

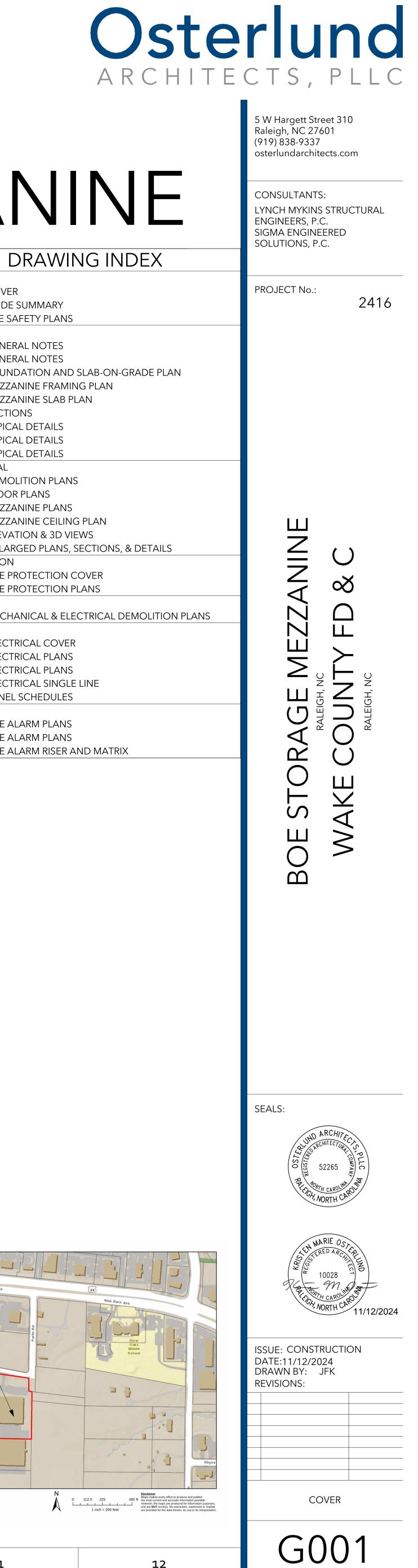
BOE STORAGE MEZZANINE

5

3

2

6



OWNER

WAKE COUNTY FD&C 336 FAYETTEVILLE STREET WCOB, 11TH FLOOR RALEIGH, NC 27601 (919) 856-6363 SARAH KAHR RICHTER, PE: sarahkahrrichter@wake.gov

STRUCTURAL ENGINEER

LYNCH MYKINS STRUCTURAL ENGINEERS, P.C. 301 N. WEST ST., SUITE 105 RALEIGH, NC 27603 (919) 782-1833 BOWEN SHEN, PE, SE: bshen@lynchmykins.com

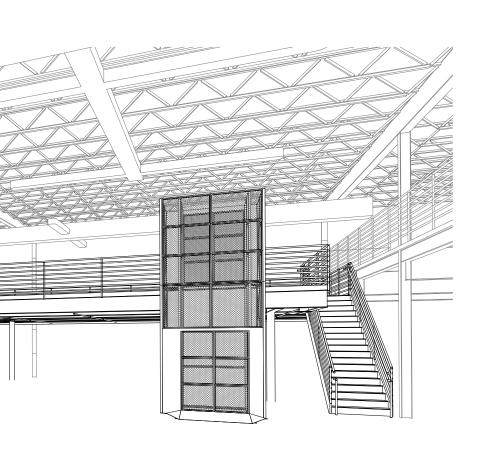
ARCHITECT

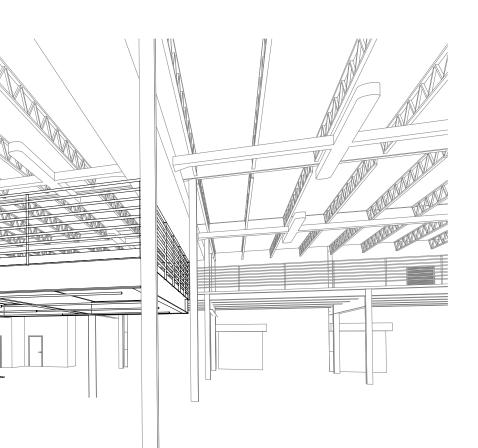
OSTERLUND ARCHITECTS, PLLC 5 W HARGETT STREET 310 RALEIGH, NC 27601 (919) 838-9337 KRISTEN OSTERLUND, AIA: kristen@osterlundarchitects.com JOE KASZTELAN: joe@osterlundarchitects.com

PMEFP ENGINEER

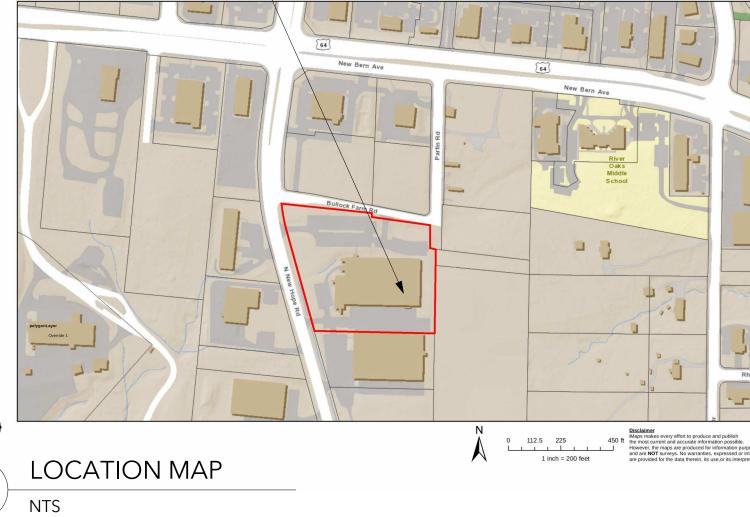
SIGMA ENGINEERED SOLUTIONS, P.C. 5909 FALLS OF NEUSE ROAD, SUITE 101 RALEIGH, NC 27609 (919) 840-9300 REGINALD ADAMS, PE: radams@sigmaes.com JOHN ERICKSON, PE: jerickson@sigmaes.com

COVER SI	HEET
G001	COVER
G002	CODE SUMMARY
G101	LIFE SAFETY PLANS
STRUCTU	IRAL
S001	GENERAL NOTES
S002	GENERAL NOTES
S111	FOUNDATION AND SLAB-ON-GRADE PLAN
S121	MEZZANINE FRAMING PLAN
S122	MEZZANINE SLAB PLAN
S301	SECTIONS
S501	TYPICAL DETAILS
S502	TYPICAL DETAILS
S503	TYPICAL DETAILS
ARCHITE	CTURAL
A101	DEMOLITION PLANS
A102	FLOOR PLANS
A103	MEZZANINE PLANS
A104	MEZZANINE CEILING PLAN
A201	ELEVATION & 3D VIEWS
A411	ENLARGED PLANS, SECTIONS, & DETAILS
FIRE PRO	TECTION
FP001	FIRE PROTECTION COVER
FP101	FIRE PROTECTION PLANS
MECHAN	ICAL
ME101	MECHANICAL & ELECTRICAL DEMOLITION P
ELECTRIC	CAL
E001	ELECTRICAL COVER
E100	ELECTRICAL PLANS
E200	ELECTRICAL PLANS
E400	ELECTRICAL SINGLE LINE
E401	PANEL SCHEDULES
FIRE ALA	RM
FA100	FIRE ALARM PLANS
FA200	FIRE ALARM PLANS
FA400	FIRE ALARM RISER AND MATRIX





PROJECT LOCATION



		2018 BUILDING DR ALL COI		SUMMA		
(EXC		DR ALL CON 2-FAMILY				IHOUSES)
Name of Address: Owner/A	1200 N	BOARD OF . New Hop Agent: Saral	e Rd	Raleigh	NC, 2	27610
	orcement J	sarah PRIVATE Jurisdiction Osterlund,	: COUN		′ake	
DESIGNER		@osterlund		s.com		
Architectural		Kristen Osterlund	10028	(919) 838 9337		terlundarchitects.com
Interior Designer Civil	N/A N/A					
Electrical	Sigma Engineered solutions	Reginald D. Adams	19658	(919) 840 9300	radams@si	gmaes.com
Fire Alarm	Sigma Engineered solutions	Reginald D. Adams	19658	(919) 840 9300	radams@si	gmaes.com
Plumbing Mechanical	N/A Sigma Engineered	John R. Erickson	050628	(919) 840	jerickson@	sigmaes.com
Sprinkler- Standpipe	solutions Sigma Engineered	John R. Erickson	050628	9300 (919) 840	jerickson@	sigmaes.com
Structural	solutions Lynch Mykins Structural	Shen	048747	9300 (919) 222	bshen@lyn	chmykins.com
Retaining Walls > 5′	Engineers, P. N/A	<u>C.</u>		1539		
High Other	N/A					
BASIC BL Construct	JILDING D	I-B	Propos	sed: II		
Sprinklers Standpipe	s: YES I					
Special In	ct: NO (Prin spections f	mary) Flood Required: N		Area: No	0	
Special In GROSS B	ct: NO (Prin spections f	mary) Flood Required: N AREA EXISTING	10 NEW	RENC	D/ALTER	SUB-TOTAL
Special In GROSS B FLC	ct: NO (Prin spections F UILDING A DOR 1 1 (S-1)	mary) Flood Required: N AREA	10	RENC		SUB-TOTAL 23,732
Special In GROSS B FLO FLOOR AREA OI FLOOR 2	Ct: NO (Prin spections f CUILDING A DOR 1 1 (S-1) F WORK 2 (S-1)	mary) Flood Required: N AREA EXISTING (SF)	10 NEW (SF)	RENC (D/ALTER SF)	
Special In GROSS B FLOOR AREA OI FLOOR 2 STORAG MEZZAN	Ct: NO (Prin spections F CUILDING A OOR 1 1 (S-1) F WORK 2 (S-1) E IINE	mary) Flood Required: N AREA EXISTING (SF) 23,732 0	NEW (SF) N/A 4,184	RENC (D/ALTER SF) N/A N/A	23,732 N/A
Special In GROSS B FLC FLOOR AREA OI FLOOR 2 STORAG	Ct: NO (Prin spections F CUILDING A DOR 1 1 (S-1) F WORK 2 (S-1) iE IINE 2 (U) G ENT	mary) Flood Required: N AREA EXISTING (SF) 23,732	NEW (SF) N/A	RENC (D/ALTER SF) N/A	23,732
Special In GROSS B FLOOR FLOOR AREA OI FLOOR STORAG MEZZAN FLOOR EXISTING EQUIPM	Ct: NO (Prin spections F CUILDING A DOR 1 1 (S-1) F WORK 2 (S-1) iE IINE 2 (U) G ENT	mary) Flood Required: N AREA EXISTING (SF) 23,732 0	NEW (SF) N/A 4,184	RENC ()	D/ALTER SF) N/A N/A	23,732 N/A
Special In GROSS B FLOOR FLOOR AREA OI FLOOR STORAG MEZZAN FLOOR EQUIPM PLATFO TOTAL ALLOWA Primary C Accessory Incidenta Special U Special Pr Mixed Oc Exc	Ct: NO (Prinspections F CUILDING A OR I COR I C	AREA EXISTING (SF) 23,732 0 4,900 23,732 0 23,732 0 23,732 Classification cy Classification cy Classif	NEW (SF) N/A 4,184 N/A N/A N/A	RENC ()))))))))))))))))))	D/ALTER SF) N/A N/A N/A N/A S-1 NON NON NON	23,732 N/A N/A 23,732 23,732
Special In GROSS B FLC FLOOR 2 STORAG MEZZAN FLOOR 2 STORAG MEZZAN FLOOR 2 EXISTING EQUIPM PLATFO TOTAL TOTAL ALLOWA Primary C Accessory Incidenta Special U Special Pr Mixed Occ Exc Incidenta Special Pr Mixed Occ Exc Special IN Special Pr Mixed Occ Exc Special IN Special Pr Mixed Occ Exc Special IN Special IN Special Pr Mixed Occ Exc Special IN Special IN Special Pr Mixed Occ Exc Special IN Special IN	Ct: NO (Prinspections P CUILDING / POR 1 COR 1	AREA EXISTING (SF) 23,732 0 4,900 4,900 23,732 Classification cy Classification cy C	N/A A,184 N/A N/A N/A N/A N/A	RENC ())))))))))))))))))	D/ALTER SF) N/A N/A N/A N/A N/A N/A N/A N/A N/A NON NON NON NON NON NON NON NON NON NO	23,732 N/A N/A 23,732 23,732 E E E E E E b lying the height ing. The most ng. be such that the floor area for each
Special In GROSS B FLC FLOOR 2 STORAG MEZZAN FLOOR 2 STORAG MEZZAN FLOOR 2 EXISTING EQUIPM PLATFO TOTAL TOTAL ALLOWA Primary C Accessory Incidenta Special U Special Pr Mixed Occ Exc Incidenta Special Pr Mixed Occ Exc Special IN Special Pr Mixed Occ Exc Special IN Special Pr Mixed Occ Exc Special IN Special IN Special Pr Mixed Occ Exc Special IN Special IN Special Pr Mixed Occ Exc Special IN Special IN	Ct: NO (Prinspections P CUILDING / POR 1 COR 1	AREA EXISTING (SF) 23,732 0 4,900 23,732 0 24,9000 24,9000 24,9000 24,9000 24,90000 24,90000000	N/A A,184 N/A N/A N/A N/A N/A	RENC (()))))))))))))))))	D/ALTER SF) N/A N/A N/A N/A N/A N/A N/A N/A N/A NON NON NON NON NON NON NON NON NON NO	23,732 N/A N/A 23,732 23,732 E E E E E E b lying the height ing. The most ng. be such that the floor area for each
Special In GROSS B FLC FLOOR 2 STORAG MEZZAN FLOOR 2 STORAG	Ct: NO (Printspections P CUILDING A POR 1 1 (S-1) F WORK 2 2 (S-1) E UINE 2 2 (U) G ENT RM CCUPANCY CCUPANCY POCCUPANCY C	AREA EXISTING (SF) 23,732 0 4,900 23,732 0 24,900 1 24,900 1 24,9000 24,9000 24,9000 24,9000 24,900000000000000000	NEW (SF) N/A 4,184 N/A N/A N/A N/A N/A on: ation(s): ode Sec: List Cod able occupation: ode Sec: List Cod able occupation: ode Sec: List Cod able occupation ined, shall a cory, the are feach use of able occupation ined, shall a cory, the are feach use of able occupation ined, shall a	RENC () </td <td>D/ALTER SF) N/A N/A N/A N/A N/A N/A N/A S-1 NON NON NON NON NON NON NON NON S): NON mined by app e entire build entire build entire build entire build ferency shall he allowable <i>ccupancy B</i> <i>Occupancy B</i></td> <td>$\begin{array}{c c} 23,732 \\ N/A \\ N/A \\ \hline 23,732 \\ \hline 24,732 \\ \hline 25,732 \\ \hline 2$</td>	D/ALTER SF) N/A N/A N/A N/A N/A N/A N/A S-1 NON NON NON NON NON NON NON NON S): NON mined by app e entire build entire build entire build entire build ferency shall he allowable <i>ccupancy B</i> <i>Occupancy B</i>	$\begin{array}{c c} 23,732 \\ N/A \\ N/A \\ \hline 23,732 \\ \hline 24,732 \\ \hline 25,732 \\ \hline 2$
Special In GROSS B FLC FLOOR 2 STORAG MEZZAN FLOOR 2 STORAG MEZZAN FLOOR 2 EXISTING EQUIPM PLATFO TOTAL TOTAL ALLOWA Primary C Accessory Incidenta Special U Special Pr Mixed Oc Exc Special Pr Mixed Oc Exc Special Indi Special I	ct: NO (Printspections F Spections F <td>AREA EXISTING (SF) 23,732 0 4,900 4,900 23,732 0 23,732 0 23,732 Classification cy Classification cy C</td> <td>N/A N/A A, 184 N/A N/A N/A N/A N/A N/A N/A N/A</td> <td>RENC () <!--</td--><td>D/ALTER SF) N/A N/A N/A N/A N/A N/A N/A N/A S-1 NON NON NON NON NON NON NON NON S): NON mined by app e entire build entire build entire build entire build for a property shall he allowable <i>ccupancy B</i> <i>Occupancy B</i></td><td>$\begin{array}{c c} 23,732 \\ N/A \\ N/A \\ \hline 23,732 \\ \hline 24,732 \\ \hline 25,732 \\ \hline 2$</td></td>	AREA EXISTING (SF) 23,732 0 4,900 4,900 23,732 0 23,732 0 23,732 Classification cy Classification cy C	N/A N/A A, 184 N/A N/A N/A N/A N/A N/A N/A N/A	RENC () </td <td>D/ALTER SF) N/A N/A N/A N/A N/A N/A N/A N/A S-1 NON NON NON NON NON NON NON NON S): NON mined by app e entire build entire build entire build entire build for a property shall he allowable <i>ccupancy B</i> <i>Occupancy B</i></td> <td>$\begin{array}{c c} 23,732 \\ N/A \\ N/A \\ \hline 23,732 \\ \hline 24,732 \\ \hline 25,732 \\ \hline 2$</td>	D/ALTER SF) N/A N/A N/A N/A N/A N/A N/A N/A S-1 NON NON NON NON NON NON NON NON S): NON mined by app e entire build entire build entire build entire build for a property shall he allowable <i>ccupancy B</i> <i>Occupancy B</i>	$\begin{array}{c c} 23,732 \\ N/A \\ N/A \\ \hline 23,732 \\ \hline 24,732 \\ \hline 25,732 \\ \hline 2$
Special In GROSS B FLC FLOOR AREA OI FLOOR STORAG MEZZAN FLOOR EXISTING EQUIPM PLATFO TOTAL TOTAL ALLOWA Primary C Accessory Incidenta Special U Special Pr Mixed Oc Exc Special Pr Mixed Oc Exc See below for sum of the ra use shall not ACCESSOR See below for Sum of the ra USP araction See below for Sum of the ra USP araction FLOOR AREA OI WORK	ct: NO (Printspections Paratella Paratella POR I (S-1) F WORK 2 (S-1) E JINE 2 (U) G ENT RM Decupancy y Occupancy y Occupancy <t< td=""><td>AREA EXISTING (SF) 23,732 0 4,900 4,900 23,732 Classification cy Classification cy C</td><td>N/A N/A A, 184 N/A A, 184 N/A N/A N/A N/A on: ation(s): ode Sec: List Cod able occupation: ode Sec: List Cod able occupation able occupation</td><td>RENC () <!--</td--><td>D/ALTER SF) N/A N/A N/A N/A N/A N/A N/A S-1 NON NON NON NON NON NON NON S): NON NON NON NON NON NON NON NON NON NON</td><td>23,732 N/A N/A $23,732$ $34,10$</td></td></t<>	AREA EXISTING (SF) 23,732 0 4,900 4,900 23,732 Classification cy Classification cy C	N/A N/A A, 184 N/A A, 184 N/A N/A N/A N/A on: ation(s): ode Sec: List Cod able occupation: ode Sec: List Cod able occupation able occupation	RENC () </td <td>D/ALTER SF) N/A N/A N/A N/A N/A N/A N/A S-1 NON NON NON NON NON NON NON S): NON NON NON NON NON NON NON NON NON NON</td> <td>23,732 N/A N/A $23,732$ $34,10$</td>	D/ALTER SF) N/A N/A N/A N/A N/A N/A N/A S-1 NON NON NON NON NON NON NON S): NON NON NON NON NON NON NON NON NON NON	23,732 N/A N/A $23,732$ $34,10$
Special In GROSS B FLC FLOOR AREA OI FLOOR STORAG MEZZAN FLOOR EXISTING EQUIPM PLATFO TOTAL TOTAL ALLOWA Primary C Accessory Incidenta Special U Special Pr Mixed Oc Exc Non-Se The required and area limin restrictive typ See below for sum of the ra use shall not ACCESSOR Story M	ct: NO (Printspections Paratella Pa	AREA EXISTING (SF) 23,732 0 4,900 4,900 23,732 Classification cy Classification cy C	N/A N/A A, 184 N/A A, 184 N/A N/A N/A N/A on: ation(s): ode Sec: List Cod able occupation: ode Sec: List Cod able occupation able occupation	RENC () </td <td>D/ALTER SF) N/A N/A N/A N/A N/A N/A N/A S-1 NON NON NON NON NON NON NON S): NON NON NON NON NON NON NON NON NON NON</td> <td>23,732 N/A N/A $23,732$ $23,732$ $23,732$ $23,732$ $23,732$ $23,732$ E E</td>	D/ALTER SF) N/A N/A N/A N/A N/A N/A N/A S-1 NON NON NON NON NON NON NON S): NON NON NON NON NON NON NON NON NON NON	23,732 N/A N/A $23,732$ $23,732$ $23,732$ $23,732$ $23,732$ $23,732$ E
Special In GROSS B FLC FLOOR 2 STORAG MEZZAN FLOOR 2 STORAG MEZZAN FLOOR 2 EXISTING EQUIPM PLATFO TOTAL TOTAL ALLOWA Primary C Accessory Incidenta Special U Special Pr Mixed Oc Exc Incidenta Special Pr Mixed Oc Exc Special Pr Mixed Oc Exc Special Incidenta Special INON-Se The required and area limit restrictive typ See below for sum of the ra use shall not ACCESSOR ACCESSOR STORY N	ct: NO (Printspections Paratella Pa	AREA EXISTING (SF) 23,732 0 4,900 4,900 23,732 Classification cy Classification cy C	N/A N/A A, 184 N/A A, 184 N/A N/A N/A N/A on: ation(s): ode Sec: List Cod able occupation: ode Sec: List Cod able occupation able occupation	RENC () </td <td>D/ALTER SF) N/A N/A N/A N/A N/A N/A N/A S-1 NON NON NON NON NON NON NON S): NON NON NON NON NON NON NON NON NON NON</td> <td>23,732 N/A N/A $23,732$ $23,732$ $23,732$ $23,732$ $23,732$ $23,732$ E E</td>	D/ALTER SF) N/A N/A N/A N/A N/A N/A N/A S-1 NON NON NON NON NON NON NON S): NON NON NON NON NON NON NON NON NON NON	23,732 N/A N/A $23,732$ $23,732$ $23,732$ $23,732$ $23,732$ $23,732$ E

Fact (Table 504.3) Access of the second				WABLE	SHO	WN ON PLAN	IS	CODE REFE	RENCE
Building Height in Stories (Table 504.4) 1. Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4. 2. The maximum height of air taffic control towers must comply with Table 412.3.1 3. The maximum height of air taffic control towers must comply with Table 406.5.4 IRE PROTECTION RECUREMENTS BUIDING BUIDING BUIDING ELEMENT RECTO RECTO RATING RECTO RATING RECTO RECTO RATING RECTO RATING RECTO RECTO RATING RECTO RATING RECTO RATING RECTO RECTO RATING RATING RECTO RATING RATING RECTO RATING RATIN	Building Height in		75	LL 303)	25' -	0"	NCBC TABLE 504.3		
1. Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4. 2. The maximum height of open parking garages must comply with Table 412.3.1 3. The maximum height of open parking garages must comply with Table 406.5.4 INTER maximum height of open parking garages must comply with Table 412.3.1 BUILDING REPOTECTION RECUREMENTS BUILDING ELEMENT RATING RECO PROVIDED PRAVIDED SHEET DESIGN # FOR RATED DESIGN # PROVIDED PRAVE Structural 0 0 # ASSEMBLY DESIGN # PROVIDED PRAVE Structural 0 0 # ASSEMBLY DESIGN # PROVIDED PRAVE Structural 0 0 # ASSEMBLY DESIGN # PROVIDED PROVIDED Structural 0 0 # ASSEMBLY DESIGN # PROVIDED PROVIDED Structural 0 0 0 DESIGN # PROVIDED PROVIDED DESIGN # PROVIDED DESIGN #	Building Height in		3		2			NCBC TABL	E 504.4
BUILDING ELEMENT RATING RATIN R	50 2. TI 3. TI	04.4. he maxim he maxim	um height um height	of air traffic co of open parkir	ntrol towe ng garage	ers must comp	oly wi	ith Table 412.	3.1
ELEMENT REQ'D PROVIDED AND FOR SHEET RATED ASSEMBLY RATED PENETRATION ASSEMBLY RATED PENETRATION ASSEMBLY PFOR PENETRATION RATED ASSEMBLY PFOR PENETRATION RATED PENETRATED PENETRATION RATED PENETRATION RATED PENETRATION RATED PENETR	2003/05/-01	68 999 - 2898 - 9 5969 D	la sue resal des tital frécuents-	Contraction and an and a second second	- 853 989 14504	DECICN #			DECICI
Structural reare, including columns, girders, trusses 0 0 girders, trusses 0 0 Separation 0 0 Distance (t) 0 0 Separation 0 0 Distance (t) 0 0 South > 30' 0 0 North > 30' 0 0 North > 30' 0 0 Nanth > 30' 0 0 Distance (t) Exterior 0 Construction 0 0 Interior walls 0 0 Supporting 0 0 Floor Celling 0 0 Column 0 0 Supporting 0 0 Supporting 0 0 Floor Celling 1 HR 1 HR Supporting 0 0 <t< td=""><td></td><td></td><td>2990</td><td>PROVIDED</td><td>AND SHEET</td><td>FOR RATED</td><td></td><td>RATED</td><td># FOR RATED</td></t<>			2990	PROVIDED	AND SHEET	FOR RATED		RATED	# FOR RATED
Exterior Bearing Obstance (f) 0 0 Distance (f) 0 0 0 Separation 0 0 0 0 East > 30' 0 0 0 0 West > 30' 0 0 0 0 0 West > 30' 0 0 0 0 0 0 Walls > 30' 0	Frame, including columns,	9	0	0		ASSEMBLI			30111
Separation Distance (ft)			0	0					
North > 30' 0 0 0 East > 30' 0 0 0 0 West > 30' 0 0 0 0 0 West > 30' 0 0 0 0 0 0 Walls 0 0 0 0 0 0 0 Walls and Partitions / Fire Separation 0	Walls / Fi Separatio	re on							
South > 30' 0 0 0 0 West > 30' 0 0 0 0 West > 30' 0 0 0 0 Walls Nonbearing 0 0 0 0 Walls and Partitions / Fire Separation 0 0 0 0 0 Exterior 0 0 0 0 0 0 North > 30' 0 0 0 0 0 East > 30' 0 0 0 0 0 0 Count > 30' 0	North	> 30'							
West > 30' 0 0 Interior Bearing 0 0				A 10 2011					
Interior Bearing 0 0 0 Walls Nonbearing 0 0 0 Walls and Partitions / Fire 0 0 0 Separation 0 0 0 0 0 Distance (ft) 0 0 0 0 0 0 Separation 0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>							-		
Nonbearing 0 0 Walls and Partitions / Fire Separation 0 0 0 Distance (tr) 0 0 0 0 Exterior 0 0 0 0 0 South > 30' 0 0 0 0 0 South > 30' 0 0 0 0 0 0 Interior walls 0	Interior B		1.2						
Separation Distance (ft)	Nonbear Walls and	ź	0	0					
Exterior 0 0 0 North > 30' 0 0	Separatic Distance	on (ft)							
East > 30' 0 0	Exterior								
South > 30' 0 0 0 Mest > 30' 0 0 0 0 Interior walls 0 0 0 0 0 Construction Including 0 0 0 0 0 Supporting 0 0 0 0 0 0 0 Assembly EXIST EXIST EXIST 0			-				<u> </u>		
West > 30' 0 0 Interior walls 0 0 0 and paritions 0 0 0 Floor 0 0 0 Construction 0 0 0 Including supporting 0 0 beams and joists 0 0 Floor Ceiling 1 HR 1 HR 1 HR Assembly EXIST EXIST 0 Column 0 0 0 Supporting 0 0 0 Floors 0 0 0 Supporting 0 0 0 Supporting 0 0 0 Supporting 0 0 0 Supporting Beams and joists 0 0 0 Column 0 0 0 0 Supporting Roof - - - - Column 0 0 0									
and partitions 0 0 Floor 0 0 Construction Including supporting beams and joists 0 0 Floor Ceiling Assembly 0 0 Floor Ceiling Assembly 1 HR 1 HR Floor Ceiling Assembly 1 HR 1 HR Column 0 0 Supporting Floors 0 0 Roof 0 0 Costruction, including supporting 0 0 Supporting Floors 0 0 Roof Cof 0 0 Column 0 0 Supporting beams and joists 0 0 Column 0 0 Supporting Roof 0 0 Supporting Roof 1HR 1HR EXIST Shaft Enclosures 1HR 1HR EXIST Other Coridor N/A Octorator N/A N/A Separation - - Staft Enclosures 1HR 1HR EXIST Separation - - Separation	West	> 30'	0	0					
Floor 0 0 Construction 0 0 Including supporting 0 beams and joists 0 Floor Ceiling 1 HR 1 HR Assembly EXIST EXIST Floor Ceiling 1 HR 1 HR Assembly EXIST EXIST Column 0 0 Supporting 0 0 Floors 0 0 Roof 0 0 Column 0 0 Supporting 0 0 beams and joists			0	0					
Construction Including supporting beams and joists Floor Ceiling Assembly Floor Ceiling Assembly EXIST Column Supporting Floors Roof Construction, including supporting beams and joists Roof Ceiling Assembly Column Construction, including Supporting beams and joists Roof Ceiling Assembly Column Supporting Beams and joists Roof Ceiling Assembly Column Supporting Shaft Enclosures - THR Shaft Enclosures - THR Supporting Separation Supporting Separation Supporting Separation Separation Simoke Partier Smoke Partier N/A N/A Separation Smoke Partier N/A N/A Separation N/A N/A Separation Smoke Partier N/A N/A Separation N/A N/A Separation N/A N/A Separation N/A N/A Separation N/A N/A Separation N/A N/A Separation N/A N/A Separation N/A N/A Separation N/A N/A Separation N/A N/A Separation N/A N/A Separation N/A N/A Separation Smoke Partier N/A N/A Separation N/A N/A Separation N/A N/A Separation N/A N/A Separation N/A N/A Separation Smoke Partier N/A N/A Separation N/A N/A Separation N/A N/A Separation N/A N/A Separation N/A N/A Separation Smoke Partier N/A N/A Separation Smoke Partier N/A N/A Separation N/A N/A Separation N/A N/A Separation Smoke Partier N/A N/A Separation Smoke Partier N/A N/A Separation Smoke Partier N/A N/A Separation Smoke Partier N/A N/A Separation Smoke Partier N/A N/A Separation Smoke Partier N/A N/A Separation Smoke Partier N/A N/A Separation Smoke Partier N/A N/A Separation Smoke Partier Smoke Partier Smok		tions	0	0			<u> </u>		
Assembly I HR 1 HR Floor Ceiling 1 HR 1 HR Assembly EXIST EXIST Column 0 0 Supporting 0 0 Floors 0 0 Roof 0 0 Construction, 0 0 including supporting	Includir supportir beams	ng ng							
AssemblyEXISTEXISTColumn00Supporting Floors0Roof00Construction, including supporting beams and joists0Roof Ceiling00Roof Ceiling00Assembly00Column00Supporting Roof00Supporting Roof00Supporting Roof0Shaft Enclosures1HR1HR1HR EXIST- Exit2HR EXISTShaft Enclosures1HR1HR1HR EXIST- Other0Occupancy/Fire Barrier1HRSeparation0Occupancy/Fire Barrier1HRN/AN/ASeparation0Supporting Supporting1HRN/AN/ASeparation0Smoke Barrier Separation0N/AN/ASupporting Supporting1/AN/AN/ASupporting Supporting1/AN/A1/ASupporting Supporting1/AN/A1/ASupporting Supporting1/AN/A1/ASupporting Supporting1/ASupporting Supporting1/ASupporting Supporting1/ASupporting Supporting1/ASupporting Supporting1/ASupporting Supporting1/ASupporting Supporting1/A <td>Assembly</td> <td>y</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Assembly	y							
Column000Supporting Floors00Roof00Construction, including supporting beams and joists0Roof Ceiling beams and joists0Roof Ceiling Column0O0Assembly0Column0Supporting RoofShaft Enclosures - Exit1HR1HR - Exit1HR - HR EXISTShaft Enclosures - Other1HR - OtherOrridor Occupancy/Fire Barrier SeparationN/A - N/AN/A SeparationN/A - N/ASmoke Barrier SeparationN/A - N/ASmoke Partition N/AN/AItenant/Dwelling Unit SeparationN/AN/A SeparationN/AIncidental Use N/AN/A									
Floors 0 0 Roof 0 0 Construction, including 0 0 supporting 0 0 Beams and joists 0 0 Roof Ceiling 0 0 Assembly 0 0 Column 0 0 Supporting Roof 1HR Shaft Enclosures 1HR 1HR 1HR EXIST - Exit 2HR EXIST Shaft Enclosures 1HR 1HR 1HR EXIST - Other - Corridor N/A Sparation N/A Separation - Party/Fire Wall N/A Separation - Smoke Barrier N/A Smoke Partition N/A N/A N/A Separation - Smoke Partition N/A N/A N/A Incidental Use N/A	Column								
Construction, including supporting beams and joistsImage: support of the s	Floors	ng							
Roof Ceiling Assembly000Column Supporting Roof00Shaft Enclosures - Exit1HR 2HR EXIST1HR EXIST 2HR EXISTShaft Enclosures - Other1HR 2HR EXIST1HR EXIST 2HR EXISTCorridor CorridorN/AN/ASeparation1HR 2HR EXIST1HR EXIST 2HR EXISTOccupancy/Fire Barrier Separation1HR 2HR EXISTBarrier SeparationN/AN/ASeparationN/AN/ASeparation1HR 2HR EXIST1HR EXISTSmoke Barrier SeparationN/AN/ASmoke Barrier Smoke BarrierN/AN/ASmoke Partition Unit/ Sleeping Unit SeparationN/AN/AIncidental UseN/AN/A	Construct including supportir) ng	0	0					
Assembly00Column00Supporting Roof1HRShaft Enclosures1HR- Exit2HR EXISTShaft Enclosures1HR1HR1HR EXIST- OtherN/ACorridorN/ASeparation1HROccupancy/Fire1HR1HR1HR EXISTSeparation1HRParty/Fire WallN/ASeparationN/ASeparationN/ASeparationN/ASeparationN/ASeparationN/ASeparationN/AN/AN/ASeparationN/ASmoke BarrierN/ASmoke PartitionN/ASmoke PartitionN/AN/AN/AIncidental UseN/AN/AN/A	beams an	nd joists	0	0					
Supporting RoofIHRIHR EXISTShaft Enclosures1HR1HR EXIST- Exit2HR EXISTShaft Enclosures1HR1HR EXIST- OtherN/AN/ACorridorN/AN/ASeparation0Occupancy/Fire1HR1HR EXISTBarrier1HRSeparation1HRParty/Fire WallN/ASmoke BarrierN/ASmoke BarrierN/ASmoke PartitionN/AN/AN/AIncidental UseN/AN/AN/A	Assembly	y	-						
Exit2HR EXISTShaft Enclosures - Other1HR1HR EXIST- OtherN/AN/ACorridorN/AN/ASeparation1HROccupancy/Fire Barrier Separation1HR1HR1HR EXISTBarrier Separation1HRParty/Fire Wall SeparationN/AN/AN/ASeparation1Smoke Barrier SeparationN/ASmoke Barrier Smoke PartitionN/AN/AN/AInt Separation1Incidental UseN/AN/AN/A	Supporti								
OtherN/AN/ACorridorN/AN/ASeparation1HROccupancy/Fire1HRBarrier1HRSeparation1HR EXISTParty/Fire WallN/AN/AN/ASeparation1Smoke BarrierN/ASmoke BarrierN/ASmoke PartitionN/ASmoke PartitionN/AInt SleepingN/AUnit SleepingN/AIncidental UseN/A	- Exit			2HR EXIST					
SeparationIHRIHR EXISTOccupancy/Fire Barrier1HR1HR EXISTBarrier SeparationN/AN/AParty/Fire Wall SeparationN/AN/ASmoke Barrier Smoke PartitionN/AN/ASmoke Partition Tenant/Dwelling Unit Sleeping Unit SeparationN/AN/AIncidental UseN/AN/A	- Other	ciosures							
SeparationN/AN/AParty/Fire Wall SeparationN/AN/ASeparationN/AN/ASmoke Barrier SeparationN/AN/ASeparationN/AN/ASeparationN/AN/ASmoke Partition Tenant/Dwelling Unit/ Sleeping Unit SeparationN/AIncidental UseN/AN/A	Separatic Occupan								
Separation N/A N/A Smoke Barrier N/A N/A Separation N/A N/A Smoke Partition N/A N/A Tenant/Dwelling N/A N/A Unit/ Sleeping N/A N/A Unit Separation N/A N/A Incidental Use N/A N/A	Separatio		N/A	N/A					
Separation N/A N/A Smoke Partition N/A N/A Tenant/Dwelling N/A N/A Unit/Sleeping N/A N/A Unit Separation N/A N/A Incidental Use N/A N/A	Separatio	on							
Tenant/Dwelling N/A N/A Unit/Sleeping N/A N/A Unit Separation N/A Incidental Use N/A	Separatio	on							
Incidental Use N/A N/A	Tenant/D Unit/ Slee	welling eping							
	Incidenta	l Use	N/A	N/A					

