

0		
	-ACCESSIBLE PAF	RKING SIGN POLE
	-EXISTING POWER	R POLE
	-ADA COLUMN MC	OUNTED DOOR ACTUATOR
	-RELOCATE EXIST	TING LIGHT POLE - SEE ELECTRI
/ /	-DOWNSPOUT AN	D SPLASH BLOCK
//+	-EXISTING POWER	R POLE TO REMAIN
	CONCRETE SIDE	WALK - REMOVE EXISTING CURI THAT FALLS WITHIN THIS AREA.
	-EXISTING SIDEW	ALK TO REMAIN
NE\ CONSTRU	V JCTION	
<u> </u>		
URT STREET SNE WAY) SNE WAY SNE WAY	IG TO AIN	
\circ		

CIVIL	
C001	



901 MAIN ST. MAYNARDVILLE, TN 37807 02.02.2018 175900

ABBREVIATIONS

	G:	
	GALV.	GALVANIZED
	GL.	GLASS, GLAZING
	G.F.R.C.	GLASS FIBER
		REINFORCED CC
ICAL TILE CEILING	GL. BLK.	GLASS BLOCK
DOOR, AREA DRAIN	GR.	
NAL	G.K.	
NT	GTP. BD.	GTPSUM BOARD
FINISH FLOOR	H:	
DLING UNIT	H/C	HANDICAPPED
ML	H.C.	HOLLOW CORE
ATE	HD.	HAND, HEAD
PANEL	HDR.	HEADER
Т	HDWE.	
1 OF CURB	HORIZ.	HEIGHT
	H.PT.	HIGH POINT
G	H.R.	HAND RAIL
	H.S.	HORIZONTAL SLI
NG	HSTWY.	HOISTWAY
MARK	l:	
`	INSUI	
	INT.	INTERIOR
PLATE	I.D.	INSIDE DIAMETE
	INV.	INVERT
Г	I.P.S.	IRON PIPE SIZE
BASIN	I.	
TE MASONRY UNIT	<u>J.</u>	
LET	J.C. IT	JAINITORS CLOS
	51.	30111
JL JOINT	K:	
	KIT.	KITCHEN
	L:	
J	LAM	LAMINATE
TE	LAM.FL.	LAMINATE FLOO
RENCE ROOM	LAV.	LAVATORY
JOUS	L.H.	
CTOR	LIL.	
GATED METAL PIPE	L.P.	
OR		
	M:	
CTILE	MACH.	MACHINE(RY)
	MRBL.	MARBLE
	MAS.	MASONRY
ER	MPT	
N	MH	MANHOLE
ON	MFR.	MANUFACTURE
	MECH.	MECHANICAL
	MIN.	MINIMUM
POUT	MTL.	METAL
G	M.O.	MASONRY OPEN
	MISC.	MISCELLANEOUS
	N:	
ION JOINT	N.C.	NONCOMBUSTIB
ON	N.I.C.	NOT IN CONTRAC
ICAL	NO.	NUMBER
OR	N/A	NOT APPLICABLE
	N.T.S.	NOT TO SCALE
	O:	
	0.C.	ON CENTER
FIJLAD	O.D.	OUTSIDE DIAME
	OFF.	OFFICE
G	OH.	OVERHEAD
DR	OPNG.	OPENING
AY	OP.HD.	OPPOSITE HAND
	0-0.	OUT TO OUT
ARM	<u>P:</u>	
DRAIN	P.C.	PRECAST
TINGUISHER	P.C.M.	PORCELAIN CER
TINGUISHER	PL.	PLASTER
г	PNL.	PANEL, PANELING
SE CABINET	PLY.	PLYWOOD
ANDPIPE	PLS.LAM.	
D FLOOR ELEVATION		
D FLOOR LINE	PVT.	PAVEMENT
D)	P.T.	SPECIMEN PASS
D) FLOOR	PV.C.	POLYVINYL CHLO
NG	Q:	
SCENI	Q.T.	QUARRY TILE
- 3100		

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_V.	GALVANIZED
	GLASS, GLAZING
.R.C.	
עוס	
DLN.	CRADE
P. BD.	GYPSUM BOARD
	HANDICAPPED
	HOLLOW CORE
	HAND, HEAD
₹.	HEADER
NE.	HARDWARE
l.	HOLLOW METAL
RIZ.	HORIZONTAL
Г.	HEIGHT
Т.	HIGH POINT
	HAND RAIL
	HORIZONTAL SLIDING
WY.	HOISTWAY
UL.	INSULATION
	INTERIOR
	INSIDE DIAMETER
	INVERT
S.	IRON PIPE SIZE
	JANITORS CLOSET
•	JOINT
	KITCHEN
1	LAMINATE
1.FL.	LAMINATE FLOORING
<i>'</i> .	LAVATORY
	LEFT HAND
	LINTEL
_	POWER POLE
I.	
	LUXURY VINYL TILE
CH.	MACHINE(RY)
BL.	MARBLE
S.	MASONRY
X.	MAXIMUM
Г.	MID-POINT
	MANHOLE
≺. ∽⊔	
⊿П.	
и. С	
0.	WIGGELLANEOUS
	NONCOMBUSTIBLE
С.	NOT IN CONTRACT
	NUMBER
•	
.S.	NOT TO SCALE
	ON CENTER
	OUTSIDE DIAMETER
.	OFFICE
	OVERHEAD
NG.	OPENING
HD.	OPPOSITE HAND
).	UUI IO OUT
	PRECAST
.M.	PORCELAIN CERAMIC MOSAIC
	PLASTER
	PANEL, PANELING
<i>.</i>	PLYWOOD
LAM.	PLASTIC LAMINATE
JMB.	PLUMBING
ELIM.	PRELIMINARY
Γ.	
	SPECIMEN PASS THROUGH
C.	
C.	POLYVINYL CHLORIDE
C.	POLYVINYL CHLORIDE
C. 	QUARRY TILE
C.	QUARRY TILE

RE.	REFERENCE
R.C.P.	REINFORCED CONCRETE PIPE
R.D.	ROOF DRAIN
REFL.	REFLECTED
REINF.	REINFORCED, REINFORCING
REQ'D.	REQUIRED
RES.	RESILIENT
RM.	ROOM
R .O.	ROUGH OPENING
R.W.L.	RAIN WATER LEADER
R.H.	RIGHT HAND
к.н. S:	RIGHT HAND
R.H. S: SCHED	SCHEDULE
R.H. S: SCHED SHT.	SCHEDULE SHEET(S)
R.H. SCHED SHT. SIM.	SCHEDULE SHEET(S) SIMILAR
R.H. SCHED SHT. SIM. SL.	SCHEDULE SHEET(S) SIMILAR
R.H. SCHED SHT. SIM. SL. SPEC.	SCHEDULE SHEET(S) SIMILAR SPECIFICATIONS
R.H. SCHED SHT. SIM. SL. SPEC. S.M.	SCHEDULE SHEET(S) SIMILAR SPECIFICATIONS SHEET METAL
R.H. SCHED SHT. SIM. SL. SPEC. S.M. S.S.	SCHEDULE SHEET(S) SIMILAR SPECIFICATIONS SHEET METAL SLOPE;SLOPED,SLOPING,SLIDING
R.H. SCHED SHT. SIM. SL. SPEC. S.M. S.S. STL.	RIGHT HAND SCHEDULE SHEET(S) SIMILAR SPECIFICATIONS SHEET METAL SLOPE;SLOPED,SLOPING,SLIDING STEEL

RADIUS, RISER

R.C.P.

R.D.

RFIN

RES.

R.W.L

R.H.

SHT.

SPEC

S.M.

S.S.

STL.

STOR.

V.I.F.

V.E.J.

VIN.

W.C.

W.H.

W/

T.O.S. TOP OF STEEL

STOR.	STORAGE			
STRUC.	STRUCTURE			
STRUCT.	STRUCTURAL			
SHR.	SHOWER			
T:				
Т.	TREAD			
T.C.	TOP OF CURB			
T.D.	TRENCH DRAIN			
TLT.	TOILET			
TEL	TELEPHONE			

T.O.W. TYP. TH. TV. TEPP	TOP OF WALL TYPICAL THRESHOLD TELEVISION TERRAZZO			
U:	TERRAZZO			
UON	UNLESS OTHERWISE NOTED			
UR. UTIL.	URINAL UTILITY			

V.C.T. VINYL COMPOSITE TILE VERT. VERTICAL VERIFY IN FIELD VENEER EXPANSION JOINT VINYL

WIDTH, WIDE WATER CLOSET WATER HEATER WITH W.W.F. WELDED WIRE FABRIC W/O. WITHOUT W.P. WORKING POINT WDW. WINDOW

GENERAL NOTES

1. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL OBTAIN WRITTEN CLARIFICATION FROM THE ARCHITECT BEFORE CONTINUING WITH CONSTRUCTION.
2. DIMENSIONS FOR CONSTRUCTION ARE TO FACE OF GYPSUM BOARD FINISH OF STUD WALLS/PARTITIONS; FACE OF GYPSUM BOARD FINISH OF FURRED MASONRY PARTITIONS; CENTER LINE OF COLUMNS; OR FACE OF CONCRETE MASONRY WALLS; UNLESS NOTED OTHERWISE.
3. PLAN DIMENSIONS PERTAINING TO EXTERIOR SKIN ARE TO FACE OF FINISHED MATERIAL OR EXTERIOR FACE OF STOREFRONT.
4. FOR ALL RATED PARTITIONS, THE SURFACE AREA OF INDIVIDUAL METALLIC OUTLET OR SWITCH BOXES SHALL NOT EXCEED 16 SQUARE INCHES. THE AGGREGATE SURFACE AREA OF THE BOXES SHALL NOT EXCEED 100 SQUARE INCHES PER 100 SQUARE FEET.
5. BOXES LOCATED ON OPPOSITE SIDES OF WALLS OR PARTITIONS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES MINIMUM.
6. ALL PIPING ABOVE GRADE AND INSIDE THE BUILDING SHALL BE CONCEALED, EXCEPT MECHANICAL EQUIPMENT ROOMS. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES TO PROVIDE FURRING FOR PIPING INSTALLED IN FINISHED AREAS.
7. ALL RATED PARTITIONS SHALL BE TIGHTLY SEALED TO THE UNDERSIDE OF DECK. INTEGRITY OF RATED PARTITIONS SHALL BE MAINTAINED AT CORNERS AND INTERSECTIONS OF OTHER PARTITION TYPES.
8. EACH PENETRATION IN RATED PARTITIONS FOR CONDUIT, PIPING OR OTHER ITEMS SHALL BE PROTECTED BY AN APPROVED UL-LISTED ASSEMBLY TO PROHIBIT THE PASSAGE OF FIRE AND SMOKE.
9. THE CONTRACTOR SHALL FURNISH ACCESS PANELS IN WALLS AND NON-ACCESSIBLE TYPE CEILINGS WHERE SERVICE AND ADJUSTMENT TO MECHANICAL, PLUMBING, AND ELECTRICAL ITEMS MAY BE REQUIRED. ACCESS PANELS SHALL HAVE A FIRE RATING EQUAL TO THAT OF THE SURFACE IN WHICH THEY OCCUR. LOCATION OF ACCESS PANELS SHALL BE APPROVED BY THE ARCHITECT PRIOR TO THE APPLICATION OF GYPSUM BOARD.
10. ALL ACCESSIBLE WATER CLOSETS SHALL BE MOUNTED SO THAT THERE IS 1'-6" BETWEEN FACE OF ADJACENT SIDE WALL AND CENTERLINE OF WATER CLOSET, EXCEPT AS DIMENSIONED OTHERWISE.
11. ALL CASEWORK DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO UNIT FABRICATION.
12. THE CONTRACTOR SHALL COORDINATE ALL EXTERIOR WINDOW SIZES AND PLACEMENT WITH THE EXTERIOR SKIN SUPPLIER.
13. THE CONTRACTOR SHALL LAY OUT ALL PARTITIONS AND VERIFY ACCEPTABILITY OF LAYOUT WITH THE ARCHITECT PRIOR TO THE START OF THIS WORK.
14. CONTRACTOR SHALL VERIFY FINAL FLOOR AND OTHER RELEVANT ELEVATION WITH ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
15. WHERE WORK IS INDICATED TO FIT TO OTHER CONSTRUCTION, VERIFY DIMENSIONS OF OTHER CONSTRUCTION BY FIELD MEASUREMENTS BEFORE FABRICATION, AND INDICATE MEASUREMENTS ON SHOP DRAWINGS. COORDINATE FABRICATION SCHEDULE WITH CONSTRUCTION PROGRESS TO AVOID DELAYING THE WORK.
16. LOCATE CONCEALED FRAMING, BLOCKING, AND REINFORCEMENTS THAT SUPPORT THE WORK BY FIELD MEASUREMENTS BEFORE BEING ENCLOSED, AND INDICATE MEASUREMENTS ON SHOP DRAWINGS.
17. BLOCKING AND SIMILAR MATERIALS IN WALLS AND ALL OTHER CONCEALED SPACES, SHALL BE FIRE-RETARDANT-TREATED WOOD, OR OTHER NON-COMBUSTIBLE MATERIALS.
18. WHERE FIELD MEASUREMENTS CANNOT BE MADE WITHOUT DELAYING THE WORK, ESTABLISH DIMENSIONS AND PROCEED WITH FABRICATING WORK WITHOUT FIELD MEASUREMENTS. PROVIDE ALLOWANCE FOR TRIMMING AT SITE, AND COORDINATE CONSTRUCTION TO ENSURE THAT ACTUAL DIMENSIONS CORRESPOND TO ESTABLISHED DIMENSIONS. IF WORK PROCEEDS WITHOUT FIELD MEASUREMENTS, THE CONTRACTOR ASSUMES RESPONSIBILITY FOR ANY CORRECTIVE ACTION NECESSARY FOR COORDINATION OF ALL THE WORK.
19. SEAL ALL PENETRATIONS IN THE EXTERIOR ENVELOPE AIR TIGHT AT BOTH THE INTERIOR (VAPOR RETARDER AND GYPSUM BOARD) AND EXTERIOR (SHEATHING AND AIR BARRIER) FACES.
20. ELEMENTS ABOVE A PAINT COLOR LINE OF AN EXPOSED CEILING STRUCTURE ARE TO BE

PAINTED THE SAME COLOR AS THE STRUCTURE. THIS INCLUDES ALL SUPPORT ELEMENTS,

18

DUCTWORK, PIPING, SOUND EQUIPMENT, ELECTRICAL CONDUITS, WIRING, DEVICES, AND

FIXTURES.









