STRUCTURAL PAVEMENT.

ABBREVIATIONS

E – EASTING EG – EXISTING GROUND

- EL/ELEV ELEVATION
- EOP EDGE OF PAVEMENT EQ – EQUAL
- ERSA EXTENDED RUNWAY SAFETY AREA
- EX/EXST/EXIST EXISTING FAA - FEDERAL AVIATION ADMINISTRATION
- FOD FOREIGN OBJECT DEBRIS
- G GREEN
- GNE GROUNDWATER NOT ENCOUNTERED GS – GLIDE SCOPE
- I/C NUMBER OF CONDUCTORS/CONDUCTOR IE/INV - INVERT ELEVATION / INVERT
- ILS INSTRUMENT LANDING SYSTEM
- IP INTERSECTION POINT
- JB JUNCTION BOX JCP- JUNCTION CAN PLAZA
- kV KILOVOLT
- LEO LAW ENFORCEMENT OFFICER
- LHA LIGHT HOUSING ASSEMBLY (PAPI)
- LF LINEAR FEET
- LT LEFT MAX – MAXIMUM
- MIN MINIMUM
- N NORTHING
- NAD NORTH AMERICAN DATUM NGVD – NATIONAL GEODETIC VERTICAL DATUM NOTAM - NOTICE TO AIRMEN

PROPOSED
61T (L) OMNIDIRECTIONAL (360° BLUE) BASE MOUNTED MEDIUM INTENSITY ELEVATED LED TAXIWAY EDGE LIGHT, ON 67, CLASS I, SIZE B BASE CAN, 24" DEEP, WITH L-830 ISOLATION TRANSFORMER, 6.6A. SEE LEGEND NOTE 1 .
LE (L–824, TYPE C, 5KV, #8 AWG) IN 2" PVC DIRECT BURIED (SLASHES INDICATE QUANTITY OF CABLES), SEE
CRETE ENCASED ELECTRICAL DUCT. QUANTITY AND SIZE OF CONDUITS AS INDICATED
ID TAG NUMBER. SEE E403.
GNATION

GENERAL ELECTRICAL NOTES

- INCLUDED.
- 2. NEW MATERIALS SHALL BE U.L. APPROVED.
- THE CONTRACTOR.
- 4. ALL EXCAVATION WITHIN 5 FEET OF ANY UNDERGROUND UTILITY SHALL BE PERFORMED BY HAND EXCAVATION METHODS. EXISTING DIRECT BURIED CABLES TO REMAIN SHALL BE ENCLOSED IN SPLIT DUCT AND ENCASED IN A 3" ENVELOPE OF P-610 CONCRETE UNDER THE FOLLOWING CONDITIONS: 4.1. WHEN WITHIN 20 FEET OF EXCAVATION, TRENCHING, ETC. 4.2. WHEN PAVEMENT WIDENING OR EXTENSIONS WILL BE ROUTED OVER THE EXISTING CABLE. THE LOC-DUCT WILL EXTEND 20 FEET BEYOND THE NEW EDGE OF THE PAVEMENT. 4.3. WHEN ENCOUNTERED DURING CONSTRUCTION.
- 4.4. WHEN SUBJECT TO DAMAGE, IN THE OPINION OF THE ENGINEER, FROM CONSTRUCTION ACTIVITIES. AN END OF DUCT MARKER SHALL BE INSTALLED ABOVE EACH END OF THE DUCT.
- 5. RUNWAY AND TAXIWAY EDGE LIGHTS SHALL BE INSTALLED 10 FEET FROM THE THEORETICAL EDGE OF THE PAVEMENT OR AS OTHERWISE INDICATED. ALL STRAIGHT SECTIONS OF RUNWAY OR TAXIWAY EDGE LIGHTS SHALL BE ALIGNED TO DEVELOP A CONTINUOUS "IN LINE" APPEARANCE OF THE LIGHTS WHEN VIEWED AT GROUND LEVEL FROM ONE END.
- 6. ALL WORK SHOWN TO BE DEMOLISHED ON THE DRAWINGS IS BASED ON FIELD OBSERVATIONS OF THE ACTUAL EXISTING CONDITIONS AND ON EXISTING "AS-BUILT" DRAWINGS OF THE AREAS AFFECTED. THEY ARE THEREFORE CONSIDERED TO BE SCHEMATIC. IT IS THE INTENT OF THE DEMOLITION DRAWINGS THAT ALL EQUIPMENT, DEVICES, FIXTURES, WIRING MATERIALS, SYSTEM AND APPURTENANCES, ETC. WHICH ARE NO LONGER REQUIRED AS A RESULT OF THE PROJECT TO BE REMOVED. THE OWNER HAS FIRST RIGHT OF REFUSAL FOR ALL REMOVED ITEMS.
- 7. ELECTRICAL DEMOLITION WORK SHALL BE LIMITED TO THE AREAS AND SCHEDULES INDICATED IN THE APPROVED PHASING PLAN.
- 8. ALL GROUND RODS AND OTHER UNDERGROUND GROUNDING CONNECTIONS SHALL BE EXOTHERMICALLY WELDED OR APPROVED EQUIVALENT. EXOTHERMICALLY WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
- 9. REFER TO CIVIL DRAWINGS FOR ACTUAL JOINT LAYOUTS, DRAINAGE, PAVING DETAILS, ETC. CIVIL DATA IS SHOWN ON ELECTRICAL DRAWINGS FOR REFERENCE ONLY.
- 10. IN NEW PAVEMENT ALL CONDUITS, DUCTBANKS, COUNTERPOISE, AND GROUNDING CONDUCTORS, ETC. SHALL BE INSTALLED PRIOR TO PLACEMENT ON THE FINAL LIFT OF PAVEMENT.
- 11. THE CONTRACTOR SHALL HAVE A CABLE TRACER AVAILABLE TO LOCATE THE EXISTING CABLES AND HAND DIGGING SHALL BE UNDERTAKEN WITHIN FIVE (5) FEET OF ANY KNOWN OR SUSPECTED EXISTING UNDERGROUND CABLES AND UTILITIES WHICH ARE NOT TO BE DISTURBED.
- 12. SHOULD ANY RUNWAY OR TAXIWAY SYSTEM BE INOPERABLE DUE TO THE CONTRACTOR'S WORK, AND THE CONTRACTOR IS UNABLE TO RESTORE THE SYSTEM BY NIGHTFALL WITH PERMANENT REPAIRS, THE CONTRACTOR SHALL AT HIS OWN EXPENSE TAKE NECESSARY MEASURES TO INSURE OPERATIONS OF THE SYSTEM DURING NIGHT HOURS. TEMPORARY WORK SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL. IF THE SYSTEM CANNOT BE RESTORED BY NIGHTFALL, THE CONTRACTOR SHALL INSTALL A TEMPORARY SYSTEM OF BATTERY OPERATED LIGHTS WITH THE APPROPRIATE COLORED LENSES FOR BOTH.
- 13. IF A LIGHT CAN IS INSTALLED INCORRECTLY, THE DUCT/CONDUIT IS PLUGGED/BROKEN, OR THE CONCRETE JOINTS ARE INSTALLED INCORRECTLY, PAVEMENT ON BOTH SIDES OF THE LIGHT CAN AND THE LIGHT SHALL BE REMOVED AND REPLACED TO JOINT LINE AT THE CONTRACTOR'S EXPENSE.
- 14. ALL DUCT LOCATED IN OR UNDER THE PAVEMENT, AND WITHIN 5 FEET OF THE EDGE OF THE SHOULDER PAVEMENT SHALL BE CONCRETE ENCASED DUCT. ALL OTHER 2" DUCT (L-110), SHALL BE DIRECT BURIED.
- 15. DIMENSIONS BETWEEN LIGHTS SHOWN ON A RADIUS ARE CURVE