PERCENTAGE OF WALL OPENING CALCULATIONS								
FIRE SEPARATION DISTANCE (FT)	DEGREES OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)					
>30'	NO LIMIT	NO LIMIT	EXISTING - NO CHANGE					

LIFE SAFETY SYSTEM REQUI	REMENTS
Emergency Lighting:	YES
Exit Signs:	YES
Fire Alarm:	YES
Smoke Detection Systems:	YES
Carbon Monoxide Detection:	NO

* Indicate section number permitting reduction

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: G101 \boxtimes Fire and/or smoke rated wall locations (Chapter 7)

 \Box Assumed and real property line locations (if not on the site plan) \Box Exterior wall opening area with respect to distance to assumed property lines (705.8)

3

2

1

= 1168 (P)

b. Total Building Perimeterc. Ratio (F/P) = 1 (F/P)

stories) (506.2).

ALLOWABLE HEIGHT

d. W = Minimum width of public way = 30 (W) e. Percent of frontage increase If = $100 [F/P - 0.25] \times W/30 = 75 (\%)$ 2. Unlimited area applicable under conditions of Section 507.

3. Maximum Building Area = total number of stories in the building x D (maximum 3

4. The maximum area of open parking garages must comply with Table 406.5.4 5. Frontage increase is based on the unsprinklered area value in Table 506.2.

	SHOWN ON PLANS	CODE REFERENCE
	25' - 0"	NCBC TABLE 504.3
	2	NCBC TABLE 504.4
on	Plans" quantity is not bas	sed on Table 504.3 or

- \boxtimes Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)
- \boxtimes Occupant loads for each area
- \boxtimes Exit access travel distances (1017)
- \Box Common path of travel distances (1006.2.1 & 2006.3.2(1)) Dead end lengths (1020.4)
- \boxtimes Clear exit widths for each exit door
- 🛛 Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
- 🛛 Actual occupant load for each exit door
- \square A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation and supporting construction for a fire barrier/fire partition/smoke barrier.
- \boxtimes Location of doors with panic hardware (1010.1.10)
- \Box Location of doors with delayed egress locks and the amount of delay
- (1010.1.9.7) \Box Location of doors with electromagnetic egress locks (1010.1.9.9)
- □ Location of doors equipped with hold-open devices
- \Box Location of emergency escape windows (1030)
- \Box The square footage of each fire area (202) \Box The square footage of each smoke compartment for Occupancy
- Classification I-2 (407.5) \square Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS (SECTION 1107)

CCESS		N/A						
FOTAL JNITS	ACC UNITS REQD	ACC UNITS PRVD	TYPE A UNITS REQD	TYPE A UNITS PRVD	TYPE B UNITS REQD	TYPE B UNITS PRVD	TOTAL ACC UNITS PRVD	
CCESSIBLE PARKING (SECTION 1106)								

						CHAN	NGE
1	LOT OR PARKING	TOTAL PARKING		# OF ACCESS	IBLE SPACE	S PROVIDED	TOTAL # ACC
	AREA	REQD	PRVD	REGULAR WITH 5' ACCESS AISLE	VAN WITH 132" ACCESS AISLE	VAN WITH 8' ACCESS AISLE	SPACES PRVD
	ΤΟΤΔΙ S						

OCCUPANTS (TABLE 1004.1.2)

OCCUPANTS	(TABLE 1004.)		AREA	OF WORK	
Description	Area (sf)	Seats	Occ Fact	upant Load or	Occupants
FLOOR 1 S-1 AREA OF WORK EXISTING	23,732	-	1/50	00	48
FLOOR 2 S-1 STORAGE MEZZANINE	4,184	-	1/50	00	9 (NEW)
TOTALS					57

PLUMBING FIXTURE REQUIREMENTS

EXISTING, NO CHANGE (TABLE 2902.1) USE WATERCLOSETS URINALS LAVATORIES SHOWERS / DRINKING TUBS FOUNTAINS MFU M F REG
 EXIST
 9
 14
 1
 4
 11
 12
 12

 NEW
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 <td QD 7 11 0 0 5 5 0

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, SCO, DPI, DHHS, ICC, etc., describe below)

NONE

ENERGY SUMMARY ENERGY REQUIREMENTS:

The following data shall be considered minimum and any special attribute required to meet the North Carolina Energy Conservation Code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: YES (If Yes, the remainder of this section is not applicable)

Exempt Building: NO

(If Yes, Provide Code or Statutory reference): N/A

Climate Zone: 4A

Method of Compliance: Energy Code Prescriptive

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly) Description of assembly: **EXISTING - NO CHANGE** U-Value of total assembly:

R-Value of insulation:

- Skylights in each assembly:
- U-Value of skylight:
- Total square footage of skylights in each assembly:

- Exterior Walls (each assembly) Description of assembly: **EXISTING - NO CHANGE** U-Value of total assembly: R-Value of insulation: Openings (windows or doors with glazing) U-Value of assembly: Solar heat gain coefficient: Projection factor: Door R-Values:
- Walls below grade (each assembly) Description of assembly: **N/A** U-Value of total assembly: R-Value of insulation:
- Floors over unconditioned space (each assembly) Description of assembly: **N/A** U-Value of total assembly: R-Value of insulation:
- Floors slab on grade Description of assembly: **EXISTING - NO CHANGE** U-Value of total assembly: R-Value of insulation: Horizontal/Vertical requirement: Slab Heated: NO

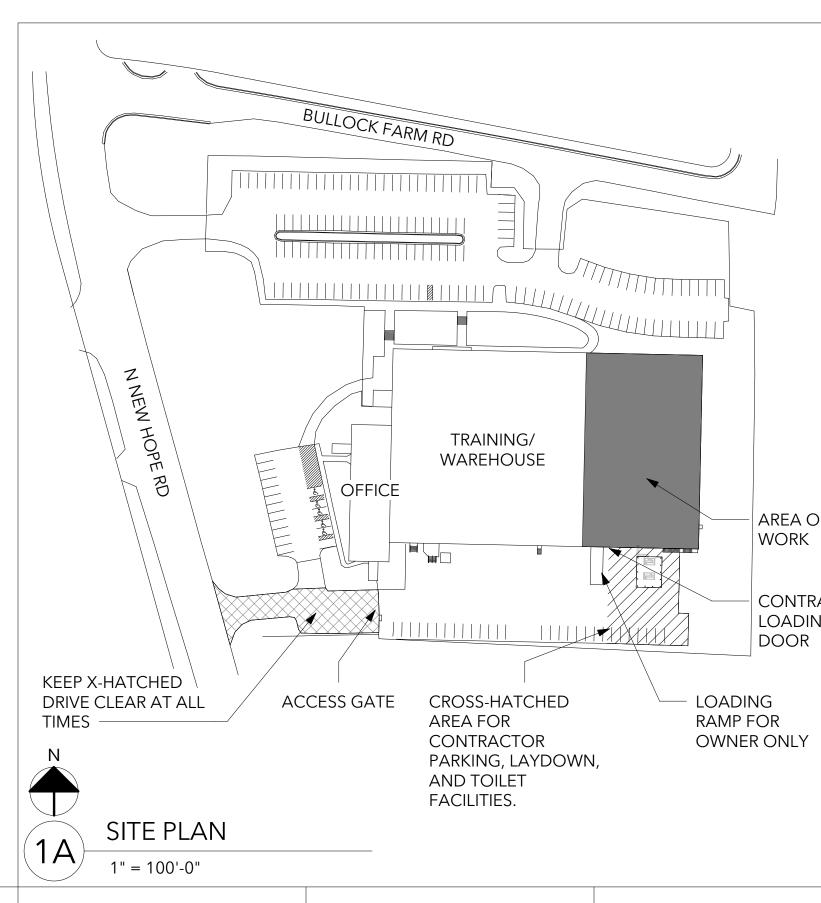
2018 APPENDIX B **BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS**

STRUCTURAL DESIGN SEE STRUCTURAL SHEETS

MECHANICAL SUMMARY SEE MECHANICAL SHEETS

ELECTRICAL SUMMARY SEE ELECTRICAL SHEETS





11





_	 THE STRUCTURAL DRAWINGS MUST BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS, AND THE SPECIFICATIONS. THE CONTRACTOR MUST VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, HOLES, AND ADDITIONAL ITEMS TO BE PLACED OR SET IN THE STRUCTURAL
	 2. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE PROVISIONS OF THE NORTH CAROLINA STATE BUILDING CODE, 2018
	EDITION. 3. THE CONTRACTOR MUST PROVIDE TEMPORARY SHORING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN
	PROPER ALIGNMENT UNTIL PERMANENT SUPPORTS AND LATERAL BRACING ARE IN PLACE.4. PORTIONS OF THE EXISTING STRUCTURE NOT ALTERED AND NOT
т	AFFECTED BY THE ALTERATION HAVE NOT BEEN REVIEWED FOR COMPLIANCE WITH THE CODE REQUIREMENTS FOR A NEW STRUCTURE.
	5. BEFORE PROCEEDING WITH WORK WITHIN THE EXISTING STRUCTURE, THE CONTRACTOR MUST BECOME FAMILIAR WITH THE EXISTING STRUCTURAL CONDITIONS. ANY SHORING OR BRACING SHOWN IS A PARTIAL AND SCHEMATIC REPRESENTATION OF THAT REQUIRED. THE CONTRACTOR MUST BE SOLELY RESPONSIBLE FOR THE DESIGN AND ERECTION OF ANY AND ALL SAFEGUARDS NECESSARY TO PROTECT THE EXISTING STRUCTURE.
ס	 THESE STRUCTURAL DRAWINGS ARE ISSUED ON THE DATE INDICATED FOR THE PURPOSE DESIGNATED. THESE DRAWINGS MUS NOT BE ISSUED OR RELEASED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN AUTHORIZATION OF THE STRUCTURAL ENGINEER OF RECORD.
	7. DETAILS LABELED "TYPICAL DETAIL" WITHIN THE DOCUMENTS APPLY TO SITUATIONS ON THE PROJECT THAT MAY OCCUR THROUGHOUT THE PROJECT. SUCH DETAILS APPLY WHETHER OR NOT THE DETAIL IS SPECIFICALLY REFERENCED AT EACH INSTANCE. NOTIFY ENGINEER IF CLARIFICATIONS ARE REQUIRED REGARDING THE APPLICABILITY OF THE "TYPICAL DETAIL".
	8. DESIGN CRITERIA:
	CLASSIFICATION OF BUILDING RISK CATEGORY
L	LIVE LOADS - UNIFORM: MEZZANINE
	<u>LIVE LOADS - CONCENTRATED:</u> MEZZANINE2,00
_	UNLESS OTHERWISE NOTED, CONCENTRATED LOADS ARE APPLIED UNIFORMLY OVER 2'-6" x 2'-6" AREA.
	SEISMIC LOADS: SITE CLASSIFICATION
1	SEISMIC DESIGN CATEGORY_ IMPORTANCE FACTOR (IE). <u>SPECTRAL RESPONSE ACCELERATIONS:</u> S _S 0.151 S ₁ 0.0
	SPECTRAL RESPONSE ACCELERATIONS. S _S 0.151 S ₁ 0.0 S _{MS} 0.242 S _{M1} 0.1 S _{DS} 0.161 S _{D1} 0.1 ANALYSIS PROCEDURE EQUIVALENT LATERAL FOR LATERAL FORCE RESISTING SYSTEM_ STEEL SYSTEMS N SPECIFICALLY DETAILED FOR SEISMIC RESISTAN
	RESPONSE MODIFICATION COEFFICIENT (R)0. SEISMIC RESPONSE COEFFICIENT (Cs)0. ULTIMATE SEISMIC BASE SHEAR (V) 30 KI
	LATERAL DESIGN CONTROL CONTROLLING LATERAL LOADS
	FOUNDATION NOTES:
	 FOUNDATIONS HAVE BEEN DESIGNED FOR A HISTORICAL ALLOWABI SOIL BEARING PRESSURE OF 3000 PSF IN ACCORDANCE WITH STRUCTURAL DRAWINGS PREPARED BY JACOBS-SIRRINE ENGINEERS, DATED SEPTEMBER 23RD, 1996.
	2. TOP OF FOOTING ELEVATIONS MUST BE A MINIMUM DEPTH OF 1'-0" BELOW LOWEST ADJACENT SOIL GRADE.
	3. PRIOR TO PLACING FOUNDATION CONCRETE, ALL FOUNDATION EXCAVATIONS MUST BE INSPECTED BY THE OWNER'S GEOTECHNICAL TESTING AGENCY TO EXPLORE THE EXTENT OF LOOSE, SOFT, EXPANSIVE, OR OTHERWISE UNSATISFACTORY SOIL MATERIAL AND TO VERIFY DESIGN BEARING PRESSURE. DIRECTION FOR CORRECTIVE ACTION WILL BE PROVIDED BY THE SPECIAL INSPECTOR WHERE UNSATISFACTORY SOILS ARE PRESENT.
_	4. CONTROL GROUNDWATER AND SURFACE RUNOFF THROUGHOUT THE CONSTRUCTION PROCESS. INUNDATION AND LONG TERM EXPOSUR OF BEARING SURFACES WHICH RESULT IN DETERIORATION OF
	BEARING MUST BE PREVENTED.
	1 2

CAST-IN-PLACE CONCRETE NOTES:

- INSTITUTE (ACI) 301 AND 318.
- A. SLAB-ON-GRADE B. SUPPORTED FLOOR SLABS
- 3. REINFORCING MATERIALS MUST BE AS FOLLOWS: REINFORCING BARS - ASTM A615, GRADE 60, DEFORMED. WELDED REINFORCING BARS - ASTM A706, GRADE 60. C. WELDED WIRE REINFORCEMENT - ASTM A1064. WELDED STEEL WIRE REINFORCEMENT; PROVIDE SHEET TYPE, ROLL TYPE IS NOT ACCEPTABLE.
- 4. ALL REINFORCING STEEL AND EMBEDDED ITEMS SUCH AS ANCHOR RODS AND WELD PLATES MUST BE ACCURATELY PLACED AND ADEQUATELY TIED AND SUPPORTED BEFORE CONCRETE IS PLACED TO PREVENT DISPLACEMENT BEYOND PERMITTED TOLERANCES.
- CONCRETE COVER TO REINFORCING STEEL MUST EQUAL THE FOLLOWING, UNLESS OTHERWISE NOTED: A. SURFACES AGAINST EARTH
- SURFACES NOT CAST AGAINST EARTH. BUT
- FINAL CONDITION
- #5 AND SMALLER #6 AND LARGER
- . 3/4" C. ELEVATED SLABS LAP CONTINUOUS REINFORCING STEEL 57 X BAR DIAMETER, TYPICAL
- 6 UNLESS OTHERWISE NOTED.

CONCRETE MUST BE IN ACCORDANCE WITH AMERICAN CONCRETE

- CONCRETE MUST BE NORMAL WEIGHT [UNLESS OTHERWISE DENOTED AS LW (LIGHTWEIGHT)] AND MUST OBTAIN 28 DAY COMPRESSIVE STRENGTHS AS FOLLOWS:
- 3,500 PSI .4,000 PSI [LW] C. CONCRETE NOT OTHERWISE NOTED. ... 3,000 PSI

- EXPOSED TO EARTH OR WEATHER IN THE 1 1/2"
- DO NOT EMBED CONDUIT AND PIPING IN OR PENETRATE THROUGH CAST-IN-PLACE CONCRETE ELEMENTS UNLESS OTHER NOTED.

STRUCTURAL STEEL NOTES:

- 1. STRUCTURAL STEEL MUST BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) 360.
- 2. STRUCTURAL STEEL FABRICATOR MUST PARTICIPATE IN THE AISC QUALITY CERTIFICATION PROGRAM AND BE A DESIGNATED AISC-CERTIFIED PLANT.
- 3. STRUCTURAL STEEL INSTALLER MUST PARTICIPATE IN THE AISC QUALITY CERTIFICATION PROGRAM AND BE A DESIGNATED AISC-CERTIFIED ERECTOR.
- 4. STRUCTURAL STEEL MUST COMPLY WITH THE FOLLOWING SPECIFICATIONS:
- A. STRUCTURAL STEEL SHAPES, PLATES AND BARS UNLESS OTHERWISE NOTED - ASTM A572, Fy = 50 KSI
- STRUCTURAL STEEL W-SHAPES ASTM A992, Fy = 50 KSI C. HOLLOW STRUCTURAL SECTIONS (HSS):
- SQUARE & RECTANGULAR ASTM A500, GRADE C, Fy = 50 KSI
- ANCHOR RODS ASTM F1554, GRADE 36 HIGH STRENGTH BOLTS - ASTM F3125, TYPE A325 (TYPICAL UON) FULLY PRETENSIONED BOLTS - ASTM F1852 (TWIST-OFF TYPE)
- G. WASHERS ASTM F436 H. NUTS - ASTM A563
- HEADED STUDS ASTM A29, GRADE 1010 THROUGH 1020
- 5. UNLESS OTHERWISE NOTED, ALL REQUIRED DESIGN STRENGTHS AND REACTIONS INDICATED ARE BASED ON THE "LOADING COMBINATIONS USING STRENGTH DESIGN OR LOAD AND RESISTANCE FACTOR DESIGN" PER SECTION 1605.2 OF THE BUILDING CODE.
- 6. STRUCTURAL STEEL FRAME IS CONSIDERED AS UNRESTRAINED FOR FIRE PROTECTION PURPOSES.
- 7. ALL STEEL CONNECTIONS AND MEMBER REINFORCEMENT MUST BE DESIGNED BY FABRICATOR'S QUALIFIED PROFESSIONAL ENGINEER FOR LOADS INDICATED ON THE DRAWINGS, PER OPTION 3B OF ANSI/AISC 303 AND COMPLETE THE FOLLOWING:
- A. SUBMIT STRUCTURAL CALCULATIONS SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE NORTH CAROLINA RESPONSIBLE FOR THEIR PREPARATION.
- B. THE PROFESSIONAL ENGINEER RESPONSIBLE FOR CONNECTION DESIGN MUST REVIEW THE SHOP DRAWINGS PRIOR TO SUBMITTAL TO VERIFY THAT THE CONNECTIONS AS DETAILED ON THE SHOP DRAWINGS COMPLY WITH THE CONNECTION DESIGN REQUIREMENTS OF THE FINAL CALCULATIONS.
- C. A REVIEW LETTER, SIGNED AND SEALED BY THE PROFESSIONAL ENGINEER RESPONSIBLE FOR CONNECTION DESIGN MUST BE PROVIDED WITH THE SHOP DRAWINGS AND CALCULATION SUBMITTAL STATING THAT THIS REVIEW AND VERIFICATION HAS BEEN COMPLETED.
- 8. HIGH STRENGTH BOLTS MAY BE TIGHTENED TO THE "SNUG TIGHT" CONDITION, UNLESS OTHERWISE NOTED.
- 9. BOLTED CONNECTIONS MAY USE NON-STANDARD HOLES, EXCEPT IN THE FOLLOWING LOCATIONS:
- A. AXIAL CONNECTIONS IDENTIFIED ON PLAN. B. ALL FRAMING CONNECTIONS AT KNEE-BRACES AND MOMENT FRAMES.
- C. CONNECTIONS IDENTIFIED ON PLAN WITH FULL DEPTH STIFFENER PLATES.
- 10. PROVIDE ANGLE FRAMING AROUND OPENINGS LARGER THAN 6 INCHES IN ANY DIMENSION (INCLUDING ROOF DRAINS) TO SUPPORT STEEL DECK. REFERENCE PLANS AND TYPICAL DETAILS FOR SIZING REQUIREMENTS.
- 11. WELDING MUST BE IN ACCORDANCE WITH AWS D1.1, "STRUCTURAL WELDING CODE - STEEL." WELD ELECTRODES MUST BE E70XX LOW HYDROGEN. UNLESS OTHERWISE NOTED, PROVIDE CONTINUOUS FILLET WELDS WITH MINIMUM SIZE REQUIRED BY TABLE J2.4 AISC 360.
- 12. INSTALLATION OF HEADED COMPOSITE STUDS MUST CONFORM TO THE REQUIREMENTS OF AWS D1.1, SECTIONS 9.4 AND 9.5. HEADED COMPOSITE STUDS MUST BE TESTED IN ACCORDANCE WITH AWS D1.1, SECTIONS 9.6, 9.7, AND 9.8 BY A QUALIFIED TESTING AGENCY.
- 13. COORDINATE ALL MEMBER LOCATIONS, UNIT WEIGHTS, OPENING SIZES, AND CURB DIMENSIONS FOR MECHANICAL EQUIPMENT WITH THE ACTUAL EQUIPMENT FURNISHED.
- 14. SHOP PRIME STEEL SURFACES, EXCEPT THE FOLLOWING: A. SURFACES EMBEDDED IN CONCRETE OR MORTAR. EXTEND PRIMING OF PARTIALLY EMBEDDED MEMBERS TO A DEPTH OF 2
- INCHES. B. SURFACES TO BE WELDED.
- C. SURFACES TO RECEIVE SPRAYED FIRE-RESISTIVE MATERIALS. D. GALVANIZED SURFACES.
- E. SURFACES ENCLOSED IN INTERIOR CONSTRUCTION.
- 15. CLEAN ALL STEEL SURFACES TO BE PAINTED. REMOVE LOOSE RUST, MILL SCALE, SPATTER, SLAG, OR FLUX DEPOSITS. PREPARE SURFACES IN ACCORDANCE WITH SSPC-SP3 SPECIFICATION AND STANDARD.
- 16. STEEL MEMBERS MUST BE SPLICED ONLY WHERE INDICATED. CONTINUOUS MEMBERS MUST BE SPLICED OVER SUPPORTS, UNLESS OTHERWISE NOTED.
- 17. LOCATE CONSTRUCTION JOINTS FOR SLABS ON METAL DECK MIDWAY BETWEEN BEAMS WHERE THE JOINT IS PARALLEL TO THE BEAM SPAN. LOCATE JOINTS WITHIN THE MIDDLE THIRD SPAN WHERE THE JOINT IS PERPENDICULAR TO THE BEAM SPAN. ANY STOP IN CONCRETE WORK MUST BE MADE WITH VERTICAL BULKHEADS, UNLESS OTHERWISE SHOWN. REINFORCING TO BE CONTINUOUS THROUGH JOINTS.
- 18. ALL STAIR LANDINGS, STAIRS, AND STAIR SUPPORTS TO BE DESIGNED BY STAIR MANUFACTURER. LAYOUT OF STAIRS, LANDINGS, HANDRAILS, ETC. SHALL COMPLY WITH ARCHITECTURAL DRAWINGS. STRUCTURAL DESIGN CALCULATIONS AND DRAWINGS STAMPED BY A REGISTERED ENGINEER SHALL BE SUBMITTED TO THE STRUCTURAL EOR FOR REVIEW OF LOADING. ARCHITECT AND STAIR MANUFACTURER ARE RESPONSIBLE TO REVIEW FOR CODE AND ADA COMPLIANCE. STAIR MANUFACTURER SHALL PROVIDE ALL POSTS AND CONNECTIONS TO SUPPORT STAIRS. POSTS AND HANGERS MUST BE LOCATED IN PARTITION WALLS AND LOAD THE STRUCTURE CONCENTRICALLY.



STEEL DECK NOTES:

STEEL DECK MUST BE IN ACCORDANCE WITH THE AMERICAN IRON AND STEEL INSTITUTE (AISI), "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" AND THE STEEL DECK INSTITUTE (SDI), "DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS, AND ROOF DECKS."

2. STEEL DECK INSTALLATION MUST COMPLY WITH THE FOLLOWING: A. COMPOSITE DECK: 2" x 18 GAGE GALVANIZED. UNLESS OTHERWISE NOTED, ATTACH DECK TO SUPPORTS WITH 5/8 INCH DIAMETER PUDDLE WELDS AT 12 INCHES ON CENTER. FASTEN SIDELAPS WITH #10 SELF-TAPPING HEX HEAD SCREWS AT 1/3 POINTS BETWEEN SUPPORTS. FASTEN EDGEMOST DECK PANEL TO STEEL FRAMING WITH 5/8 INCH DIAMETER PUDDLE WELDS AT SAME SPACING AS SIDELAP FASTENERS.

STEEL DECK MUST BE INSTALLED PERPENDICULAR TO SUPPORTS AND MUST HAVE A MINIMUM OF THREE CONTINUOUS SPANS. ENDLAPS MUST ONLY OCCUR AT SUPPORTS.

- WELDING MUST BE IN ACCORDANCE WITH AWS D1.3 "STRUCTURAL WELDING CODE - SHEET STEEL".
- 5. STEEL DECK SCHEDULED TO RECEIVE SPRAYED-ON FIREPROOFING MUST BE GALVANIZED.

SHEAR CONNECTORS FOR COMPOSITE FLOOR SYSTEMS SIZE AND LENGTHS MUST BE PER TYPICAL DETAILS AND CONFORM AS SPECIFIED IN "STRUCTURAL STEEL NOTES".

CONDUIT AND PIPING MUST NOT BE PLACED IN ELEVATED SLABS.

STRUCTURAL DELEGATED DESIGN **ELEMENT NOTES:**

1. THE FOLLOWING BUILDING ELEMENTS REQUIRE DELEGATED DESIGN AND ENGINEERING BY A SPECIALTY STRUCTURAL ENGINEER: A. METAL STAIRS

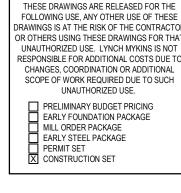
- STRUCTURAL STEEL CONNECTIONS
- MECHANICAL, ELECTRICAL, AND PLUMBING SUPPORTS AND DISTRIBUTIONS SYSTEMS, INCLUDING BRACING AND ATTACHMENTS

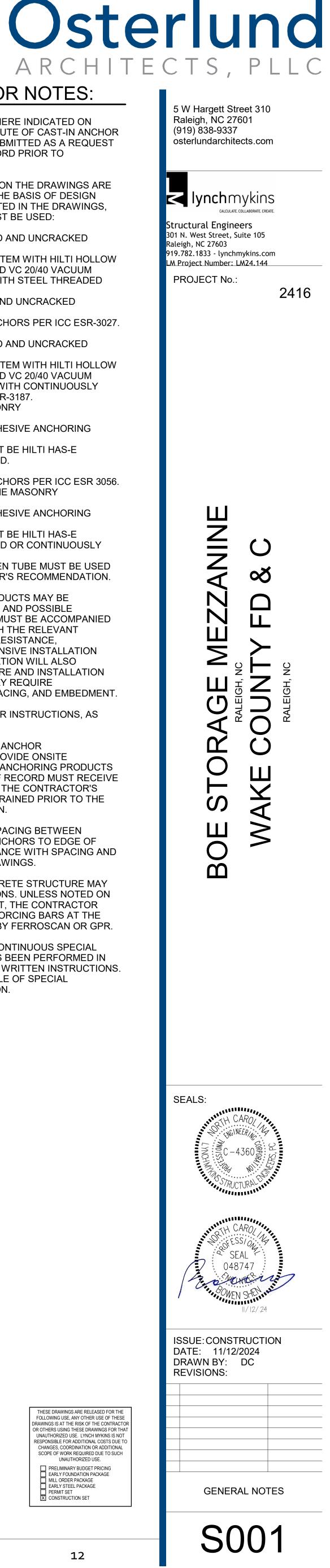
SUBMIT COMPLETE CALCULATIONS AND SHOP DRAWINGS, SIGNED AND SEALED BY THE PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA RESPONSIBLE FOR THE DESIGN, INCLUDING DESIGN LOADINGS AND REACTIONS APPLIED TO THE SUPPORTING STRUCTURE. INCLUDE A SUMMARY OF THE CONTROLLING LOAD CASES FOR EACH LOCATION.