	<u> </u>	
	A	
		$\mathbf{D}\mathbf{M}\mathbf{C}$
	В	BARBERMcMURRY architects since 1915
		505 Market St Suite 300 Knoxville, TN 37902 t 865.934.1915 f 865.546.0242 bma1915.com
		HILLING ARTING
ITE ESS E ON	D	2.3.10 0
		PROJECT NUMBER
	E	PROJECT NAME UNION COUNTY COURTHOUSE ADDITION
		OWNER UNION COUNTY
	F	PROJECT ADDRESS 901 MAIN ST. MAYNARDVILLE, TN 37807
	G	GENERAL NOTES 1. COORDINATE WITH APPLICABLE DIMENSIONS AND DETAILS ON OTHER SHEETS. 2. NOTES AND DETAILS ARE TYPICALLY APPLICABLE TO SIMILAR ITEMS ELSEWHERE ON THE SHEET. 3. PROVIDE BLOCKING, ROUGH HDWE, ETC, AS REQUIRED TO MOUNT EQUIPMENT. 4. * INDICATES LOCATIONS REQUIRING SAFETY GLAZING
	Н	WALL LEGEND
	J	
	K	
B TO E	L	
	M	
	N	PARTNER-IN-CHARGEMTDPROJECT MANAGERKDPDRAWN BYKDPREVIEWED BYAMB
		ISSUE DATE 02.02.2018 REVISIONS
	0	
	P	A101 PLANS AND ELEVATIONS