S – STRAIGHT SCH – SCHEDULE SGN – SIGN SIDA – SECURITY IDENTIFICATION DISPLAY AREA SPT – STANDARD PENETRATION TEST SS – STAINLESS STEEL STA – STATION STD – STANDARD TL – TAXILANE TTL – TOTAL TW – TAXIWAY TDZ – TOUCHDOWN ZONE

TSA – TAXIWAY SAFETY AREA TYP – TYPICAL UON - UNLESS OTHERWISE NOTED 1. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR TO RELOCATE, MODIFY AND INSTALL THE AIRFIELD ELECTRICAL SYSTEMS AS INDICATED ON THE DRAWINGS. ITEMS NOT SHOWN BUT

3. THE DUCT BANKS AND CONDUITS BETWEEN DEMOLISHED MANHOLES, HANDHOLES, BASE CANS ETC. SHALL BE REMOVED EXCEPT WHERE LOCATED UNDER EXISTING PAVEMENT TO REMAIN OR WHERE THE DUCT OR CONDUIT IS TO BE EXTENDED IN THE NEW WORK. ALL REMOVED FIXTURES, TRANSFORMERS, ETC. SHALL BE TURNED OVER TO THE OWNER'S MAINTENANCE DEPARTMENT. ALL REMOVED CABLES, DUCT, BASE CANS, CONCRETE PADS, MANHOLES, ETC. SHALL BE PROPERLY AND LEGALLY DISPOSED OF OFF THE SITE BY

LENGTHS.

- 16. ITEMS SHOWN IN SCREEN (GHOST) ARE EXISTING ITEMS AND ITEMS SHOWN IN SOLID (BOLD) ARE NEW AND TO BE PROVIDED UNDER THIS CONTRACT UNLESS OTHERWISE NOTED.
- OBVIOUSLY NECESSARY FOR COMPLETION OF THE WORK SHALL BE 17. PROJECT PAY ITEMS: THE PROJECT PAY ITEMS ARE PROVIDED TO BE INCLUSIVE OF ALL WORK TO BE PERFORMED AS SHOWN IN THESE PLANS. ALL WORK TO BE IDENTIFIED WITH A SPECIFIC PAY ITEMS IS TO BE CONSIDERED REQUIRED WORK TO COMPETE THE PROJECT AND IS TO BE SUBSIDIARY TO THE COST OF PROJECT PAY ITEMS PROVIDED.
 - 18. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO STARTING WORK.
 - 19. HIGH VOLTAGE INSULATION RESISTANCE TEST

SUBJECT EACH SERIES LIGHTING CIRCUIT TO A HIGH VOLTAGE INSULATION RESISTANCE TEST BY MEASUREMENT OF THE INSULATION LEAKAGE CURRENT. PROVIDE A SUITABLE HIGH VOLTAGE TEST INSTRUMENT WHICH HAS A STEADY, FILTERED DIRECT CURRENT OUTPUT VOLTAGE AND LIMITED CURRENT. HIGH VOLTAGE TESTER SHALL INCLUDE AN ACCURATE VOLTMETER AND MICROAMMETER FOR READING VOLTAGE APPLIED TO THE CIRCUIT AND RESULTANT INSULATION LEAKAGE CURRENT. DO NOT APPLY VOLTAGES IN EXCESS OF TEST VALUES SPECIFIED BELOW.

19.1. TEST PROCEDURE: DISCONNECT BOTH LEADS FROM REGULATOR OUTPUT TERMINALS AND SUPPORT SO THAT AIR GAPS OF SEVERAL INCHES EXIST BETWEEN BARE CONDUCTORS AND GROUND. CLEAN AND DRY CABLE SHEATHS, FOR DISTANCE OF ONE FOOT FROM ENDS OF CABLES AND EXPOSED INSULATION AT ENDS OF CABLES. CONNECT ENDS OF BOTH CONDUCTORS OF THE CIRCUIT TOGETHER AND TO HIGH-VOLTAGE TERMINALS OF TEST EQUIPMENT, AND APPLY TEST VOLTAGE SPECIFIED IN THE FOLLOWING TABULATION BETWEEN CONDUCTORS AND GROUND FOR A PERIOD OF 5 MINUTES.

TEST VOLTAGE, DC	FIRST TEST ON EXISTING CIRCUITS	TEST ON NEW CIRCUITS
SERIES <u>LIGHTING CIRCUITS</u>		
HIGH INTENSITY SERIES LIGHTING CIRCUITS (5000–VOLT LEADS, 500– AND 200–WATT TRANSFORMERS)	9000	5000
MEDIUM INTENSITY SERIES LIGHTING CIRCUITS (5000–VOLT LEADS, 30/45–WATT TRANSFORMERS)	6000	3000
600-VOLT CIRCUITS	1800	800

WHEN ADDITIONS ARE MADE TO EXISTING CIRCUITS, TEST ONLY NEW SECTIONS IN ACCORDANCE WITH "FIRST TEST ON NEW CIRCUITS" IN TABLE ABOVE. (TO ENSURE RELIABLE OPERATION, TEST COMPLETE CIRCUIT AT REDUCED VOLTAGES INDICATED ABOVE.)

19.2. LEAKAGE CURRENT: MEASURE AND RECORD INSULATION LEAKAGE CURRENT IN MICROAMPERES FOR EACH CIRCUIT FOR EACH MINUTE APPLICATION OF TEST VOLTAGE. DO NOT EXCEED THE VALUE OF THE INSULATION LEAKAGE CURRENT CALCULATED ON THE BASIS OF THE FOLLOWING LEAKAGE CURRENT ALLOWANCES FOR CABLE AND CONNECTED EQUIPMENT FOR EACH CIRCUIT:

19.2.1.1.	3 MICROAMPERES FOR EACH 1000 FEET OF CABLE.
19.2.1.2.	2 MICROAMPERES FOR EACH 200-WATT AND EACH 500-WATT 5000-VOLT SERIES TRANSFORMER.
19.2.1.3.	2 MICROAMPERES FOR EACH 30/45-WATT 5000-VOLT SPACING SERIES TRANSFORMER.
19.2.1.4.	2 MICROAMPERES FOR EACH 10/15-WATT 5000-VOLT SPACING SERIES TRANSFORMER.