- 3. IN ADDITION TO THEIR OWN DEAD WEIGHT AND THE DEAD LOADS SHOWN OR INDICATED IN THE DRAWINGS, MEMBERS MUST BE DESIGNED TO SUPPORT THE LOADS INDICATED IN THE GENERAL NOTES.
- 4. CONNECTION DETAILS SHOWN ARE SCHEMATIC ONLY. ALL CONNECTIONS MUST BE DESIGNED AND DETAILED BY THE MANUFACTURER TO SUIT THE SPECIFIED LOADS. CONNECTIONS MUST ACCOUNT FOR THERMAL MOVEMENT, DEFLECTION, CREEP, MANUFACTURING TOLERANCES, AND ERECTION TOLERANCES. DETAIL ALL CONNECTIONS ON SHOP DRAWINGS.
- 5. THE CONTRACTOR MUST BE RESPONSIBLE FOR THE COORDINATION OF ALL SPECIALTY STRUCTURAL ELEMENTS AND COST ASSOCIATED WITH A CONTRACTOR INITIATED CHANGE IN BUILDING STRUCTURE, INCLUDING CONSTRUCTION COSTS AND RE-ENGINEERING COSTS.

POST-INSTALLED ANCHOR NOTES:

- ANCHORS TO BE POST-INSTALLED ONLY WHERE INDICATED ON CONSTRUCTION DOCUMENTS. ANY SUBSTITUTE OF CAST-IN ANCHOR TO POST-INSTALLED ANCHORS MUST BE SUBMITTED AS A REQUEST FOR DEVIATION TO THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.
- ALL POST INSTALLED ANCHORS INDICATED ON THE DRAWINGS ARE BY HILTI, INC, AND MUST BE CONSIDERED THE BASIS OF DESIGN PRODUCT. WHERE NOT EXPLICITLY INDICATED IN THE DRAWINGS, THE FOLLOWING ANCHORS/ADHESIVES MUST BE USED: A. ANCHORAGE TO CONCRETE
 - 1. ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
 - a. HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT (TE-CD OR TE-YD) AND VC 20/40 VACUUM SYSTEM (VC 20-U OR VC40U) WITH STEEL THREADED
 - ROD PER ICC ESR-3187. 2. SCREW ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
 - a. HILTI KWIK HUS EZ SCREW ANCHORS PER ICC ESR-3027. **REBAR DOWELING INTO CONCRETE** ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED
 - CONCRETE USE: a. HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW
- DRILL BIT (TE-CD OR TE-YD) AND VC 20/40 VACUUM SYSTEM (VC 20-U OR VC 40-U) WITH CONTINUOUSLY DEFORMED REBAR PER ICC ESR-3187. C. ANCHORAGE TO SOLID GROUTED MASONRY
- ADHESIVE ANCHORS USE:
- a. HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM (ICC PENDING). b. STEEL ANCHOR ELEMENT MUST BE HILTI HAS-E
 - CONTINUOUSLY THREADED ROD.
- 2. MECHANICAL ANCHORS USE: a. HILTI KWIK HUS EZ SCREW ANCHORS PER ICC ESR 3056.
- D. ANCHORAGE TO HOLLOW / MULTI-WYTHE MASONRY ADHESIVE ANCHORS USE:
 - a. HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM PERICCESR-3342.
 - b. STEEL ANCHOR ELEMENT MUST BE HILTI HAS-E
 - CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR.
 - c. THE APPROPRIATE SIZE SCREEN TUBE MUST BE USED PER ADHESIVE MANUFACTURER'S RECOMMENDATION.
- 3. ALTERNATE POST INSTALLED ANCHOR PRODUCTS MAY BE SUBMITTED TO THE ENGINEER FOR REVIEW AND POSSIBLE APPROVAL. ALL SUBSTITUTION REQUESTS MUST BE ACCOMPANIED BY AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE. INSTALLATION CATEGORY, AND COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE. ALTERNATE PRODUCTS MAY REQUIRE MODIFICATIONS TO ANCHOR DIAMETER. SPACING, AND EMBEDMENT.
- 4. INSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.
- 5. THE CONTRACTOR MUST ARRANGE FOR AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF ANCHOR INSTALLATION.
- ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
- EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT. THE CONTRACTOR MUST LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS OF THE CONCRETE ANCHORS, BY FERROSCAN OR GPR.
- 8. ALL POST INSTALLED ANCHORS REQUIRE CONTINUOUS SPECIAL INSPECTIONS TO VERIFY INSTALLATION HAS BEEN PERFORMED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS. REFERENCE THE STATEMENT AND SCHEDULE OF SPECIAL INSPECTIONS FOR ADDITIONAL INFORMATION.





			ABBRI	REVIATIONS			
		AFF ARCH	ABOVE FINISHED FLOOR ARCHITECT	KCJ Ld	KEYED CONSTRUCTION JOINT REBAR TENSION		
_		BD BM	BAR DIAMETER BEAM	Ldc	DEVELOPMENT LENGTH REBAR COMPRESSION		
		BOD BOS	BOTTOM OF DECK BOTTOM OF STEEL	Ldh	DEVELOPMENT LENGTH HOOKED REBAR TENSION		
		BOT, B BRG BTWN	BOTTOM BEARING BETWEEN	L LLH	DEVELOPMENT LENGTH LOW LONG LEG HORIZONTAL		
	_	C TO C CJ	CENTER TO CENTER CONTROL JOINT	LLN LLV LSH	LONG LEG VERTICAL LONG SIDE HORIZONTAL		
		CL CLR	CENTERLINE CLEAR	LSV LTWT	LONG SIDE VERTICAL LIGHTWEIGHT		
		COL CONC	COLUMN CONCRETE	LWC MATL	LIGHTWEIGHT CONCRETE MATERIAL		
		CONN CONSTR	CONNECTION CONSTRUCTION	MAX MECH	MAXIMUM MECHANICAL		
Т		CONT COORD CTR	CONTINUOUS COORDINATE CENTER	MF MFR MID	MOMENT FRAME MANUFACTURER		
		CTRD DBA	CENTERED DEFORMED BAR ANCHOR	MIN MOD	MIDDLE MINIMUM MODIFY		
		DBL DIA, Ø	DOUBLE DIAMETER	MOS NOM	MIDDEPTH OF SLAB NOMINAL		
	_	DIST DJ	DISTANCE DOUBLE JOIST	NS NTS	NEAR SIDE NOT TO SCALE		
		DWGS EA	DRAWINGS EACH	OC OPH	ON CENTER OPPOSITE HAND		
		EF EJ EL	EACH FACE EXPANSION JOINT ELEVATION	OPNG PAF	OPENING POWDER ACTUATED FASTENER		
(5				PAR PC			
U		EOS EQ	EDGE OF SLAB EQUAL	PEN PERP			
		EW EXIST	EXISTING	PL PT	PLATE POST-TENSIONED (CONC)		
		EXP EXT FD	EXPANSION EXTERIOR FLOOR DRAIN	R REF	PRESSURE TREATED (WOOD) RADIUS REFERENCE, REFER TO		
		FDN FO	FOUNDATION FACE OF	REINF	REINFORCE, REINFORCED, REINFORCING		
		FF EL	FINISHED FLOOR ELEVATION		REQUIREMENTS		
		FIN FIN FLR FOB	FINISH FINISHED FLOOR FACE OF BUILDING	SIM SJ	SAWED JOINT		
ш		FOC FOS	FACE OF CONCRETE FACE OF SLAB/ STUD	SL SOG	SLOPE SLAB-ON-GRADE		
		FRMG FTG	FRAMING FOOTING	STIFF			
		FS FV, ± GALV	FAR SIDE FIELD VERIFY GALVANIZED		TOP & BOTTOM THICKNESS TOP OF CONCRETE		
		GC GEN	GENERAL CONTRACTOR GENERAL		TOP OF FOOTING		
		H HK	HIGH HOOK	TS/STR	THICKENED SLAB THICKENED SLAB AT STAIR		
		HORIZ HSS	HORIZONTAL HOLLOW STRUCTURAL SECTION	TYP UON VERT	TYPICAL UNLESS OTHERWISE NOTED VERTICAL		
		HSA HT	HEADED STUD ANCHOR HEIGHT	W/ WP	WITH WORKING POINT		
ш		HVY INT	HEAVY INTERIOR	WWR	WELDED WIRE REINFORCING		
		JT KCJ	JOINT KEYED CONSTRUCTION				
			JOINT				
	-						
\cap							
	-						
U							
	_						
В							
	-						
∢							

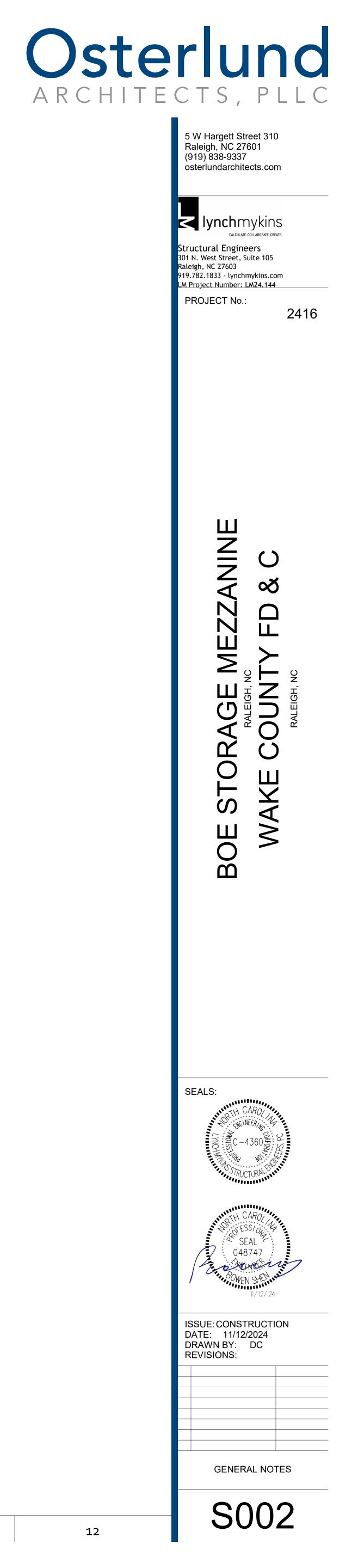
ABBREVIATIONS



DRAWING	S LEO
GENERAL ANNOTATIONS	
SECTIONS	
SECTION/DETAIL NUMBER/LETTER	
$ \begin{array}{ c } \hline X \\ \hline SX \\ \hline SX \\ \hline SX \\ \hline \end{array} = SECTION/DETAIL MARK $	
SHEET NUMBER WHERE SECTION/DETAIL MARK IS DRAWN	
SHEET NUMBER WHERE SECTION/DETAIL MARK IS CUT	
COLUMNS	
GRID = COLUMN GRID MARK	
= EXISTING COLUMN GRID MARK	
GENERAL PLANS	
	ВОГ
X = PLAN KEY NOTE MARK	
± = FIELD VERIFY	TOS
= CHANGE IN ELEVATION	BOS
SHALLOW FOUNDATIONS	
= SLAB-ON-GRADE JOINT	
CFX = COLUMN FOOTING MARK	
FLOOR AND ROOF FRAMING	
= WARP LINE OF ROOF DECK	I I I I
= HORIZONTAL BRIDGING	ΙI
= CROSS BRIDGING	
	BEAN
	MOM REAC (KIP-F

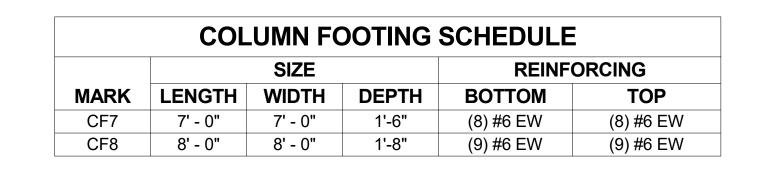
S LEGEND	
	ELEVATIONS
	FOUNDATIONS
<u>(-X'-X")</u> =	TOP OF FOOTING ELEVATION MEASURED FROM REFERENCED FINISHED FLOOR ELEVATION = 0'-0"
<u>(-X'-X")</u> =	TOP OF PILE CAP / GRADE BEAM ELEVATION MEASURED FROM REFERENCED FINISHED FLOOR ELEVATION = 0'-0"
<-X'-X"> =	TOP OF EXISITNG FOOTING ELEVATION MEASURED FROM REFERENCED FINISHED FLOOR ELEVATION = 0'-0"
X'-X" =	TOP OF SLAB ELEVATION MEASURED FROM REFERENCED FINISHED FLOOR ELEVATION = 0'-0"
	FLOORS AND ROOF
BOD = +X'-X" =	BOTTOM OF DECK ELEVATION MEASURED FROM REFERENCED FINISHED FLOOR ELEVATION = 0'-0"
TOS = +X'-X" =	TOP OF STEEL ELEVATION MEASURED FROM REFERENCED FINISHED FLOOR ELEVATION = 0'-0"
BOS = +X'-X" =	BOTTOM OF STEEL ELEVATION MEASURED FROM REFERENCED FINISHED FLOOR ELEVATION = 0'-0"
	STEEL
[CONNECTIONS
⊥►→→ =	MOMENT CONNECTION
⊥ ● =	AXIAL CONNECTION
⊥	FULL DEPTH STIFFENER CONNECTION
⊥ =	JOIST BOTTOM CHORD EXTENSION
=	BEAM BOTTOM FLANGE BRACE
	COMPOSITE BEAMS
BEAM SIZE	NUMBER OF HEADED STUDS
MOMENT REACTION	CAMBER
V 60	$\frac{(26 (36) [2"]}{(26 (36) [2"]} = \frac{\text{COMPOSITE BEAM}}{\text{NOTATION}}$
M 20 • A 15 •	M 20 A 15
AXIAL REACTION (KIPS)	SHEAR REACTION (KIPS) IF GREATER THAN LOADS GIVEN IN "MINIMUM BEAM REACTION SCHEDULE"
	MISC ANNOTATIONS
(SJ) =	JOIST SLIP CONNECTION
(SG) =	JOIST GIRDER SLIP CONNECTION
(SB) =	BEAM SLIP CONNECTION
=	JOIST GIRDER MOMENT MARK







T

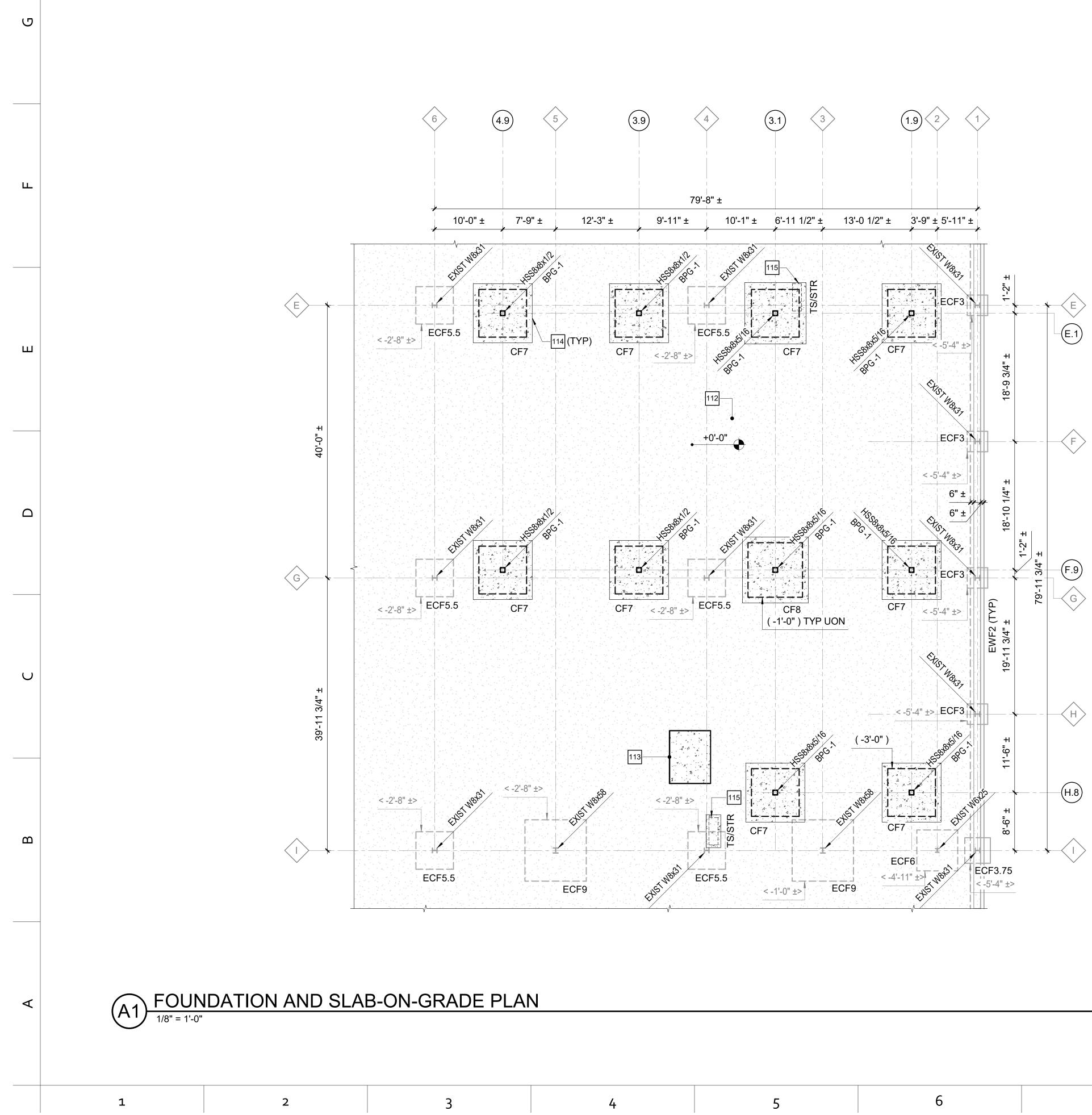


EXISTING WALL FOOTING SCHEDULE

	SIZE				
MARK	WIDTH	DEPTH			
EWF2	2' - 0"	1'-3"			

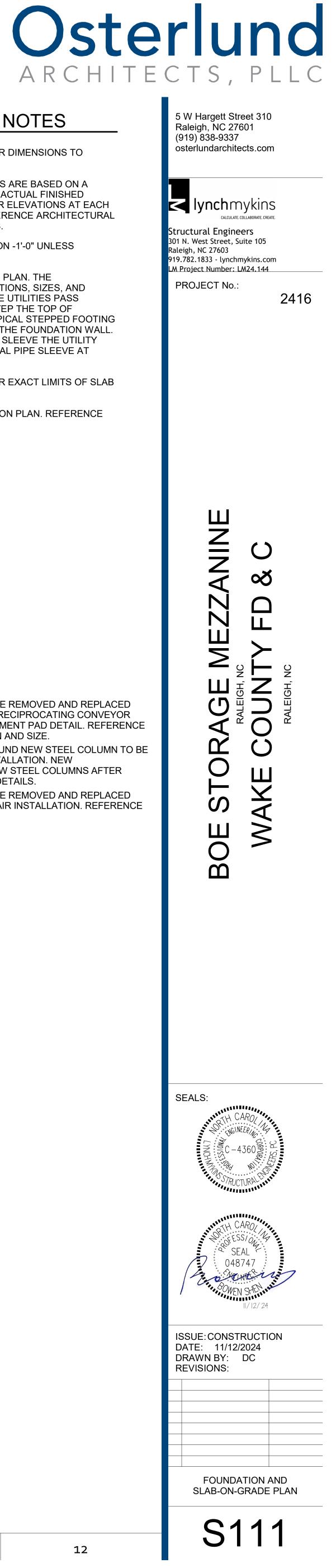
EXISTING COLUMN FOOTING SCHEDULE						
		SIZE				
MARK	LENGTH	WIDTH	DEPTH			
ECF3	3' - 0"	3' - 0"	1'-3"			
ECF3.75	3' - 9"	3' - 9"	1'-3"			
ECF5.5	5' - 6"	5' - 6"	1'-3"			
ECF6	6' - 0"	6' - 0"	1'-8"			
ECF9	9' - 0"	9' - 0"	1'-8"			

EXISTING COLUMN FOOTING SCHEDULE					
		SIZE			
MARK	LENGTH	WIDTH	DEPTH		
ECF3	3' - 0"	3' - 0"	1'-3"		
ECF3.75	3' - 9"	3' - 9"	1'-3"		
ECF5.5	5' - 6"	5' - 6"	1'-3"		
ECF6	6' - 0"	6' - 0"	1'-8"		
ECF9	9' - 0"	9' - 0"	1'-8"		



7

8

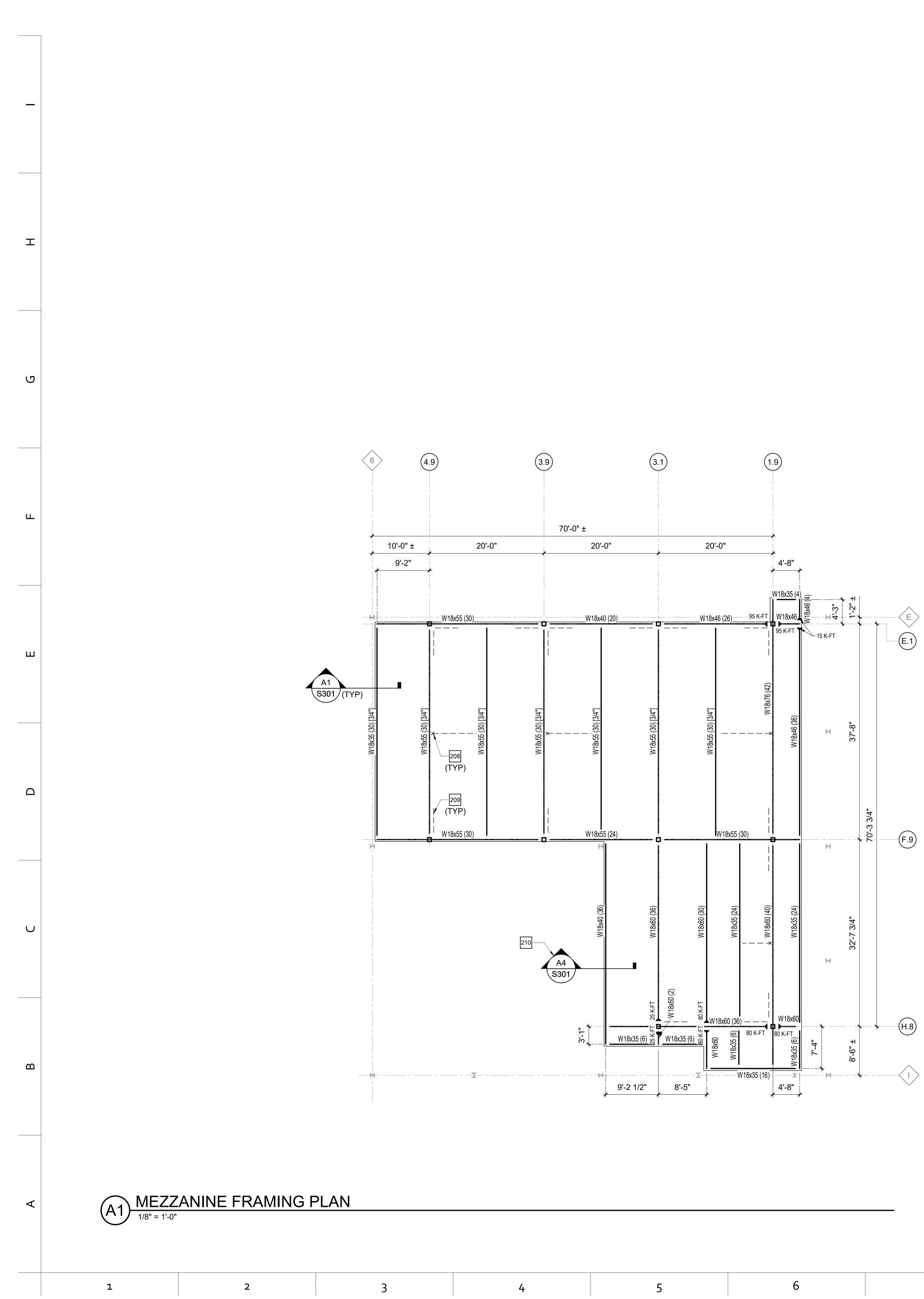


FOUNDATION/SLAB PLAN NOTES

- A. REFERENCE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO NONBEARING WALLS.
- B. UNLESS OTHERWISE NOTED, ALL ELEVATIONS ARE BASED ON A FINISHED FIRST FLOOR REFERENCE OF 0'-0". ACTUAL FINISHED FLOOR ELEVATION IS 295'-8". FINISHED FLOOR ELEVATIONS AT EACH LEVEL ARE INDICATED ON SLAB PLANS. REFERENCE ARCHITECTURAL DRAWINGS FOR FINISHED FLOOR MATERIALS.
- C. TOP OF ALL FOOTINGS MUST BE AT ELEVATION -1'-0" UNLESS OTHERWISE NOTED.
- D. NOT ALL UTILITY LOCATIONS ARE SHOWN ON PLAN. THE CONTRACTOR MUST COORDINATE THE LOCATIONS, SIZES, AND INVERTS OF UTILITIES. AT LOCATIONS WHERE UTILITIES PASS BELOW THE TOP OF FOOTING ELEVATION, STEP THE TOP OF FOOTING DOWN ON EACH SIDE PER THE "TYPICAL STEPPED FOOTING DETAIL" AND SLEEVE THE UTILITY THROUGH THE FOUNDATION WALL. THE CONTRACTOR MAY, AT HIS/HER OPTION, SLEEVE THE UTILITY THROUGH THE FOUNDATION PER THE "TYPICAL PIPE SLEEVE AT WALL FOOTING DETAILS."
- E. REFERENCE ARCHITECTURAL DRAWINGS FOR EXACT LIMITS OF SLAB DEPRESSIONS AND OMITTED SLABS.
- F. FLOOR SINKS AND DRAINS ARE NOT SHOWN ON PLAN. REFERENCE PME DRAWINGS FOR LOCATIONS.

KEY NOTES

- 112 EXISTING CONCRETE SLAB-ON-GRADE.
- EXISTING CONCRETE SLAB-ON-GRADE TO BE REMOVED AND REPLACED 113 WITH THICKENED CONCRETE SLAB UNDER RECIPROCATING CONVEYOR LIFT. REFERENCE TYPICAL INTERIOR EQUIPMENT PAD DETAIL. REFERENCE ARCHITECTURAL DRAWINGS FOR LOCATION AND SIZE.
- EXISTING CONCRETE SLAB-ON-GRADE AROUND NEW STEEL COLUMN TO BE 114 REMOVED FOR COLUMN AND FOOTING INSTALLATION. NEW SLAB-ON-GRADE TO BE ADDED AROUND NEW STEEL COLUMNS AFTER COLUMN ERECTION. REFERENCE TYPICAL DETAILS.
- EXISTING CONCRETE SLAB-ON-GRADE TO BE REMOVED AND REPLACED 115 WITH THICKENED CONCRETE SLAB FOR STAIR INSTALLATION. REFERENCE TYPICAL DETAILS.



8



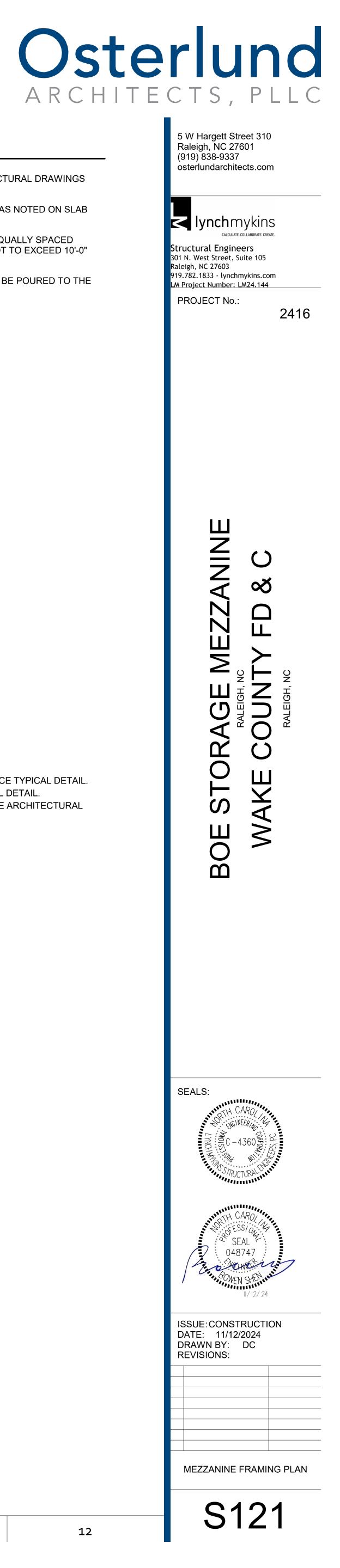
FRAMING PLAN NOTES

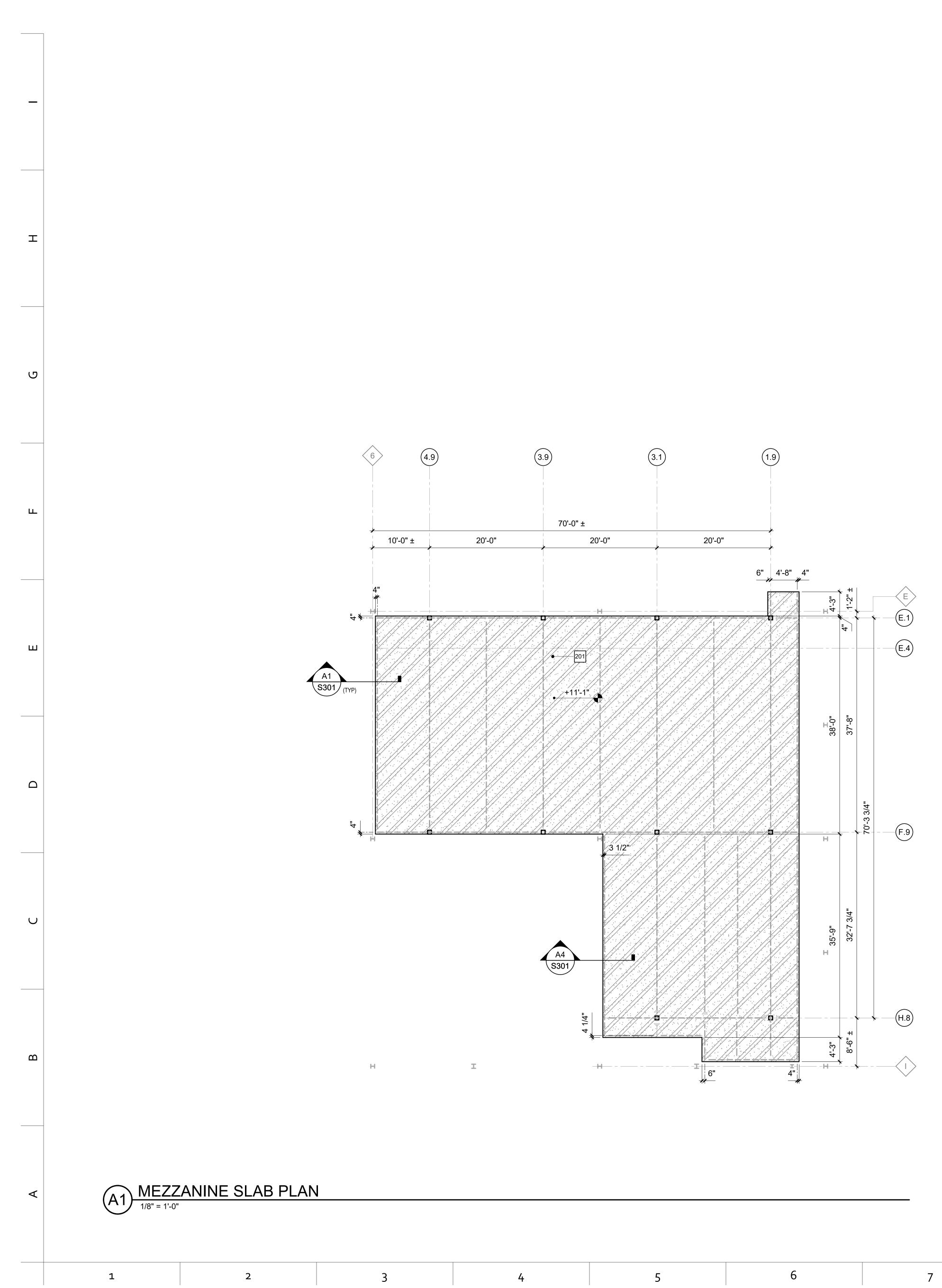
- A. REFERENCE FOUNDATION PLAN AND ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
- B. TOP OF FINISHED FLOOR ELEVATION MUST BE AS NOTED ON SLAB PLANS.
- C. COMPOSITE STEEL BEAM FRAMING MUST BE EQUALLY SPACED BETWEEN POINTS OF KNOWN DIMENSIONS (NOT TO EXCEED 10'-0" ON-CENTER).
- D. CONCRETE ON ELEVATED METAL DECKS MUST BE POURED TO THE THICKNESS INDICATED.