		A401 0 3" 6" 9"	12"			
7	8	9	10	11	12	

	USE OF DRAWINGS	DESIGN LOADS: BUILDING FOLLOWS:	DESIGN LOAI	DS HAVE B	EEN DETERMIN	ED IN ACCO	RDANCE WITH	THE BUILDIN	IG CODE AND ASCE 7 AS
А	<u>TYPICAL DETAILS</u> : ALL TYPICAL DETAILS AND NOTES SHOWN IN THE DRAWINGS SHALL APPLY UNLESS NOTED OTHERWISE. TYPICAL DETAILS MAY NOT NECESSARILY BE INDICATED ON THE PLANS BUT SHALL STILL APPLY AS SHOWN OR DESCRIBED IN THE DETAILS. WHERE TYPICAL DETAILS ARE NOTED ON THE DRAWINGS, THE SPECIFIED TYPICAL DETAIL SHALL BE USED. WHERE NO DETAIL IS NOTED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CHOOSE THE APPROPRIATE TYPICAL DETAIL FROM THOSE PROVIDED. THE CONTRACTOR SHALL SUBMIT ALL PROPOSED ALTERNATE TYPICAL DETAILS TO THOSE PROVIDED WITH RELATED CALCULATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO SHOP DRAWING PRODUCTION AND FIELD USE. <u>STRUCTURAL GENERAL NOTES</u> : NOTES ON THE STRUCTURAL GENERAL NOTES SHEET ARE APPLICABLE UNLESS SPECIFICALLY NOTED	ROOF DEAD LOADS: ROOFING METAL DECK STEEL FRAMING 5/8" GYP CEILING INSULATION ALLOWANCE M,E,& P ALLOWANCE		2 PSF 2 PSF SELF-WE 3 PSF 6 PSF 5 PSF	EIGHT				
	OTHERWISE ON THE DRAWINGS. <u>USE OF DRAWINGS AND COORDINATION:</u> USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH ARCHITECTURAL, CIVIL, MECHANICAL AND OTHER DRAWINGS FOR BIDDING AND CONSTRUCTION. SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR EMBEDS, OPENINGS, SLEEVES, ETC NOT SHOWN ON THE STRUCTURAL DRAWINGS. COORDINATE WORK AND VERIFY DIMENSIONS AND	EQUIPMENT TOTAL ROOF DEAD LOAD <u>LIVE LOADS:</u>		ACTUAL	WEIGHT				
В	CONDITIONS FOR COMPATIBILITY BETWEEN TRADES AND EQUIPMENT PURCHASED. NOTIFY OWNER'S REPRESENTATIVE OF DISCREPANCIES PRIOR TO CONSTRUCTION. DRAWING SCALE: NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS - DO NOT SCALE DRAWINGS.	ROOF <u>SNOW LOAD:</u> GROUND SNOW LOAD::		20 PSF Pg - 10 P	SF				
	<u>DIMENSION VERIFICATION:</u> DIMENSIONS NOTED PLUS OR MINUS (+/-) OR AS 'FIELD VERIFY' INDICATE UN-VERIFIED DIMENSIONS THAT REQUIRE CONFIRMATION OR DETERMINATION BY THE CONTRACTOR PRIOR TO FABRICATION AND CONSTRUCTION. NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY OF CONFLICTS OR VARIATIONS FROM INDICATED DIMENSIONS.	SNOW DRIFT LOADS PE WIND LOADS: ANALYSIS PROCEDURE:	R ASCE 7, SE	CTION 7.7.	2 – ANALYTICA	L PROCEDU	RE		
	NOTE CONFLICTS: IF ANY STRUCTURAL NOTES ARE IN CONFLICT WITH EACH OTHER ARCHITECTURAL, OTHER DRAWINGS, OR THE SPECIFICATIONS, USE THE MOST STRINGENT REQUIREMENT FOR BIDDING AND CONSTRUCTING THE WORK.	RISK CATEGORY:		Vult - 115 Vasd - 90	MPH MPH	LINGEDU			
С	EXISTING CONDITIONS: INFORMATION SHOWN ON THE DRAWINGS RELATED TO EXISTING CONDITIONS REPRESENTS THE PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS IN THE FIELD PRIOR TO COMMENCING ANY WORK. IMMEDIATELY REPORT CONDITIONS THAT CONFLICT WITH THE CONTRACT DOCUMENTS TO THE ENGINEER OF RECORD. DO NOT DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION FROM THE ENGINEER OF RECORD.	DIRECTIONALITY FACTOR, I TOPOGRAPHIC FACTOR, KZ INTERNAL PRESSURE COEF COMPONENTS & CLADDING	Kd: zt: FFICIENT: & WIND PRES:	B, ALL FA 0.85 1.00 ± 0.18 SURES, SE	E DIAGRAMS				
	MEANS AND METHODS MEANS AND METHODS: CSA ENGINEERING, INC. OR ANY OF ITS EMPLOYEES SHALL NOT HAVE CONTROL OR BE RESPONSIBLE FOR	ANALYSIS PROCEDURE: MAPPED SPECTRAL RESPO	INSE ACCELE	EQUIVAL RATIONS: Ss – 0.38	ENT LATERAL F	ORCE PROC	EDURE		
	CONSTRUCTION MEANS AND METHODS, TECHNIQUES, PROCEDURES, SEQUENCES, ACTS OR OMISSIONS OF THE CONTRACTOR OR ANY OTHER PERSONS PERFORMING THE WORK, OR FOR THE FAILURE OF ANY OF INDIVIDUAL OR COMPANY TO SAFELY CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.	SITE CLASS: RISK CATEGORY: SEISMIC LOAD RESISTING S	SYSTEM:	S1 – 0.11 D II STRUCTI	9 Ural steel sy	STEMS NOT	SPECIFICALLY	DETAILED	FOR SEISMIC RESISTANCE
D	STABILITY: THE CONTRACTOR SHALL PROVIDE NECESSARY BRACING AND SHORING AS REQUIRED UNTIL THE BUILDING'S STRUCTURAL SYSTEMS HAVE BEEN COMPLETED. THE STRUCTURE SHALL NOT BE CONSIDERED STABLE UNTIL ALL STRUCTURAL ELEMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL RETAIN A QUALIFIED LICENSED STRUCTURAL ENGINEER WHO SHALL DETERMINE WHERE TEMPORARY SHORING/BRACING IS REQUIRED AND PROVIDE ITS DESIGN. PROVIDE THE TEMPORARY BRACING AS REQUIRED TO STABILIZE THE STRUCTURE AND ITS COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED ACCORDING TO THE CONTRACT DOCUMENTS.	RESPONSE MODIFICATION DEFLECTION AMPLIFICATIO SEISMIC IMPORTANCE FAC DESIGN SPECTRAL RESPON	FACTOR: ON FACTOR: TOR: NSE ACCELE	R = 3 Cd = 3 le = 1.0 RATIONS: Sds - 0.3 Sd1 - 0.1	3 80 85				
	JOBSITE SAFETY: THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING A SAFE PLACE TO WORK AND FOR MEETING THE REQUIREMENTS OF ALL APPLICABLE JURISDICTIONS. EXECUTE WORK IN A MANNER THAT PROVIDES FOR THE SAFETY OF PERSONS AND ADJACENT PROPERTY AGAINST INJURY AND DAMAGE DUE TO FALLING DEBRIS AND OTHER HAZARDS IN CONNECTION WITH CONSTRUCTING THE WORK.	SEISMIC DESIGN CATEGOR SEISMIC RESPONSE COEFF DESIGN BASE SHEAR: <u>ROOF DRAINAGE:</u> THE ROO	icient: DF Framing	Cs - 0.12 Cs - 0.12 1.5 KIPS SYSTEM H	7 AS BEEN DESIG	NED WITH T	HE ASSUMPTIC	N THAT A D	RAINAGE SYSTEM ADEQUATE TO
-	<u>CONSTRUCTION LOADING:</u> THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE STRUCTURE DURING CONSTRUCTION. WHERE CONSTRUCTION SEQUENCING AND STAGING ARE LIKELY TO CREATE OVERLOADING, THE CONTRACTOR SHALL RETAIN A QUALIFIED STRUCTURAL ENGINEER TO DETERMINE HOW TO TEMPORARILY SHORE AND SUPPORT THE OVERLOADED ELEMENTS IN A MANNER THAT DOES	SITE VISITS: THE STRUCTU AND HAS BEEN RETAINED (e provided. Jral Engine Dnly to pro	er has ne Vide thes	EITHER THE AUT SE DESIGN DOC	'HORITY NO UMENTS. S	R THE RESPON TRUCTURAL OF	SIBILITY TO SERVATION	OBSERVE THE CONSTRUCTION IS REQUIRED BY THE PROJECT
E	NOT EXCEED THE STRESS LIMITS OF THE ELEMENTS AND THE SUPPORTING FOUNDATION AS DEFINED BY THE APPLICABLE BUILDING CODES.	SPECIFICATIONS OR THE B HANDRAILS: DESIGN LOAD A. 200 LB CONCENTRATED	UILDING COD S FOR HAND	DE, MUST B RAILS SHA ED AT ANY	e Performed LL Be as follo Point and in <i>i</i>	BY A STRUC WS: ANY DIRECT	CTURAL OBSER	VER APPRO	VED BY THE ARCHITECT.
	ASSUMED SOIL DESIGN PARAMETERS: A GEOTECHNICAL REPORT HAS NOT BEEN PROVIDED TO THE ENGINEER. THE FOUNDATION SYSTEM HAS BEEN DESIGNED USING THE FOLLOWING ASSUMED SOIL PARAMETERS. THE CONTRACTOR SHALL EMPLOY A TESTING LABORATORY TO VERIFY AND INSPECT THE FOLLOWING DESIGN PARAMETERS. A GEOTECHNICAL ENGINEER LICENSED IN THE PROJECT STATE EMPLOYED BY THE TESTING LABORATORY SHALL REVIEW AND VERIFY THE FOLLOWING DESIGN PARAMETERS TO ENSURE THAT	B. 50 PLF APPLIED IN ANY THESE LOADS ARE NOT TO THE RESPECTIVE HANDRAI	DIRECTION. BE APPLIED L COMPONEN	SIMULTAN NTS.	EOUSLY, BUT E	ACH SHALL	BE APPLIED TC	PRODUCE I	MAXIMUM STRESSES IN EACH OF
	ANTICIPATED TOTAL SETTLEMENT WILL NOT EXCEED ONE INCH. SHOULD ACTUAL CONDITIONS BE DETERMINED TO DEVIATE FROM THE VALUES SPECIFIED, THE TESTING LABORATORY AND THE CONTRACTOR SHALL NOTIFY ARCHITECT AND ENGINEER BEFORE CONSTRUCTION OF THE SHALLOW FOUNDATION SYSTEM.	GUARDRAILS: DESIGN LOA A. 200 LB CONCENTRATED B. 50 PLF APPLIED HORIZC GUARDRAIL.	DS FOR GUA LOAD APPLI NTALLY AND	RDRAILS S ED AT ANY A SIMULT	HALL BE AS FO POINT AND IN A ANEOUS LOAD (LLOWS: ANY DIRECT DF 100 PLF A	ION AT THE TO APPLIED VERTIO	P of the gu Cally down	JARDRAIL. IWARD AT THE TOP OF THE
F	ALLOWABLE BEARING PRESSURE: 2000 PSF FROST DEPTH: 18 INCHES BUILDING PAD: SUBGRADE MODULUS: 125 PCI	C. 200 LB CONCENTRATED THESE LOADS ARE NOT TO THE RESPECTIVE HANDRAI	BE APPLIED	l load ap Simultan NTS.	PLIED ON A 1 F EOUSLY, BUT E	I SQUARE A ACH SHALL	REA AT ANY PO BE APPLIED TO	PRODUCE I	SYSTEM. MAXIMUM STRESSES IN EACH OF
	COEFFICIENT OF FRICTION: 0.35 FOUNDATION/RETAINING WALL: WEIGHT OF BACKFILL MATERIAL: 110 PCF AT REST PRESSURE: 75 PSF/FT	SUBMITTALS	SHOP DRAW					R'S REPRES	ENTATIVE AND ENGINEER-OF-
	ACTIVE PRESSURE:35 PSF/FTPASSIVE PRESSURE:330 PSF/FTCOEFFICIENT OF FRICTION:0.35	RESPONSIBILITIES AND ARI PRIOR TO REVIEW BY THE I AND THE CONTRACT DOCU	E NOT REVIE ENGINEER OI	WED BY TH F RECORD DISCOVER	E ENGINEER O IE ENGINEER O . IF DEVIATIONS ED, EITHER PRI	F RECORD. , DISCREPA OR TO OR A	THE CONTRAC NCIES, OR CON FTER THE ENG	FICATION AF FOR SHALL F IFLICTS BET	REVIEW AND STAMP DRAWINGS WEEN SHOP DRAWING SUBMITTA WESSES THE SHOP DRAWING
G	<u>GEOTECH APPROVAL</u> : THE GEOTECHNICAL ENGINEER SHALL OBSERVE AND APPROVE PREPARED SOIL BEARING SURFACES PRIOR TO PLACEMENT OF REINFORCING STEEL AND CASTING OF FOOTING. THE GEOTECHNICAL ENGINEER OR AN APPROVED TESTING LAB SHALL OBSERVE SOIL COMPACTION WORK.	DEVIATION FROM CONTRAC REQUESTED IN WRITING. T	<u>CT DOCUMEN</u> THE CONTRA	IND SPECIF I <u>TS:</u> CHAN CTOR IS LI	GES TO THE CO ABLE FOR ANY I	NTRACT DC	CUMENTS SHALL BE	LL BE CLOU	DED ON SHOP DRAWINGS OR CKNOWLEDGED BY THE ENGINEE
	SUBGRADE PREP: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS SHALL CONFORM STRICTLY TO THE CONTRACT DOCUMENTS, THE RECOMMENDATIONS GIVEN IN THE GEOTECHNICAL REPORT, AND AS DIRECTED BY THE GEOTECHNICAL ENGINEER.	DRAWING PREPARATION: (DRAWINGS. ALL SHOP DRA	COPIES OF S	TRUCTURA T BE REPR	L DRAWINGS (F ODUCED BY TH	PLANS AND/C E RESPECTI)r Details) Wi Ve Suppliers	LL NOT BE A AND DETAIL	CCEPTED BY CSA AS SHOP ED AS NECESSARY.
	UTILITIES: DETERMINE THE LOCATION OF ALL NEW/EXISTING UNDERGROUND UTILITIES IN AND ADJACENT TO THE AREA OF WORK PRIOR TO COMMENCING EXCAVATION. COORDINATE UTILITY LOCATIONS WITH FOUNDATIONS AS REQUIRED.	SUBMITTAL REVIEW TIME: SUBMITTAL. THE 10 WORKI	THE CONTRA ING DAYS CO	ACTOR SHA DMMENCE U	ALL PROVIDE 10 JPON THE ENGI	WORKING D NEER'S REC	DAYS IN HIS SCI EIPT OF A PRC	HEDULE FOR PERLY COM	R THE ENGINEER'S REVIEW OF EA PLETED SUBMITTAL IN HIS OFFIC
Н	OBJECTS WITHIN THE ZONE OF EXCAVATION INCLUDING WORK PERFORMED AS A PORTION OF THIS PROJECT BEFORE EXCAVATING OR INSTALLING FOUNDATION ELEMENTS. NOTIFY THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH ANY EXCAVATIONS OR OTHER SITE WORK, IF THE EXCAVATION WILL CUT BELOW AN ADJACENT STRUCTURE'S BOTTOM OF FOOTING ELEVATION OR IF AN ADJACENT STRUCTURE IS UPSLOPE FROM THE PLANNED SITE WORK.	REQUIRED SUBMITTALS: REQUIRED SUBMITTALS INC CONCRETE MIX DESIGN	CLUDE, BUT A	ARE NOT LI	MITED TO, THE	FOLLOWING) :		
	BACKFILL: BACKFILL FOOTINGS AND RETAINING WALLS WITH FREE DRAINING GRANULAR FILL. PROVIDE A SUBSURFACE DRAINAGE SYSTEM FOR FOUNDATION AND RETAINING WALLS BASED ON THE GEOTECHNICAL REPORT RECOMMENDATIONS. DO NOT BACKFILL BEHIND WALLS BEFORE ADJACENT SUPPORTING ELEMENTS ARE COMPLETE AND CURED. ALTERNATIVELY, PROVIDE DESIGN AND CONSTRUCTION OF TEMPORARY PRACING THAT PROTECTS THE WALL ACAINST OVERSTRESS OR MOVEMENT.	STRUCTURAL STEEL METAL DECKING	FOLLOWING	ACCEPTA	NCE BY THE AR	CHITECT AN	D ENGINEER AI	ND PRIOR TO) FABRICATION, ADDITIONAL TIME
	SLAB-ON-GRADE BASE: AGGREGATE BASE (GRANULAR FILL) BELOW CONCRETE SLAB-ON-GRADE SHALL CONSIST OF MATERIAL AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER AND BASED ON LOCAL AVAILABILITY.	FOR REVIEW AND ACCEPTA THE CONTRACTOR'S SCHEI <u>SUBSTITUTIONS:</u> SUBMIT S	ANCE OF SUB DULE. SUBSTITUTIO	3MITTAL BY	' THE BUILDING TS PER THE PR	OFFICIAL IS	REQUIRED AN	D SHALL BE	IDENTIFIED AND ALLOWED FOR IN
J	FOOTINGS: FOOTINGS SHALL BEAR ON SOLID UNDISTURBED EARTH (CONTROLLED, COMPACTED STRUCTURAL FILL OR BOTH) AT LEAST FROST DEPTH BELOW LOWEST ADJACENT FINISHED GRADE. FOOTING DEPTHS/ELEVATIONS SHOWN ON PLANS AND DETAILS ARE MINIMUM. ESTABLISH THE ACTUAL BOTTOM-OF-FOOTING ELEVATIONS IN THE FIELD, BASED UPON THE GEOTECHNICAL ENGINEER'S ON- SITE OBSERVATIONS AND ADDITIONAL TESTING, IF REQUIRED, THAT WILL ACHIEVE THE ALLOWABLE DESIGN BEARING PRESSURE. NOTIFY ENGINEER OF ANY NECESSARY DEVIATIONS FROM THE FOOTING ELEVATIONS SHOWN ON THE DRAWINGS PRIOR TO CONSTRUCTING THE FOOTINGS	THE ARCHITECT AND STRU ENGINEERING CALCULATIO OF THE CONTRACTOR FOR CONCRETE	CTURAL ENG ONS AND DET SUBSTITUTI	SINEER FOF AILS, PRO\ ONS THAT	R REVIEW AND A /IDED BY A STR ARE NOT SIMIL	APPROVAL F UCTURAL EN AR TO THE S	PRIOR TO DETA NGINEER LICEN SPECIFIED PRO	ILING, FABR ISED IN THE DUCTS AND	ICATION AND ERECTION. ADDITIC PROJECT STATE, MAY BE REQUI CONFIGURATION.
	<u>CONCRETE PLACEMENT:</u> FOUNDATION CONCRETE SHALL BE PLACED THE SAME DAY THE EXCAVATION IS MADE WHEN FEASIBLE. WHERE FOUNDATION EXCAVATIONS MUST REMAIN OPEN OR EXPOSED, SPECIAL CARE SHOULD BE TAKEN TO PROTECT THE EXPOSED SOILS FROM BEING DISTURBED, SATURATED, OR DRIED OUT PRIOR TO THE PLACEMENT OF SELECT FILL OR CONCRETE WITH A MUD MAT OF LEAN (250 PSI) CONCRETE OR AS APPROVED BY THE GEOTECHNICAL ENGINEER	REFERENCE STANDARDS: ACI AMERICAN CONCRE AWS AMERICAN WELDING	TE INSTITUTE S SOCIETY, S	E, BUILDING TRUCTURA	G CODE REQUIF	REMENTS FO	OR STRUCTURA ORCING STEEL,	L CONCRET	E, ACI 318
к	FORMS: THE EXTERIOR VERTICAL FACE OF ALL EXPOSED SLAB TURNDOWNS SHALL BE FORMED. THE SIDES OF FOOTINGS MAY BE EARTH FORMED AS LONG AS THE SOIL WILL MAINTAIN A VERTICAL FACE. ALL FOUNDATION STEM WALLS AND RETAINING WALLS SHALL BE FORMED ON BOTH SIDES OF THE WALL.	GENERAL: CONCRETE SHA MIX DESIGNS: THE CONCR DESIGN SUBMITTALS SHALL	LL BE MIXED ETE MIX TAB L BE IDENTIF	, PROPOR LE SHOWN IED FOR IN	TIONED, CONVE	YED, AND P APPLY TO A CTURAL USE	LACED IN ACCO	ORDANCE WI MIX DESIGN ED TO THE C	TH IBC SECTION 1905 AND ACI 30 S USED ON THIS PROJECT. MIX OWNER'S REPRESENTATIVE AND
	EXCAVATION: THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, UNDERPINNING AND PROTECTION OF EXISTING CONSTRUCTION. COMPLY WITH ALL APPLICABLE OSHA REGULATIONS.	MIX PROPORTIONING: ALL AND/OR TRIAL MIXTURES) (CONCRETE N DF ACI 318. S	WO WEEK	S PRIOR TO PLA NS SHALL BE PF (DESIGN FOR E	CING ANY C ROPORTIONE ACH CLASS	ED IN ACCORDA	NCE WITH S	SECTION 5.3 (FIELD EXPERIENCE DARD DEVIATION ANALYSIS IS US
	COMPACTION: MECHANICALLY COMPACT EXCAVATION BACKFILL IN LAYERS. PROVIDE THE FOLLOWING MINIMUM COMPACTION IN ACCORDANCE WITH THE ASTM D1557 TEST METHOD UNLESS NOTED OTHERWISE IN THE GEOTECHNICAL REPORT: TRENCH AND WALL BACKFILL: 90% MAXIMUM DRY DENSITY FILL BENEATH SLAB-ON-GRADE: 95% MAXIMUM DRY DENSITY	NOT CONFORM TO ACI 318	SECTION 5.3	SHALL BE	REJECTED.		IGNS	2.2 OF AUI 3	18. SUBMITTALS MADE WHICH DO
L	FILL BENEATH FOOTINGS: 95% MAXIMUM DRY DENSITY DESIGN AND CONSTRUCTION CRITERIA	CONCRETE USAGE	f'c (PSI) 28 DAY, MIN	SI UMP	ENTRAINED AIR (MAX)	W/C RATIO (MAX)	MAXIMUM AGGREGATE SIZE	FLY ASH CONTENT	NOTES
	EXISTING BUILDING: THE EXISTING BUILDING WILL BE MODIFIED AS PART OF THE PROJECT. THE PROJECT IS NOT INTENDED TO BE A FULL SEISMIC RENOVATION OF THE BUILDING.	FOOTINGS FOUNDATION WALLS INTERIOR SLAB ON GRADE	3,000 4,000 4,000	6" 4"	5% (+/- 1.5%) 6% NONE	0.50 0.45 0.50	1" 3/4" 1"	15-25% 15-20% 15-20%	SEE INTERIOR SLAB NOTES BEL
	BUILDING CODE (IBC), AS AMENDED BY THE CITY OF MAYNARDVILLE, TN. PRIMARY REFERENCE STANDARDS: THE PUBLICATIONS LISTED BELOW ARE THE MATERIAL SPECIFIC GOVERNING CODES AND STANDARDS USED REFERENCED BY THEIR BASIC DESIGNATION. IN THE CASE OF CONFLICTING REQUIREMENTS. THE PUBLICADE SHALL COVERN	EXTERIOR SLAB ON GRADE	4,000	4"	5% (+/- 1.5%)	0.50	1"	15-20%	
	ADDITIONAL MATERIAL SPECIFIC DESIGN STANDARDS ARE ALSO LISTED UNDER THE RESPECTIVE MATERIAL SECTION OF THESE GENERAL NOTES. FOR ALL STANDARDS, USE THE VERSION REFERENCED BY THE GOVERNING BUILDING CODE. IF NOT REFERENCED BY GOVERNING BUILDING CODE, USE THE LATEST EDITION.	MINIMUM CM CONTENT: COARSENESS FACTOR (CF) WORKABILITY FACTOR (WF	IMIX DESIGN):):	<u>SPECIFICA</u> 520 LB/C 60% ±5% 40% ±5%	<u>ations:</u> Y 9				
M	ACI 318-11 AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE	I UTAL PASTE FRACTION (P TOTAL MORTAR FRACTION MAX AGGREGATE SIZE = UTILIZE A BLEND OF #57, #4	(MF): (MF): 4, AND #7 AS	25-28% 50-55% 1 1/2" REQUIRED). • • • • · · -				
	ASCE 7-10 AMERICAN SOCIETY OF CIVIL ENGINEERS MINIMUM DESIGN LOADS FOR DUIL DIVISO AND OTHER STRUCTURES	UTILIZE A BLENDED MIX OF ADD MASTERFIBER F100 AT CEMENT CONTENT: SCHEE	NATURAL AN 1.5 LB/CY DULE CEMEN	אט MANUFA T CONTEN	ACTURED SAND	JM TOTAL C	EMENTITIOUS	MATERIALS	CONTENT INCLUDING PORTLAND
	ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM INTERNATIONAL)	CEMENT AND FLY ASH. <u>FLY ASH:</u> FLY ASH SHALL C INCLUDING ASTM C150, C59	CONFORM TO 95, C845, AND	ASTM C61 C1157 CEI	8, TYPE F. PER MENT. DO NOT	CENTAGE S USE FLY AS	CHEDULED IS E	BY WEIGHT C	OF TOTAL CEMENTITIOUS MATERI PERCENTAGES SHOWN CANNOT
Ν	INTERNATIONAL CODE COUNCIL, INTERNATIONAL CODE COUNCIL - EVALUATION SERVICES (ICC-ES) MATERIAL PROPERTIES: MATERIAL PROPERTIES:	ACHIEVED. ADMIXTURES: WATER-RED BE USED IN STRICT ACCOR	UCING ADMIX	XTURES CO	ONFORMING TO	ASTM C494 ECOMMEND	MAY BE INCOR DATIONS. CALC	PORATED IN UM CHLORII	I THE CONCRETE MIX DESIGNS AI DE OR OTHER WATER-SOLUBLE
	WHERE POSSIBLE, THESE CODES HAVE BEEN USED IN THEIR ENTIRETY. WHERE THESE CODES REFERENCE OBSOLETE INFORMATION, INFORMATION BASED UPON CURRENT INDUSTRY STANDARDS HAS BEEN SUBSTITUTED AS NECESSARY. <u>PROJECT STATE:</u> THE PROJECT IS TO BE CONSTRUCTED IN THE STATE OF TENNESSEE.	CHLORIDE ADMIXTURES SH AIR CONTENT: AN AIR-ENT EXPOSED TO WEATHER W	IALL NOT BE	USED. ENT CONFC	ORMING TO AST	M C260 SHA	LL BE USED IN	ALL CONCRE	TE MIXES FOR WORK THAT IS
		NATURALLY. THE AMOUNT	OF ENTRAIN	ED AIR SH	ALL BE MEASUR	LL BE ACHIE	EVED PRIOR TO	ADDING AN	Y WATER REDUCING ADMIXTURE
0		LABORATORY TESTING: LA ASTM C39; AIR CONTENT TE METHOD: SUMMETER TO THE	BORATORY T EST PER AST	TESTING W M C138 (GF	/ILL BE REQUIRI RAVIMETRIC ME	ED IN ACCOF THOD), AST	RDANCE WITH A M C173 (VOLUM	ASTM C31. F IETRIC METH	PERFORM COMPRESSION TEST PE HOD), OR ASTM C231 (PRESSURE
oodmiller.rvt		LABORATORY SHALL TEST 2 AT 7 DAYS FOR INFOR 2 AT 28 DAYS FOR ACCE	THE NUMBER MATION EPTANCE	R of cylin	DERS SPECIFIE	D BELOW FO	OR EACH 100 C	JBIC YARDS	OR FRACTION THEREOF:
ST-17-18112_gg									
Ler\Documents									
Users/ggoodmil.	1 STRUCTURAL GENERAL NOTES								
<u>:</u> ن	1 2 3 4	5		6			7		8