NOTE: THE ABOVE VALUES INCLUDE ALLOWANCES FOR THE NORMAL NUMBER OF CONNECTORS AND SPLICES. IF MEASURED VALUE OF INSULATION LEAKAGE CURRENT EXCEEDS CALCULATED VALUE, SECTIONALIZE THE CIRCUIT AND REPEAT SPECIFIED TEST FOR EACH SECTION. LOCATE DEFECTIVE COMPONENTS AND REPAIR OR REPLACE UNTIL REPEATED TESTS INDICATE AN ACCEPTABLE VALUE OF LEAKAGE CURRENT FOR THE ENTIRE CIRCUIT.

20. OPERATING TEST

UPON COMPLETION OF TESTS, SHOW BY DEMONSTRATION IN SERVICE THAT CIRCUITS, CONTROL EQUIPMENT, AND LIGHTS COVERED BY THE CONTRACT ARE IN GOOD OPERATING CONDITION. OPERATE EACH SWITCH IN THE LIGHTING PANELS SO THAT EACH SWITCH POSITION IS ENGAGED AT LEAST TWICE. DURING THIS PROCESS, OBSERVE LIGHTS AND ASSOCIATED EQUIPMENT TO DETERMINE THAT EACH SWITCH CONTROLS PROPERLY CORRESPONDING CIRCUIT. PROVIDE TELEPHONE OR RADIO COMMUNICATION BETWEEN THE OPERATOR AND THE OBSERVERS. REPEAT TESTS FROM THE ALTERNATE CONTROL STATION, FROM THE REMOTE CONTROL POINTS, AND AGAIN FROM THE LOCAL CONTROL SWITCHES ON THE REGULATORS. TEST EACH LIGHTING CIRCUIT BY OPERATING THE LAMPS AT MAXIMUM BRIGHTNESS FOR NOT LESS THAN 30 MINUTES. VISUALLY EXAMINE AT THE BEGINNING AND AT THE END OF THIS TEST TO ENSURE THAT THE CORRECT NUMBER OF LIGHTS ARE BURNING AT FULL BRIGHTNESS. CONDUCT ONE DAY AND ONE NIGHT OPERATING TEST FOR THE ENGINEER.

SHEET

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A. GENERAL

- 1. THE ELECTRICAL INSTALLATION, AS A MINIMUM, SHALL MEET ALL FAA STANDARDS, THE NATIONAL ELECTRICAL CODE AND LOCAL REGULATIONS.
- 2. ALL LIGHTING SYSTEM COMPONENTS FURNISHED BY THE CONTRACTOR (INCLUDING FAA APPROVED EQUIPMENT) SHALL BE COMPATIBLE IN ALL RESPECTS WITH EACH OTHER AND THE REMAINDER OF THE NEW/EXISTING SYSTEM. ANY NONCOMPATIBLE COMPONENTS FURNISHED BY THIS CONTRACTOR SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER WITH A SIMILAR UNIT, APPROVED BY THE ENGINEER/ RESIDENT PROJECT REPRESENTATIVE (RPR) (DIFFERENT MODEL OR DIFFERENT MANUFACTURER) THAT IS COMPATIBLE WITH THE REMAINDER OF THE AIRPORT LIGHTING SYSTEM.
- 3. IN CASE THE CONTRACTOR SELECTS TO FURNISH AND INSTALL AIRPORT LIGHTING EQUIPMENT REQUIRING ADDITIONAL WIRING, TRANSFORMERS. ADAPTERS. MOUNTINGS. ETC.. TO THOSE SHOWN ON THE DRAWINGS AND/OR LISTED IN THE SPECIFICATIONS, ANY COST FOR THESE ITEMS SHALL BE INCIDENTAL TO THE EQUIPMENT COST. CHANGES SHALL BE APPROVED BY THE ENGINEER/ RPR PRIOR TO ORDERING.
- 4. THE CONTRACTOR INSTALLED EQUIPMENT (INCLUDING FAA APPROVED) SHALL NOT GENERATE ANY ELECTROMAGNETIC INTERFERENCE IN THE EXISTING AND/OR NEW COMMUNICATIONS. WEATHER, AIR NAVIGATION, AND AIR TRAFFIC CONTROL EQUIPMENT. ANY EQUIPMENT GENERATING SUCH INTERFERENCE SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST WITH EQUIPMENT MEETING THE APPLICABLE SPECIFICATIONS AND NOT GENERATING ANY INTERFERENCE.
- 5. WHEN A SPECIFIC TYPE, STYLE, CLASS, ETC. OF FAA APPROVED EQUIPMENT IS SPECIFIED ONLY THAT TYPE, STYLE, CLASS, ETC. WILL BE ACCEPTABLE, EVEN THOUGH EQUIPMENT OF OTHER TYPES, STYLES, CLASS, ETC. MAY BE FAA APPROVED.
- 6. ANY AND ALL INSTRUCTIONS FROM THE ENGINEER/ RPR TO THE CONTRACTOR REGARDING CHANGES IN, OR DEVIATIONS FROM THE PLANS AND SPECIFICATIONS SHALL BE IN WRITING WITH COPIES SENT TO THE AIRPORT AND THE FAA FIELD OFFICE (ADO/AFO). THE CONTRACTOR SHALL NOT ACCEPT ANY VERBAL INSTRUCTIONS FROM THE ENGINEER/ RPR OR OWNER REGARDING ANY CHANGES FROM THE PLANS AND SPECIFICATIONS.
- 7. A MINIMUM OF FIVE (5) COPIES OF INSTRUCTION BOOK(S) SHALL BE SUPPLIED WITH EACH DIFFERENT TYPE OF EQUIPMENT THE BOOKS DESCRIBING A MORE SOPHISTICATED TYPE OF EQUIPMENT, SUCH AS REGULATORS, PAPI, REIL, ETC. AS A MINIMUM SHALL CONTAIN THE FOLLOWING:
- 7.1. DETAILED DESCRIPTION OF THE OVERALL EQUIPMENT AND ITS INDIVIDUAL COMPONENTS. 7.2. THEORY OF OPERATION INCLUDING THE FUNCTION OF EACH COMPONENT.
- 7.3. INSTALLATION INSTRUCTIONS. 7.4. START-UP INSTRUCTIONS.
- 7.5. PREVENTATIVE MAINTENANCE REQUIREMENTS.
- 7.6. CHART FOR TROUBLESHOOTING. 7.7. COMPLETE POWER AND CONTROL DETAILED WIRING DIAGRAM(S), SHOWING EACH CONDUCTOR/CONNECTION/COMPONENT—"BLACK" BOXES ARE NOT ACCEPTABLE. THE DIAGRAM OR THE NARRATIVE SHALL SHOW VOLTAGES/CURRENTS/WAVE SHAPES AT STRATEGIC LOCATIONS TO BE USED WHEN CHECKING AND/OR TROUBLE SHOOTING THE EQUIPMENT. WHEN THE EQUIPMENT HAS SEVERAL MODES OF OPERATION, SUCH AS SEVERAL BRIGHTNESS STEPS, THESE PARAMETERS SHALL BE INDICATED FOR ALL THE DIFFERENT MODES. 7.8. PARTS LIST WHICH WILL INCLUDE ALL MAJOR AND MINOR COMPONENTS, SUCH AS RESISTORS, DIODES, ETC. IT SHALL
- INCLUDE A COMPLETE NOMENCLATURE OF EACH COMPONENT AND, IF APPLICABLE, THE NAME OF ITS MANUFACTURER AND THE CATALOG NUMBER. 7.9. SAFETY INSTRUCTIONS.
- 8. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, INSPECTIONS AND APPROVALS
- 9. ALL MATERIALS SCHEDULED FOR REMOVAL SUCH AS EXISTING RUNWAY AND TAXIWAY LIGHTS WHICH ARE DEEMED SALVAGABLE BY THE AIRPORT SHALL BE DELIVERED TO THE LOCATION ON AIRPORT PROPERTY AS INDICATED BY THE AIRPORT. ALL NON-SALVAGABLE MATERIALS REMOVED SUCH AS CONCRETE FOUNDATIONS, CONDUIT, CONDUCTORS, ETC. SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR. ALL MATERIALS SHALL BE APPROVED BY THE AIRPORT.
- 10. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE AIRPORT, FEDERAL AVIATION ADMINISTRATION (FAA) AND THE ENGINEER PRIOR TO AND DURING ALL CONSTRUCTION TO ENSURE THAT ALL ELECTRICAL CIRCUITS AND FACILITIES HAVE BEEN LOCATED, FLAGGED AND ACCOUNTED FOR AND THAT ALL NECESSARY CIRCUITS HAVE BEEN DETERMINED PRIOR TO INITIATING CONSTRUCTION IN ANY LOCATIONS.
- 11. DEWATERING FOR THE INSTALLATION OF MANHOLES AND/OR DUCTBANKS IS INCIDENTAL TO THE RESPECTIVE PAY ITEM. THE CONTRACTOR SHALL BE RESPONSIBLE TO PAY FOR AND OBTAIN ANY AND ALL PERMITS REQUIRED FOR DEWATERING.
- 12. THE AIRPORT "LOCK/TAG/TRY" PROCEDURE SHALL BE COMPLIED WITH BY THE CONTRACTOR. THE AIRPORT WILL PROVIDE THE CONTRACTOR FOR THIS SAFETY PROCEDURE.
- 13. AIRFIELD SIGNS PROVIDING DIRECTIONS TO CLOSED AREAS SHALL BE COVERED. ALL AREAS CLOSED TO AIRCRAFT SHALL NOT BE LIGHTED. ADEQUATE LIGHTING IN THE OPINION OF THE ENGINEER SHALL BE PROVIDED TO DELINEATE THE ACTIVE AND CLOSED AREAS OF THE AOA.
- 14. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THAT ALL AIRFIELD LIGHTING CIRCUITS, EXCEPT THOSE THAT ARE SERVING CLOSED TAXIWAYS OR RUNWAYS, ARE COMPLETELY OPERATIONAL, BY 4:00 PM EACH DAY THAT WORK IS PERFORMED USING THE TOWER CONTROLS. THE OPERATION SHALL BE DEMONSTRATED BY THE CONTRACTOR EACH DAY AND SHALL BE VERIFIED WITH THE ENGINEER/ RPR BEFORE LEAVING THE SITE.