KEY NOTES

	-
208	
209	
210	

BEAM BOTTOM FLANGE BRACE. REFERENCE TYPICAL DETAIL. KNEE BRACE ANGLE. REFERENCE TYPICAL DETAIL. RECIPROCATING CONVEYOR - REFERENCE ARCHITECTURAL DRAWINGS.







FRAMING PLAN NOTES

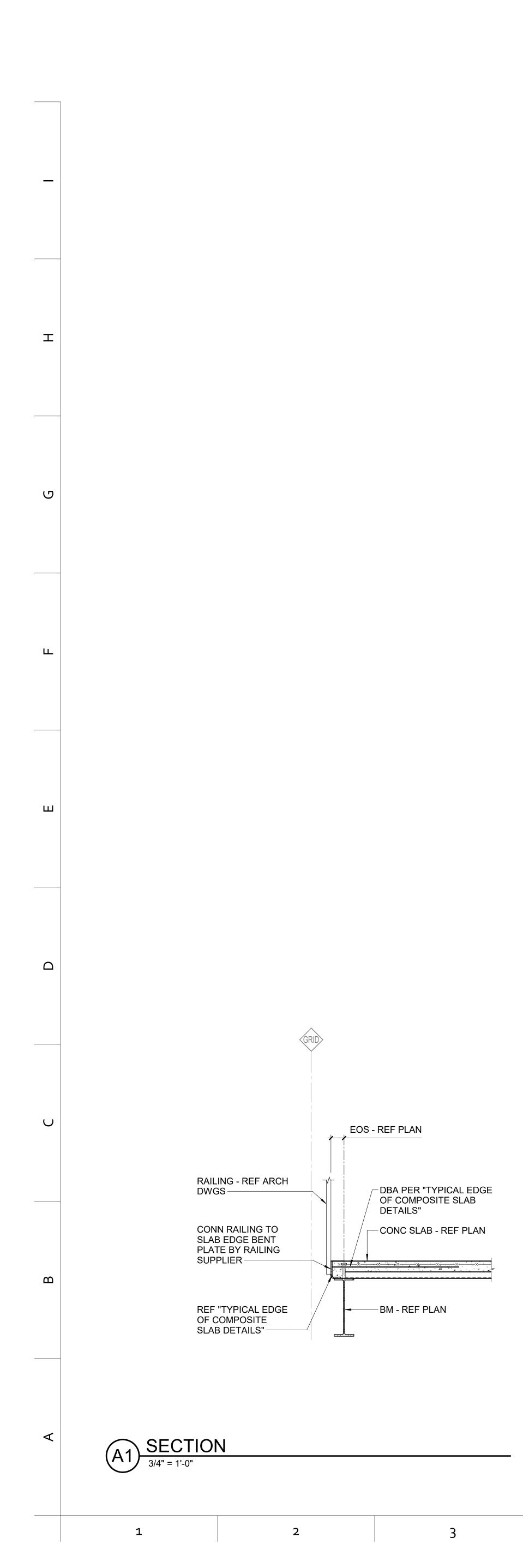
- A. REFERENCE FOUNDATION PLAN AND ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
- B. TOP OF FINISHED FLOOR ELEVATION MUST BE AS NOTED ON SLAB PLANS.
- C. COMPOSITE STEEL BEAM FRAMING MUST BE EQUALLY SPACED BETWEEN POINTS OF KNOWN DIMENSIONS (NOT TO EXCEED 10'-0" ON-CENTER).
- D. CONCRETE ON ELEVATED METAL DECKS MUST BE POURED TO THE THICKNESS INDICATED.

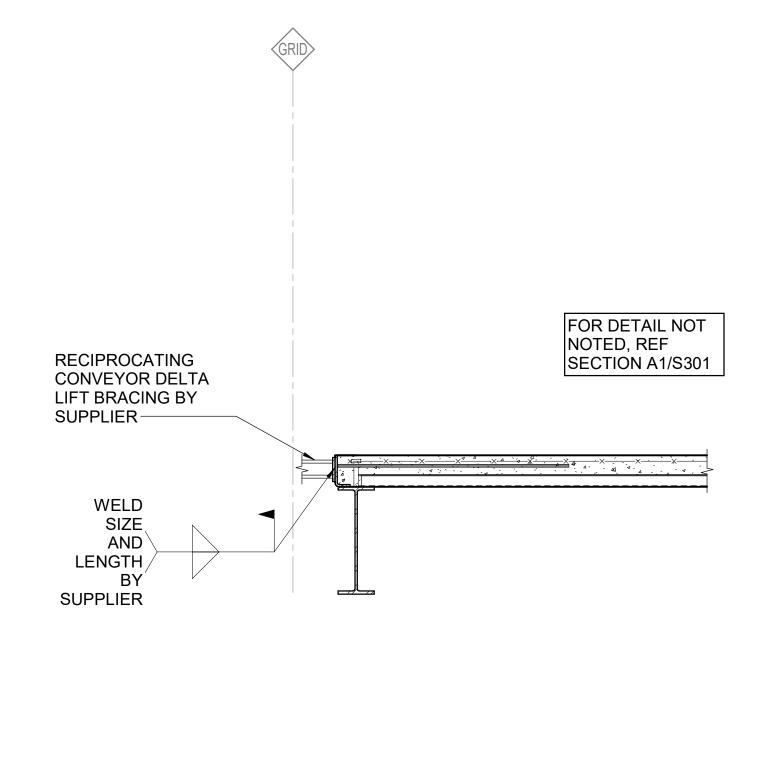
KEY NOTES

201

3 1/4" LIGHTWEIGHT CONCRETE SLAB ON 2" COMPOSITE FLOOR DECK, (5 1/4" TOTAL) REINFORCED WITH 6x6-W2.9xW2.9 WELDED WIRE REINFORCING LOCATED 1" CLEAR BELOW TOP OF SLAB.

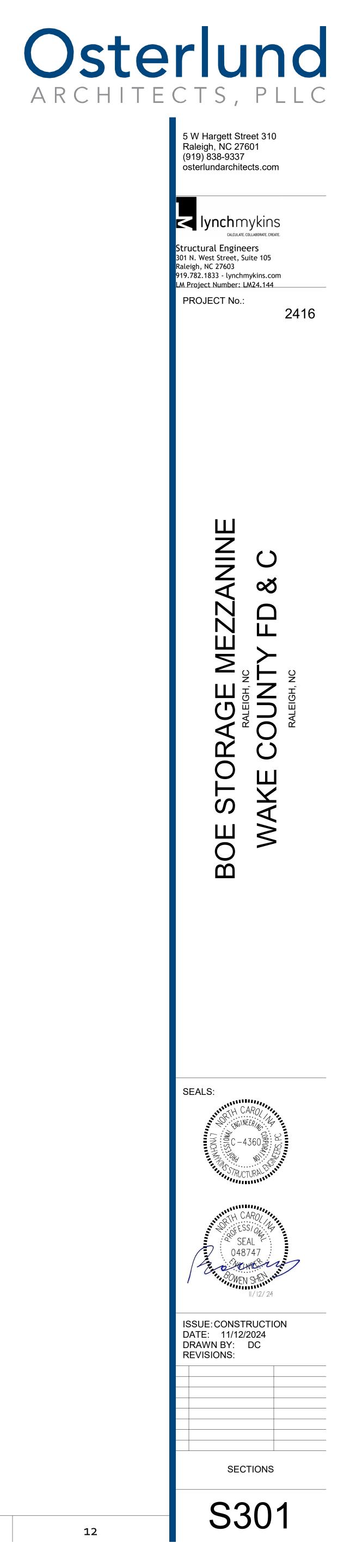


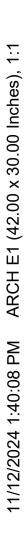


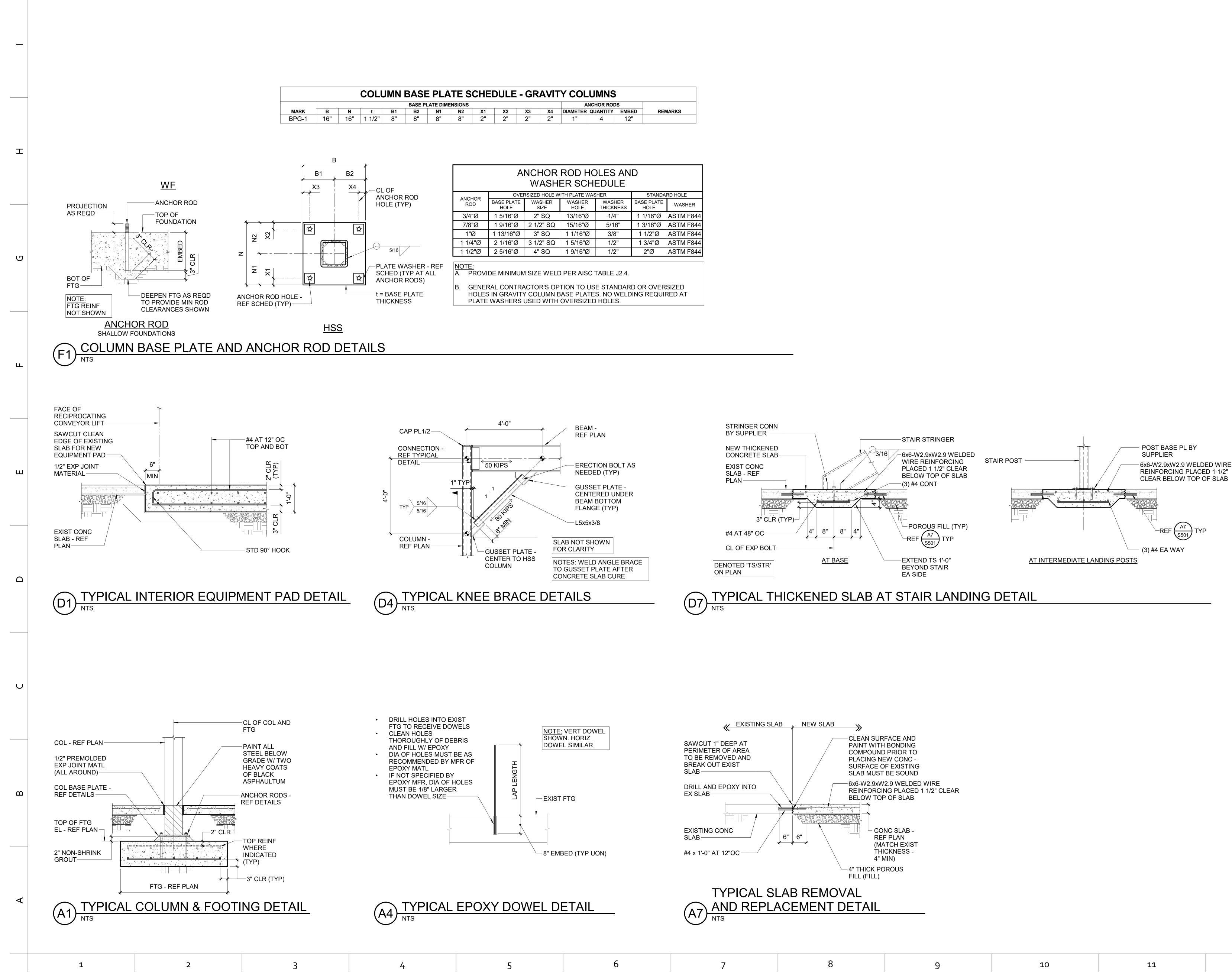


A4 <u>SECTION</u> 3/4" = 1'-0"





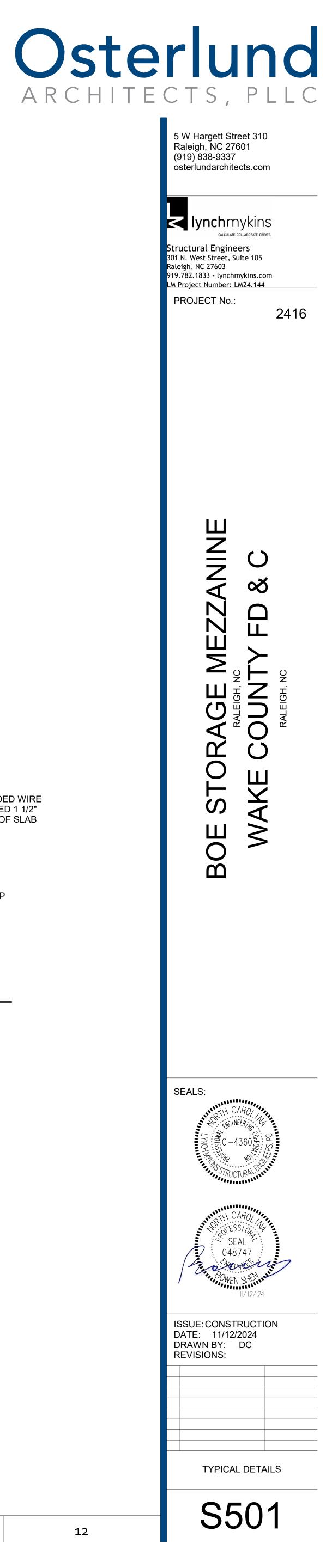


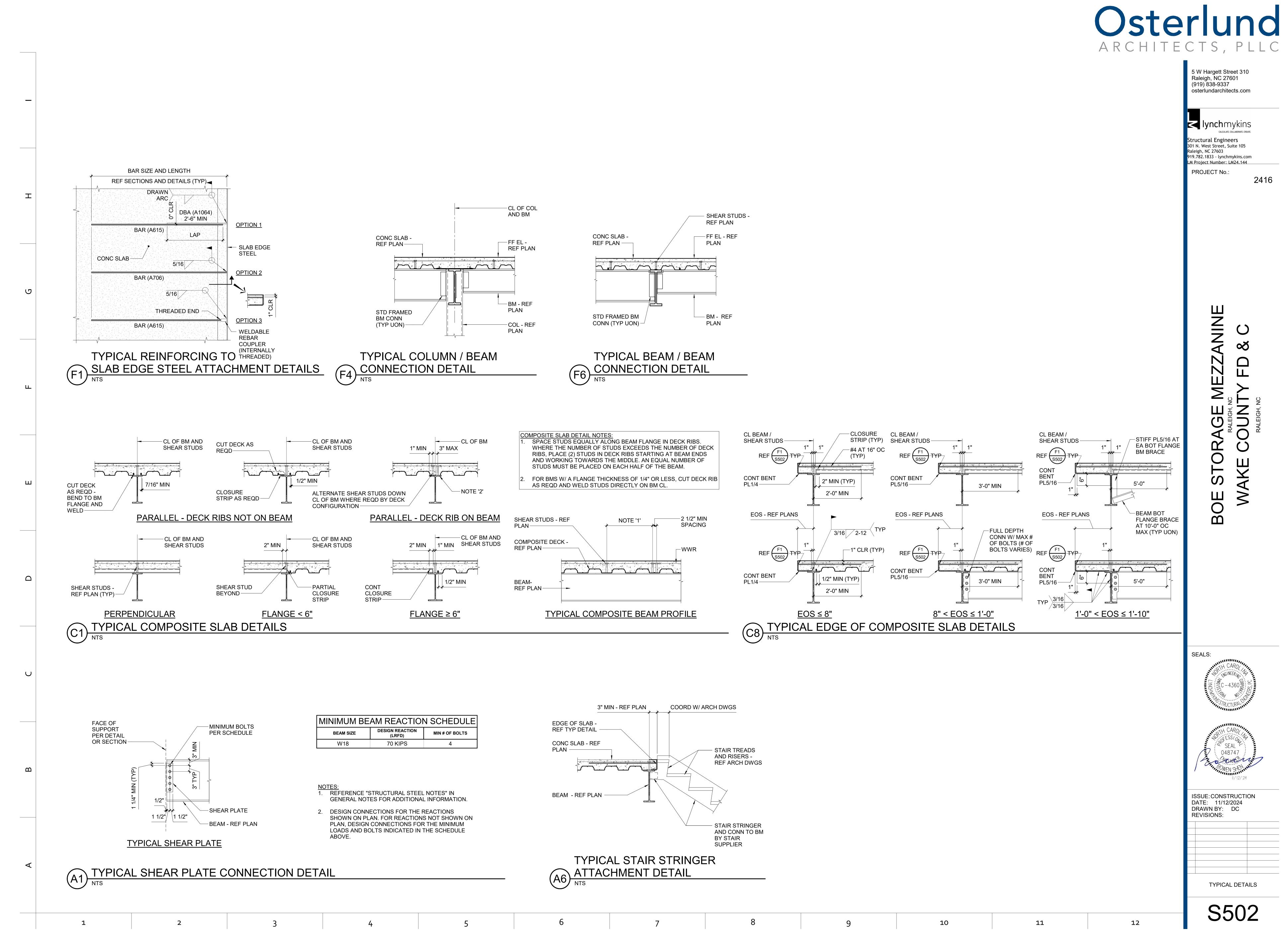


l	JMN BASE PLATE SCHEDULE - GRAVITY COLUMNS											
		BASE PL	ATE DIME	INSIONS					A	NCHOR ROD	DS	
	B1	B2	N1	N2	X1	X2	X3	X4	DIAMETER	QUANTITY	EMBED	REMARKS
	8"	8"	8"	8"	2"	2"	2"	2"	1"	4	12"	

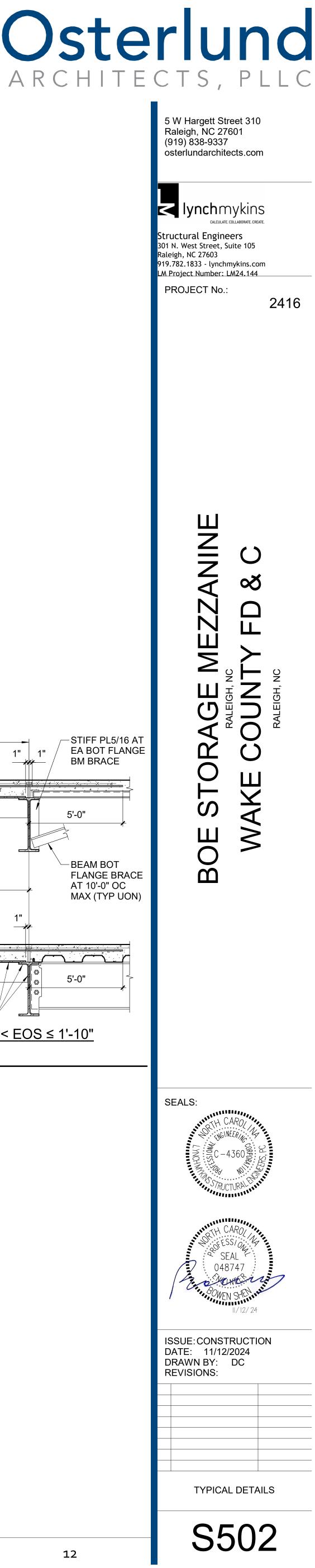
. OF	ANCHOR ROD HOLES AND WASHER SCHEDULE								
ICHOR ROD		OVE	RSIZED HOLE W	ITH PLATE WAS	SHER	STANDA	RD HOLE		
DLE (TYP)	ANCHOR ROD	BASE PLATE HOLE	WASHER SIZE	WASHER HOLE	WASHER THICKNESS	BASE PLATE HOLE	WASHER		
	3/4"Ø	1 5/16"Ø	2" SQ	13/16"Ø	1/4"	1 1/16"Ø	ASTM F844		
	7/8"Ø	1 9/16"Ø	2 1/2" SQ	15/16"Ø	5/16"	1 3/16"Ø	ASTM F844		
	1"Ø	1 13/16"Ø	3" SQ	1 1/16"Ø	3/8"	1 1/2"Ø	ASTM F844		
	1 1/4"Ø	2 1/16"Ø	3 1/2" SQ	1 5/16"Ø	1/2"	1 3/4"Ø	ASTM F844		
5/16	1 1/2"Ø	2 5/16"Ø	4" SQ	1 9/16"Ø	1/2"	2"Ø	ASTM F844		
ATE WASHER - REF CHED (TYP AT ALL ICHOR RODS) BASE PLATE	NOTE: A. PROVIDE MINIMUM SIZE WELD PER AISC TABLE J2.4. B. GENERAL CONTRACTOR'S OPTION TO USE STANDARD OR OVERSIZED HOLES IN GRAVITY COLUMN BASE PLATES. NO WELDING REQUIRED AT								
IICKNESS	PLATE WASHERS USED WITH OVERSIZED HOLES.								

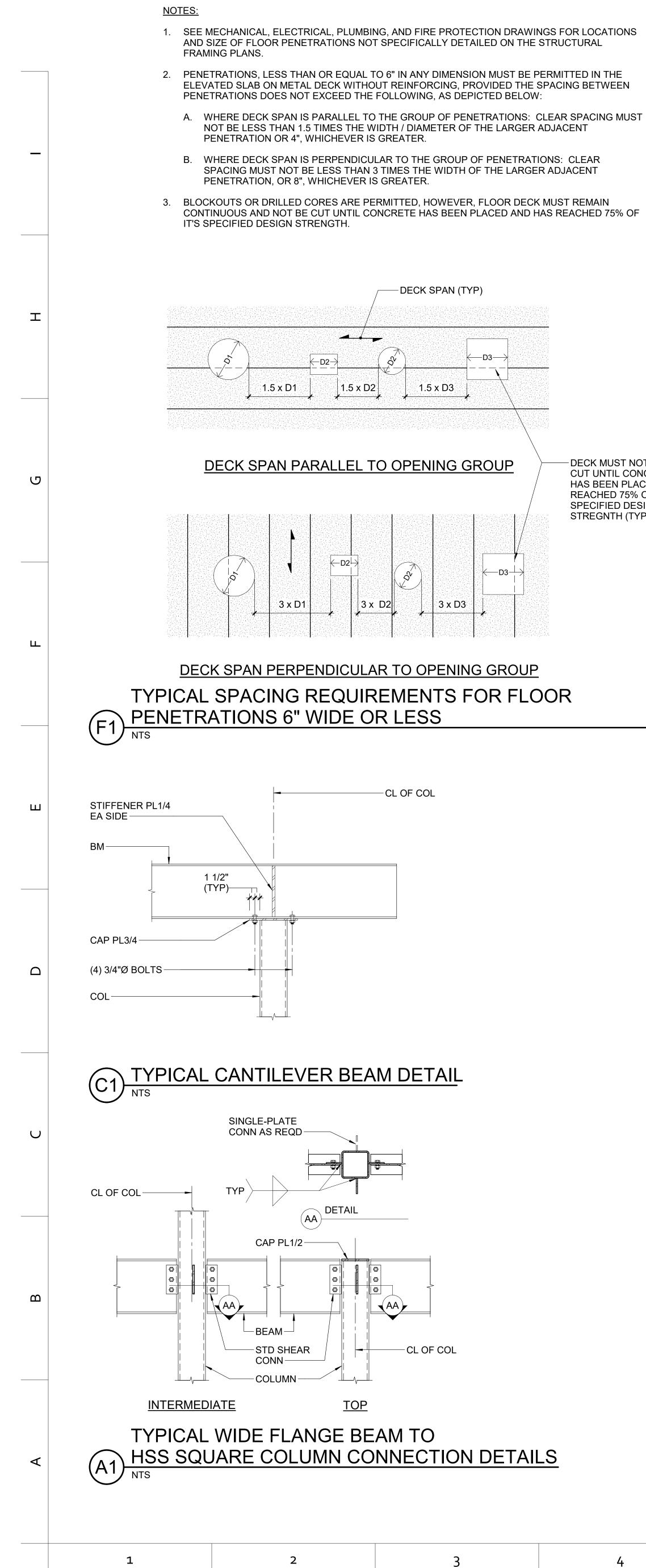




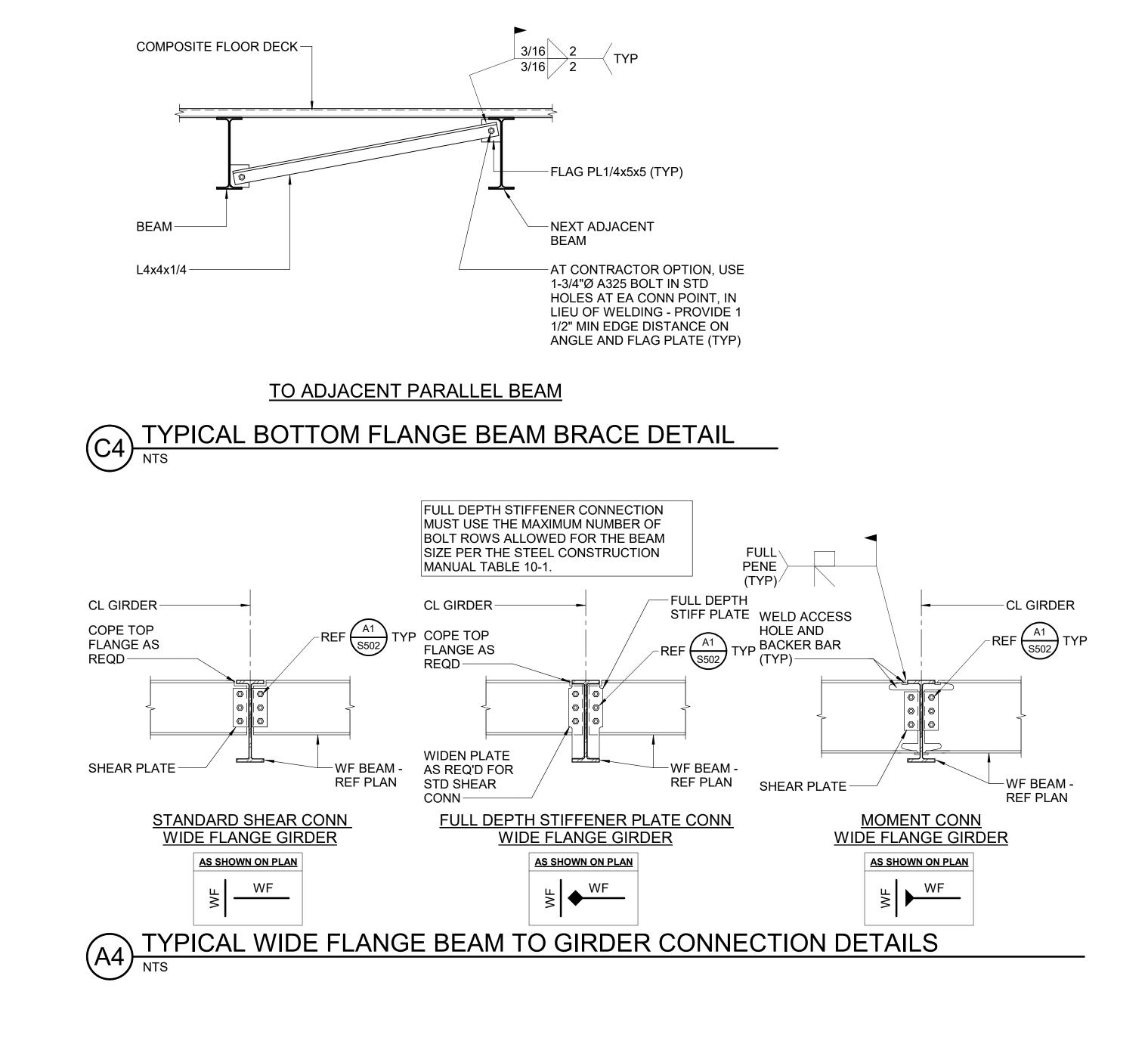


	70 KIPS	4	CONC SLAB - REF PLAN		— STAIR TREADS AND RISERS - REF ARCH DWG
NOTI DNNE N PL/ SIGN	ECTIONS FOR THE	AL INFORMATION. E REACTIONS NS NOT SHOWN ON DR THE MINIMUM	BEAM - REF PLAN —		- STAIR STRINGER AND CONN TO B BY STAIR SUPPLIER
				AL STAIR S HMENT D	ER
Z	ŀ	5	6	7	8