1 2 3 4 5 6 7 N DETERMINED IN ACCORDANCE WITH THE BUILDING CODE AND ASCE 7 AS NON-STRUCTURAL EMBEDS: REFER TO DRAWINGS OF OTHER DISCIPLINES AND VENDOR DRAWINGS FOR EMBEDDED ITEMS AND RECESSES NOT SHOWN ON STRUCTURAL DRAWINGS. CONDUIT: WHEN RUN IN SLABS, ELECTRICAL CONDUIT SHALL BE RUN AT MID-DEPTH OF THE SLAB AND CONDUIT SIZE SHALL NOT EXCEED 33 PERCENT OF THE SLAB DEPTH. NO CONDUIT SHALL BE PLACED IN SLABS WITH ACTUAL CONCRETE THICKNESS LESS THAN 3 INCHES, NOT INCLUDING METAL DECK DEPTH. THERE SHALL BE A MINIMUM OF 3 INCHES OF CLEAR SPACE BETWEEN CONDUITS. ALUMINUM CONDUIT IS PROHIBITED. ADDITIONAL REINFORCEMENT, #3 AT 12" OC, SHALL BE PLACED PERPENDICULAR TO THE CONDUIT ABOVE AND BELOW THE CONDUIT. THE ADDED REINFORCING SHALL EXTEND 1' - 0" BEYOND THE CONDUITS ON BOTH SIDES. **REINFORCING STEEL MATERIALS:** DEFORMED BARS ASTM A615, GRADE 60 SMOOTH WELDED WIRE FABRIC (WWF) ASTM A185 (Fy = 65,000 PSI) WELDED WIRE FABRIC: WIRE FABRIC SHALL BE PLACED AT THE CENTER OF CONCRETE SLABS UNO. WWF SHALL BE SUPPORTED AT A MAXIMUM SPACING OF 3'-0" OC IN ANY DIRECTION. ALL WELDED WIRE FABRIC SHALL LAP TWO FULL MESHES AND BE SECURELY WIRED AT EACH SIDE AND END. WELDED WIRE FABRIC SHALL BE FABRICATED FROM SHEETS. ROLLS ARE NOT ALLOWED. REINFORCING STEEL DETAILING: REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH ACI 315 – DETAILS AND DETAILING OF CONCRETE REINFORCEMENT. ANALYTICAL PROCEDURE REINFORCING STEEL PLACEMENT: ALL REINFORCEMENT SHALL BE HELD SECURELY IN POSITION WITH STANDARD ACCESSORIES IN CONFORMANCE WITH CRSI MANUAL OF STANDARD PRACTICE AND ACI 315 DURING CONCRETE PLACEMENT. REINFORCING PLACEMENT SHALL BE APPROVED BY THE ARCHITECT OR THEIR AUTHORIZED REPRESENTATIVE BEFORE CONCRETE IS PLACED. REBAR SPLICES: LAP REINFORCING BARS AS NOTED ON THE DRAWINGS. WHERE SPLICE LENGTH IS NOT SHOWN, USE TYPE 'LS' SPLICE PER DEVELOPMENT AND SPLICE LENGTH SCHEDULE. MECHANICAL OR WELDED BUTT SPLICES SHALL BE SUBJECT TO STRUCTURAL ENGINEER'S APPROVAL. MECHANICAL SPLICES, WHERE ALLOWED ON THE PLANS, SHALL DEVELOP 125% OF THE SPECIFIED YIELD STRENGTH OF THE SPLICED BARS IN BOTH TENSION AND COMPRESSION. LAP SPLICES OF BOTTOM BARS SHALL OCCUR AT A SUPPORT. LAP SPLICES OF TOP STEEL SHALL OCCUR AT MID SPAN. IAGRAMS FIELD BENDING: NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY DETAILED AS T LATERAL FORCE PROCEDURE SUCH OR APPROVED BY THE STRUCTURAL ENGINEER. CONCRETE PROTECTION: CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE: CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH..... STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE EXPOSED TO EARTH OR WEATHER #5 OR SMALLER.....1 1/2" #6 OR LARGER......

RAWINGS (PLANS AND/OR DETAILS) WILL NOT BE ACCEPTED BY CSA AS SHOP JCED BY THE RESPECTIVE SUPPLIERS AND DETAILED AS NECESSARY. PROVIDE 10 WORKING DAYS IN HIS SCHEDULE FOR THE ENGINEER'S REVIEW OF EACH IN THE ENGINEER'S RECEIPT OF A PROPERLY COMPLETED SUBMITTAL IN HIS OFFICE. ED TO, THE FOLLOWING:

PER THE PROCEDURES IN THE SPECIFICATIONS WITH APPLICABLE ICC REPORTS TO EVIEW AND APPROVAL PRIOR TO DETAILING, FABRICATION AND ERECTION. ADDITIONAL ED BY A STRUCTURAL ENGINEER LICENSED IN THE PROJECT STATE, MAY BE REQUIRED E NOT SIMILAR TO THE SPECIFIED PRODUCTS AND CONFIGURATION.

trained R (Max)	W/C RATIO (MAX)	MAXIMUM AGGREGATE SIZE	FLY ASH CONTENT	NOTES
(+/- 1.5%)	0.50	1"	15-25%	
6%	0.45	3/4"	15-20%	
NONE	0.50	1"	15-20%	SEE INTERIOR SLAB NOTES BELOW
(+/- 1.5%)	0.50	1"	15-20%	

PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS......1 1/2" CHAMFER: PROVIDE 3/4" CHAMFER AT ALL EXPOSED CORNERS OF BEAMS, WALLS, ETC UNLESS NOTED OTHERWISE. MISC CONCRETE PADS: COORDINATE CONCRETE EQUIPMENT PAD AND HOUSE KEEPING PAD LOCATIONS AND DIMENSIONS WITH ARCH, MECHANICAL, ELECTRICAL, PLUMBING, AND OWNER REQUIREMENTS. CONCRETE PLACEMENT: ALL CONCRETE SHALL BE VIBRATED.

NOT EXPOSED TO EARTH OR WEATHER OR IN CONTACT WITH GROUND

.....1 1/2"

STEEL

SLABS, WALLS, JOISTS #11 OR SMALLER ALL OTHER.....

BEAMS, COLUMNS

REFERENCE STANDARDS:

AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION, SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AISC 360

AWS AMERICAN WELDING SOCIETY, STRUCTURAL WELDING CODE – STEEL, AWS D1.1 AND STRUCTURAL WELDING CODE – SHEET STEEL, AWS D1.3

RCSC RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS, SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS STRUCTURAL STEEL MATERIALS:

COLUMN BASE PLATES ASTM A572, GRADE 50 HOLLOW STRUCTURAL SECTIONS (HSS) RECTANGULAR & SQUARE ASTM A500, GRADE B, Fy = 46 KSI ASTM A53, GRADE B, Fy = 35 KSI STEEL PIPE OTHER STEEL SHAPES AND PLATES ASTM A36, Fy = 36 KSI STRUCTURAL BOLTS ASTM A325 OR A490 ASTM F1554, GRADE 36 COLUMN ANCHOR RODS THREADED RODS ASTM A36 WELDING ELECTRODES F70XX WELDED HEADED STUDS (WHS) ASTM A108, Fy = 50 KSI WELDED THREADED STUDS (WTS) ASTM A108, Fy = 50 KSI

DESIGN METHOD: ALL STRUCTURAL STEEL DESIGN SHALL CONFORM TO THE FOURTEENTH EDITION OF THE AISC STEEL CONSTRUCTION MANUAL LOAD AND RESISTANCE FACTOR DESIGN AND THE SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS. MISC STEEL: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTION AIDS AND JOINT PREPARATIONS THAT INCLUDE, BUT ARE NOT

LIMITED TO, ERECTION ANGLES, LIFT HOLES AND OTHER AIDS, WELDING PROCEDURES, REQUIRED ROOT OPENINGS, ROOT FACE DIMENSIONS, GROOVE ANGLES, BACKING BARS, COPES, SURFACE ROUGHNESS VALUES, AND TAPERS OF UNEQUAL PARTS. GALVANIZING: STRUCTURAL STEEL AND CONNECTIONS EXPOSED TO WEATHER SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION IN COMPLIANCE WITH ASTM A123. GALVANIZE BOLTS AND SIMILAR THREADED FASTENERS EXPOSED TO WEATHER IN ACCORDANCE WITH ASTM A153, CLASS C AND D, AS APPLICABLE. ALL FIELD WELDS EXPOSED TO WEATHER SHALL BE COATED WITH BRUSH APPLIED ZINC-RICH PAINT COMPLYING WITH ASTM A780 (GALVACON OR EQUIVALENT).

PAINTING: STRUCTURAL STEEL SHALL BE PRIMED AND PAINTED, IF NOTED ON THE ARCHITECTURAL DRAWINGS OR SPECIFICATIONS. PRIMER SHALL BE THE FABRICATOR'S STANDARD LEAD AND CHROMATE FREE, NON-ASPHALTIC, RUST-INHIBITING PRIMER. STEEL ANCHORS, TIES AND OTHER MEMBERS EMBEDDED IN CONCRETE OR MASONRY SHALL BE LEFT UNPAINTED. STEEL ENCASED WITH CEMENTITIOUS FIREPROOFING SHALL NOT BE PAINTED.