B. POWER AND CONTROL

- 1. STENCIL THE FUSE OR FUSE LINK AMPERE RATING. WHERE THE EQUIPMENT DOES NOT HAVE SUFFICIENT STENCILING AREA, THE STENCILING MUST BE DONE ON THE WALL NEXT TO THE UNIT. THE LETTERS MUST BE ONE INCH(25 MM) HIGH AND PAINTED IN WHITE OR BLACK PAINT TO PROVIDE THE HIGHEST CONTRAST WITH THE WITH ONE INCH (25 MM) WHITE (BLACK BACKGROUND) OR BLACK (WHITE BACKGROUND) CHARACTERS. ALL MARKINGS MUST BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT. LEGEND PLATES SHALL BE FURNISHED AND INSTALLED ON ALL PANELBOARDS, JUNCTION BOXES, REGULATORS, POWER DISTRIBUTION EQUIPMENT, CONTROL PANELS AND ANY OTHER ITEM BY THE ENGINEER. LEGEND PLATES SHALL BE WEATHERPROOF AND ABRASION RESISTANT PHENOLIC MATERIALS. LETTERING SHALL BE BLACK ON WHITE BACKGROUND. LEGEND PLATES SHALL BE INSTALLED USING DOUBLE SIDED TAPE OR ADHESIVE WITH PEAL OFF BACKING.
- 2. COLOR CODE ALL PHASE WIRING BY THE USE OF COLORED WIRE INSULATION AND/OR COLORED TAPE. WHERE TAPE IS USED, THE WIRE INSULATION SHALL BE BLACK. BLACK AND RED SHALL BE USED FOR SINGLE-PHASE, THREE WIRE RED AND BLUE SHALL BE USED FOR THREE-PHASE SYSTEMS. NEUTRAL CONDUCTORS, SIZE NO. 6 AWG OR SMALLER, SHALL BE IDENTIFIED BY A CONTINUOUS WHITE OR NATURAL GRAY OUTER FINISH ALONG ITS ENTIRE LENGTH. NEUTRAL CONDUCTORS LARGER THAN NO. 6 AWG SHALL BE IDENTIFIED EITHER BY A CONTINUOUS WHITE OR NATURAL GRAY OUTER OR BY THE USE OF WHITE TAPE AT ITS TERMINATION AND INSIDE ACCESSIBLE WIREWAYS.
- 3. ALL BRANCH CIRCUIT CONDUCTORS CONNECTED TO A PARTICULAR PHASE SHALL BE IDENTIFIED WITH THE SAME COLOR. THE COLOR CODING SHALL BE EXTENDED TO THE POINT OF UTILIZATION.
- 4. IN CONTROL WIRING, THE SAME COLOR SHALL BE USED THROUGHOUT THE SYSTEM FOR THE SAME FUNCTION, SUCH AS 10%, 30%, 100% BRIGHTNESS CONTROL, ETC.
- 5. ALL POWER AND CONTROL CIRCUIT CONDUCTORS SHALL BE COPPER; ALUMINUM SHALL NOT BE ACCEPTED. THIS INCLUDES WIRE, CABLE, BUSSES, TERMINALS, SWITCH/PANEL COMPONENTS, ETC.
- 6. LOW VOLTAGE (600 V.) AND HIGH VOLTAGE (5000 V.) CONDUCTORS SHALL BE INSTALLED IN SEPARATE WIREWAYS.
- 7. NEATLY LACE WIRING IN DISTRIBUTION PANELS, WIREWAYS, SWITCHES AND JUNCTION/PULL BOXES.
- 8. THE MINIMUM SIZE OF PULL/JUNCTION BOXES, REGARDLESS OF THE QUANTITY AND THE SIZE OF THE CONDUCTORS SHOWN, AS FOLLOWS:
- 8.1. IN STRAIGHT PULLS THE LENGTH OF THE BOX SHALL NOT BE LESS THAN EIGHT TIMES THE TRADE DIAMETER OF THE LARGER CONDUIT. THE TOTAL AREA (INCLUDING THE CONDUIT CROSS-SECTIONAL AREA) OF A BOX END SHALL BE AT
- LEAST 3 TIMES GREATER THAN THE TOTAL TRADE CROSS-SECTIONAL AREA OF THE CONDUITS TERMINATING AT THE END. 8.2. IN ANGLE OR U PULLS THE DISTANCE BETWEEN EACH CONDUIT ENTRY INSIDE THE BOX AND THE OPPOSITE WALL OF THE BOX SHALL NOT BE LESS THAN SIX TIMES THE TRADE DIAMETER OF THE LARGEST CONDUIT. THIS DISTANCE SHALL BE INCREASED FOR ADDITIONAL ENTRIES BY THE AMOUNT OF THE SUM OF THE DIAMETERS OF ALL OTHER CONDUIT ENTRIES ON THE SAME WALL OF THE BOX. THE DISTANCE BETWEEN CONDUIT ENTRIES ENCLOSING THE SAME CONDUCTOR SHALL NOT BE LESS THAN SIX TIMES THE TRADE DIAMETER OF THE LARGEST CONDUIT.
- 9. A RUN OF CONDUIT BETWEEN TERMINATIONS AT EQUIPMENT ENCLOSURES, SQUARE DUCTS AND PULL/JUNCTION BOXES, SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL). INCLUDING THOSE BENDS LOCATED IMMEDIATELY AT THE TERMINATIONS. CAST, CONDULET TYPE OUTLETS SHALL NOT BE TREATED AS PULL/JUNCTION BOXES.
- 10. EQUIPMENT CABINETS SHALL NOT BE USED AS PULL/JUNCTION BOXES. ONLY WIRING TERMINATING AT THE EQUIPMENT SHALL BE BROUGHT INTO THESE ENCLOSURES.