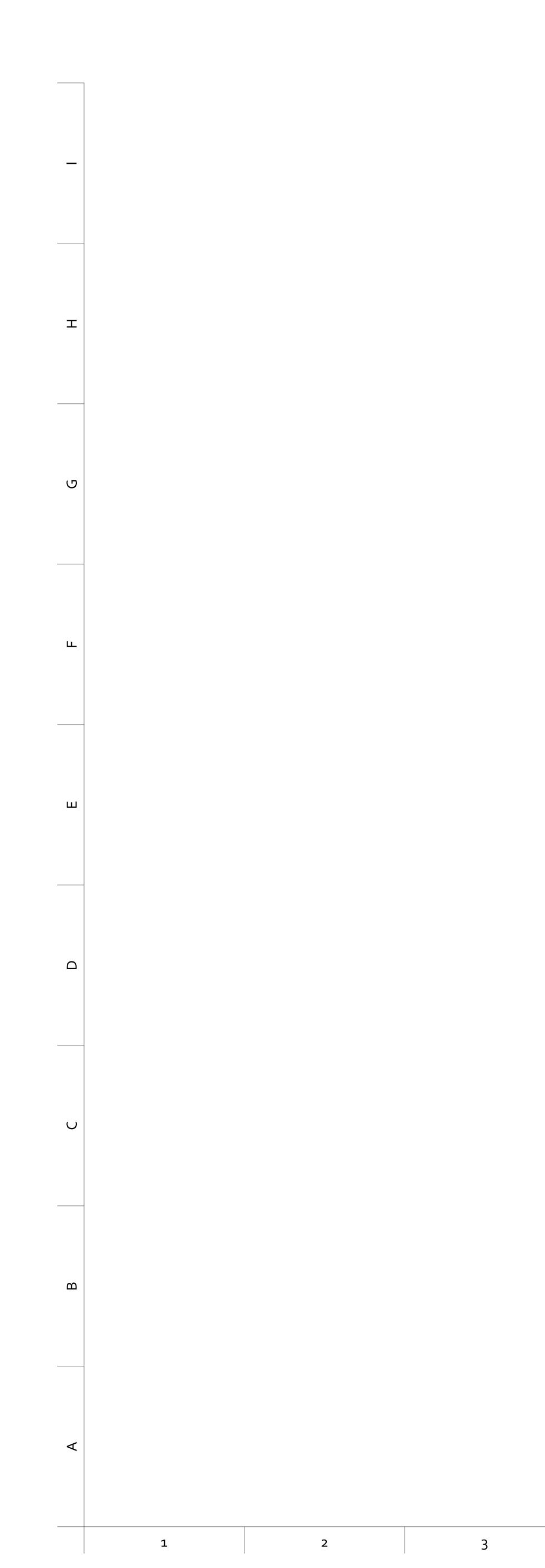


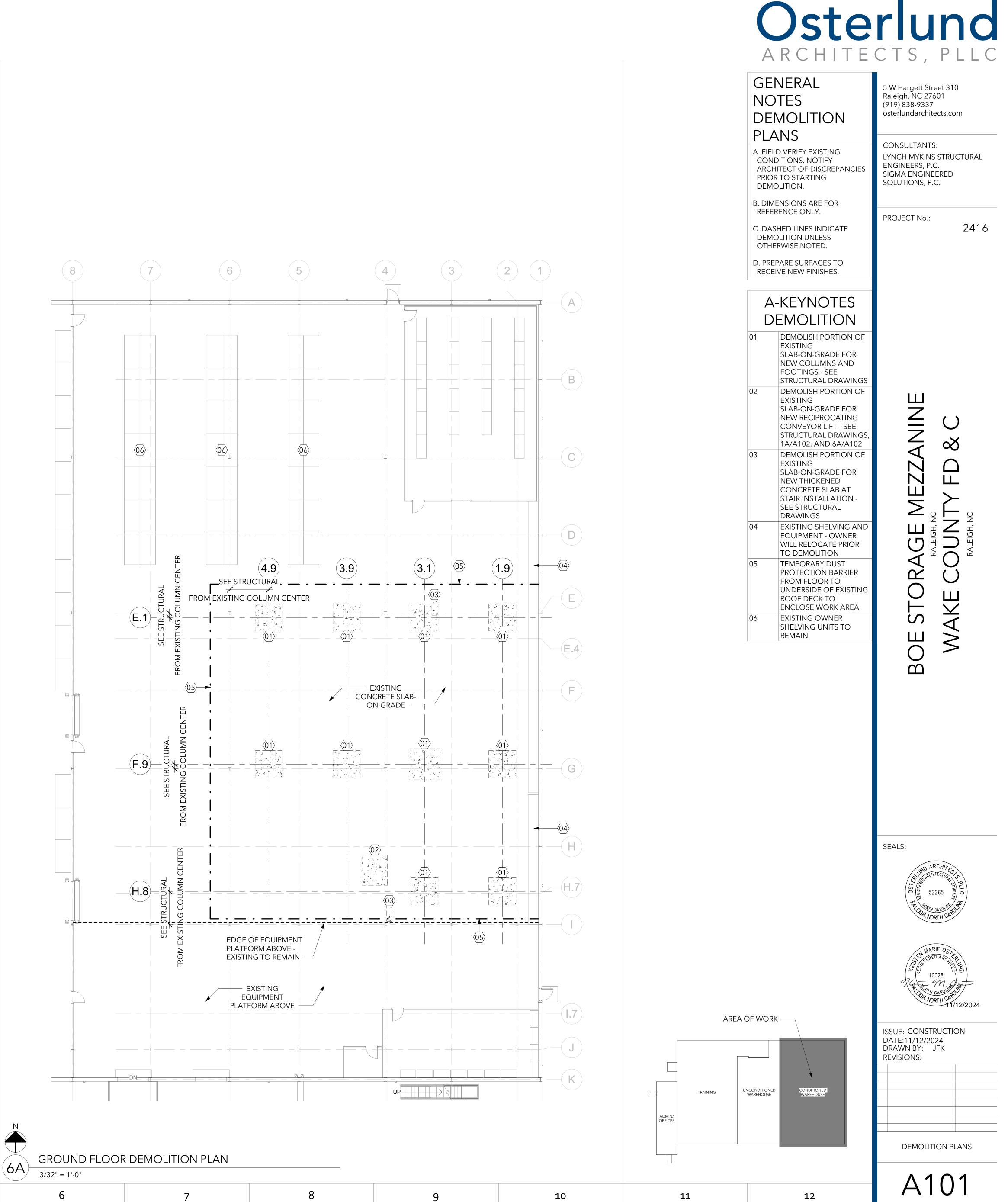
- DECK MUST NOT BE CUT UNTIL CONCRETE HAS BEEN PLACED AND REACHED 75% OF SPECIFIED DESIGN STREGNTH (TYP)

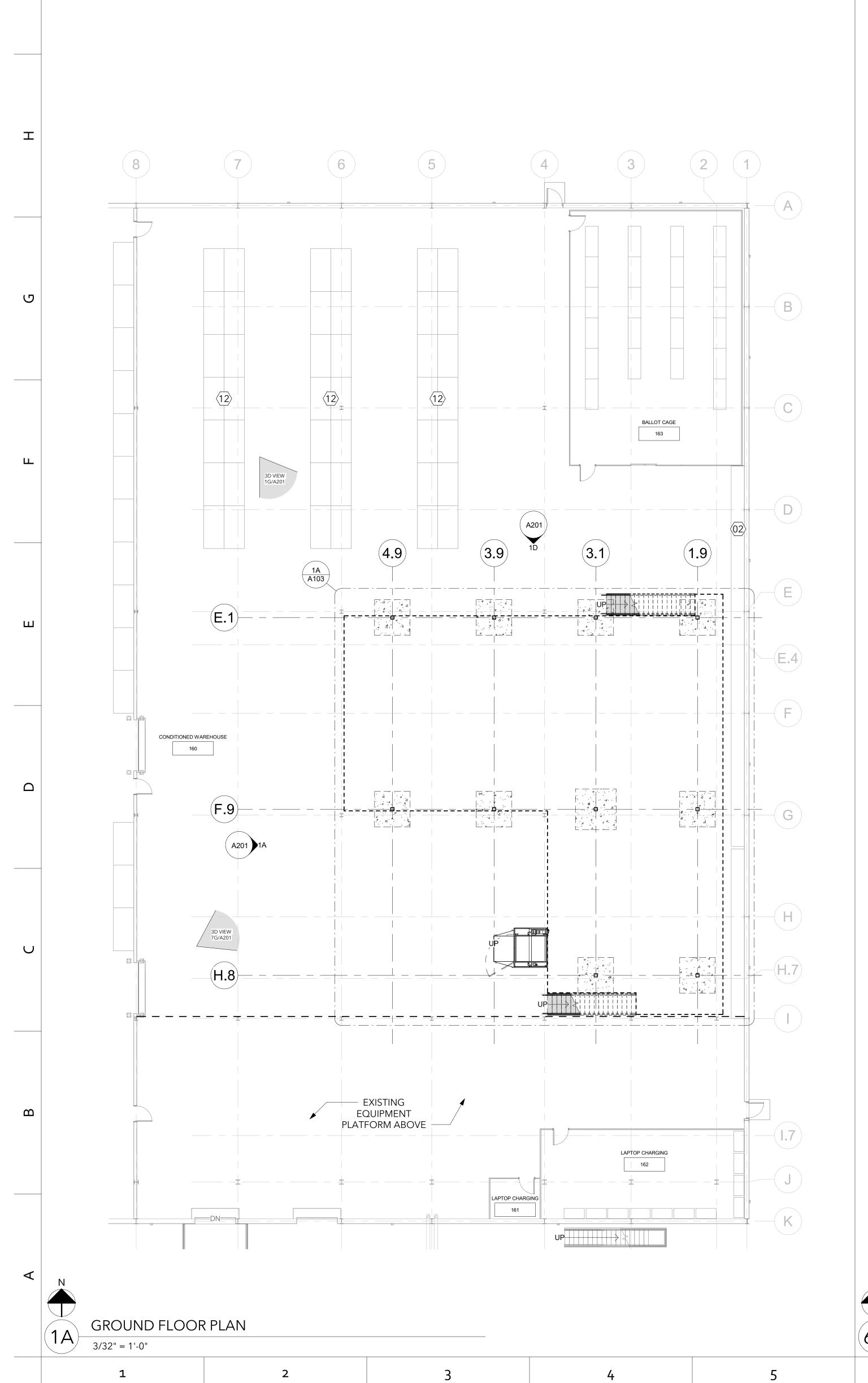


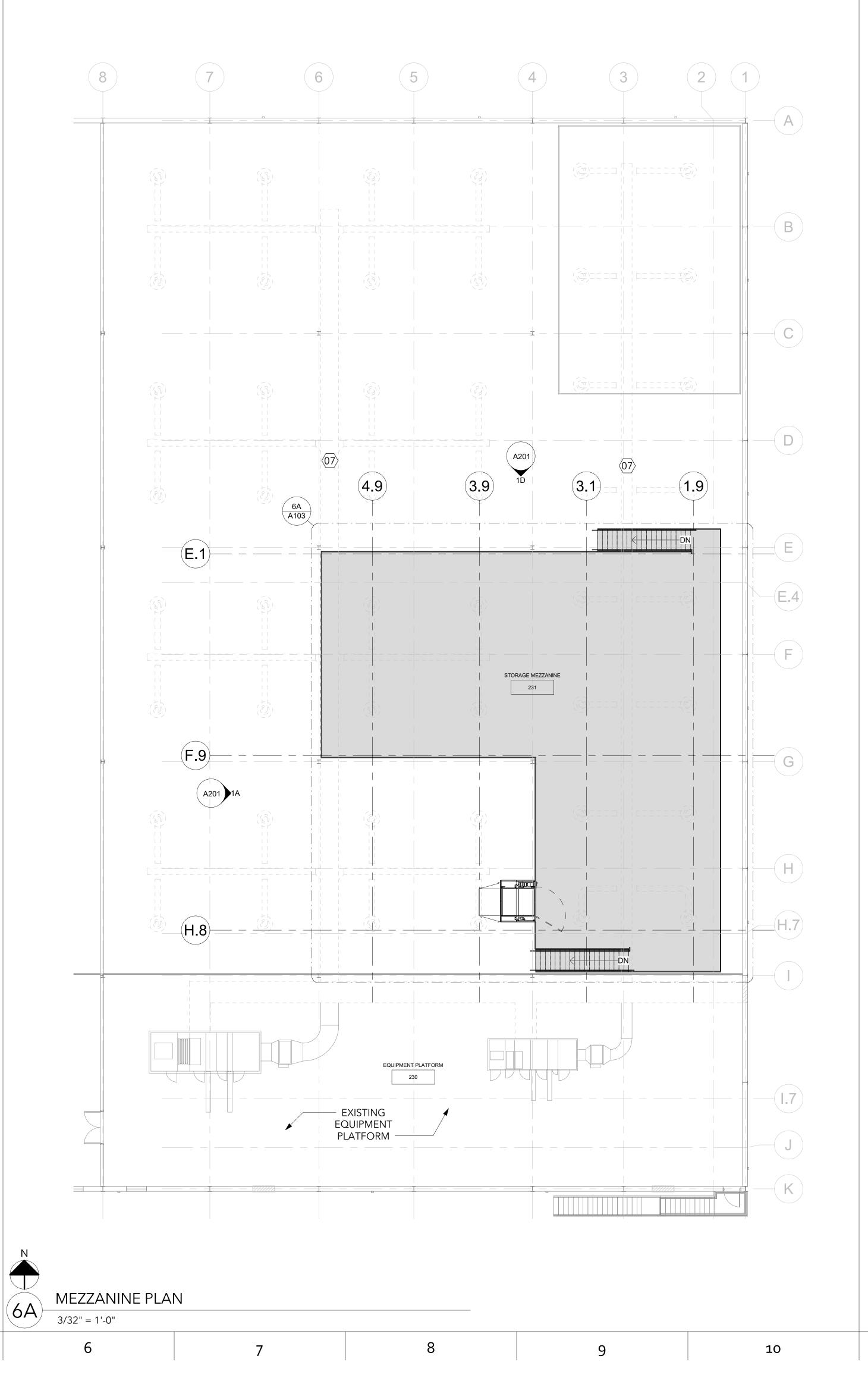












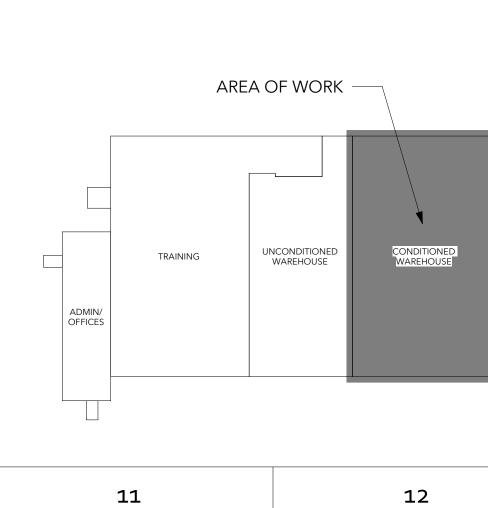


ARCHITECT OF DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.

B. DIMENSIONS ARE FOR REFERENCE ONLY.

C. PREPARE SURFACES TO RECEIVE NEW FINISHES.

KEYNOTES W CONSTR
EXISTING OWNER TABULATOR SHELVING UNITS ALONG WALL T REMAIN
EXISTING DUCTWORK ABOVE
EXISTING OWNER SHELVING UNITS TO REMAIN



12



CTWORK

LYNCH MYKINS STRUCTURAL ENGINEERS, P.C. SIGMA ENGINEERED SOLUTIONS, P.C.

PROJECT No.:

2416



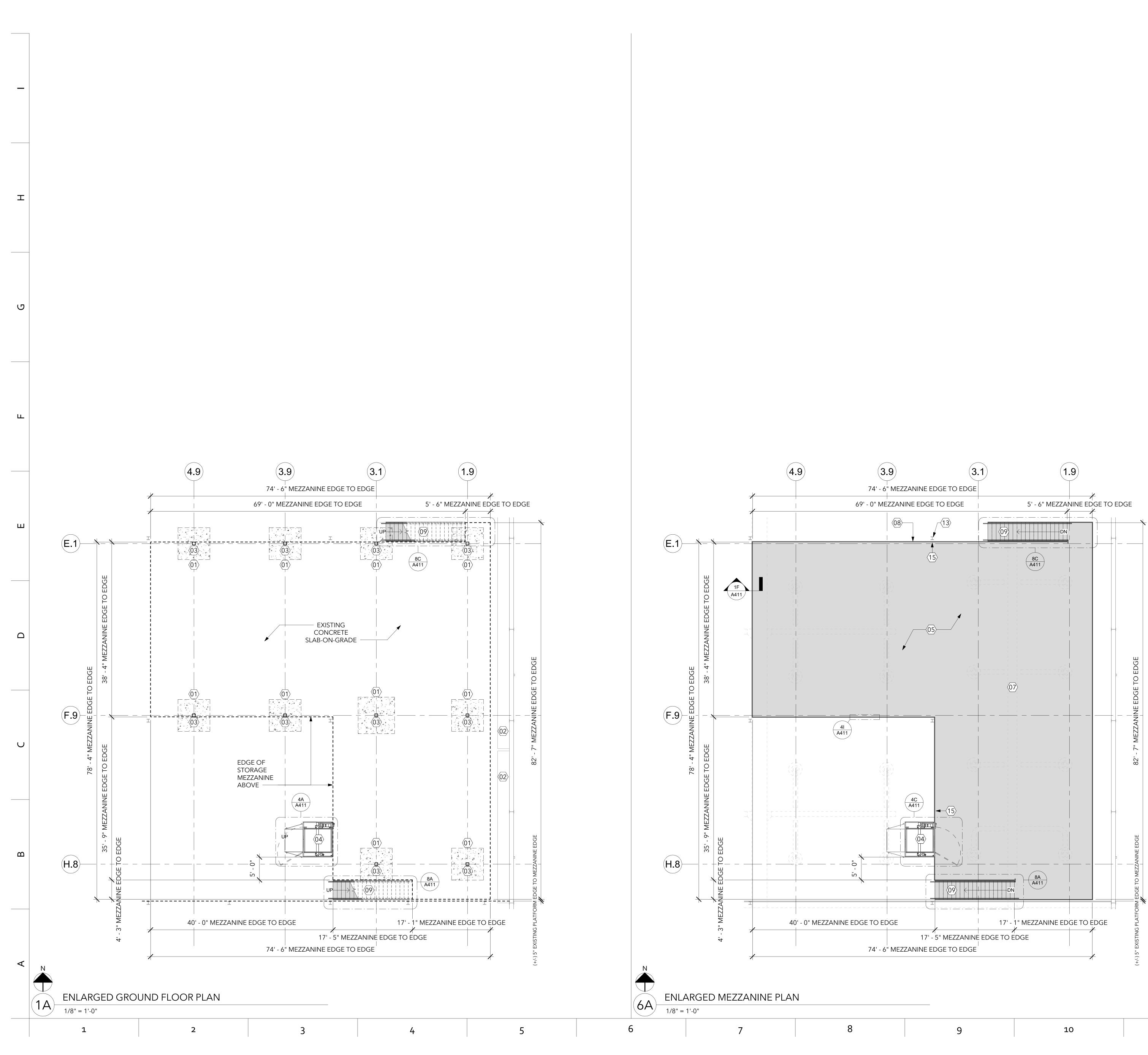
SEALS:



ISSUE: CONSTRUCTION DATE:11/12/2024 DRAWN BY: JFK REVISIONS:

FLOOR PLANS







GENERAL NOTES FLOOR PLANS

A. FIELD VERIFY EXISTING CONDITIONS. NOTIFY ARCHITECT OF DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.

B. DIMENSIONS ARE FOR REFERENCE ONLY.

C. PREPARE SURFACES TO RECEIVE NEW FINISHES.

	KEYNOTES W CONSTR.
01	CONCRETE SLAB-ON-GRADE AT NEW FOOTINGS - SEE STRUCTURAL DRAWINGS
02	EXISTING OWNER TABULATOR SHELVING UNITS ALONG WALL TO REMAIN
03	STEEL COLUMN - SEE STRUCTURAL DRAWINGS
04	VERTICAL RECIPROCATING CONVEYOR DELTA LIFT WITH RAMP
05	CONCRETE SLAB-ON-DECK - SEE STRUCTURAL DRAWINGS
07	EXISTING DUCTWORK ABOVE
08	METAL RAILING ATTACHED TO SLAB EDGE/ANGLE TYP.
09	METAL PAN STAIR
13	CAMERA ON EXISTING COLUMN - EXISTING TO REMAIN
15	FIRE EXTINGUISHER AND BRACKET. INCLUDE STEEL MOUNTING PLATE ON GUARDRAIL. COORDINATE SIZE AND SHAPE OF PLATE WITH BRACKET





5 W Hargett Street 310 Raleigh, NC 27601 (919) 838-9337 osterlundarchitects.com

CONSULTANTS: LYNCH MYKINS STRUCTURAL ENGINEERS, P.C. SIGMA ENGINEERED SOLUTIONS, P.C.

PROJECT No.:

2416



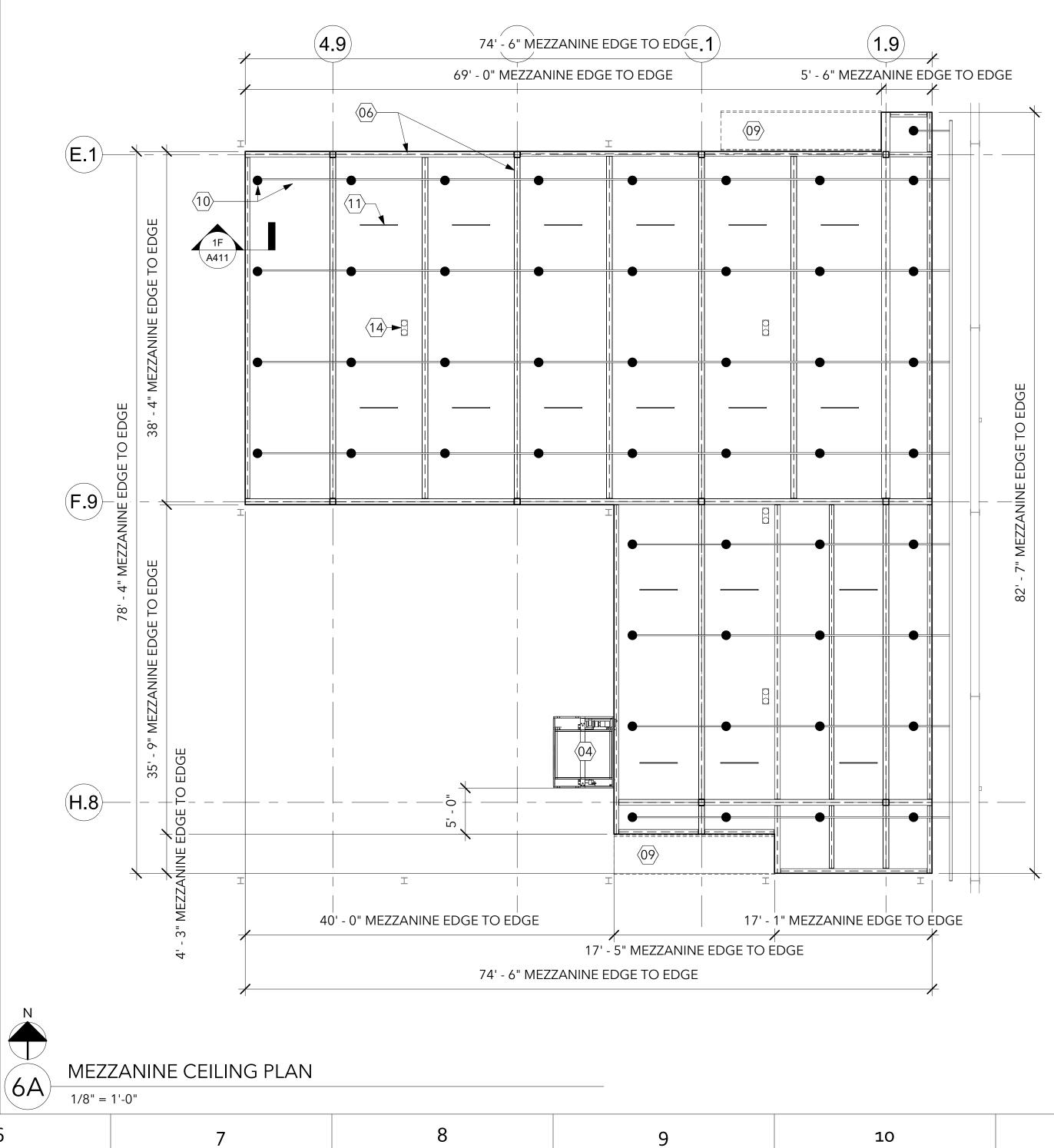
SEALS:

ISSUE: CONSTRUCTION DATE:11/12/2024 DRAWN BY: JFK **REVISIONS:**

MEZZANINE PLANS











A. FIELD VERIFY EXISTING CONDITIONS. NOTIFY ARCHITECT OF DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.

B. DIMENSIONS ARE FOR REFERENCE ONLY.

C. PREPARE SURFACES TO RECEIVE NEW FINISHES.

NE	KEYNO W CON
1	VERTICAL RECIPROCATIN

	WITH RAMP
06	STEEL BEAMS
	CONCRETE DE
	STRUCTURAL D
09	METAL PAN ST
10	SPRINKLER HEA
	PIPING TYP S
	PROTECTION D
11	LED STRIP LIGH
	SEE ELECTRICA
	DRAWINGS
14	EGRESS FIXTUR





ING CONVEYOR DELTA LIFT

> BELOW DECK - SEE DRAWINGS TAIR

> EAD AND SEE FIRE DRAWINGS iht typ. -AL

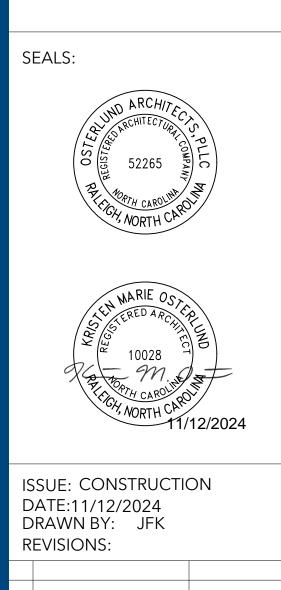
EGRESS FIXTURE - SEE ELECTRICAL DRAWINGS 5 W Hargett Street 310 Raleigh, NC 27601 (919) 838-9337 osterlundarchitects.com

CONSULTANTS: LYNCH MYKINS STRUCTURAL ENGINEERS, P.C. SIGMA ENGINEERED SOLUTIONS, P.C.

PROJECT No.:

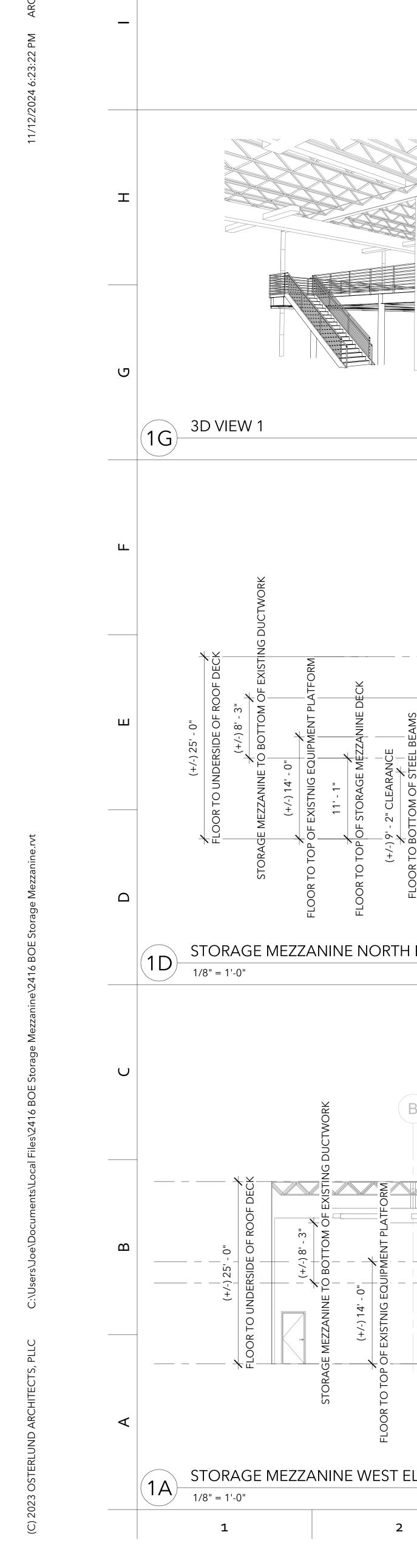
2416

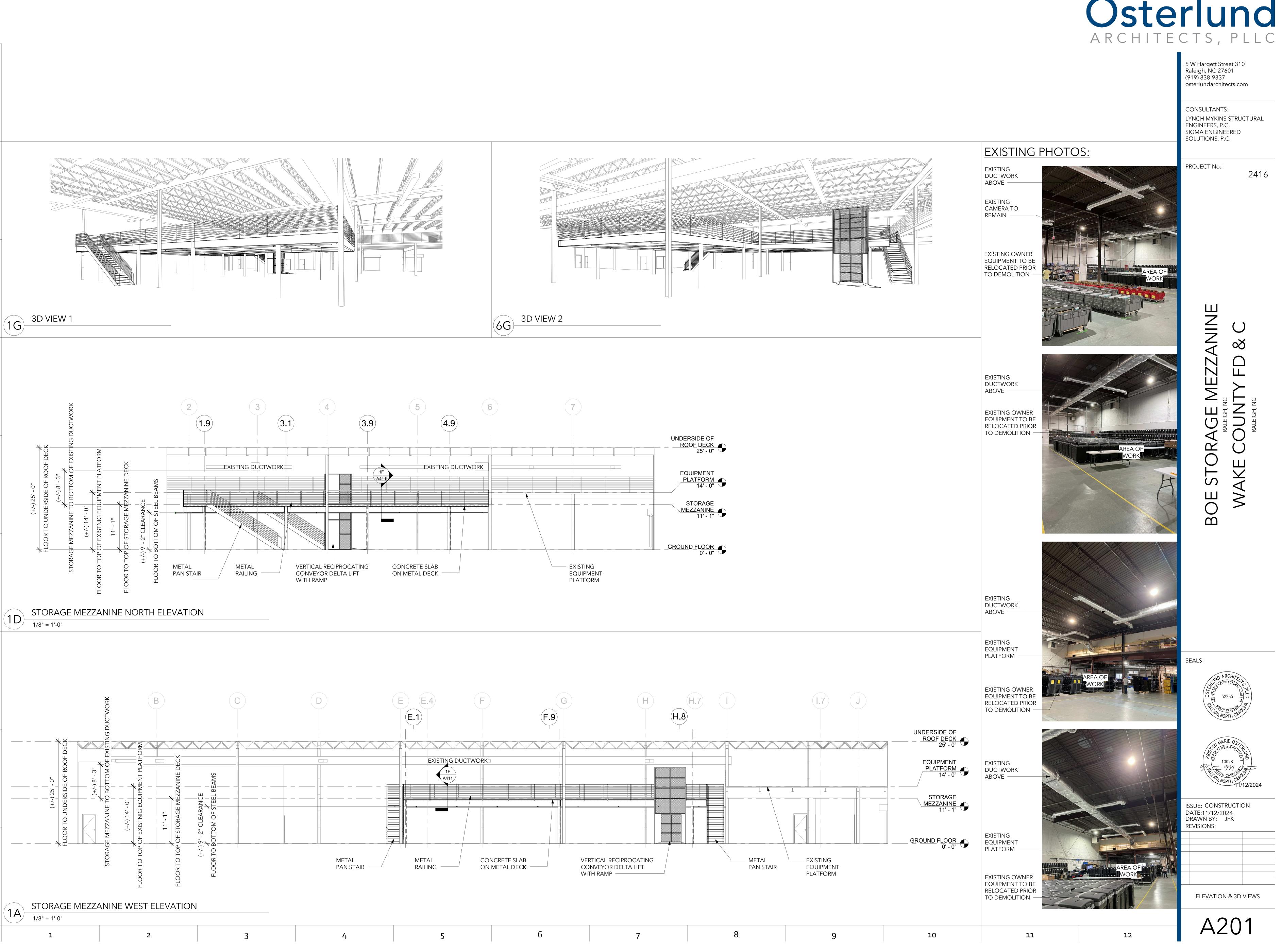




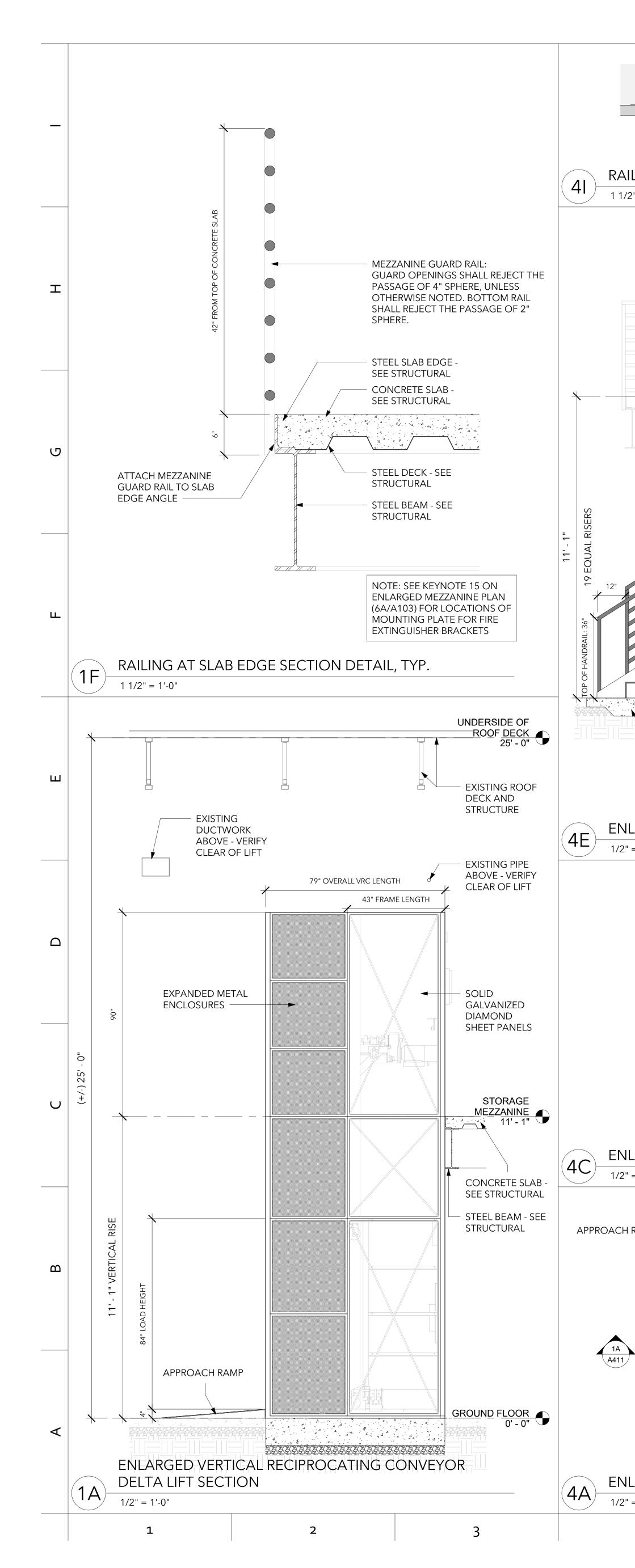
MEZZANINE CEILING PLAN

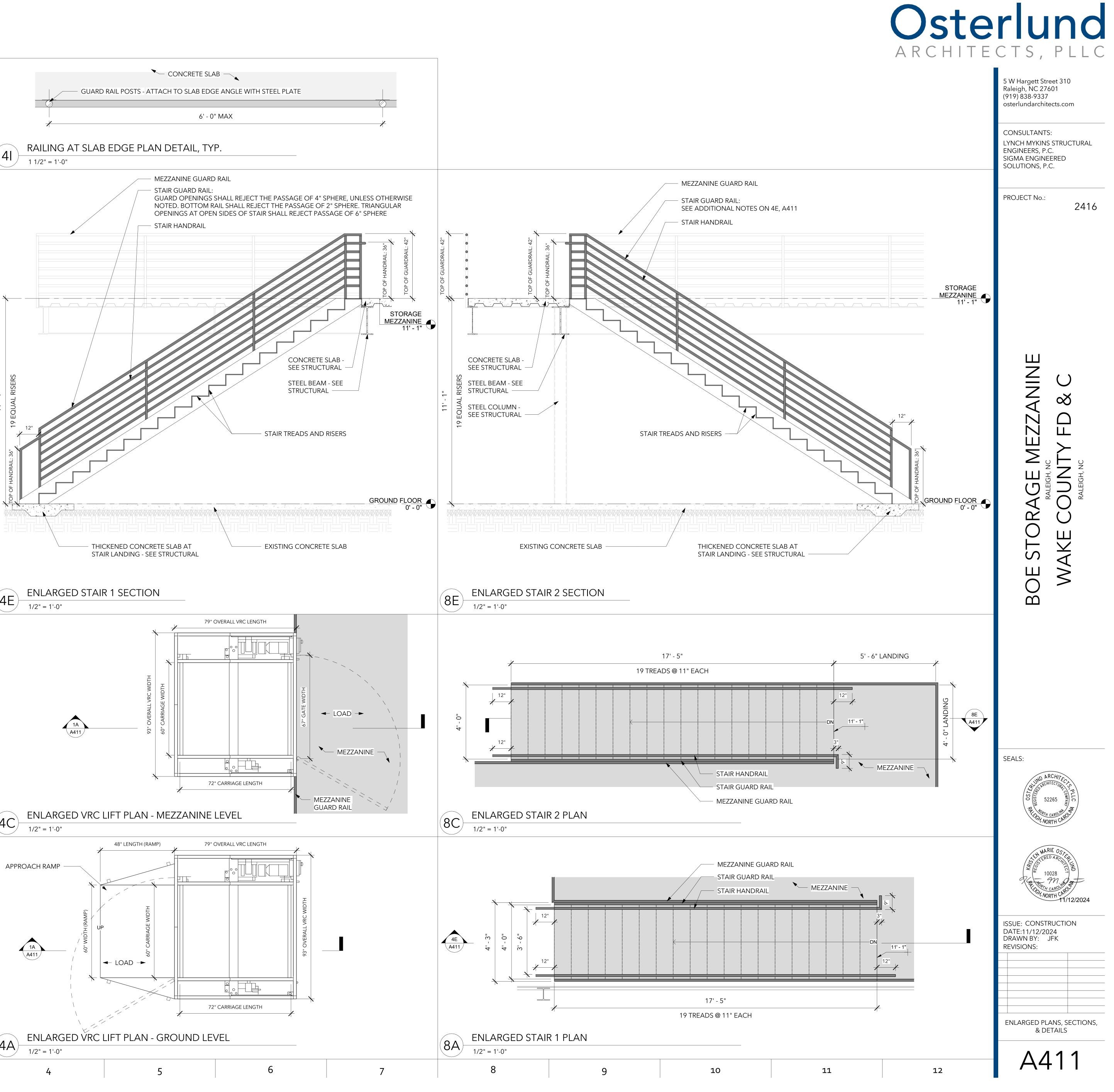


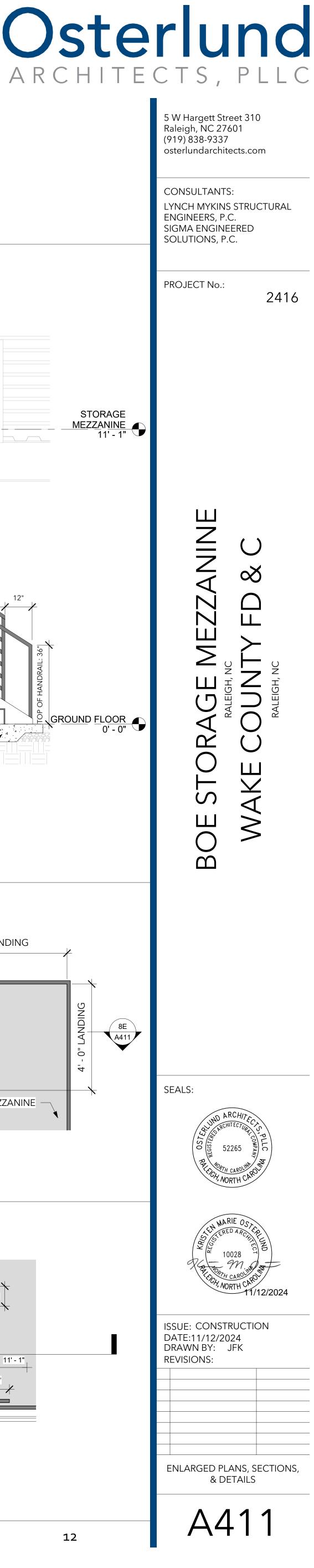












1 0				
8	9	10	11	12

Docusign Envelope ID: 6324D56F-F09D-41C1-B489-1C29A68ECCF9

1

2

3

		FIRE PROT	ECTION S	(MBOLS AND ABBRE)	/IATIONS
(PIPE TURNING UP PIPE TURNING DOWN	<u>હ</u> <	CENTER LINE ANGLE	HP
—(TEE DOWN	Ø #	ROUND, DIAMETER OR PHASE POUNDS OR NUMBER	HR HTG.
(-0	TEE UP	А	COMPRESSED AIR	HVAC
	ÇÇ	45° OFFSET	ABV.CLG. ACFM	ABOVE CEILING ACTUAL CUBIC FEET PER MINUTE	HYD. IN.
		DIRECTION OF FLOW IN PIPE PIPE SLOPED IN DIRECTION	ACU AFF	AIR CONDITIONING UNIT ABOVE FINISHED FLOOR	KW MAX.
-		OF ARROW	AFF	ABOVE FINISHED GRADE	MECH. MEZZ
]]		AHU ALUM.	AIR HANDLING UNIT ALUMINUM	MFG. MFR.
		CONCENTRIC REDUCER	ANSI	AMERICAN NATIONAL STANDARD	MIN.
		PIPE UNION	AP	ASSOCIATION ACCESS PANEL	MJ MTD
		GATE VALVE	APPROX. ARCH.	APPROXIMATE ARCHITECTURAL	NC NEC
— —		CHECK VALVE	ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	NEMA
—	- `v.	BUTTERFLY VALVE	ASV AUTO	AUTOMATIC SPRINKLER VALVE AUTOMATIC	NFPA
	⊣⊕́⊢—	BALL VALVE	AWWA	AMERICAN WATER WORKS ASSOCIATION	N.I.C. NO
		SOLENOID VALVE	BFF	BELOW FINISHED FLOOR	NO.
		PRESSURE REDUCING VALVE	BFP		NPSH N.R.S.
	\$	SAFETY RELIEF VALVE	BHP BOP	BRAKE HORSEPOWER BOTTOM OF PIPE	N.T.S. O.C.
	-(s)	BASKET STRAINER	C C/C	CELSIUS CENTER TO CENTER	O.D. OPNG
	\mathbb{Q}	PRESSURE GAUGE (W/ BALL VALVE)	CI	CAST IRON	0.R.
	 		CLG. CONC.	CEILING CONCRETE	OSD O.S.&Y.
	——————————————————————————————————————	PIPE ANCHOR FLEXIBLE PIPE CONNECTION	CONFIG. CONN.	CONFIGURATION	P.C. PICU
		PUMP	CON'T.	CONTINUATION	PLBG.
г		FIRE HOSE CABINET	CONST. CONTR.	CONSTRUCTION CONTRACTOR	PRS PRV
			COORD. COP	COORDINATE COEFFICIENT OF PERFORMANCE	PS PSI
		HYDRAULIC CALCULATION NODE (SPRINKLER SYSTEM)	CTR	CENTER	PSIA
	24	HYDRAULIC CALCULATION NODE (STANDPIPE SYSTEM)	CU CU.FT.	COPPER CUBIC FOOT	PSIG
-		ALARM CHECK VALVE	CW CU.YD.	COLD WATER OR CITY WATER CUBIC YARD	PVC
-		DRY PIPE VALVE WITH EXHAUSTER OR ACCELERATOR	D.I.	DUCTILE IRON	QR QTY.
-	-	DELUGE VALVE	DIA. DN.	DIAMETER DOWN	REINF.
	-	PREACTION VALVE	DWG. E.C.	DRAWING ELECTRICAL CONTRACTOR	REQ'D REV.
-			EL ELEC.	ELEVATION ELECTRICAL	RPDA
	(TS) 	TAMPER SWITCH (SHOWN ON VALVE)	EQUIP. EQ.	EQUIPMENT EQUAL	RPM RPZ
_	PS	PRESSURE SWITCH	EQ. EXIST.	EXISTING	R.S.
_	FS	FLOW SWITCH	FCA FDC	FLOOR CONTROL ASSEMBLY FIRE DEPARTMENT CONNECTION	R.S. S.C.
		ANGLE VALVE (ELEVATION VIEW)	FIN.	FINISHED	SCH. SPEC.
	T H&I	ANGLE VALVE (PLAN VIEW)	FL FLEX	FLOOR FLEXIBLE	SPR
		FIRE HYDRANT WITH OS&Y	FLG FP	FLANGE FIRE PROTECTION	SSU SSS
		VALVE IN ROADWAY BOX	F.P.C. FPM	FIRE PROTECTION CONTRACTOR	STA.
	\longrightarrow	SIAMESE CONN., FIRE DEPT. CONN.	FPS	FEET PER SECOND	STRUCT. SYM
	Î	FIRE PUMP TEST HEADER	FS FT	FLOW SWITCH FOOT/FEET	SYS. T.O.P.
			GA. GAL.	GAGE GALLONS	T.O.S. TS
	F.C.A.	FLOOR CONTROL ASSEMBLY	GALV. G.C.	GALVANIZED GENERAL CONTRACTOR	TYP. U.F.
			GPM	GALLONS PER MINUTE	UL UNO
			H.C.	HEATING, VENTILATING, AND AIR CONDITIONING CONTRACTOR	VERT.
			HGR. H.CAB.	HANGER HOSE CABINET	VLV.
			HOA	HAND-OFF-AUTOMATIC	W/ W/O
			HORZ.	HORIZONTAL	ZCA
L			-		-

HIGH PRESSURE OR HORSEPOWER HOUR HEATING HEATING, VENTILATING AND AIR CONDITIONING HYDRANT INCH KILOWATT MAXIMUM MECHANICAL MEZZANINE MANUFACTURING MANUFACTURER MINIMUM MECHANICAL JOINT MOUNTED NORMALLY CLOSED NATIONAL ELECTRIC CODE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION NATIONAL FIRE PROTECTION ASSOCIATION NOT IN CONTRACT NORMALLY OPEN NUMBER NET POSITIVE SUCTION HEAD NON RISING STEM NOT TO SCALE ON CENTER OUTSIDE DIAMETER OPENING OPERATING ROOM OPEN SIGHT DRAIN OUTSIDE SCREW AND YOKE PLUMBING CONTRACTOR PEDIATRIC INTENSIVE CARE UNIT PLUMBING PRESSURE REDUCING STATION PRESSURE REDUCING VALVE PRESSURE SWITCH POUNDS PER SQUARE INCH POUNDS PER SQUARE INCH ABSOLUTE POUNDS PER SQUARE INCH GAUGE POLYVINYL CHLORIDE QUICK RESPONSE QUANTITY REINFORCING REQUIRED REVISION REDUCED PRESSURE DETECTOR ASSMBLY REVOLUTIONS PER MINUTE REDUCED PRESSURE ZONE BACKFLOW PREVENTER **RISING STEM** SITE CONTRACTOR SCHEDULE SPECIFICATION SPRINKLER STANDARD SPRAY UPRIGHT STANDARD SPRAY SIDEWALL STEEL STRUCTURAL SYMBOL OR SYMMETRICAL SYSTEM TOP OF PIPE TOP OF STEEL TAMPER SWITCH TYPICAL UNDER FLOOR UNDERWRITERS LABORATORIES UNLESS NOTED OTHERWISE VERTICAL VALVE WITH WITHOUT ZONE CONTROL ASSEMBLY

FIRE PROTECTION GENERAL NOTES

I. DIVISION 21 SHALL PROVIDE ALL LABOR AND MATERIALS REQUIRED FOR A COMPLETE WORKING SYSTEM WHICH SHALL COMPLY FULLY WITH

NFPA #13, 2013 EDITION, STANDARD FOR INSTALLATION OF AUTOMATIC SPRINKLER SYSTEMS. THE NORTH CAROLINA STATE BUILDING CODE, 2018 EDITION, AND THE REQUIREMENTS OF ALL LOCAL FIRE MARSHALL AUTHORITIES. FINAL ACCEPTANCE IS CONTINGENT UPON APPROVAL OF ALL WORK AND COMPLETION OF THE CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FORM 85A. 2. DIVISION 21 SHALL PROVIDE ENGINEERED SHOP DRAWINGS FOR THE PROPOSED BUILDING. THE DRAWINGS SHALL INCLUDE THE FULLY AUTOMATIC WET PIPE SPRINKLER SYSTEM WITH ALL PIPING, SPRAY HEADS OF EVERY TYPE REQUIRED, FITTINGS, VALVES, DEVICES, ACCESSORIES, HANGERS AND SUPPORTS, ALARM CHECK VALVES, WATER MOTOR GONG AND CONNECTIONS. THE WORK SHALL INCLUDE HYDRAULIC CALCULATIONS FOR THE AUTOMATIC WET PIPE SPRINKLER SYSTEMS MOST REMOTE AREAS (MINIMUM 10 PSI SAFETY FACTOR REQUIRED) SEE

SPRINKLER DESIGN DATA ON THIS SHEET, SUBMIT TO ENGINEER FOR APPROVAL. 3. ALL MATERIALS AND EQUIPMENT SHALL BE NEW, UL LISTED AND FM APPROVED FOR THE INTENDED USE AND SHALL BE INSTALLED IN FULL COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS.

4. THE FIRE SPRINKLER SYSTEM FOR THE OCCUPIED AND HEATED AREAS SHALL BE AN AUTOMATIC WET PIPE SYSTEM.

5. SPRINKLER HEADS SHALL BE SPACED AS PER N.F.P.A. 13, 2013 EDITION.

6. ALL SYMBOLS AND ABBREVIATIONS MAY NOT BE UTILIZED FOR THIS PROJECT.

7. ALL PIPING AND/OR CONDUIT PENETRATIONS THRU FIRE RATED FLOORS AND/OR WALLS SHALL BE MADE/SEALED IN ACCORDANCE WITH UL LISTED SYSTEMS.

8. UNLESS OTHERWISE INDICATED DIVISION 21 IS RESPONSIBLE FOR ALL CUTTING, CORE DRILLING AND PATCHING REQUIRED TO INSTALL FIRE PROTECTION WORK.

9. ALL SPRINKLER HEADS SHALL BE LOCATED IN CENTER OF CEILING TILES WHERE LAY-IN CEILINGS OCCUR UNLESS SHOWN OR NOTED OTHERWISE.

10. REFER TO ALL ARCHITECTURAL/GENERAL CONSTRUCTION CONTRACT SPECIFICATIONS AND DRAWING DOCUMENTS FOR PROJECT REQUIREMENTS.

11. IT IS TOTALLY DIVISION 21'S RESPONSIBILITY TO COORDINATE HANGERS & SUPPORTS WITH OTHER TRADES. ANY DAMAGE INCURRED ON EXISTING FIREPROOFING MATERIAL DUE TO INSTALLATION OF HANGERS BY THIS CONTRACTOR, SHALL BE REPAIRED BY THE FIREPROOFING SUBCONTRACTOR AT THE FIRE PROTECTION CONTRACTOR'S EXPENSE.

12. ALL PIPE LARGER THAN 2" SHALL BE BLACK STEEL SCH. 10 WITH GROOVED ENDS JOINED BY GROOVE FITTINGS. USE RIGID COUPLINGS WITH ALL 2" BRANCH LINES TO PREVENT PIPE ROTATION.

13. ALL PIPE 2" AND SMALLER SHALL BE BLACK STEEL SCH. 40 WITH THREADED ENDS JOINED BY THREADED FITTINGS. 14. FINAL PIPE SIZING SHALL BE BASED ON HYDRAULIC CALCULATIONS FOR APPROPRIATE HAZARD AND A WATER FLOW TEST OF FIRE HYDRANT

FLOW NEAREST TO THE SITE. THE TEST SHALL BE PROVIDED BY DIVISION 21. 15. ALL ARMOVERS SHALL BE 1", ARMOVERS EXCEEDING 1"X 2'-0" SHALL BE SUPPORTED WITH A HANGER PER NFPA #13.

16. ALL INTERIOR SPRINKLER PIPING SHALL BE PRESSURE TESTED FOR 2 HOURS AT 200 PSI OR 50 PSI ABOVE THE MAXIMUM SYSTEM WORKING

PRESSURE, WHICHEVER IS GREATER. 17. AUTOMATIC SPRINKLERS SHALL BE PROVIDED UNDER DUCTS OF 48" AND GREATER WIDTH AND UNDER LESSER WIDTH DUCTS WHERE SPRAY

18. ALL WELDING SHALL BE PERFORMED BY WELDERS CERTIFIED FOR THE PROCEDURES USED. ALL SLAG CAUSED BY WELDING OR CUTTING PROCEDURES SHALL BE REMOVED FROM PIPING BEFORE INSTALLATION OF PIPING.

19. FLUSHING CONNECTIONS SHALL BE PROVIDED AT THE ENDS OF EACH CROSS MAIN.

HEADS CANNOT BE LOCATED TO COMPLY WITH THE CLEARANCE GUIDELINES OF NFPA # 13.

20. A PERMANENT METAL PLACARD SHALL BE PROVIDED AT THE BASE OF THE RISER INDICATING THE DESIGN CRITERIA AND SYSTEM DEMANDS. 21. PROVIDE FLOW SWITCHES FOR SYSTEM MAIN AND ZONES AND TAMPER SWITCHES FOR ALL ABOVE GROUND GATE, WAFER, AND BALL VALVES ABOVE GROUND AND INSIDE THE BUILDING.

22. WIRING FROM TAMPER SWITCHES AND FLOW SWITCHES TO FIRE ALARM PANEL SHALL BE BY ELECTRICAL CONTRACTOR.

23. ALL PENETRATIONS OF RATED WALLS AND FLOORS SHALL BE FIRE STOPPED IN ACCORDANCE WITH THE SCHEDULE AND DETAILS ON THIS SHEET.

24. ALL SPRINKLER PIPING, AS SHOWN, IS DIAGRAMMATIC WITH APPROXIMATE PIPE LOCATIONS, ELEVATIONS, ROUTING, ETC., AND IS PROVIDED FOR INFORMATIONAL PURPOSES. EVERY FITTING, ELL, TEE AND LENGTH OF PIPE MAY NOT BE SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO REVIEW THE CONTRACT DRAWINGS AND COORDINATE THE FIRE PROTECTION SYSTEM INSTALLATION WITH THE BUILDING STRUCTURAL, MECHANICAL AND ELECTRICAL SYSTEMS. THE FIRE PROTECTION CONTRACTOR SHALL CREATE A FABRICATION DRAWING SHOWING ALL PIPE SIZES, LOCATION, ROUTING, HANGERS & ELEVATIONS THAT IS A RESULT OF THIS COORDINATION EFFORT. NECESSARY OFFSETS IN PIPING REQUIRED TO PROPERLY INSTALL THE FIRE PROTECTION SYSTEM AS TO TAKE UP MINIMUM SPACE SHALL BE FURNISHED AND INSTALL BY THE CONTRACTOR WITH NO ADDITIONAL EXPENSE TO THE OWNER.

STRUCTURAL

STEEL MEMBER

WITH LOCKNUT.

THREADED HANGER ROD

– FM APPROVED SWIVEL

EXTEND HANGER ROD AS

- SHOWN FOR APPLICATIONS WHERE PRESSURE EXCEEDS

100 PSI. (SEE GEN. NOTE 1).

RING HANGER

TYP. SPRINKLER PIPING

NOTE: 1. THESE METHODS SHALL BE USED WHEN PRESSURE EXCEEDS 100 PSI & SHALL

LINE; ALL INSTALLATION SHALL COMPLY WITH NFPA 13.

BE INSTALLED WITHIN 12" OF THE LAST SPRINKLER DROP ON EACH SPRINKLER BRANCH

HANGER DETAIL

NO SCALE

F.M. APPROVED C-CLAMP

IS SYSTEM COMPLIANT WITH CHAPTER 23 (FPC)

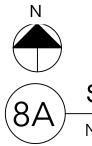
mmodity Class

Figure Curve

#

Stable/Unstable

<u>NOTE:</u>



Project Location:	1200 N. NEW HOPE ROAD	F 1#		Sys. Sq. Ft.							
Suite:		Floor#: -		Ceiling Hgt.							- SHEET LETTER
	MA ENGINEERED SOLUTIONS		919) 840-9300	Total Bldg.	Hgt.: 25'-0"	' MAXIMUM					- SHEET LETTER
Occupancy: OFI	FICE	Hazard:	SEE BELOW								
											 SHOWN ON SHEET NUM ELEVATION LETTER
		FIRE PROT		FSIGN		RY					
	System #2										
Design Method	CALCULATED										
Design Area #	R1									-> -	— DIMENSION LINE
Location	BELOW NEW MEZZANINE										
Type of System	WET									$\langle - \rangle$	SHEET NUMBER
Hazard Class	ORDINARY 2										WITH DETAIL LETTER
Criteria From	NFPA 13										\frown
Design Area	969 SQ FT									\searrow	_()
Sprinkler Spacing	100 SQ FT (MAX)										\bigcirc
Density	0.2									\frown	
K-Factor	5.6									(A1)	COLUMN NUMBER OR
Hose Allowance	250 GPM									\bigcirc	LETTER
# Design Sprklr's.	13										
Special App Spklr	N/A									$\langle 1 \rangle$	KEYED NOTE NUMBER
Req.@ BOR											
G.P.M. Req'd.	353.1 GPM										
P.S.I. Req'd.	55.78 PSI									CPR?	REVISION NUMBER
Req.@ PUMP											
G.P.M. Req'd.	N/A										CONNECT TO EXISTING
P.S.I. Req'd.	N/A										
Safety Factor@Test	5.4 PSI (7.1%)										REMOVE TO THIS POIN
Dry Sys. Vol. (gal)	N/A										
		PROTECTIO	Т		LY INFO						
TESTED BY			SEPT. 23, 2024 / 12:4	45 PM	PRESSURE HYD		VHYD112696				
HYDRANT ELEV.	295'	FLOW HYDRANT #1	WHYD111428		FLOW HYDRAN		/A				
STATIC (PSI)	77	RESIDUAL (PSI)	74		FLOW (GPM)	1	,546				
		COPY OF TEST DAT	A TO BE INCLUDED	WITH CALC	ULATION						
	ANDREW KIN ENGINEERING, PLLC 295' 77	DATE/TIME FLOW HYDRANT #1 RESIDUAL (PSI) COPY OF TEST DAT	SEPT. 23, 2024 / 12:4 WHYD111428 74 A TO BE INCLUDED	45 PM	PRESSURE HYD FLOW HYDRAN FLOW (GPM) CULATION	DRANT V NT #2 N 1	VHYD112696 /A .546	NOT IN			
								t in Ope	_		
Commodity Description	n MEDICAL SUPPLIES	Storage T	ype (Rack, Bin, Pile)	RA	ACK						
		- 11-1-1-1-1		01	0						

			FIRE		TECTIOI RAGE HEIGH					ATION	SCOPE
01	n I	MEDICAL SUPF	LIES	s	Storage Type (Ra	ck, Bin, I	Pile)	RACK			
	I, II, III, I	IV	Storage Heig	ght 2	20'		Clearance 3' MINIMUM		JM		
	STABLE	Ξ	Open/Clos Array	e (OPEN		Wet/Dr Syster		WET (ES	FR)	
		Density Area	Height Factor	Clear Factor	Array Factor	Dry Pena		sign	Minimum Design	Final Design	
	Initial	-	-	-	-	-		-	-	-	
		-	-	-	-	-	-	-	-	-	
	Seconda	iry -	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	
IA	NT WITH	CHAPTER 23 (FPC)	IS STORA	AGE AREA LAYC	UT. RA	CK. AND PIL	E PLAN	INCLUDED?		

FIRE PROTECTION DESIGN DATA

Project Name: BOARD OF ELECTIONS PHASE II

System: WET

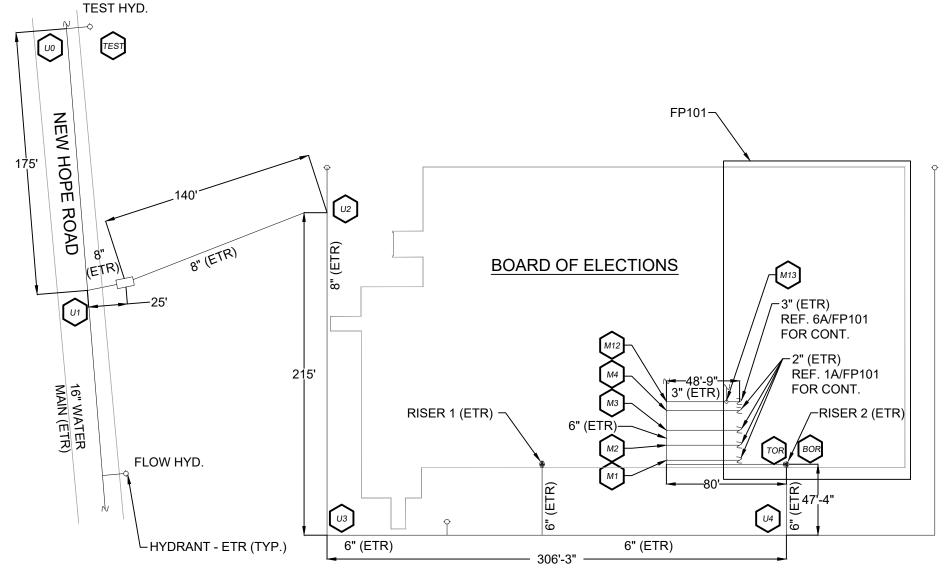
SPRINKLER HEAD LEGEND

Y DRY SPRINKLER HEAD, QR, SS SIDEWALL CHROME BODY, 1", 155°, K=5.6.

UPRIGHT SPRINKLER HEAD, QR, SSU BRASS BODY, 1/2", 155°, K=5.6. \bigcirc

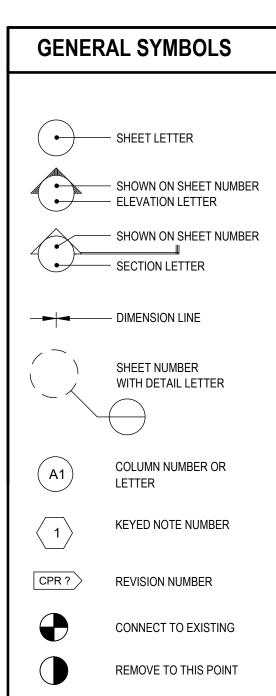
RECESSED PENDENT SPRINKLER HEAD: QR, SSP BRASS BODY, 1/2", 155°, K=5.6.

ALL SPRINKLER HEAD SPECIFICATION INFORMATION LISTED ABOVE IS TYPICAL UNLESS OTHERWISE INDICATED ON THE DRAWINGS AND/OR AS OTHERWISE REQ'D. BY CODE (ORIFICE SIZES, TEMP. RATINGS, ETC.).