HIGH-STRENGTH BOLTS: HIGH-STRENGTH BOLTS SHALL BE INSTALLED, TIGHTENED AND INSPECTED IN ACCORDANCE WITH THE AISC SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS. BOLT HOLES SHALL BE STANDARD SIZE UNLESS NOTED OTHERWISE

WASHERS: HARDENED WASHERS SHALL BE INSTALLED OVER SHORT SLOTTED OR OVERSIZE HOLES OCCURRING IN THE OUTER PLY OF A CONNECTION. A PLATE WASHER AT LEAST 5/16 INCH THICK WITH STANDARD HOLES SHALL BE INSTALLED OVER LONG SLOTTED HOLES OCCURRING IN AN OUTER PLY OF A CONNECTION.

ANCHOR RODS: PROVIDE HEAVY HEX NUTS AND WASHERS COMPLYING WITH THE REQUIREMENTS OF TABLE 14-2 IN THE AISC STEEL CONSTRUCTION MANUAL UNLESS THICKER AND/OR LARGER WASHERS ARE NOTED ON THE DRAWINGS. HOLE DIAMETER IN WASHERS SHALL BE THE ANCHOR ROD DIAMETER + 1/16 INCH. IN LIEU OF HEADED RODS, THREADED RODS WITH A HEAVY HEX NUT FULLY ENGAGED AND TACK WELDED TO THE EMBEDDED END MAY BE USED.

COLUMN ANCHOR BOLT HOLES SHALL BE OVERSIZED IN ACCORDANCE WITH THE FOLLOWING: ROD DIAMETERS 3/4 INCH TO 1 INCH - 5/16 INCH OVERSIZE

COLUMN BRACING: BASE PLATE CONNECTIONS ARE NOT DESIGNED TO PROVIDE STABILITY OF COLUMNS DURING ERECTION. COLUMNS SHALL BE TEMPORARILY BRACED BY THE ERECTOR PRIOR TO RELEASE OF THE COLUMN FROM THE HOISTING EQUIPMENT. GROUT: GROUT USED UNDER COLUMN BASE PLATES SHALL BE CEMENT BASED, NON-SHRINK, NON-METALLIC GROUT. THE GROUT SHALL

EXHIBIT NO SHRINKAGE IN ACCORDANCE WITH ASTM C827 AND SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 5000 PSI WHEN TESTED IN ACCORDANCE WITH ASTM C109. A307 BOLTS: PROVIDE WITH LOCK WASHERS UNDER NUTS OR SELF-LOCKING NUTS. BOLT HOLES SHALL BE STANDARD SIZE UNLESS NOTED OTHERWISE.

WELDING: WELDING SHALL BE IN CONFORMANCE WITH AISC AND AWS STANDARDS AND SHALL BE PERFORMED BY AWS CERTIFIED WELDERS USING ASTM E70 SERIES ELECTRODES FOR SHOP WELDING A36 STEEL, AND E70 SERIES LOW HYDROGEN ELECTRODES FOR ALL WELDING OF HIGH STRENGTH STEELS AND FOR ALL FIELD WELDING.

ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED. WELDS SHOWN ON THE DRAWINGS ARE THE MINIMUM SIZE. INCREASE WELD SIZE TO AWS MINIMUM SIZES BASED ON PLATE THICKNESS. MINIMUM WELD SIZE SHALL BE 3/16 INCH. SHOP DRAWINGS SHALL SHOW ALL WELDING WITH AWS A2.4 SYMBOLS.

WHEN WELDS ARE NOT CALLED-OUT ON DRAWINGS, THEY ARE MINIMUM SIZE CONTINUOUS FILLET WELDS IN ACCORDANCE WITH AWS D1.1. FILLET WELDS NOT SPECIFIED AS TO LENGTH SHALL BE CONTINUOUS. PROVIDE FILLET WELDS AT ALL CONTACT JOINTS BETWEEN STEEL MEMBERS SUFFICIENT TO DEVELOP THE ALLOWABLE TENSILE STRENGTH OF THE SMALLER MEMBER AT THE JOINT.

WELDING INSPECTION: ALL FILLET WELDS BY EACH WELDER SHALL BE VISUALLY INSPECTED.

OPENINGS: COORDINATE ALL OPENINGS AND DIMENSIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. FIELD CONFIRM ALL DIMENSIONS

BELOW GRADE STEEL: PROTECT ALL STEEL BELOW GRADE BY ENCASING IN CONCRETE OR PAINTING WITH BITUMASTIC PAINT. FABRICATION & ERECTION: FABRICATOR AND ERECTION SHALL BE APPROVED BY THE ARCHITECT. FABRICATOR SHALL HAVE BEEN IN BUSINESS FOR PERIOD OF THREE CONSECUTIVE YEARS AND SHALL PROVIDE PROOF THAT THEY HAVE FABRICATED A MINIMUM OF FIVE JOBS OF SIZE AND COMPLEXITY EQUAL TO THAT INDICATED ON THESE DRAWINGS.

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13	14	15	16	17	18	19
MECHANICAL AND C	HEMICAL ANCHORS					

ANCHOR CAPACITY: ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY MANUFACTURER OR

SUCH OTHER METHOD AS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD. INSTALLATION: INSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS AND IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES

INDICATED ON THE DRAWINGS. POST-INSTALLED DRILLING: HOLES FOR INSTALLING REINFORCING BARS, BOLTS, THREADED RODS AND INSERTS SHALL BE DRILLED USING THE ICC APPROVED DRILLING METHOD FOR THE ANCHOR TO BE INSTALLED. NON-DESTRUCTIVELY LOCATE EXISTING REINFORCING PRIOR TO DRILLING. DO NOT CUT EXISTING REINFORCING.

THREADED RODS: ADHESIVE ANCHORS SHALL USE ASTM A36 THREAD RODS, UNO

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INSTALLATION TRAINING: PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL ARRANGE FOR A MANUFACTURER'S FIELD REPRESENTATIVE TO PROVIDE INSTALLATION TRAINING FOR ALL PRODUCTS TO BE USED. ONLY TRAINED INSTALLERS SHALL PERFORM POST INSTALLED ANCHOR INSTALLATION. A RECORD OF TRAINING SHALL BE KEPT ON SITE AND BE MADE AVAILABLE TO THE EOR AS REQUESTED.

OVERHEAD INSTALLATION: ADHESIVE ANCHORS INSTALLED IN HORIZONTAL OR VERTICALLY OVERHEAD ORIENTATIONS THAT SUPPORT SUSTAINED TENSION LOADS SHALL BE DONE BY A CERTIFIED ADHESIVE ANCHOR INSTALLER (AAI) AS CERTIFIED THROUGH ACI/CRSI (ACI 318-11 D.9.2.2). PROOF OF CURRENT CERTIFICATION SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF INSTALLATION.

MINIMUM CONCRETE AGE: ADHESIVE ANCHORS MUST BE INSTALLED IN CONCRETE AGED A MINIMUM OF 21 DAYS (ACI 318-11 D.2.2).

SPECIAL INSPECTION: PROVIDE SPECIAL INSPECTION FOR ALL MECHANICAL AND ADHESIVE ANCHORS PER THE APPLICABLE BUILDING CODE AND PER THE CURRENT ICC-ES REPORT (IBC 2012 TABLE 1705.3 NOTE B).

SHALLOW-EMBEDMENT ANCHORS FOR HOLLOW CORE AND POST TENSION SLAB: DEWALT MINI-UNDERCUT

ALLOWABLE ANCHORS: THE FOLLOWING TABLE OF ANCHORS REPRESENT THE DEFAULT PRODUCTS USED IN DESIGN. WHERE SPECIFIC PRODUCTS ARE NOT OTHERWISE CALLED OUT IN THE STRUCTURAL DRAWINGS, THIS TABLE SHALL CONTROL.

BASE MATERIAL	ADHESIVE	EXPANSION ANCHOR	SCREW ANCHOR	PAF
		HILTI		
CONCRETE	HY 200	KWIK BOLT TZ	KWIK HUS-EZ	X-C*
CMU (GROUTED)	HY 70	KWIK BOLT TZ	KWIK HUS-EZ	X-C
CMU (HOLLOW)	HY 70	HLC SLEEVE	KWIK CON II+	X-C
CLAY BRICK (URM)	HY 70	HLC SLEEVE	KWIK CON II+	
STEEL			SELF DRILL HWH2 10-16	X-U
* USE X-CP FOR	WOOD SILL PLATE	TO CONCRETE		
	SIM	PSON STRONG	-TIE	
CONCRETE	SET-XP	STRONG BOLT 2	TITEN HD	PDPA**

CMU (GROUTED)	SET-XP	STRONG BOLT 2	TITEN HD	PDP
CMU (HOLLOW)	SET		TITEN HD	PDP
CLAY BRICK (URM)	SET	SLEEVE-ALL	TITEN HD	
STEEL			X METAL SCREW #10	PDPA

USE PHN FOR WOOD SILL PLATE TO CONCRETE

	DEWALT	/POWERS FAS	TENERS	
CONCRETE	PURE 110+ AC100+GOLD	STUD+ SD-1	WEDGE BOLT+	0.300" DIA HEAD DRIVE PIN***
CMU (GROUTED)	AC100+GOLD	STUD+ SD-1	WEDGE BOLT+	0.300" DIA HEAD DRIVE PIN***
CMU (HOLLOW)	AC100+GOLD			0.300" DIA HEAD DRIVE PIN***
LAY BRICK (URM)	AC100+GOLD	LOK-BOLT AS	WEDGE BOLT+	
STEEL				0.300" DIA HEAD DRIVE PIN***
*** 0.145" DIA SHA	NK			

NOTE: CLAY BRICK (URM) REFERS TO SOLID UNREINFORCED MASONRY WALLS CONSTRUCTED WITH CLAY BRICK.

METAL DECK

REFERENCE STANDARDS SDI STEEL DECK INSTITUTE, STANDARD FOR NON-COMPOSITE STEEL FLOOR DECK, STANDARD FOR STEEL ROOF DECK, AND CODE OF STANDARD PRACTICE

AWS AMERICAN WELDING SOCIETY, STRUCTURAL WELDING CODE – SHEET STEEL, AWS D1.3

ROOF DECK: METAL ROOF DECK SHALL BE TYPE N ROOF DECK OF THE SIZE AND GAUGE SHOWN ON THE PLANS AND DETAILS. DECK FASTENING SHALL BE AS SHOWN IN TYPICAL DETAILS. THE DECK SHALL CONFORM TO ASTM A611, GRADE C, D OR E OR ASTM A653, STRUCTURAL QUALITY. ROOF DECK SHALL BE GALVANIZED TO ASTM A924 G90 WHERE DECK IS LEFT PERMANENTLY EXPOSED. IN OTHER AREAS, GALVANIZED COATING SHALL BE GALVANIZED TO ASTM A924 G60.THE MINIMUM END LAP AND BEARING LENGTH SHALL BE 2 INCHES.

DECK GAGE AND SPAN: MINIMUM DECK GAGES SHOWN ARE BASED ON A 3 SPAN CONDITION WITH UNSHORED CONSTRUCTION. THE DECK SUPPLIER SHALL INCREASE DECK GAGES BASED ON ACTUAL DECK LAYOUT AND SPAN CONDITIONS TO PROVIDE THE LOAD CAPACITY SHOWN ON THE DRAWINGS. METAL DECK IS DESIGNED FOR UNIFORM LOADS ON THE SPANS SHOWN. NO CONCENTRATED OR LINE LOADS SHALL BE INDUCED ON METAL DECK.

MISC CLOSURE PLATES: PROVIDE RIDGE AND VALLEY PLATES, FILLER SHEETS, COLUMN CLOSURE PLATES, CELL CLOSURE PLATES, POUR STOPS AND MISCELLANEOUS LIGHT GAGE METAL SHAPES NECESSARY TO COMPLETE THE WORK. PROVIDE RUBBER CLOSURE IF SHOWN IN THE ARCHITECTURAL DRAWINGS. COORDINATE ALL CLOSURES WITH ELEVATOR, STAIR, ESCALATOR AND OTHER ARCHITECTURAL DETAILS.

DECK WELDING: DECK WELDING SHALL BE IN ACCORDANCE WITH STRUCTURAL WELDING CODE – SHEET STEEL, AWS D1.3.

ROOF DECK FASTENING: ROOF DECK FASTENING SHALL BE PER TYPICAL DETAIL.

DECK PENETRATIONS: COORDINATE ROOF DECK PENETRATIONS WITH THE TRADES THAT REQUIRE THEM. HOLES OR COMBINATIONS OF HOLES SHALL BE LAID OUT SO THAT ONLY ONE DECK RIB IS CUT IN ANY 24" WIDTH OF DECK THROUGHOUT THE SPAN. LARGER PENETRATIONS OR GROUPS OF PENETRATIONS REQUIRE SUPPLEMENTAL REINFORCING. SEE PLANS FOR DETAILS. HANGING ELEMENTS: SUSPENDED CEILINGS, LIGHT FIXTURES, PIPES, DUCTS, MECHANICAL OR ELECTRICAL EQUIPMENT OR OTHER

ULTIMATE WIND PRESSURES (PSF)											
ROOF											
ZONE	10 SF	50 SF	100 SF								
ALL ZONES	+16.0	+16.0	+10.0								
1	-28.8	-27.1	-26.4								
2	-48.4	-36.4	-31.3								
3	-72.8	-43.8	-31.3								
1o & 2o	-41.5	-39.8	-39.1								
30	-68.4	-34.3	-19.5								
	WA	LLS									
ZONE 10 SF 100 SF 500 SF											
4	-28.6	-24.7	-22.0								
4	+26.4	+22.5	+19.8								
4p	N/A	N/A	N/A								
_	-35.2	-27.4	-22.0								
5	+26.4	+22.5	+19.8								
5р	N/A	N/A	N/A								
NOTES: 1. TABLE PRES TRIBUTARY AR AREAS, LINEAF SHOWN ABOVE 2. POSITIVE PR SURFACES. NE	SURES ARE EA SHOWN. RLY INTERPO E. ESSURES A EGATIVE PRI	FOR THE SQU FOR OTHER DLATE BETWE CT TOWARD T ESSURES ACT	JARE FOOT TRIBUTARY EN VALUES THE TAWAY								

UTILITIES SHALL NOT BE SUPPORTED BY THE STEEL DECK.