- 11. SPLICES AND JUNCTION POINTS SHALL BE PERMITTED ONLY IN JUNCTION BOXES, DUCTS EQUIPPED WITH REMOVABLE COVERS, AND AT EASILY ACCESSIBLE LOCATIONS.
- 12. CIRCUIT BREAKERS IN POWER DISTRIBUTION PANEL(S) SHALL BE THERMAL-MAGNETIC, MOLDED CASE, PERMANENT TRIP WITH 100 AMPERE. MINIMUM. FRAME.
- 13. DUAL LUGS SHALL BE USED WHERE TWO WIRES, SIZE NO.6 OR LARGER, ARE TO BE CONNECTED TO THE SAME TFRMINAI
- 14. RIGID STEEL CONDUIT SHALL BE USED THROUGHOUT THE INSTALLATION UNLESS OTHERWISE SPECIFIED. THE MINIMUM TRADE SIZE SHALL BE 3/4 INCH.
- 15. UNLESS OTHERWISE SHOWN ALL EXPOSED CONDUITS SHALL BE RUN PARALLEL TO OR AT RIGHT ANGLES WITH THE LINES OF THE STRUCTURE.
- 16. USE CONDUIT BUSHINGS AT EACH CONDUIT TERMINATION. WHERE NO. 4 AWG OR LARGER UNGROUNDED WIRE IS INSTALLED, USE INSULATED BUSHINGS.
- 17. USE DOUBLE LOCK NUTS AT EACH CONDUIT TERMINATION.
- . WRAP ALL PRIMARY AND SECONDARY POWER TRANSFORMER CONNECTIONS WITH SUFFICIENT LAYERS OF INSULATING TAPE AND COVER WITH INSULATING VARNISH FOR FULL VALUE OF CABLE INSULATION VOLTAGE.
- 19. UNLESS OTHERWISE NOTED, ALL INDOOR SINGLE CONDUCTOR CONTROL WIRING SHALL BE NO. 12 AWG. (MIN.).
- 20. BOTH ENDS OF EACH CONTROL CONDUCTOR SHALL BE TERMINATED AT A TERMINAL BLOCK. THE TERMINAL BLOCKS SHALL BE OF PROPER RATING AND SIZE FOR THE FUNCTION INTENDED AND THEY SHALL BE LOCATED IN EQUIPMENT ENCLOSURES OR SPECIAL TERMINAL CABINETS.
- 21. ALL CONTROL CONDUCTOR TERMINATIONS SHALL BE OF THE OPEN-EYE CONNECTOR/SCREW TYPE. SOLDERED. CLOSED-EYE TERMINATIONS, OR TERMINATIONS WITHOUT CONNECTORS ARE NOT ACCEPTABLE.
- 22. IN TERMINAL BLOCK CABINETS THE MINIMUM SPACING BETWEEN PARALLEL TERMINAL BLOCKS SHALL BE 6 INCHES. THE MINIMUM SPACING BETWEEN TERMINAL BLOCK SIDES/ENDS AND CABINET SIDES/BOTTOM/TOP SHALL BE 5 INCHES. THE MINIMUM SPACING WILL BE INCREASED AS REQUIRED BY THE NUMBER OF CONDUCTORS. ADDITIONAL SPACING SHALL BE PROVIDED AT CONDUCTOR ENTRANCES.
- 23. BOTH ENDS OF ALL CONTROL CONDUCTORS SHALL BE IDENTIFIED AS TO THE CIRCUIT, TERMINAL BLOCK, AND TERMINAL NUMBER. ONLY STICK-ON LABELS SHALL BE USED.
- 24. A SEPARATE AND CONTINUOUS NEUTRAL CONDUCTOR SHALL BE INSTALLED AND CONNECTED FOR EACH BREAKER CIRCUIT IN THE POWER PANEL(S) FROM THE NEUTRAL BAR TO EACH POWER/CONTROL CIRCUIT
- 25. THE FOLLOWING SHALL APPLY TO RELAY/CONTACTOR PANELS/ENCLOSURES
- 25.1. ALL COMPONENTS SHALL BE MOUNTED IN DUST PROOF ENCLOSURE(S) WITH VERTICALLY HINGED COVERS. 25.2. THE ENCLOSURE(S) SHALL HAVE AMPLE SPACE FOR THE CIRCUIT COMPONENTS, TERMINAL BLOCKS, AND INCOMING AND INTERNAL WIRING.
- 25.3. ALL INCOMING/OUTGOING WIRING SHALL BE TERMINATED AT TERMINAL BLOCKS.
- 25.4. EACH TERMINAL ON TERMINAL BLOCKS AND ON CIRCUIT COMPONENTS SHALL BE CLEARLY IDENTIFIED. 25.5. ALL CONTROL CONDUCTOR TERMINATIONS SHALL BE OF THE OPEN-EYE CONNECTOR/SCREW TYPE. SOLDERED, CLOSED-EYE TERMINATIONS. OR TERMINATIONS WITHOUT CONNECTORS ARE NOT ACCEPTABLE.
- 25.6. WHEN THE ENCLOSURE COVER IS OPENED, ALL CIRCUIT COMPONENTS, WIRING, AND TERMINALS SHALL BE EXPOSED AND ACCESSIBLE WITHOUT REMOVAL OF ANY PANELS, COVERS, ETC., EXCEPT THOSE COVERING HIGH
- VOLTAGE COMPONENTS. CIRCUIT COMPONENT OR TERMINAL BLOCK. 25.7. EACH CIRCUIT COMPONENT SHALL BE CLEARLY IDENTIFIED INDICATING ITS CORRESPONDING NUMBER SHOWN IN THE DRAWINGS AND ITS FUNCTION.
- 25.8. A COMPLETE WIRING DIAGRAM (NOT A SCHEMATIC DIAGRAM) SHALL BE MOUNTED ON THE INSIDE OF THE COVER. THE DIAGRAM SHALL REPRESENT EACH CONDUCTOR BY A SEPARATE LINE. 25.9. MINIMUM WIRE SIZE SHALL BE NO.12 AWG UNLESS OTHERWISE NOTED.