SITE PLAN - FOR HYDRAULIC CALCULATION REFERENCE ONLY NO SCALE

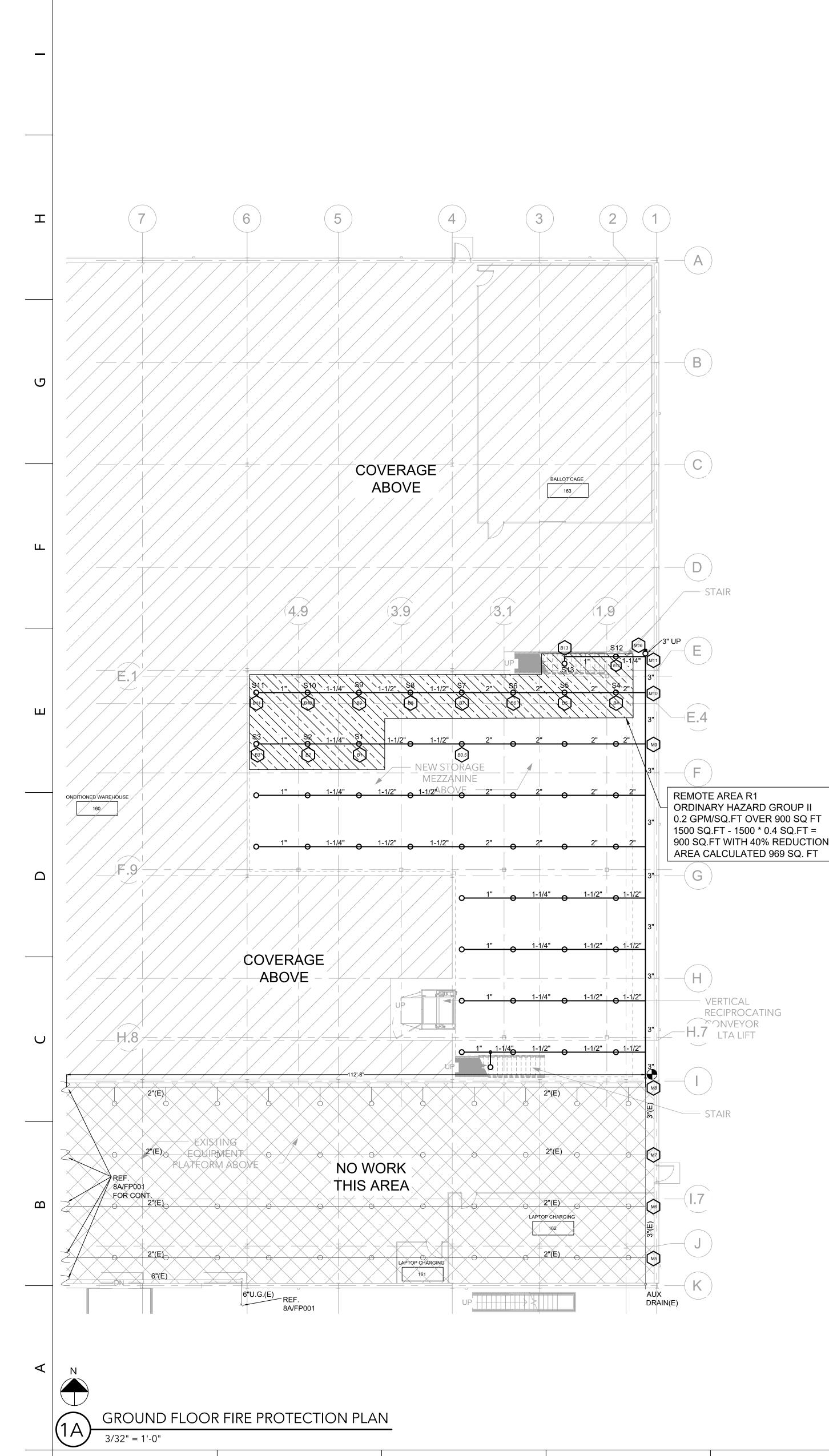
8	9	10	11	

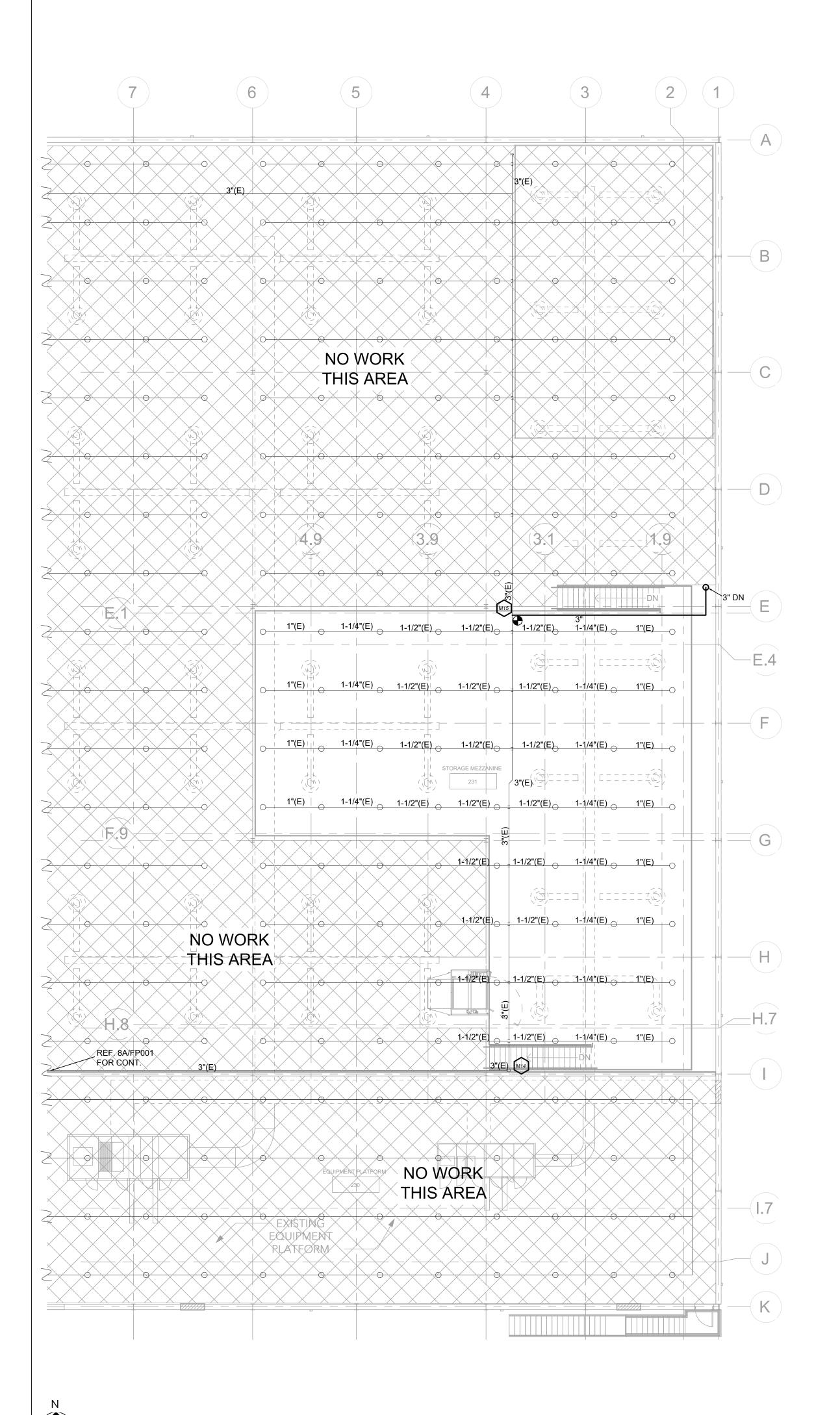




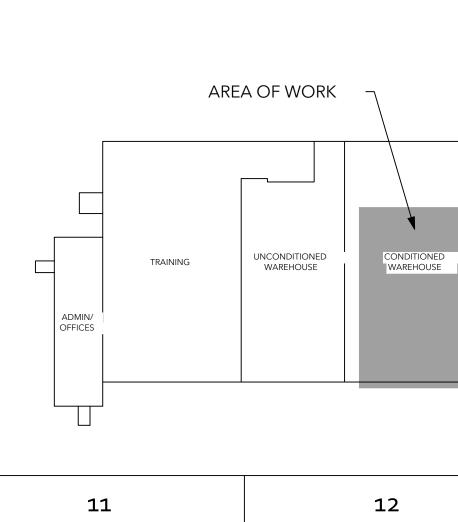


Docusign Envelope ID: 6324D56F-F09D-41C1-B489-1C29A68ECCF9



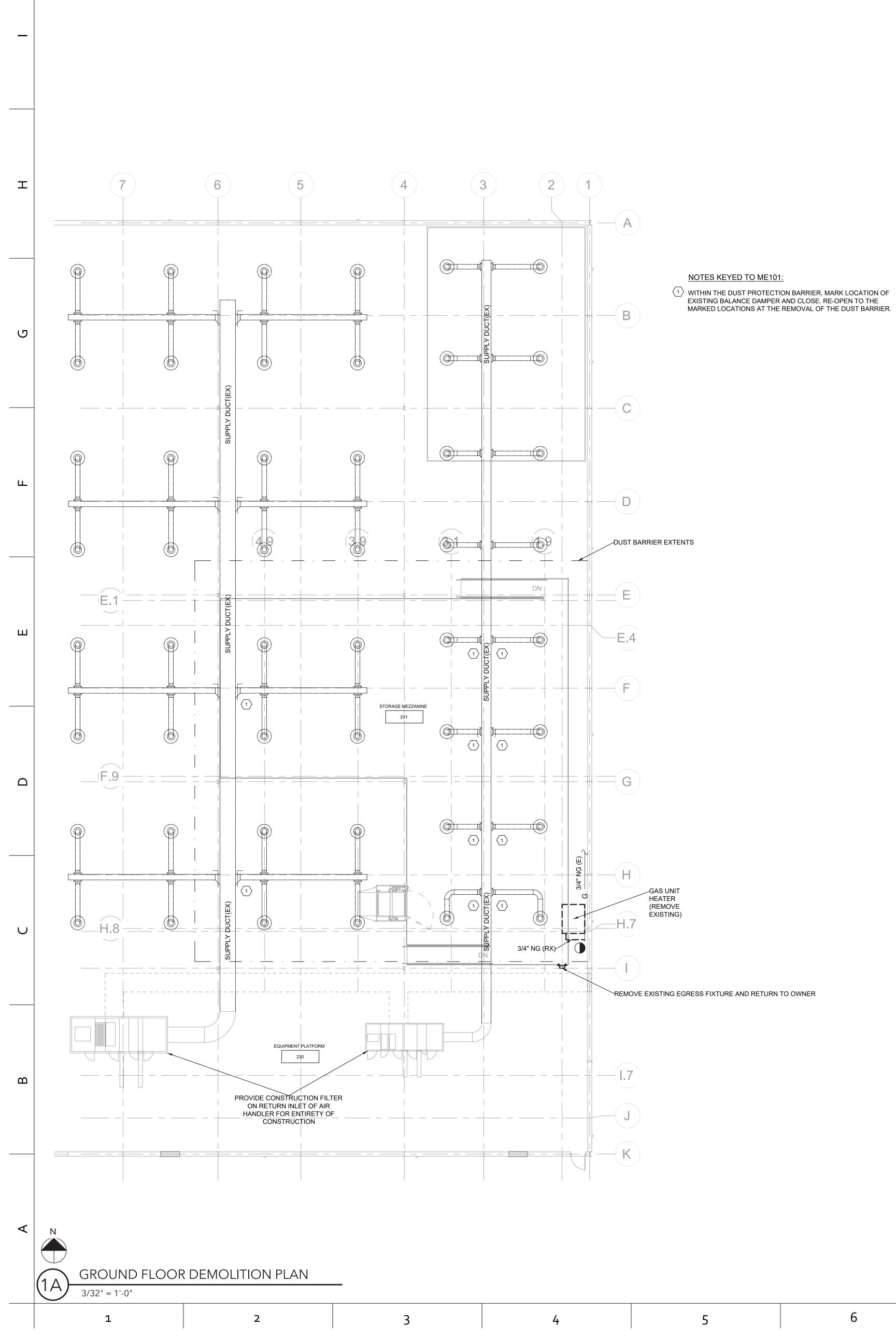


MEZZANINE FIRE PROTECTION PLAN 6A 3/32" = 1'-0"



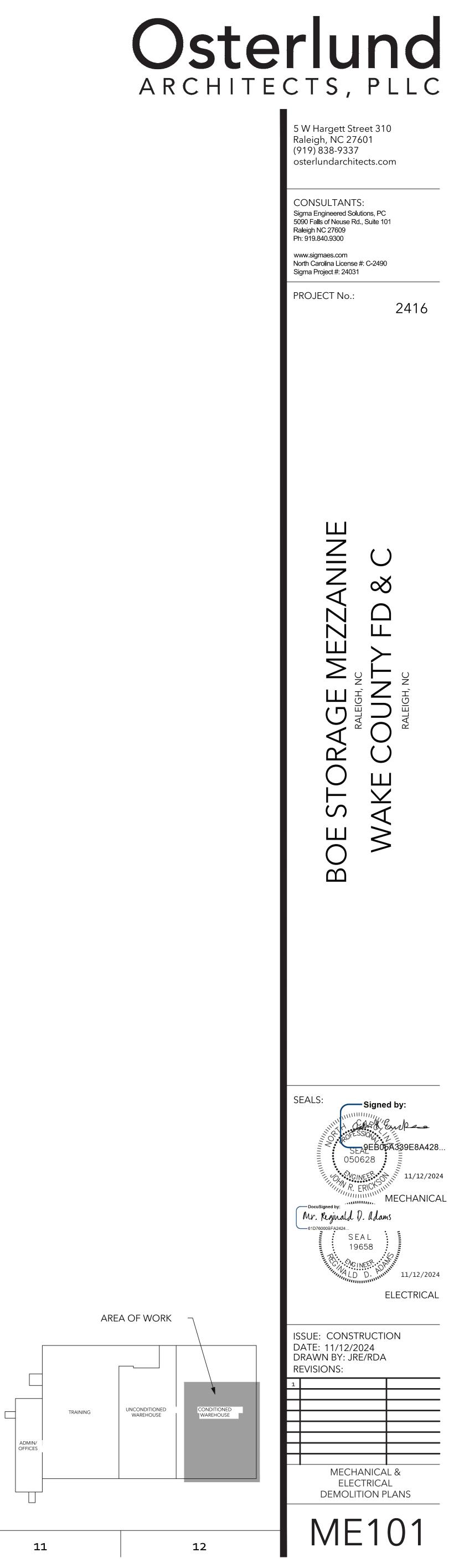


Docusign Envelope ID: 06D7248A-D665-4F8A-9E08-1484DB290748



4	5	





_	LIGHTING SYMBOLS	OUTLET BOX WITH BLANK	COVER - LOCATE AS REQUIRED TO	C/PROJ	AV SYSTEM SYMBOLS CEILING MOUNTED PROJECTOR. PROVIDE AV CONDUIT ROUGH-IN AND RECEPTACLE AT CEILING PER DETAIL
	WALL OR CEILING MTD EXIT SIGN WITH SELF CONTAINED BATTERY BACK-UP, SINGLE FACE. ARROW WHEN USED INDICATES DIRECTION.	FLUSH MTD DUPLEX REC 20A, 125V, 3W		SCREEN (J	2/SS603. CEILING MOUNTED SCREEN AND CONTROLS. PROVIDE
	WALL OR CEILING MTD EXIT SIGN WITH SELF CONTAINED BATTERY BACK-UP, DOUBLE FACE. ARROW WHEN USED INDICATES DIRECTION. SUSPENDED OR SURFACE MTD LED LIGHTING FIXTURE AND OUTLET, LETTER INDICATES FIXTURE TYPE;	0	JPLEX RECEPTACLE AND OUTLET 4" ABOVE BACKSPLASH OR	U TP U	AV CONDUIT ROUGH-IN AND POWER AT CEILING PER DETAIL 1/SS603. WALL MOUNTED TOUCH PANEL. PROVIDE AV CONDUIT ROUGH-IN AND ALL REQUIRED BOXES PER DETAIL
T	SUSPENDED OR SURFACE MTD LED LIGHTING FIXTURE LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT	FLUSH MOUNTED QUADR	JPLEX RECEPTACLE AND OUTLET 4" ABOVE BACKSPLASH OR	₽ Now	1/SS604. WALL MOUNTED MONITOR. PROVIDE AV CONDUIT ROUGH-IN AND RECEPTACLE AT WALL PER DETAIL
	INSTALLED WITH EMERGENCY DRIVER ON NITE-LITE CIRCUIT CEILING MTD OR LAY-IN TYPE LED LIGHTING FIXTURE AND OUTLET, LETTER INDICATES FIXTURE TYPE;	「四〇」 FLOORS. NOTE TO ALL RECEPTACLES/JUNC	ELUSH MOUNTED IN CONCRETE		3/SS603. CEILING MOUNTED SPEAKER JUNCTION BOX. PROVIDE
	CEILING MTD OR LAY-IN LED LIGHTING FIXTURE LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT INSTALLED WITH EMERGENCY DRIVER ON NITE-LITE CIRCUIT	ELECTRIC WATER COOLER. 2. SUBSCRIPT WP INDICATES GR STEEL LOCKABLE CLOSED WE 3. SUBSCRIPT GFI INDICATES GR	OUND FAULT TYPE RECEPTACLE WITH ATHERPROOF COVER. OUND FAULT TYPE RECEPTACLE.	JB-SP	AV CONDUIT ROUGH-IN AT CEILING PER DETAIL 2/SS604. CEILING MOUNTED SPEAKER.
	CEILING MTD OR LAY-IN TYPE LED LIGHTING FIXTURE AND OUTLET, LETTER INDICATES FIXTURE TYPE; NUMBER INDICATES CIRCUIT	VENDING MACHINE. 5. SUBSCRIPT TV INDICATES REC BRACKET.	ROUND FAULT TYPE RECEPTACLE FOR EPTACLE FOR TV MOUNTED IN RELINE INSTALLATION PER DETAILS.	PS J	CEILING MOUNTED PARTITION SENSOR. PROVIDE AV CONDUIT ROUGH-IN AT CEILING PER DETAIL 3/SS604.
U	CEILING MTD OR LAY-IN LED LIGHTING FIXTURE LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT INSTALLED WITH EMERGENCY DRIVER ON NITE-LITE CIRCUIT	 SUBSCRIPT USB INDICATES CO SUBSCRIPT HD INDICATES HAI 	MBINATION 20A OUTLET AND USB PORT. ID DRYER CONNECTION. RECEPTACLE MOUNTED BELOW SINK		
	 CEILING/PENDENT MTD/RECESSED LIGHTING FIXTURE AND OUTLET, LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT CEILING/PENDENT MTD/RECESSED LIGHTING FIXTURE 	120 VOLT 20 AMPERE SWITCH 11. SUBSCRIPT CR INDICATES 120	HWASHER CONNECTION. PROVIDE WITH ABOVE COUNTER FOR DISCONNECT. V POWER FOR CARD READER. V POWER CONNECTION FOR CEILING		
	LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT INSTALLED WITH EMERGENCY DRIVER ON NITE-LITE CIRCUIT SURFACE MOUNTED WALL LUMINAIRE	TELE/COMM OUTLET 4" SC CABLE AS NOTED.	9. BOX WITH 1"C PER RISER. PROVIDE		
	OUTLET, LETTER INDICATES FIXTURE TYPE; NUMBER INDICATES CIRCUIT SURFACE MOUNTED WALL LUMINAIRE	ABOVE BACKSPLASH OR	9. BOX WITH 1"C PER RISER. MOUNT 4" AS NOTED. PROVIDE CABLE AS NOTED. AY PER DRAWINGS AND PROJECT		
ш	LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT INSTALLED WITH EMERGENCY DRIVER ON NITE-LITE CIRCUIT EMERGENCY WALL BATTERY PACK UNIT PER THE SCHEDULE. LETTER NEXT TO FIXTURE ON PLANS INDICATES FIXTURE TYPE. CONNECT	2. SUBSCRIPT FA DESIGNATES CO	/IRELESS ACCESS POINT MOUNTED IN CEILING. NNECTION FOR FIRE ALARM DIAL OUT.		
	UNSWITCHED TO INDICATED BRANCH CIRCUIT. EMERGENCY CEILING BATTERY PACK UNIT PER THE SCHEDULE. LETTER NEXT TO FIXTURE ON PLANS INDICATES FIXTURE TYPE. CONNECT UNSWITCHED TO INDICATED BRANCH CIRCUIT.	4. SUBSCRIPT W DESIGNATES WA 5. SUBSCRIPT DC DESIGNATES DC 6. SUBSCRIPT SEC DESIGNATES C			
	NOTE TO ALL LIGHTING: <u>X/Y-SUBSCRIPTS @ LIGHTING FIXTURES:</u> 1. X-REPRESENTS OCCUPANCY SENSOR THAT CONTROLS FIXTURE. 2. Y-REPRESENTS SWITCH THAT CONTROLS FIXTURE.	LINE 8. SUBSCRIPT AV DESIGNATES 1" HC HANDICAPPED DOOR OPE	C TO ABOVE CEILING FOR AV CONNECTION.		
	3. WHEN NO SUBSCRIPT IS SHOWN, LOCAL OCC SENSOR AND SWITCH CONTROLS FIXTURE. SOR DIGITAL TIMER SWITCH-INTERMATIC EI235 OR EQUAL		DVIDE 30A, NON-FUSED U.O.N.		
ш	SDTDIGITAL TIMER SWITCH-INTERMATIC ST01 OR EQUALSFLUSH MTD TOGGLE SWITCH, S.P.S.T., 20A, 120/277VS3FLUSH MTD 3-WAY TOGGLE SWITCH, 20A, 120/277V	NON-FUSED DISCONNECT			
	S 4 FLUSH MTD 4-WAY TOGGLE SWITCH, 20A, 120/277V S D FLUSH MTD 0-10V LED DIMMER SWITCH		CT SWITCH, FUSED AT 20 AMP. OLTAGE PER CIRCUIT FED.		
	S OS SWITCH TYPE OCCUPANCY SENSOR WITH BUILT-IN OVERRIDE SWITCH S L SURFACE MTD TOGGLE SWITCH, S.P.S.T., 20A, 120/277V W/LOCKABLE	30 NUMBER OF POLES AND	THERPROOF NEMA 3R DISCONNECT SWITCH. OLTAGE PER CIRCUIT FED. A 4X SS DISCONNECT SWITCH.		
	$S_a \; S_b \; \text{ Lower case subscript indicate which lights the switch is to be connected to.}$	30 NUMBER OF POLES AND	OLTAGE PER CIRCUIT FED. ONNECT SWITCH AND MAGNETIC		
	DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR; A/V DESIGNATES SENSOR PROVIDED AS PART OF DIMMING OR A/V PACKAGE U/H DESIGNATES ULTRA-SONIC DEVICE RATED FOR HALLWAY INSTALL	MOTOR STARTER OR VFD			
Δ	WALL MOUNTED OCCUPANCY SENSOR	A.C. MOTOR, NUMERAL IN "F" INDICATES FRACTION			
	NOTE ON OCC SENSORS: SENSORS SHALL PROVIDE COVERAGE TO 1000 SF AND SWITCH LOAD OFF AFTER 20 MIN. (PS) PARTITION SENSOR	S PANEL BOARD, FLUSH MO S PANEL BOARD, SURFACE			
	LC LIGHTING CONTACTOR	CONCEALED RACEWAY. I IN 3/4" CONDUIT-WIRE PEI	NDICATES HOMERUN TO PANEL R PANEL SCHEDULES.		
		ELECTRICAL SYN	IBOL NOTES		
U		 SYMBOLS AND ABBREVIAT UTILIZED FOR THIS PROJE SYMBOLS NOT LISTED IN ¹ 	CT.		
		LEGEND ARE IDENTIFIED THEY OCCUR. 3. MOUNTING HEIGHT GIVEN	ON THE DRAWINGS WHERE		
		SPECIFICATIONS IS TO TH DEVICE AND SHALL BE FC NOTED.	E CENTERLINE OF THE LLOWED UNLESS OTHERWISE		
Ê					
۷					
	1 2 R		4 <i>۲</i>		6
		l			

			ABBREVIATION	S	
	REFER TO DETAILS SHEETS SS600 AND SS601 FOR			<u> </u>	
	ROUGH-IN DETAILS RELATED TO SEC. SYSTEMS INSTALLATION.	А	AMPERE, AMMETER	KW	KILOWATTS
		AFF	ABOVE FINISHED FLOOR	LC	LIGHTING CONTACTOR
DROP 3	REFER TO SS601 FOR ROUGH-IN INFORMATION	AIC	AMPERES INTERRUPTING CAPACITY	LTG	LIGHTING
		AHU	AIR HANDLING UNIT	LV	LOW VOLTAGE
CR	CARD READER.	ATS	AUTOMATIC TRANSFER SWITCH	MB	MAIN BREAKER
		AV,A/V	AUDIO-VISUAL	MC	MECHANICAL CONTRACTOR
(J) CAX	CARD READER DOOR ROUGH IN.	BFG	BELOW FINISHED GRADE	MCB	MAIN CIRCUIT BREAKER
		C/CON.	CONDUIT	MCC	MOTOR CONTROL CENTER
(J) ELX	ELECTRIC LOCK ROUGH IN AND POWER.	CATV	CABLE (COMMUNITY) ANTENNA TELEVISION	MH	MANHOLE
		CU	COPPER	MLO	MAIN LUGS ONLY
\bigcirc		DISC	DISCONNECT	NF	NON FUSED
(J) DCX	DOOR CONTACT.	EC	ELECTRICAL CONTRACTOR	NIC	NOT IN CONTRACT
		ECB	ENCLOSED CIRCUIT BREAKER	NL	NIGHT LIGHT
(J) GB	GLASS BREAK.	EGC	EQUIPMENT GROUNDING CONDUCTOR	Р	POLE, PHASE
GB		EWC	ELECTRIC WATER COOLER	PB	PULL BOX
К	KEYPAD.	E	EXISTING	PC	PLUMBING CONTRACTOR
		FA, F/A	FIRE ALARM F	P/BD, PNL	PANELBOARD
KB	SECURITY CONNECTION AT KNOX BOX.	FAAP	FIRE ALARM ANNUNCIATOR PANEL	PR	PAIR
5.1		FACP	FIRE ALARM CONTROL PANEL	PV	PHOTO-VOLTAIC
RM	SECURITY CONNECTION AT REFRIGERANT	FAGE			
RM	SECURITY CONNECTION AT REFRIGERANT MONITORING SYSTEM.	GEC	GROUNDING ELECTRODE CONDUCTOR	SN	SOLID NEUTRAL
_	MONITORING SYSTEM.			SN SW	SOLID NEUTRAL SWITCH
		GEC	GROUNDING ELECTRODE CONDUCTOR		
_	MONITORING SYSTEM.	GEC G,GND	GROUNDING ELECTRODE CONDUCTOR GROUND	SW	SWITCH
O ST4	MONITORING SYSTEM. SECURITY TELEPHONE.	GEC G,GND GC	GROUNDING ELECTRODE CONDUCTOR GROUND GENERAL CONTRACTOR	SW SWBD	SWITCH SWITCHBOARD
_	MONITORING SYSTEM.	GEC G,GND GC GF,GFI	GROUNDING ELECTRODE CONDUCTOR GROUND GENERAL CONTRACTOR GROUND FAULT INTERRUPTER	SW SWBD T/C	SWITCH SWITCHBOARD TELECOM
J ST4 ∭X	MONITORING SYSTEM. SECURITY TELEPHONE.	GEC G,GND GC GF,GFI HH	GROUNDING ELECTRODE CONDUCTOR GROUND GENERAL CONTRACTOR GROUND FAULT INTERRUPTER HANDHOLE	SW SWBD T/C UG	SWITCH SWITCHBOARD TELECOM UNDERGROUND
O ST4	MONITORING SYSTEM. SECURITY TELEPHONE. MOTION DETECTOR.	GEC G,GND GC GF,GFI HH HP	GROUNDING ELECTRODE CONDUCTOR GROUND GENERAL CONTRACTOR GROUND FAULT INTERRUPTER HANDHOLE HORSEPOWER	SW SWBD T/C UG UON	SWITCH SWITCHBOARD TELECOM UNDERGROUND UNLESS OTHERWISE NOTED
J ST4 ∭X DX	MONITORING SYSTEM. SECURITY TELEPHONE. MOTION DETECTOR. DURESS BUTTON.	GEC G,GND GC GF,GFI HH HP IG, ISG	GROUNDING ELECTRODE CONDUCTOR GROUND GENERAL CONTRACTOR GROUND FAULT INTERRUPTER HANDHOLE HORSEPOWER ISOLATED GROUND	SW SWBD T/C UG UON V	SWITCH SWITCHBOARD TELECOM UNDERGROUND UNLESS OTHERWISE NOTED VOLT
ST4 O MX DX ₽ V1-2 P	MONITORING SYSTEM. SECURITY TELEPHONE. MOTION DETECTOR.	GEC G,GND GC GF,GFI HH HP IG, ISG JB	GROUNDING ELECTRODE CONDUCTOR GROUND GENERAL CONTRACTOR GROUND FAULT INTERRUPTER HANDHOLE HORSEPOWER ISOLATED GROUND JUNCTION BOX	SW SWBD T/C UG UON V WP	SWITCH SWITCHBOARD TELECOM UNDERGROUND UNLESS OTHERWISE NOTED VOLT WEATHERPROOF
	MONITORING SYSTEM. SECURITY TELEPHONE. MOTION DETECTOR. DURESS BUTTON.	GEC G,GND GC GF,GFI HH HP IG, ISG JB	GROUNDING ELECTRODE CONDUCTOR GROUND GENERAL CONTRACTOR GROUND FAULT INTERRUPTER HANDHOLE HORSEPOWER ISOLATED GROUND JUNCTION BOX	SW SWBD T/C UG UON V WP	SWITCH SWITCHBOARD TELECOM UNDERGROUND UNLESS OTHERWISE NOTED VOLT WEATHERPROOF
ST4 MX DX U1-2	MONITORING SYSTEM. SECURITY TELEPHONE. MOTION DETECTOR. DURESS BUTTON.	GEC G,GND GC GF,GFI HH HP IG, ISG JB	GROUNDING ELECTRODE CONDUCTOR GROUND GENERAL CONTRACTOR GROUND FAULT INTERRUPTER HANDHOLE HORSEPOWER ISOLATED GROUND JUNCTION BOX	SW SWBD T/C UG UON V WP	SWITCH SWITCHBOARD TELECOM UNDERGROUND UNLESS OTHERWISE NOTED VOLT WEATHERPROOF
ST4 MX DX U1-2	MONITORING SYSTEM. SECURITY TELEPHONE. MOTION DETECTOR. DURESS BUTTON.	GEC G,GND GC GF,GFI HH HP IG, ISG JB	GROUNDING ELECTRODE CONDUCTOR GROUND GENERAL CONTRACTOR GROUND FAULT INTERRUPTER HANDHOLE HORSEPOWER ISOLATED GROUND JUNCTION BOX	SW SWBD T/C UG UON V WP	SWITCH SWITCHBOARD TELECOM UNDERGROUND UNLESS OTHERWISE NOTED VOLT WEATHERPROOF
	MONITORING SYSTEM. SECURITY TELEPHONE. MOTION DETECTOR. DURESS BUTTON.	GEC G,GND GC GF,GFI HH HP IG, ISG JB	GROUNDING ELECTRODE CONDUCTOR GROUND GENERAL CONTRACTOR GROUND FAULT INTERRUPTER HANDHOLE HORSEPOWER ISOLATED GROUND JUNCTION BOX	SW SWBD T/C UG UON V WP	SWITCH SWITCHBOARD TELECOM UNDERGROUND UNLESS OTHERWISE NOTED VOLT WEATHERPROOF

BUILDING CODE SUMM	2018 APPENDIX /ARY FOR ALL C	_
	LECTRICAL DESIGN ELECTRICAL SHEETS	IF A

FOR ALL COMMERCIAL PROJECTS CAL DESIGN RICAL SHEETS IF APPLICABLE) ELECTRICAL SUMMARY ELECTRICAL SYSTEM AND EQUIPMENT PERFORMANCE
 X PRESCRIPTIVE METHOD OF COMPLIANCE: ENERGY CODE PERFORMANCE
PRESCRIPTIVE PER SCHEDULE PER SCHEDULE PER SCHEDULE PER SCHEDULE PER SCHEDULE D VS ALLOWED 440W vs 2100W IED VS ALLOWED NA vs NA IRED FOR ASHRAE 90.1) QUIPMENT PERFORMANCE VER DENSITY ITING CONTROLS RGY IR SYSTEM IN SERVICE WATER HEATING THE DESIGN OF THIS BUILDING COMPLIES WITH THE EMENT OF, THE NORTH CAROLINA STATE BUILDING

ASHRAE 90.1
LIGHTING SCHEDULE
LAMP TYPE REQUIRED IN FIXTURE
NUMBER OF LAMPS IN FIXTURE
BALLAST TYPE USED IN THE FIXTURE
NUMBER OF BALLASTS IN FIXTURE
TOTAL WATTAGE PER FIXTURE
TOTAL INTERIOR WATTAGE SPECIFIED
TOTAL EXTERIOR WATTAGE SPECIFIED
ADDITIONAL EFFICIENCY PACKAGE OPTIONS (WHEN USING THE 2018 NCECC; NOT REQUIR
C406.2 MORE EFFICIENT HVAC EQU
X C406.3 REDUCED LIGHTING POWER
C406.4 ENHANCED DIGITAL LIGHTI
C406.5 ON-SITE RENEWABLE ENER
C406.7 REDUCED ENERGY USE IN S
DESIGNER STATEMENT:
TO THE BEST OF MY KNOWLEDGE AND BELIEF, TH ELECTRICAL SYSTEM AND EQUIPMENT REQUIREM CODE
Sound