FROM THE SURFACES. 3. ROOF UPLIFT PRESSURES LISTED ARE GROSS PRESSURES. A MIN DEAD LOAD OF 4.0 PSF MAY BE 4. Θ = ROOF ANGLE FROM HORIZONTAL a = 3.0 ft.

	1	2	3	4	5	6	7
А							1. VERIFY MATERIALS BELO
							 DESIGN BEARING CAPAC 2. VERIFY EXCAVATIONS AF 3. PERFORM CLASSIFICATIO 4. VERIFY USE OF PROPER COMPACTION OF COMPA 5. PRIOR TO PLACEMENT OF
В							5. PRIOR TO PLACEMENT OF BEEN PREPARED PROPER
C							INSPECTION OF REINFOR INSPECTION OF REINFOR TABLE 1705.2.2, ITEM 2b. INSPECTION OF ANCHOR
							 4. INSPECTION OF ANCHOR MEMBERS (NOTE a). a. MECHANICAL ANCHOR 5. VERIFY USE OF REQUIRE 6. AT THE TIME FRESH CON
D							 FOR STRENGTH TESTS, F DETERMINE THE TEMPER 7. INSPECTION OF CONCRE APPLICATION TECHNIQUE 8. INSPECTION FOR MAINTE AND TECHNIQUES. 9. VERIFICATION OF IN-SITU
							OF TENDONS IN POST-TE OF SHORES AND FORMS 10. INSPECT FORMWORK FO CONCRETE MEMBER BEIN <u>TABLE NOTES:</u> a. SPECIFIC REQUIREMENTS BY AN APPROVED SOURCE
E 							REQUIREMENTS ARE NOT PROFESSIONAL AND SHAL
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7	7 8	9	10		11	12	13	14		15	16	17	18	
	IBC TABLE 1705.6: REQUIRED VERIFICATION AND INS	SPECTION OF SOILS				AISC 360, SECTION N5: REQUIRED	QUALITY ASSURANCE OF STRUCTURAL ST	EEL		STATEMENT OF SPECI	AL INSPECTIONS:			
	VERIFICATION AND INSPECTION	CO	ONTINUOUS	PERIODIC		VERIFICATION AND INSPE	CTION	CONTINUOUS	PERIODIC					
1. VERIFY MATERI DESIGN BEARIN	IALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THING CAPACITY.	ΗE		Х	1. REVIEW MATERIAL TEST RI COMPLIANCE WITH THE CO	EPORTS AND CERTIFICATIONS LIST DNSTRUCTION DOCUMENTS.	ED IN AISC360, SECTION N3.2. FOR	X		1. SPECIAL INSPECTION ITEMS IDENTIFIED BY THE BUILDING C	DNS AND STRUCTURAL TESTING SI N THIS SECTION AND IN OTHER AF DFFICIAL (SEE IBC CHAPTER 17).	ALL BE PROVIDED BY AN INDEPEN EAS OF THE APPROVED CONSTRUC	DENT AGENCY EMPLOYED BY THE CTION PLANS AND SPECIFICATIONS	OWNER FOR THE 6, UNLESS WAIVED
2. VERIFY EXCAVA	ATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PRO	PER MATERIAL.		Х	2. PRIOR TO CONCRETE PLAC	CEMENT, INSPECTOR SHALL BE ON	THE PREMISES DURING PLACEMENT OF			2. THE INSPECTION A	ND TESTING AGENT(S) SHALL BE E	NGAGED BY THE OWNER'S REPRES	ENTATIVE OR THE SPECIAL INSPEC	CTOR, AND NOT BY
3. PERFORM CLAS	SSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.			Х	ANCHOR RODS AND OTHER WITH THE CONSTRUCTION	R EMBEDMENTS THAT SUPPORT ST DOCUMENTS:	RUCTURAL STEEL. VERIFY COMPLIANCE			THE CONTRACTOR PRIOR TO COMMEN	OR SUBCONTRACTOR WHOSE WO ICING WORK	RK IS TO BE INSPECTED OR TESTEI	D. ANY CONFLICT OF INTEREST MU	JST BE DISCLOSED
4. VERIFY USE OF	F PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PL	ACEMENT AND	Х		a. DIAMETER.				Х	 THE SPECIAL INSPE OFFICIAL, FOR INSPECTIVE 	ECTOR SHALL BE A QUALIFIED PER PECTION OF THE PARTICULAR TYP	SON WHO SHALL DEMONSTRATE CO E OF CONSTRUCTION OR OPERATION	DMPETENCE, TO THE SATISFACTIO IN REQUIRING INSPECTION.	IN OF THE BUILDIN

IBC TABLE 1705.3: REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION													
VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCE STANDARD	IBC REFERENCE									
1. INSPECTION OF REINFORCING STEEL AND PLACEMENT.		Х	ACI318: 3.5, 7.1 - 7.7	1910.4									
2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1705.2.2, ITEM 2b.			AWS D1.4 ACI 318: 3.5.2										
3. INSPECTION OF ANCHORS CAST IN CONCRETE.		Х	ACI 318: D.9.2	1909.1									
4. INSPECTION OF ANCHORS POST INSTALLED IN HARDENED CONCRETE MEMBERS (NOTE a).													
a. MECHANICAL ANCHORS AND ADHESIVE ANCHORS		Х	ACI 318: D.9.2	1909.1									
5. VERIFY USE OF REQUIRED DESIGN MIX.		Х	ACI 318: CH 4, 5.2-5.4	1904.2, 1910.2, 1910.3									
6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X		ASTM C172 ASTM C31 ACI 318: 5.6, 5.8	1910.10									
7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	x		ACI 318: 5.9, 5.10	1910.6, 1910.7, 1910.8									
8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.		Х	ACI 318: 5.11-5.13	1910.9									
9. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.		Х	ACI 318: 6.2										
10. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.		Х	ACI 318: 6.1.1										
TABLE NOTES													

5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS

BEEN PREPARED PROPERLY.

a. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH ACI 355.2 OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF THE WORK.

d. PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION. 4. STRUCTURAL STEEL WELDING AND HIGH-STRENGTH BOLTING (SEE ACCO

AISC 360, SECTION N5: REQUIRED QUALITY ASSU VERIFICATION AND INSPECTION INSPECTION TASKS PRIOR TO

1. (REFER TO AISC 360 FOR REQUIREMENTS)

INSPECTION TASKS DURING V 1. (REFER TO AISC 360 FOR REQUIREMENTS)

INSPECTION TASKS AFTER W 1. VERIFY WELDS CLEANED.

2. VERIFY SIZE, LENGTH, AND LOCATION OF WELDS.

3. VERIFY WELDS MEET VISUAL ACCEPTANCE CRITERIA:

a. CRACK PROHIBITION.

b. WELD / BASE-METAL FUSION. c. CRATER CROSS SECTION.

d. WELD PROFILES.

e. WELD SIZE.

Х

f. UNDERCUT.

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g. POROSITY.

4. VERIFY ARC STRIKES. 5. VERIFY BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED).

6. VERIFY REPAIR ACTIVITIES.

7. DOCUMENT THE ACCEPTANCE OR REJECTION OF WELDED JOINT OR ME

IBC TABLE 1705.2.2: REQUIRED VERIFICATION AND INSPECTION OF VERIFICATION AND INSPECTION

1. MATERIAL VERIFICATION OF COLD-FORMED STEEL DECK:

a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPEC APPROVED CONSTRUCTION DOCUMENTS.

b. MANUFACTURER'S CERTIFIED TEST REPORTS.

2. INSPECTION OF WELDING:

a. COLD-FORMED STEEL FLOOR & ROOF DECK WELDS

	VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC
1.	REVIEW MATERIAL TEST REPORTS AND CERTIFICATIONS LISTED IN AISC360, SECTION N3.2. FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS.	Х	
2.	PRIOR TO CONCRETE PLACEMENT, INSPECTOR SHALL BE ON THE PREMISES DURING PLACEMENT OF ANCHOR RODS AND OTHER EMBEDMENTS THAT SUPPORT STRUCTURAL STEEL. VERIFY COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS:		
	a. DIAMETER.		Х
	b. GRADE.		Х
	c. TYPE.		Х
	d. LENGTH.		Х
	e. EMBEDMENT DEPTH.		Х
3.	INSPECT THE ERECTED STEEL TO VERIFY COMPLIANCE WITH DETAILS ON THE CONSTRUCTION DOCUMENTS:		
	a. BRACES.		Х
	b. STIFFENERS.		Х
	c. MEMBER SIZES & LOCATIONS.		Х
	d. PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION.		Х
4	STRUCTURAL STEEL WELDING AND HIGH-STRENGTH BOLTING (SEE ACCOMPANYING TABLES.)		

URANCE OF STRUCTU	RAL STEEL WEL	DING	
		CONTINUOUS	PERIODIC
WELDING (TABLE N5.4	-1)		1
			X
WELDING (TABLE N5.4-2	2)		
			Х
VELDING (TABLE N5.4-3)		
			Х
		Х	
		Х	
		Х	
		Х	
		Х	
		Х	
		Х	
		Х	
		Х	
		Х	
		Х	
		Х	
IEMBER.		Х	
OF STEEL CONSTRUCT	ON OTHER THA	N STRUCTURAL	STEEL
	CONTINUOUS	PERIODIC	REFERENCE
ECIFIED IN THE		х	ASTM STANDARDS
		Х	

X

AWS D1.3

- OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING INSPECTION. 4. DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR:
- A. THE SPECIAL INSPECTOR SHALL REVIEW ALL WORK LISTED BELOW FOR CONFORMANCE WITH THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS AND THE 2012 IBC. ALL ITEMS NOT IN COMPLIANCE SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, AND IF UNCORRECTED, TO THE EOR AND THE BUILDING OFFICIAL. B. THE SPECIAL INSPECTOR SHALL FURNISH SPECIAL INSPECTION REPORTS TO THE EOR, CONTRACTOR, OWNER, AND BUILDING OFFICIAL ON
- A MONTHLY BASIS, OR MORE FREQUENTLY AS REQUIRED BY THE BUILDING OFFICIAL. REPORTS SHALL DESCRIBE ALL INSPECTIONS, TEST PERFORMED, DISCREPANCY NOTICES AND CORRECTIVE ACTIONS TAKEN. C. ONCE CORRECTIONS HAVE BEEN MADE BY THE CONTRACTOR, THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT TO THE BUILDING OFFICIAL STATING THAT WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE SPECIAL INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS AS WELL AS THE APPLICABLE WORKMANSHIP
- PROVISIONS OF THE 2012 IBC. 5. DUTIES AND RESPONSIBILITIES OF THE CONTRACTOR A. THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE OWNER AND THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF WORK. IN ACCORDANCE WITH IBC 1704.4, THE STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGEMENT OF THE SPECIAL INSPECTOR REQUIREMENTS CONTAINED WITHIN THE "STATEMENT OF SPECIAL INSPECTIONS". B. THE CONTRACTOR SHALL NOTIFY THE RESPONSIBLE SPECIAL INSPECTOR THAT WORK IS READY FOR INSPECTION AT LEAST ONE WORKING DAY (24 HOURS MINIMUM) BEFORE SUCH INSPECTION IS REQUIRED. C. ALL WORK REQUIRING SPECIAL INSPECTION SHALL REMAIN ACCESSIBLE AND EXPOSED UNTIL IT HAS BEEN OBSERVED BY THE SPECIAL
- INSPECTOR. D. THE SPECIAL INSPECTION PROGRAM DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO COMPLY WITH THE CONTRACT DOCUMENTS. JOBSITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. 6. PLEASE SEE THE "SPECIAL INSPECTION SCHEDULE" ON THIS SHEET FOR THE TYPES, EXTENTS, AND FREQUENCY OF SPECIFIC ITEMS REQUIRING SPECIAL INSPECTIONS AND STRUCTURAL TESTS AS PART OF THIS PROJECT.

SIGNATURE:

7. THIS STATEMENT OF SPECIAL INSPECTIONS ENCOMPASSES THE FOLLOWING DISCIPLINES: STRUCTURAL 8. SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE ARE NOT REQUIRED PER IBC 1705.11. 9. SPECIAL INSPECTIONS FOR WIND RESISTANCE ARE NOT REQUIRED PER IBC 1705.10.