C. FIELD LIGHTING

- UNLESS OTHERWISE NOTED, ALL UNDERGROUND FIELD POWER MULTIPLE AND SERIES CIRCUIT CONDUCTORS WHETHER DIRECT BURIED OR IN DUCT/CONDUIT SHALL BE FAA APPROVED L-824 TYPE. INSULATION VOLTAGE AND SIZE SHALL BE AS SPECIFIED. ALL SERIES CIRCUIT CABLES SHALL BE #8 AWG RATED AT 5KV (L-824-C), ALL CIRCUITS SHALL BE MEGGERED AFTER INSTALLATION.
- NO COMPONENTS OF PRIMARY CIRCUIT SUCH AS CABLE, CONNECTORS AND TRANSFORMERS SHALL BE BROUGHT ABOVE GROUND AT EDGE LIGHTS, SIGNS, REIL, PAPI, ETC. THIS PRACTICE MAY BE APPROVED FOR TEMPORARY PURPOSES ONLY.
- 3. THERE SHALL BE NO EXPOSED POWER/CONTROL CABLES BETWEEN THE POINT WHERE THEY LEAVE THE UNDERGROUND (DIRECT BURIED OR L-867 BASES) AND WHERE THEY ENTER THE EQUIPMENT (SUCH AS TAXIWAY SIGNS, PAPI, REIL, ETC.) ENCLOSURES. THESE CABLES SHALL BE ENCLOSED IN RIGID CONDUIT OR IN FLEXIBLE, WATER-TIGHT CONDUIT WITH BREAKABLE COUPLING(S) AT THE GRADE OR THE HOUSING COVER, AS SHOWN IN APPLICABLE DETAILS.
- 4. THE JOINTS OF THE L-823 PRIMARY CONNECTORS SHALL BE WRAPPED WITH AT LEAST ONE LAYER OF RUBBER OR 6. SYNTHETIC RUBBER TAPE AND ONE LAYER OF PLASTIC TAPE, ONE-HALF LAPPED, EXTENDING AT LEAST 1-1/2INCHES ON EACH SIDE OF THE JOINT. SEE DETAILS FOR SPECIFIC REQUIREMENTS.
- WATERTIGHT CABLE ENTRANCE.
- 6. HEAT SHRINK WITH INTERNAL ADHESIVE SHALL BE INSTALLED OVER L-823 ASSEMBLY, AS DETAILED IN THE PLANS.
- 7. L-823 TYPE II. TWO-CONDUCTOR SECONDARY CONNECTORS SHALL BE CLASS "A" (FACTORY MOLDED).
- 8. THERE SHALL BE NO SPLICES IN THE SECONDARY CABLE(S) WITHIN THE STEMS OF A RUNWAY/TAXIWAY EDGE/THRESHOLD LIGHTING FIXTURES AND THE WIREWAYS LEADING TO TAXIWAY SIGNS AND PAPI/REIL EQUIPMENT.
- 9. ELECTRICAL INSULATING GREASE SHALL BE APPLIED WITHIN THE L-823, SECONDARY, TWO CONDUCTOR CONNECTORS TO PREVENT WATER ENTRANCE. THESE CONNECTORS SHALL NOT BE TAPED.
- 10. A SLACK OF 3 FEET, MINIMUM, SHALL BE PROVIDED IN THE PRIMARY CABLE AT EACH TRANSFORMER/CONNECTOR TERMINATION. PAYMENT SHALL BE PER LINEAR FOOT OF CABLE INSTALLED IN EACH BASE CAN.

11. DIRECTION OF PRIMARY CABLES SHALL BE IDENTIFIED BY COLOR CODING. CONTRACTOR SHALL COORDINATE ALL

- COLOR CODING REQUIREMENTS WITH OWNER MAINTENANCE PERSONNEL.
- 12. L-867 BASES SHALL BE SIZE B, 24" DEEP, CLASS IA, UNLESS OTHERWISE NOTED.
- 13. BASE-MOUNTED FRANGIBLE COUPLINGS MUST NOT HAVE WEEP HOLES TO THE OUTSIDE. PLUGGED HOLES ARE NOT ACCEPTABLE. IT SHALL HAVE A 1/4' DIAMETER, MINIMUM, OR EQUIVALENT OPENING FOR DRAINAGE FROM THE SPACE AROUND THE SECONDARY CONNECTOR INTO THE L-867 BASE.
- 14. THE ELEVATION OF THE BREAKABLE COUPLING GROOVE SHALL NOT EXCEED 1 1/2" ABOVE THE EDGE OF THE COVER IN CASE OF BASE MOUNTED COUPLINGS, OR THE TOP OF THE STAKE IN CASE OF STAKE MOUNTED COUPLINGS.
- 15. WHERE THE BREAKABLE COUPLING IS NOT AN INTEGRAL PART OF THE LIGHT FIXTURE STEM OR MOUNTING LEG, A BEAD OF SILICON SEAL SHALL BE APPLIED COMPLETELY AROUND LIGHT STEM OR WIREWAY AT BREAKABLE COUPLING TO PROVIDE A WATERTIGHT SEAL.
- 16. PLASTIC LIGHTING FIXTURE COMPONENTS, SUCH AS LAMP HEADS, STEMS, BREAKABLE COUPLINGS, BASE COVERS, BRACKETS, STAKES, SHALL NOT BE ACCEPTABLE. THE METAL THREADED FITTINGS SHALL BE SET IN THE FLANGE DURING CASTING PROCESS. BASE COVER BOLTS SHALL BE FABRICATED FROM 18-8 STAINLESS STEEL.
- 17. EDGE LIGHT NUMBERING TAGS SHALL BE FACING THE PAVEMENT. SEE DETAILS FOR TYPE.
- 18. CABLE/SPLICE/DUCT MARKERS SHALL BE PRECAST CONCRETE OF THE SIZE SHOWN. LETTERS/NUMBERS/ARROWS

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FOR THE LEGEND TO BE IMPRESSED INTO THE TOPS OF THE MARKERS SHALL BE PRE-ASSEMBLED AND SECURED IN THE MOLD BEFORE THE CONCRETE IS POURED. LEGEND INSCRIBED BY HAND IN WET CONCRETE SHALL NOT BE ACCEPTABLE.