PREPARED BY:

NAME: ROBERT A. HAINES

	LICENSE #: <u>112384</u>	-
_	OWNER'S AUTHORIZATION:	BUILDING OFFICIAL'S ACCEPTANCE:

SIGNATURE:

DATE:

DATE:

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		7		8 9 10 11 12		12		13	14	15	1													
									VQTEM											HVAC LEGEND & S	VMBOLS			
																			TIVAO LEGEND & O					
DRAWING	SYMBOL		CFM	C	CAPACITY (BTUH)			INDOOR UN	NIT ELEC.		(OUTDOOR	UNIT ELEC.			MANUFACTURER	& MODEL NO.*		~	A. RECTANGULAR DUCT: * MANUAL OPPOSED BLADE DAMPER	WITH LOCKING QUADRANT. LEVER			
OOR	OUTDOOR	CFM	0.A.	TOTAL COOLING	SEN. COOLING	HEATING	WGT. LBS.	MCA	MOP	VOLT.	WGT. LBS.	MCA	MOP	VOLT.	SEER	AIR HANDLER	COND. UNIT		OR	OPERATOR, OF STEEL CONSTRUCTION. * LOUVERS & DAMPERS MODEL CD-400; KRUEGER MODEL 0BD-DM				
HU 1		646	30	24,000	17,520	27,000	46.3	-	-	208-230/1	142.2	12.06	20	208-230/1	20.5	SAMSUNG AC024KN4DCH/AA	SAMSUNG AC024JXADCH/AA			B. ROUND DUCT: * ROUND BLADE CONTROL DAMPER (MANUAL OPERATOR * LOUVEDO AND DAMPERO MODEL OF	DF STEEL CONSTRUCTION WITH			
TER RACH (EAR COM UIPMENT (OVIDE CO (OVIDE AII (OVIDE AII (OVIDE UN TERNATE DOOR UNI (RDWIRED DUND BOD (ANUNMAN (ANUNMAN)	I AND FILTER FURNISHED WITH UNIT. PRESSOR WARRANTY. TO BE ARI CERTIFIED AND UL APPROVED. PACITY AT 80/67 EAT, 95 ODT. NDENSATE PUMP WITH UNIT. YHANDLER WITH LOW AMBIENT CONTROLS. IIT WITH A HARD START KIT. MANUFACTURERS: CARRIER, LG T POWERED THROUGH OUTDOOR UNIT. 7-DAY PROGRAMMABLE THERMOSTAT. Y AND DISCHARGE FASCIA. Y OPEN TYPE, ROUND WHITE FASCIA PANEL.															<u>"w"</u> G	ID 90° ELBOW	USE THIS DESIGN OF ROUND 90° ELS WHEN POSSIBLE.						
		OOLD OOT																		FRESH AIR SUPPLY DUCT				
																		<i>~</i>		ROUND FRESH AIR SUPPLY DUCT RISER				
																		~		FRESH AIR SUPPLY DUCT				
<i>(</i>																			XX	INDICATES NEW HVAC EQUIPMENT				
	0)																		1	THERMOSTAT				

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GENERAL NOTES:

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1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS BEFORE FABRICATION OF H.V.A.C. COMPONENTS OR PURCHASE OF EQUIPMENT.

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- 2. CONTRACTOR SHALL COORDINATE ALL OTHER TRADES WITH THE INSTALLATION OF H.V.A.C. SYSTEM. 3. H.V.A.C. LEGEND MAY CONTAIN SYMBOLS AND ABBREVIATIONS NOT USED ON THIS SPECIFIC PROJECT, LEGEND SHALL BE USED FOR REFERENCE PURPOSES.
- 4. CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE H.V.A.C. SYSTEM AS IT RELATES TO DRAWINGS AND SPECIFICATIONS.
- 5. CONTRACTOR IS REQUIRED TO REVIEW ARCHITECTURAL PLANS FOR RATED ASSEMBLIES. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF FIRE AND/OR SMOKE DAMPERS IN ACCORDANCE WITH THE SPECIFICATIONS AND APPLICABLE BUILDING CODES.
- 6. "STANDARD" ACCESSORIES OR CONTROLS ON H.V.A.C. EQUIPMENT SHALL BE THOSE WHICH MANUFACTURER PROVIDES ON THE MAJORITY OF STOCK MERCHANDISE. 7. BRAND NAMES AND MODEL NUMBERS ARE PROVIDED TO ESTABLISH A LEVEL OF QUALITY AND PERFORMANCE. "EQUAL TO" ITEMS MAY BE SUBMITTED FOR CONSIDERATION BY THE ENGINEER AND
- OWNER. 8. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATE THE APPROXIMATE ROUTING OF PIPING AND DUCTWORK. CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES. MINOR OFFSETS AND
- ADJUSTMENTS SHALL BE PROVIDED WHERE REQUIRED AT NO ADDITIONAL COST TO THE OWNER.

HVAC NOTES:

- 1. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE EXHAUST DUCT AS FOLLOWS: DUCTWORK TO BE DESIGNED, BRACED, AND SUPPORTED IN ACCORDANCE WITH SMACNA FOR LOW PRESSURE APPLICATIONS, SEAL CLASS C PER SMACNA HVAC DUCT CONSTRUCTION STANDARDS - METAL DUCTWORK SMACNA-06). SINGLE WIRE HANGERS SHALL NOT BE ALLOWED FOR
- FLEXIBLE DUCTWORK SUPPORT. FLEXIBLE DUCTWORK SHALL BE SUPPORTED IN A MANNER THAT PREVENTS CONSTRICTION OR DIPS. INSULATION SHALL BE AS NOTED BELOW. 2. ALL DUCT ELBOWS SHALL BE 1.5 R/D, UNLESS NOTED OTHERWISE.
- 3. CONDENSATE DRAIN PIPING SHALL BE FULL SIZE PER EQUIPMENT CONNECTION WITH PVC ROUTED TO INDIRECT CONNECTION WITHOUT CREATING AN OBSTRUCTION. ALL SUPPORTS FOR THE CONDENSATE DRAIN PIPING IS BY THE MECHANICAL/HVAC CONTRACTOR.
- 4. THE MECHANICAL SYSTEMS SHALL HAVE TESTING AND BALANCING PERFORMED BY THE CONTRACTOR RESPONSIBLE FOR THE INSTALLATION OF THE SYSTEM(S). THE CONTRACTOR SHALL PREPARE AND SUBMIT A COMPLETE REPORT IDENTIFYING ALL MAJOR PIECES OF HVAC EQUIPMENT AND AIR DISTRIBUTION DEVICES WITH PERFORMANCES AND FINAL AIR BALANCE OF EACH. SUBMITTAL SHALL BE PRESENTED TO THE ENGINEER AND BUILDING OWNER OR TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL. 5. PROVIDE MINIMUM 10 FEET SEPARATION BETWEEN OUTSIDE AIR INTAKES AND EXHAUST VENTS, PLUMBING
- VENTS, ETC. 6. THERMOSTATS SHALL BE MOUNTED 48" ABOVE FINISHED FLOOR UNLESS INDICATED OTHERWISE. 7. PROVIDE ACCESS DOOR (12"x12" MIN) AS REQUIRED FOR DAMPER AND CONTROL ACCESS IN WALLS AND CEILINGS.

DUCT SEALING:

- A. PRESSURE SENSITIVE TAPE USED AS THE PRIMARY SEALANT IS CERTIFIED AND SHALL COMPLY WITH UL-181A OR UL-181B.
- B. PROVIDE LONGITUDINAL SEAMS ON RIGID DUCT AND TRANSVERSE SEAMS ON ALL DUCTS. C. PROVIDE MECHANICAL FASTENERS AND SEALANTS SHALL BE USED TO CONNECT DUCTS AND AIR DISTRIBUTION DEVICES.

INSULATION:

- 1. DUCTWORK SHALL BE INSULATED IN ACCORDANCE WITH THE FOLLOWING: A. DUCTWORK PROVIDE 2" FIBERGLASS BLANKET TYPE INSULATION WITH FOIL VAPOR BARRIER
- COVER IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS. B. NO INSULATION FOR EXPOSED SPIRAL DUCT WORK.

PENETRATIONS:

1. SLEEVES SHALL BE INSTALLED WHERE DUCTS, LOUVERS, OR PIPING PENETRATE NON-RATED EXTERIOR WALLS, PARTITIONS, FLOORS, OR ROOF. PACK AROUND SLEEVES AND SEAL WEATHER TIGHT. INSTALL FLASHING AS REQUIRED. SLEEVES SHALL BE MINIMUM 16 GAUGE GALVANIZED STEEL AND SHALL BE FIRMLY SET IN BUILDING STRUCTURE.

SUBMITTALS AND ACCEPTANCE:

- I. UNLESS OTHERWISE INSTRUCTED, THE CONTRACTOR SHALL SUBMIT THREE (3) SETS OF HVAC SHOP DRAWINGS TO THE PROJECT MANAGER WHO SHALL THEN RELAY THEM TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL
- PRIOR TO THE PURCHASE OF EQUIPMENT. 2. OPERATION AND MAINTENANCE MANUALS FOR ALL MECHANICAL EQUIPMENT SHALL BE COMPILED INTO A THREE RING BINDER AND TURNED OVER TO BUILDING OWNER UPON PROJECT COMPLETION.

EXISTING SPRINKLER SYSTEM NOTES

- FIRE SPRINKLER SYSTEM NOTES: 1. FIRE SPRINKLER CONTRACTOR SHALL PROVIDE A FIRE SPRINKLER SYSTEM DESIGN COMPLIANT WITH ALL APPLICABLE PROVISIONS OF NFPA 13.
- 2. THESE DRAWINGS ARE SCHEMATIC FOR DESIGN INTENT ONLY AND THE DESIGN-BUILD CONTRACTOR IS RESPONSIBLE FOR A COMPLETE AND FUNCTIONAL SYSTEM WITH ANY NECESSARY APPURTENANCES.
- 3. FIRE SPRINKLER SHOP DRAWINGS (2 SETS OF WORKING PLANS, PRODUCT DATA AND HYDRAULIC CALCULATIONS) ARE TO BE SUBMITTED FOR REVIEW AFTER
- THE ENGINEER OF RECORD IS SATISFIED THAT THE SHOP DRAWINGS SATISFY THE REQUIREMENTS OF THE NFPA 13 AND THE PROJECT DOCUMENTS. THE ENGINEER OF RECORD SHALL CITE SUCH APPROVAL ON THE SHOP DRAWINGS
- 4. ALL DETAIL DESIGN DRAWINGS AND CALCULATIONS SHALL BE SEALED BY A SPRINKLER SYSTEM ENGINEER OR R.M.E. LICENSED IN THE STATE OF TENNESSEE. 5. THE SPACES IN THE OFFICE ARE CLASSIFIED AS "LIGHT HAZARD" WITH A DESIGN DENSITY OF .10 GPM/FT2, THE WAREHOUSE AND SHOP ARE CLASSIFIED
- "ORDINARY HAZARD GROUP TWO" DESIGN CALCULATIONS SHALL INCLUDE SPRINKLERS TO PROVIDE WITH A DESIGN DENSITY OF .20 GPM/FT2. MECHANICAL ROOMS AND JANITORS CLOSET SHALL HAVE A DESIGN DENSITY OF .15 GPM/FT2.
- 6. ALL SYSTEM VALVES AND GAUGES SHALL BE ACCESSIBLE FOR OPERATION, INSPECTION, TEST, AND MAINTENANCE. 7. COORDINATE LOCATION OF SPRINKLER WITH ALL OTHER DISCIPLINES.
- 8. CONTRACTOR SHALL SUPPLY FLEXIBLE PIPE COUPLINGS ON ALL PIPES 2" OR LARGER AT ALL FLEXIBLE JOINTS PER NFPA 13. FLEXIBLE COUPLINGS SHALL
- ALSO BE PROVIDED WITHIN 1' OF BOTH SIDES OF STRUCTURAL ELEMENTS THAT PIPING PASSES THROUGH. 9. ALL PIPING SHALL HAVE HANGERS INSTALLED PER NFPA 13.
- 10. PENETRATION OF FIRE AND SMOKE BARRIERS/PARTITIONS SHALL BE ADEQUATELY SEALED/PROTECTED.

SPRINKLER REFERENCE NOTES:

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1. ALL PLACES WHERE EXISTING HEADS WERE REMOVED DURING NEW CONSTRUCTION, SPRINKLER PIPING SHALL BE CAPPED BEHIND SURFACE AND/OR CEILING.

- 2. FIELD LOCATE EXISTING PIPE AND CONNECT NEW HEADS. PROVIDE NEW PIPE WHERE NEEDED. 3. CONTRACTOR RESPONSIBLE FOR HYDROSTATICALLY TESTING SYSTEM AT 200psi FOR 2 HOURS AFTER SYSTEM IS COMPLETE.
- 4. AS PER NFPA 8.7.4.1.1.2 HORIZONTAL SIDEWALL SPRINKLERS SHALL BE PERMITTED TO BE LOCATED IN A ZONE 6 IN. TO 12 IN. OR 12 IN. TO 18 IN. BELOW NON-COMBUSTIBLE AND LIMITED COMBUSTIBLE CEILINGS.
- 5. EXISTING HEADS SHALL BE ALLOWED TO REMAIN WHERE APPLICABLE AND PROVIDE PROPER COVERAGE IN COMPLIANCE WITH NFPA 13.

				SPRINKL	ER HEAD LEGEND)		
SYMBOL	TYPE	TEMP	K	MAX PRESSURE	MANUFACTURE	MODEL	SERIES	COMMENTS
\bigcirc	UPRIGHT	165°	5.6	175	TYCO	TY3121	TY-FRL	QUICK RESPONSE
* PROVID	E ALL BRACING, SUPPOR	TS AND HAN	IGERS PER N	IFPA 13 - 2007 EDIT	TION			
* "WG" DE	ENOTES WIRE GUARD							
* COORDINATE SPRINKLER HEAD FINISH WITH ARCHITECT								

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BARBERMcMURRY architects since 1915 505 Market St Suite 300 Knoxville, TN 37902 t 865.934.1915 f 865.546.0242 bma1915.com PROJECT NUMBER 175900 PROJECT NAME UNION COUNTY COURTHOUSE VESTIBULE ADDITION OWNER UNION COUNTY PROJECT ADDRESS 901 MAIN ST. MAYNARDVILLE, TN 37807 FACILITY 13 South Central Street, Suite 101 Knoxville, Tennessee 37902 Phone: (865) 246-0164 Fax: (865) 246-1084 M.T.D. PARTNER-IN-CHARGE L.T.H. PROJECT MANAGER L.E.R. DRAWN BY J.W.H./L.T.H. REVIEWED BY 02.02.2018 ISSUE DATE REVISIONS M/FP1.0 MECHANICAL PLAN ©2018 BARBERMcMURRY architects

	EXISTING PANELBOARD HOME RUN TO PANEL WITH CIRCUIT SHOWN, CROSS MARKS INDICATE NUMBER OF CONDUCTORS WHERE MORE
(IHAN TWO, NOT INCLUDING GROUND, MINIMUM #12 AWG.
	JNDERGROUND WIRING HID, INCANDESCENT, LED, OR COMPACT FLUORESCENT LIGHTING FIXTURE; "A" INDICATES TYPE, REFER TO
PS I	PHOTOCELL SENSOR
S _a L	LIGHT SWITCH, TOGGLE, 20 AMP. 277V, MTD 48" AFF, UNO. "a" CORRESPONDS TO FIXTURES CONTROLLED BY SWITCH.
	JUNCTION BOX, SIZE AND USE AS REQUIRED FLOOR BOX, USE WALKER CO. MODEL NO. 880CS2 WITH COVER, PROVIDE DUPLEX RECEPTACLE AND APPROPRIATE BRACKETS FOR DATA JACKS, SINGLE BOX IS SHOWN ON BOTH PLANS FOR
	FLOOR BOX LISE WALKER CO. MODEL NO. 880CS1 WITH COVER. PROVIDE DUPLEX RECEPTACLE
	HEAVY DUTY FUSED DISCONNECT SWITCH, PROVIDE FUSES AS RECOMMENDED BY EQUIPMENT MFGR. USE
ML (MAGLOCK, SECURITRON M62 SERIES, INSTALL ON DOOR FRAME, EXTEND LOW VOLTAGE WIRING TO DOOR CONTROLLER.
XMS E	EXIT MOTION SENSOR, SECURITRON XMS SERIES, INSTALL ON CEILING, EXTEND LOW VOLTAGE WIRING TO DOOI CONTROLLER.
	PROXIMITY READER, FARPOINTE DATE P-500, INSTALL +48" AFF, EXTEND LOW VOLTAGE WIRING TO DOOR CONTROLLER. PROVIDE SURFACE MOUNT WEATHERPROOF BOX.
	AT +48" AFF.
	ELECTRICAL ABBREVIATIONS
	AMPERE ABOVE FINISHED FLOOR - MEASURED FROM FLOOR TO CENTER OF DEVICE, EXCEPT AS OTHERWISE
AFF	SPECIFICALLY NOTED. AMERICANS WITH DISABILITIES ACT OF 1990
AFG C	ABOVE FINAL GRADE CONDUIT
CM F	INDICATES DEVICE TO BE CEILING MOUNTED FUSE
FPN G	FUSE PER NAMEPLATE REQUIREMENTS GROUND
GF MCM	INDICATES RECEPTACLE OR CIRCUIT BREAKER, AS APPLICABLE, TO HAVE GROUND FAULT PROTECTION Kcmil (THOUSAND CIRCULAR MILS)
NEC N	NATIONAL ELECTRICAL CODE NEUTRAL
NL	INDICATES FIXTURE TO BE CONNECTED UNSWITCHED TO SERVE AS A "NIGHT" LIGHT.
	UNLESS NOTED OTHERWISE VABIABLE EREQUENCY DRIVE - PROVIDED LINDER DIVISION 15
WP	INDICATES DEVICE TO HAVE WEATHERPROOF COVER
GENERAL ELECTE 1. THE CONTRAC THIS WORK S	<u>RICAL NOTES:</u> CTOR SHALL VISIT THE JOB SITE AND CAREFULLY EXAMINE THOSE PORTIONS OF THE SITE AFFECTED BY O AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS THAT WILL AFFECT EXECUTION OF THE WORK.
2. THE CONTRAC CONSTRUCTION 3. ALL WORK SH	CTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND PAYING ALL UTILITY CO. AID TO ON FEES. IALL BE IN ACCORDANCE WITH THE CURRENT/APPLICABLE NATIONAL ELECTRICAL CODE, NFPA 70,
LOCAL CODES CODE TAKES APPROVAL OI	3/ORDINANCES AND THE APPLICABLE ACCESSIBLITY CODE. SHOULD PLANS AND CODES CONFLICT, THE PRECEDENCE. MAKE NO CHANGES, EVEN IN THE CASE OF CONFLICT, WITHOUT FIRST OBTAINING F THE ARCHITECT/ENGINEER.
4. "PROVIDE" AS FURNISH, INS MOUNTING H/	TALL, WIRE, AND ON THE DRAWINGS, IS AN ALL-INCLUSIVE TERM REQUIRING CONTRACTOR TO TALL, WIRE, AND CONNECT ALL SPECIFIED EQUIPMENT AS WELL AS COMPONENTS, ACCESSORIES, AND ARDWARE TO INSURE THAT SPECIFIED EQUIPMENT FUNCTIONS TO MEET SYSTEM REQUIREMENTS.
5. II SHALL BE I DAMAGE. THE OR OTHER PF	E RESPONSIBILITY OF THE CONTRACTOR TO PROTECT OTHER FACILITIES AND EQUIPMENT FROM CONTRACTOR SHALL BEAR ALL EXPENSE FOR REPAIR OR REPLACEMENT OF FACILITIES, EQUIPMENT, OPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE COMPLETION OF THIS WORK.
6. PROVIDE SPE	IENT OF ANY EXCAVATION. IENT OF ANY EXCAVATION. ICIFIED EQUIPMENT, AS NOTED ON DRAWINGS, OR APPROVED EQUAL. ADDITIONAL EQUIPMENT AND
MATERIAL MA SUCH AS HAN EQUIPMENT F	IS BE REQUIRED OTHER THAN THAT SHOWN ON DRAWINGS TO INSTALL THE SPECIFIED EQUIPMENT IGERS, SUPPORTS, ETC. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR, AND REQUIRED.
	INS AS THE EQUIPMENT USED AS THE BASIS OF DESIGN. IF THE EQUIPMENT IS DIFFERENT, THE SHALL MAKE ADJUSTMENTS TO THE PANELS AND CIRCUITS AND INCLUDE THEM IN SUBMITTALS.
9. DESIGN IS BA	STALL BE LISTED AND LABELED BY UNDERWRITERS LABORATORY, INC. SED ON AN EXISTING 208Y/120 VOLT, THREE PHASE, FOUR WIRE, SOLIDLY GROUNDED WYE SERVICE. 1ALL BE TERMINATED AND LABELED. ALL JUNCTION BOXES SHALL BE LABELED TO INDICATED THE NTAINED IN THE BOX
11. PANELBOARD BREAKER SEF	LEGENDS SHALL BE TYPED. LABEL ALL PANELBOARDS/SWITCHGEAR INDICATING LOCATION OF RVING PANEL IN ACCORDANCE WITH N.E.C.
13. UNLESS OTHE VOLT INSULATION 14. PROVIDE A DI	ERWISE NOTED, ALL CONDUCTORS SHALL BE COPPER AND #12 AWG MINIMUM WITH THHN/THWN, 600 TION. EDICATED NEUTRAL, COLOR CODED, FOR EACH UNGROUNDED CONDUCTOR. SHARING OF NEUTRALS IS
PROHIBITED. 15. DO NOT INST/ 16. THE MINIMUM	ALL MORE THAN THREE CIRCUITS (SIX CURRENT CARRYING CONDUCTORS) IN A CONDUIT. I CONDUIT SIZE SHALL BE 1/2". INTERIOR CONDUITS SHALL BE EMT; UNDERGROUND CONDUIT AND
CONCRETE EI PVC., UNLESS 17. MC CABLE SH	NCASED CONDUIT SHALL BE SCHEDULE 40 PVC. EXTERIOR EXPOSED CONDUIT SHALL BE SCHEDULE 40 3 NOTED OTHERWISE. IALL NOT BE USED.
18. A GREEN, COI ENCLOSURES 19. BONDING JUN	PPER GROUND WIRE SHALL BE INSTALLED IN ALL CONDUIT SYSTEMS AND SHALL BE BONDED TO ALL 3, BOXES, AND EQUIPMENT. IPERS SHALL BE USED TO BOND CONDUIT TO ENCLOSURES, BOXES, AND EQUIPMENT WHERE
20. ALL DIMENSIC 21. THE CONTRAC	ARE USED.)NS ARE MEASURED TO THE CENTER OF THE DEVICE. CTOR SHALL PROVIDE FIRESTOPPING OF ALL RATED PENETRATIONS PER DETAILS. ELECTRICAL BOXES
INSTALLED ON SEPARATION. 22. THE CONTRAC	CTOR SHALL GUARANTY ALL WORK TO BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR
LIGHTING NOTES	TER SUBSTANTIAL COMPLETION.
1. CONTRACTOR THE DRAWING 2. CONFIRM EXA	1 SHALL FURNISH AND INSTALL LIGHT SWITCHES/CONTROLS FOR ALL LIGHTING AT LOCATIONS AS SHOWN ON 3S. ACT LIGHT FIXTURE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN.
3. CONNECT ALL UPON LOSS C	- EATLAIND EIVIERGEINGT LIGHTS TO UNSWITCHED LIGHTING CIRCUITS. UNITS SHALL OPERATE AUTOMATICALLY)F POWER.
POWER NOTES: 1. CONTRACTOF MANUFACTUF	R SHALL FURNISH AND INSTALL FUSED DISCONNECTS FOR ALL HVAC EQUIPMENT WITH FUSES AS PER RECOMMENDATIONS. AMPACITY, POLES, AND TYPE NEMA ENCLOSURE OF DISCONNECT SWITCHES
AS REQUIRED EACH HVAC P 2. MOUNT ALL S). FURNISH AND INSTALL A WEATHERPROOF, GFCI DUPLEX RECEPTACLE OUTLET WITHIN 25 FEET OF IECE OF EQUIPMENT. WITCHES AND OTHER ELECTRICAL EQUIPMENT IN COMPLIANCE WITH APPLICABLE PROVISIONS OF THE
APPLICABLE A 3. ALL RESTROC 4. ALL EXTERIOF	ACCESSIBILITY CODE.)M, EXTERIOR, COUNTER TOP, AND ROOF TOP HVAC SERVICE RECEPTACLES SHALL BE GFCI. RECEPTACLES SHALL HAVE APPROVED WEATHERPROOF COVERS AS PER NEC 406.8 (B).
5. ALL DAMP AN	D WET LOCATION DEVICES SHALL BE WEATHER RESISTANT.
1. CONTRACTOR TERMINAL BO 2. PROVIDE APP	REALT FURNISH AND INSTALL ALL COMBINATION TELEPHONE AND DATA CONDUITS, BOXES, PLYWOOD ARD, ETC. ACTIVE EQUIPMENT AND CABLING TO BE PROVIDED/INSTALLED BY OTHERS. PROPRIATE NYLON PULLSTRING/ROPE IN ALL EMPTY CONDUITS.
1. REMOVE ALL REMOVE ALL LIGHT FIXTUR	EXISTING DEVICES IN WALL AND CEILINGS BEING REMOVED AND PROPERLY ABANDON CONDUIT SYSTEM. EXISTING UNUSED OR ABANDONED CONDUIT, WIRING, JUNCTION BOXES, ETC. ABOVE CEILING. REMOVE ALL ES IN AREAS WHERE NEW FIXTURES ARE ILLUSTRATED, PROPERLY DISPOSE OF OR TURN OVER TO OWNER AS
SYM	CATALOG NUMBER LAMPS MOUNTING DESCRIPTION
СОМ	PANY MODEL NUMBER NO. WATTS TYPE
A USAI LIGH	ITING BLRD5-09C3-35Ks-50-S-WH-CC 1 9 LED SURFACE 6" DIAMETER CYLINDER, WITH CONDUIT CUTOUTS
B LIGMAN	ULW-10874-27w LED-W30-?? 1 27 LED IN-GRADE 32" TALL BOLLARD
NOTES:	-IXTURES (NOTED BY ? IN THE MODEL NUMBER) SHALL BE VERIFIED WITH AND APPROVED BY THE ARCHITECT
NOTES: 1. THE FINISH OF ALL F PROVIDE SAMPLES FOR	R COLOR SELECTION.
NOTES: 1. THE FINISH OF ALL F PROVIDE SAMPLES FOF 2. REFER TO THE ARCH 3. ALL FIXTURES SHALL	R COLOR SELECTION. HITECT'S REFLECTED CEILING PLAN FOR THE EXACT LOCATION OF FIXTURES. L BE FURNISHED COMPLETE WITH LAMPS AND BALLASTS. UNLESS NOTED OTHERWISE.