19. ALL UNDERGROUND CABLE RUNS SHALL BE IDENTIFIED BY CABLE MARKERS AT 200 FEET MAXIMUM SPACING, WITH AN ADDITIONAL MARKER AT EACH CHANGE OF DIRECTION OF THE CABLE RUN. CABLE MARKERS SHALL BE INSTALLED IMMEDIATELY ABOVE THE CABLE.

20. LOCATIONS OF ENDS OF ALL UNDERGROUND DUCTS SHALL BE IDENTIFIED BY DUCT MARKERS

21. STEEL TAGS TO BE ATTACHED AT BOTH ENDS TO THE CABLE BY THE USE OF PLASTIC STRAPS. MINIMUM OF TWO TAGS SHALL BE PROVIDED ON EACH CABLE IN A MAN/HAND HOLE - ONE AT THE CABLE ENTRANCE AND ONE AT THE CABLE EXIT.

22. APPLY AN OXIDE INHIBITING, ANTI-SEIZING COMPOUND TO ALL SCREWS, NUTS, BOLTS AND BREAKAGE COUPLING THREADS. APPROVED SAE GRADE 5 COATED BOLTS SHALL NOT REQUIRE ANTI-SEIZING COMPOUND.

23. THERE SHALL BE NO SPLICES BETWEEN THE ISOLATION TRANSFORMERS. L-823 CONNECTORS ARE ALLOWED AT TRANSFORMER CONNECTIONS ONLY, UNLESS OTHERWISE SHOWN.

24. CONCRETE USED FOR SLABS, FOOTINGS, BACKFILL AROUND TRANSFORMER HOUSINGS, MARKERS, ETC. SHALL BE CONSISTENT WITH THE REQUIREMENTS OF ITEM P-610.

25. PERFORM ACCEPTANCE TEST FOR SERIES AND MULTIPLE AIRFIELD LIGHTING CIRCUITS ON COMPLETE LIGHTING CIRCUITS. SUBJECT EACH SERIES AND MULTIPLE LIGHTING CIRCUIT TO A HIGH VOLTAGE INSULATION RESISTANCE TEST. SEE SHEET E-002, NOTE 19 FOR DETAILED REQUIREMENTS.

D. CABLE PROTECTION CRITERIA

1. ALL EXISTING SYSTEMS/UTILTITIES TO REMAIN SHALL BE PROTECTED FROM DAMAGE. REPLACEMENT OF ANY DAMAGED SYSTEMS/UTILITIES SHALL BE AT THE CONTRACTORS EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGED ELECTRICAL SYSTEMS AND SHALL MAKE REPAIRS IMMEDIATELY, AT HIS OWN COST. IN ACCORDANCE WITH APPLICABLE FAA SPECIFICATIONS. DAMAGED ELECTRICAL SYSTEMS SHALL BE IMMEDIATELY REPORTED TO THE RPR.

EXISTING CONDUIT, DUCTBANK, CIRCUITING AND UTILITY INFORMATION IS BASED ON AIRPORT "AS BUILT" AND "RECORD" DRAWINGS AND SITE VISITS BY THE UTILITIES AND THE ENGINEER. THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND SHALL NOT BE SCALED FOR EXACT LOCATIONS. NOT ALL UTILITIES MAY BE SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE APPROPRIATE UTILITY/AGENCY, PRIOR TO STARTING WORK, FOR THE LOCATION OF EXISTING UTILITIES. ANY INTERPRETATION OF AN EXISTING SYSTEM OR UTILITY SERVICE SHALL BE COORDINATED AND APPROVED BY THE AUTHORITY, AGENCY OR UTILITY HAVING JURISDICTION. PRIOR TO THE START OF WORK THE CONTRACTOR SHALL CONTACT ALL LOCAL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT THE APPROPRIATE UTILITY COMPANIES, AGENCY ETC. PRIOR TO ANY

EXCAVATION/CONSTRUCTION TO LOCATE THE UTILITY, AGENCIES, UNDERGROUND CABLES, PIPES, CONDUITS, DUCTBANKS, ETC. REPLACEMENT OF EXISTING CABLES OR UTILITIES DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE AT THE CONTRACTORS EXPENSE.

4. EXISTING CABLES AND CONDUITS SHALL BE EXCAVATED BY HAND. SEE GENERAL NOTES ON E-002 FOR ADDITIONAL REQUIREMENTS.

5. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THAT ALL AIRFIELD LIGHTING CIRCUITS, EXCEPT THOSE THAT ARE SERVING CLOSED TAXIWAYS OR RUNWAYS, ARE COMPLETELY OPERATIONAL, USING THE EXISTING CONTROLS, AT THE TERMINATION OF WORK EACH DAY AND SHALL SO CERTIFY TO THE OWNERS AUTHORIZED REPRESENTATIVE BEFORE LEAVING THE SITE

INSTALL A PLASTIC, DETECTABLE, MAGNETIC THREE INCH (3'') WIDE TAPE EIGHT INCHES (8'') BELOW GRADE ABOVE ALL PORTIONS OF EXISTING UNDERGROUND UTILITIES EXPOSED FOR ANY REASON. THE DETECTABLE TAPE SHALL BE OMITTED WHERE THE UNDERGROUND UTILITY IS UNDER AIRFIELD PAVEMENT.

7. FAA CABLES AND FIBER OPTIC CABLES DAMAGED DURING CONSTRUCTION CANNOT BE SPLICED BY THE CONTRACTOR UNLESS ORDERED BY THE FAA AND THE OWNER. DAMAGE TO ANY EXISTING CABLE SHALL RESULT IN THE CONTRACTOR BEING RESPONSIBLE FOR THE COMPLETE REPLACEMENT OF THE CABLE

E. GROUNDING

ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE NEC (NFPA-70), FAA-SO-STD-71 AND FAA-STD-019f, LATEST EDITIONS.

GROUND ALL NON-CURRENT-CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT BY USING NO. 6 AWG BARE COPPER EXOTHERMICALLY WELDED TO GROUND ROD AT EACH LIGHT FIXTURE BASE LOCATION. CONNECT TO BASE EXTERNAL GROUND

ALL GROUND CONNECTIONS TO BUSSES, PANELS, ETC. SHALL BE MADE WITH PRESSURE TYPE SOLDERLESS LUGS AND CLEAN ALL METAL SURFACES BEFORE MAKING GROUND CONNECTIONS. ALL GROUND CONNECTIONS AT GROUND RODS SHALL BE EXOTHERMIC TYPE (CADWELD OR EQUAL).

4. TOPS OF GROUND RODS SHALL BE A MINIMUM OF 6 INCHES BELOW GRADE.

THE RESISTANCE TO GROUND OF THE VAULT GROUNDING SYSTEM WITH THE COMMERCIAL POWER LINE NEUTRAL DISCONNECTED SHALL NOT EXCEED 10 OHMS. THIS PERTAINS TO THE VAULT GROUNDING SYSTEM ONLY.

THE RESISTANCE TO GROUND OF THE COUNTERPOISE SYSTEM, OR AT ISOLATED LOCATIONS, SUCH AS AIRPORT BEACON SHALL NOT EXCEED 25 OHMS. THIS REFERS TO EACH GROUND ROD LOCATION IN THE AIRFIELD. IF SOIL RESISTIVITY IS HIGH, PROVIDE ADDITIONAL GROUND RODS AS REQUIRED TO MEET 25 OHMS REQUIREMENTS.

5. THE ID OF THE PRIMARY L-823 FIELD ATTACHED CONNECTORS SHALL MATCH THE CABLE OD TO PROVIDE A 7. ALL NEW SIGN BASES AND MANHOLES SHALL HAVE GROUND RODS IN ADDITION TO THE REQUIREMENTS OF PLACING THE GROUND RODS SHALL BE A MINIMUM OF 10 FEET DEEP AND 3/4 INCH DIAMETER AND SHALL BE MEGGERED TO OBTAIN A NOT-TO-EXCEED 25 OHMS, RESISTANCE TO GROUND PRIOR TO CONNECTION WITH THE COUNTERPOISE SYSTEM.

> 8. SURGE PROTECTIVE DEVICES (SPD) SHALL BE INSTALLED IN ACCORDANCE WITH FAA-STD-019e. THESE DEVICES SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE PANEL THEY SERVE AND IN ACCORDANCE WITH THE MANUFACTURERS. INSTRUCTIONS. THE CONDUIT OR CONDUIT NIPPLE CONNECTING THE SPD ENCLOSURE TO THE PANEL ENCLOSURE SHALL BE SEALED WITH DUCT SEAL OR OTHER APPROVED NON FLAMMABLE MEDIUM TO PREVENT SOOT FROM ENTERING THE ENCLOSURE IN THE EVENT OF SPD FAILURE.

CONDUCT A MEGGER TEST ON EACH SECTION OF CIRCUIT OR PROGRESSIVE COMBINATION OF SECTIONS AS THEY ARE INSTALLED. CHECK EACH SECTION OR PROGRESSIVE COMBINATION OF SECTIONS WITH A MEGOHMETER PROVIDING A VOLTAGE OF APPROXIMATELY 1000 VOLTS TO PROVIDE A DIRECT READING IN RESISTANCE, AND DOCUMENT RESULTS. LOCATE ANY FAULTS INDICATED BY THE TEST AND ELIMINATE BEFORE PROCEEDING WITH THE CIRCUIT INSTALLATION.

10. PROVIDE A LIGHT BASE GROUND INSTALLED AT EACH LIGHT FIXTURE. THE LIGHT BASE GROUND SHALL BE SEPARATE FROM THE COUNTERPOISE SYSTEM. THE PURPOSE OF THE LIGHT BASE GROUND IS TO PROVIDE A DEGREE OF PROTECTION FOR MAINTENANCE PERSONNEL FROM POSSIBLE CONTACT WITH AN ENERGIZED LIGHT BASE OR MOUNTING STAKE.

10.1. THE LIGHT BASE GROUND MUST BE A #6 AWG BARE COPPER WIRE JUMPER BONDED TO THE GROUND LUG AT FIXTURE BASE OR STAKE TO A GROUND ROD INSTALLED BESIDE THE FIXTURE. INSTALL GROUND ROD WITHIN LIGHT BASE EXCAVATION.

GROUND TEST LOCATION	MAXIMUM RESISTANCE ALLOWED PRIOR TO COUNTERPOISE SYSTEM CONNECTION	MAXIMUM RESISTANCE ALLOWED WITH COUNTERPOISE SYSTEM CONNECTION			
TAXIWAY EDGE LIGHTS	25 OHMS	10 OHMS			
RUNWAY EDGE LIGHTS	25 OHMS	10 OHMS			
GUIDANCE SIGNS	25 OHMS	10 OHMS			
ELD LIGHT VAULT GROUND TEST WELL	10 OHMS	10 OHMS			
FIELD LIGHTING VAULT MAIN SERVICE GROUND	10 OHMS	10 OHMS			
AIRFIELD BEACON	10 OHMS	10 OHMS			
JUNCTION CAN PLAZAS	25 OHMS	10 OHMS			
WIND CONES	10 OHMS	10 OHMS			
RCISION APPROACH PATH INDICATOR	25 OHMS	10 OHMS			
UNWAY END IDENTIFICATION LIGHTS	25 OHMS	10 OHMS			

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	LIGHTING FIXTURE SCHEDULE																
						FIXTURE HOUSIN	IG									10.000	
FIXTURE/	QTY, OF	11110		LENS/	FRAME/		AIR/		MANUFACTURER	INSTALL/		DISTRIBUTION		LAMP	,	VOLTAGE/	
TAG	FIXTURE	SIZE	DESCRIPTION	REFLECTOR	FINISH	BODY	FUNCTION	MANUFACTURER	CATALOG	MOUNTING	LUMENS	TYPE	QTY.	WATTS	TYPE/COLOR	DRIVER	MISCELLANEOUS/ ACCESSORIES
							-										

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GENERAL NOTES

1. SEE EOO1 FOR GENERAL NOTES.

PHOTOMETRIC SUMMARY

HORIZONTAL ILLUMINANCE – FOOT–CANDLES (FC)									
TERMINAL	AVG	AVG/MIN	MIN						
APRON	2.7	5.43:1	0.4						
ROAD	2.12	7.07:1	0.3						
PARKING LOT	4.34	5.43:1	0.8						
IES RP37-22 LIGHTING RECOMMENDATION - RON	2.00	4:1	0.5						
IES RP37-22 LIGHTING RECOMMENDATION - ROAD									
IES RP37-22 LIGHTING RECOMMENDATION-PARKING LOT									

LIGHT ILLUMINANCE LEGEND

✓ 1 HEAD POLE ◎ 20 FT TALL.

 $\int 2$ HEADS POLE @ 60 FT TALL.

LIGHT ILLUMINANCE LEGEND

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LIGHT POLE LEGEND

LIGHT POLE LEGEND

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The Ohmega Group, Inc. | Be Brilliant.

Consulting 🗖 Engineers

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NC PE NO. 034060 | NC COA NO. P-1143

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1. SEE EOO1 FOR GENERAL NOTES.

KEYED NOTES

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1. SEE E001 FOR GENERAL NOTES.

KEYED NOTES

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1. SEE EOO1 FOR GENERAL NOTES.

KEYED NOTES

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