(squed 1 bons SIGNED: REGGIE ADAMS P.E. ELECTRICAL ENGINEER

NAME:

TITLE:

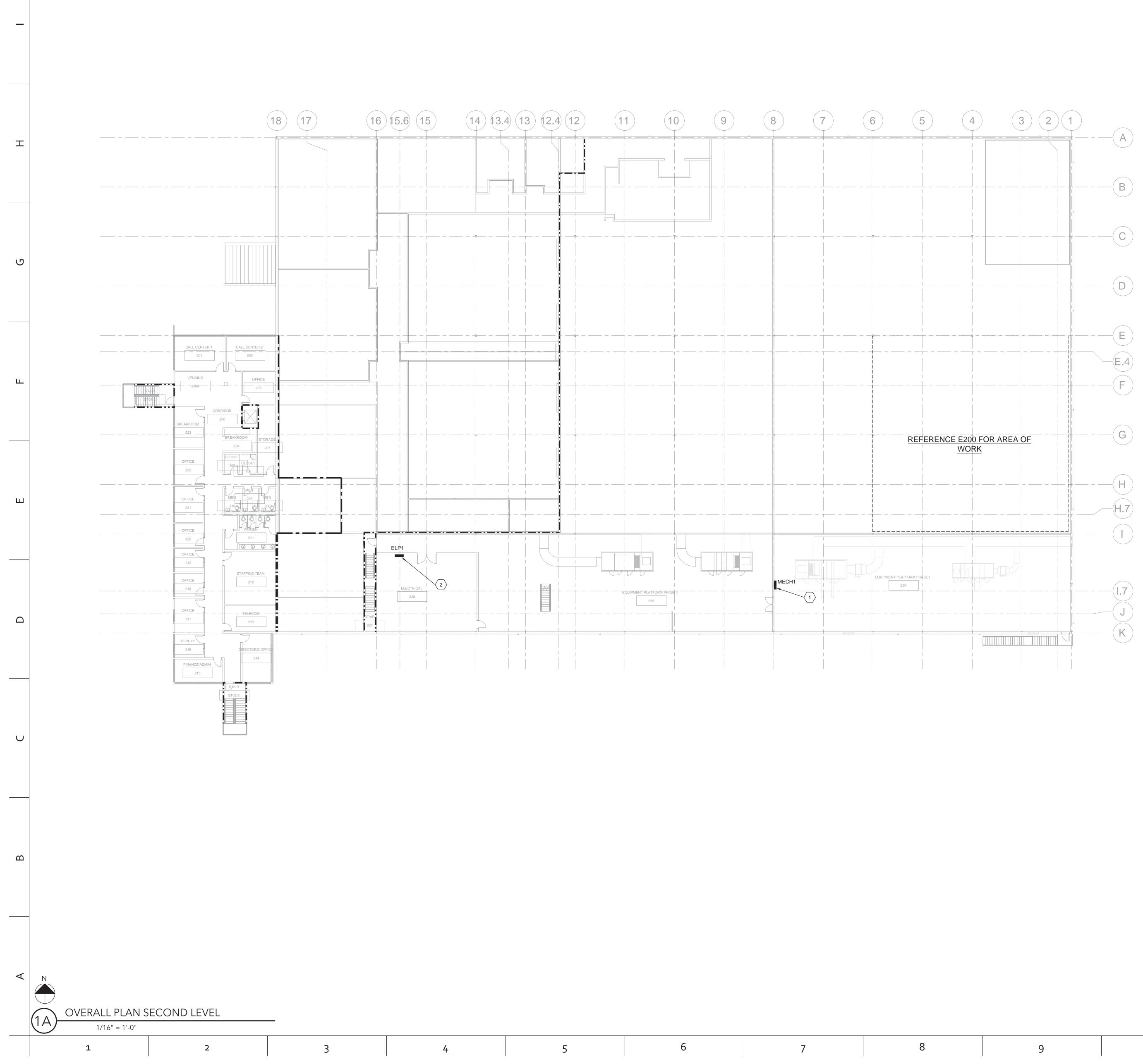
SECURITY SYSTEM SYMBOLS

ABBREVIATIONS









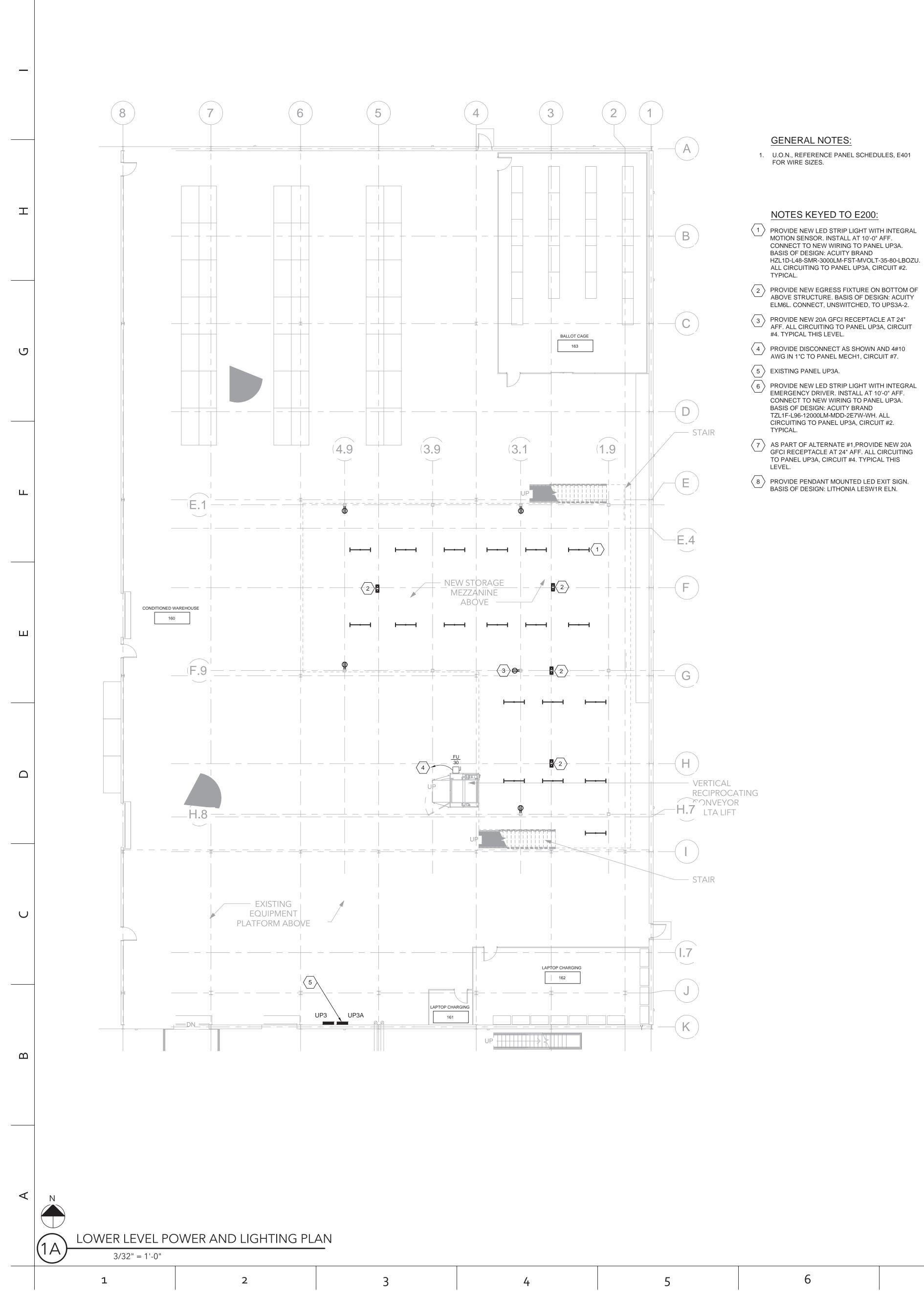
4	5	6	7	8	9	10	11	12

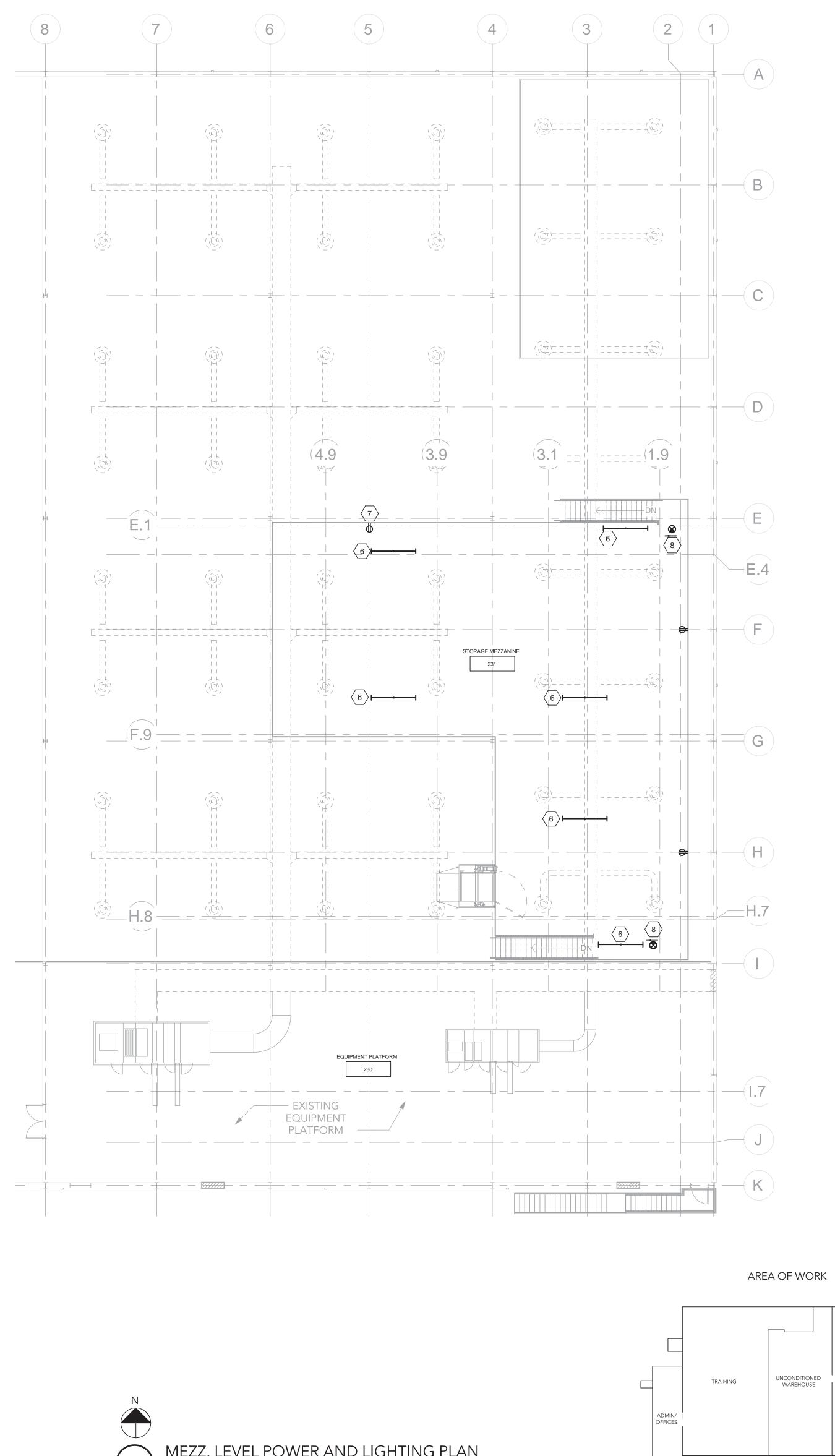


- NOTES KEYED TO E100:
- 1 PROVIDE NEW 15 AMPERE, 3-POLE BREAKER IN PANEL. REFERENCE E200 FOR WIRING.
- 1 LOCATION OF PANEL ELP1. SHOWN FOR REFERENCE.











GENERAL NOTES:

FOR WIRE SIZES.

TYPICAL.

 $\left< 5 \right>$ EXISTING PANEL UP3A.

TYPICAL.

LEVEL.

 \frown

1. U.O.N., REFERENCE PANEL SCHEDULES, E401

NOTES KEYED TO E200:

BASIS OF DESIGN: ACUITY BRAND

HZL1D-L48-SMR-3000LM-FST-MVOLT-35-80-LBOZU.

ALL CIRCUITING TO PANEL UP3A, CIRCUIT #2.

2 PROVIDE NEW EGRESS FIXTURE ON BOTTOM OF ABOVE STRUCTURE. BASIS OF DESIGN: ACUITY

4 PROVIDE DISCONNECT AS SHOWN AND 4#10 AWG IN 1"C TO PANEL MECH1, CIRCUIT #7.

6 PROVIDE NEW LED STRIP LIGHT WITH INTEGRAL / EMERGENCY DRIVER. INSTALL AT 10'-0" AFF. CONNECT TO NEW WIRING TO PANEL UP3A.

BASIS OF DESIGN: ACUITY BRAND

TZL1F-L96-12000LM-MDD-2E7W-WH. ALL

CIRCUITING TO PANEL UP3A, CIRCUIT #2.

 7
 AS PART OF ALTERNATE #1,PROVIDE NEW 20A

 GECL RECEPTACLE AT 24" AFE, ALL CIRCUITING

(8)PROVIDE PENDANT MOUNTED LED EXIT SIGN.BASIS OF DESIGN: LITHONIA LESW1R ELN.

GFCI RECEPTACLE AT 24" AFF. ALL CIRCUITING

TO PANEL UP3A, CIRCUIT #4. TYPICAL THIS

ELM6L. CONNECT, UNSWITCHED, TO UPS3A-2.

8

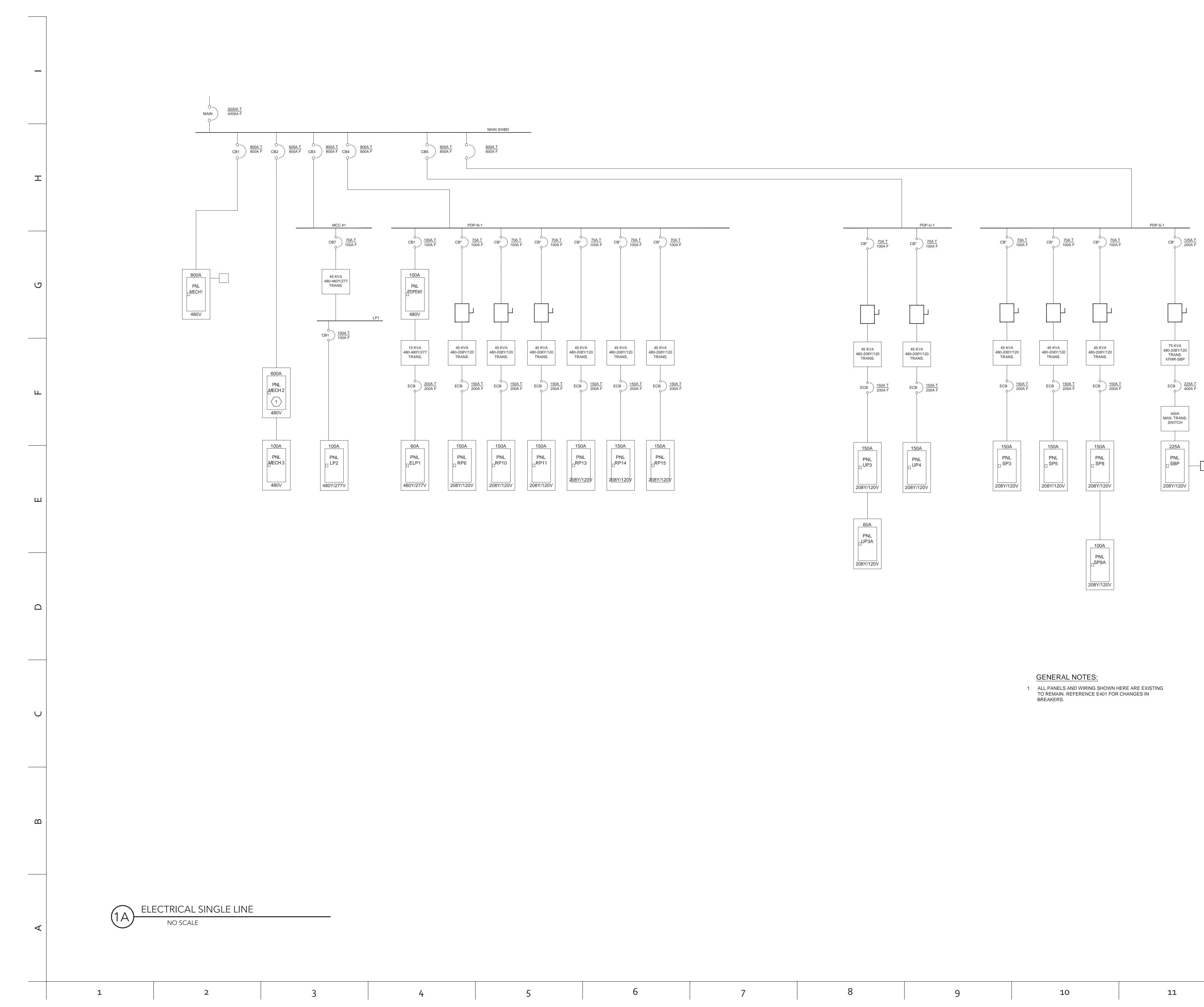
MEZZ. LEVEL POWER AND LIGHTING PLAN

9

3/32" = 1'-0"

11







8	9	10	11



U

ш

 \square

 \cup

MAIN SWBD TYPE: AMPERES: AIC RATING: VOLTAGE:	(EXISTING) QED SWITCHBOARD-SE LABE 4000 AMPERES 65,000 AMPERES 480 VOLTS 3 PHASE, 3 WIRE	ELED					
					kVA	PER PH	ASE
POS	LOAD SERVED	TRIP	POLE	kVA	Α	В	C
MAIN	MAIN CIRCUIT BREAKER-100% RATED WITH LSI&G FUNCTION	4000	3				
				176.53	176.53		
1	PANEL MECH1	800	3	176.53		176.53	
			100	176.53		1	176.53
				62.10	62.10	1	
2	PANEL MECH2	600	3	62.10	10 00 01	62.10	1.1.1.1
		-		62.10		1	62.10
3	MCC	800	3				
				77.59	77.59	-	-
4	PANEL PDP-N-1	800	3	74.73		74.73	
	and the second s			71.59			71.59
				27.27	27.27	1	1.
5	PANEL PDP-U-1	800	3	27.27	÷	27.27	
				27.02			27.02
				39.08	39.08		
6	PANEL PDP-S-1	600	3	39.72		39.72	
				36.50			36.50
TOTAL CONNECTE	D AMPERES	1136.7 1368.8		TOTALS:	382.57	380.35	373.74
TOTAL DEMAND k		1136.7					
TOTAL DEMAND A	MPERES	1368.8					

	PANEL "UP3"			PANE BUS S VOLT				NQOD 150A 208Y/120				MCB of MOUN MINIM	ITING		MCB SURFACE NEMA 1 10,000			PANE
							kV	A PER PHA	SE	i tuti	in the					1.0.2		
CKT	LOAD SERVED	TRIP	POLE	kVA	WIRE*	CON.	Α	В	С	CON.	WIRE*	kVA	POLE	TRIP	LOAD SERVED	СКТ	CKT	LOA
1	DUPLEX REC	20	1	0.50	#12/#12	3/4"	1.00			3/4"	#12/#12	0.50	1	20	DUPLEX REC	2	1	PALLE
3	DUPLEX REC	20	1	0.50	#12/#12	3/4"		1.00		3/4"	#12/#12	0.50	1	20	DUPLEX REC	4	3	TO
5	SINGLE 20A REC	20	1	1.00	#12/#12	3/4"	1000		2.00	3/4"	#12/#12	1.00	1	20	SINGLE 20AREC	6	5	1
7	DUPLEX REC	20	1	0.50	#12/#12	3/4"	1.00			3/4"	#12/#12	0.50	1	20	DUPLEX REC	8	7	
9	DUPLEX REC	20	1	0.50	#12/#12	3/4"		1.00		3/4"	#12/#12	0.50	1	20	DUPLEX REC	10	9	
11	SINGLE 20A REC	20	1	1.00	#12/#12	3/4"			2.00	3/4"	#12/#12	1.00	1	20	SINGLE 20AREC	12	11	
13	DUPLEX REC	20	1	0.50	#12/#12	3/4"	1.00			3/4"	#12/#12	0.50	1	20	DUPLEX REC	14	13	
15	DUPLEX REC	20	1	0.50	#12/#12	3/4"		1.00	1	3/4"	#12/#12	0.50	1	20	DUPLEX REC	16	15	
17	SINGLE 20A REC	20	1	1.00	#12/#12	3/4"			2.00	3/4"	#12/#12	1.00	1	20	SINGLE 20AREC	18	17	
19	DUPLEX REC	20	1	0.50	#12/#12	3/4"	1.00	(B		3/4"	#12/#12	0.50	1	20	DUPLEX REC	20	19	
21	DUPLEX REC	20	1	0.50	#12/#12	3/4"		1.00		3/4"	#12/#12	0.50	1	20	DUPLEX REC	22	21	1
23	SINGLE 20A REC	20	1	1.00	#12/#12	3/4"		1	2.00	3/4"	#12/#12	1.00	1	20	SINGLE 20AREC	24	23	
25	DUPLEX REC	20	1	0.50	#12/#12	3/4"	1.50			3/4"	#12/#12	1.00	1	20	QUAD RECEP	26	25	1
27	DUPLEX REC	20	1	0.50	#12/#12	3/4"		1.50		3/4"	#12/#12	1.00	1	20	QUAD RECEP	28	27	
29	SINGLE 20A REC	20	1	1.00	#12/#12	3/4"		1	2.00	3/4"	#12/#12	1.00	1	20	QUAD RECEP	30	29	
31	DUPLEX REC	20	1	0.50	#12/#12	3/4"	1.50			3/4"	#12/#12	1.00	1	20	QUAD RECEP	32	31	1
33	DUPLEX REC	20	1	0.50	#12/#12	3/4"		2.00	il an a stall	3/4"	#12/#12	1.50	1	20	FUTURE T/C	34	33	
35	SINGLE 20A REC	20	1	1.00	#12/#12	3/4"	Lag Publi		2.50	3/4"	#12/#12	1.50	1	20	BARCODE SCANNER	36	35	
37	DUPLEX REC	20	1	0.50	#12/#12	3/4"	2.27					1.77				38	37	
39	DUPLEX REC	20	1	0.50	#12/#12	3/4"		1.52		PER	RISER	1.02	3	60	UP3A	40	39	
41	SINGLE 20A REC	20	1	1.00	#12/#12	3/4"			1.30			0.30				42	41	
			Т	OTALS	:	kW	9.27	9.02	12.50									
						Α	33.47	32.56	45.13									
	ONNECTED kVA : EMAND kVA :	30.79 33.87		85.57 94.13	A A				3		NATES LO		T DEVIC	CE ON	BREAKER			NNECTED

PDP-U-1 TYPE: AMPERES: AIC RATING: VOLTAGE:	(EXISTING) ILINE 800 AMPERES 65,000 AMPERES 480 VOLTS 3 PHASE, 3 W	IRE					
				10 -	kVA	PER PH	ASE
POS	LOAD SERVED	TRIP	POLE	kVA	Α	В	C
(t)	SPARE	100	3				
2	SPARE	100	3	1			
		-		9.3	9.27		-
3	PANEL UP3	70	3	9.0		9.02	
	1 1			12.5			12.50
		_	1	8.00	8.00		
4	PANEL UP4	70	3	8.00		8.00	
1				8.00			8.00
				10.00	10.00		
5	PANEL UP5	70	3	10.00		10.00	
		1 1 1 1	111	10.00			10.00
TOTAL CONNECT	TED KVA :	84.79		TOTALS:	27.27	27.02	30.50
TOTAL CONNECT	TED AMPERES	102.11					
TOTAL DEMAND		106					
TOTAL DEMAND	AMPERES	127.64	-				

MECH1 TYPE: AMPERES: AIC RATING: VOLTAGE:	(EXISTING) ILINE 800 AMPERES 65,000 AMPERES 480 VOLTS 3 PHASE, 3 WIRE			3	218		
	1.0.00000000000000000000000000000000000	195-001	6.67	15 DAL	kVA	PER PH	ASE
POS	LOAD SERVED	TRIP	POLE	and the second se	A	В	С
11 N N 1	AHU-2 SF/RF(15HP/7.5HP),	50		11.63	11.63	11.00	
1	PCHWP-1 (3HP), FUTURE PCHWP (5HP)	50	3	11.63		11.63	44.00
	AHU-1 SF/RF(7.5HP/5HP),	-	1	11.63 8.03	8.03		11.63
2	SCHWP-1 (3HP), FUTURE	40	3	8.03	0.05	8.03	
	SCHWP (2X5HP)		Ŭ	8.03		0.00	8.03
1			1			1	
3	SPARE	70	3			1	
		- C.T.	1			1	
	1 A A A A A A A A A A A A A A A A A A A	1	1			1	
4	SPD	60	3	-	-	5	
<u> </u>	219 M.	12.644			100		
100 B		1		9.00	9.00		
5	EDH-1A	45	3	9.00	F 1 - 1 - 1	9.00	0.00
			-	9.00	40.00		9.00
6	EDH-1B	90	3	19.33	19.33	10.22	
0	EDH-IB	90	3	19.33 19.33		19.33	19.33
		-	-	1.11	1.11		19.55
7	MEZZ LIFT	15N	3	1.11	1.11	1.11	
				1.11	11223		1.11
			-		-	-	
8	SPARE	1.000	1.5			1	
1244-10	Longer a					1	
12	August of Augusta		1.5	69.25	69.25	in all the second	
10	CHILLER #2	300	3	69.25		69.25	TRUNC
	114000		-	69.25			69.25
		10101	1	58.17	58.17		1.00
11	CHILLER #1	250	3	58.17	C.H. 12	58.17	
			-	58.17		-	58.17
12	SPACE	15	3		-	-	-
12	SPACE	19	3	-		-	-
1.0	2 A A A A A A A A A A A A A A A A A A A		-		-		
13	SPACE	225				-	
1		004	1.1.1.1			1	
	121.023	TOWN				1	
14	SPACE	400					
The second second				1.0010.21	122.3	Land	
TOTAL CONNEC		529.58		TOTALS:	176.53	176.52	176.52
TOTAL CONNEC		637.74					
TOTAL DEMAND		540		1000			
TOTAL DEMAND	AMPERES	650.25		N-NEW	BREAKER	5	

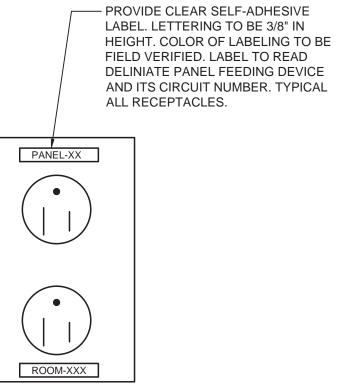
PANEL SCHEDULES **(**1A)

NO SCALE

2

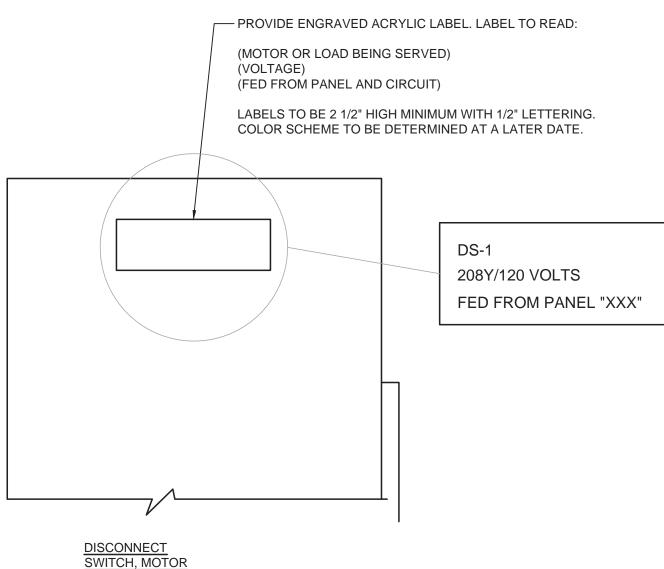


TOTAL DEMAND kV



RECEPTACLE

(4A)



VARIABLE FREQUENCY DRIVI

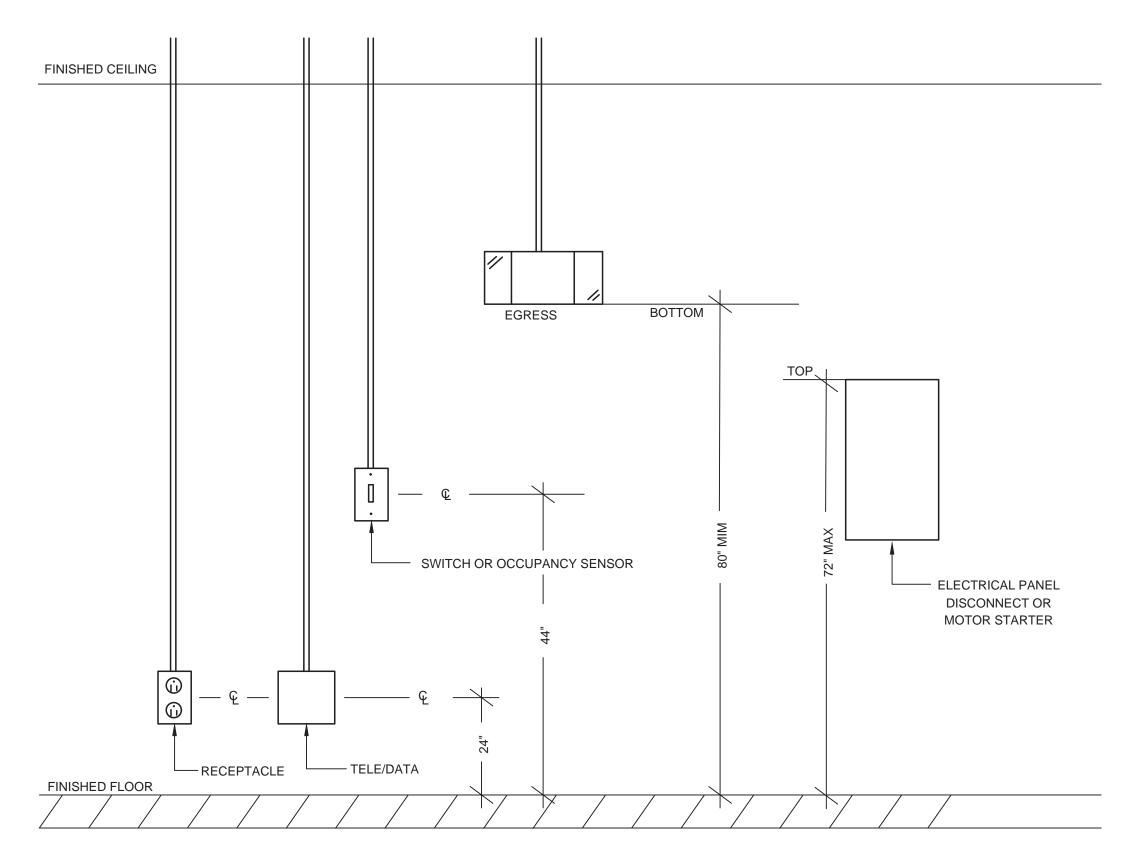
LABELING AND MOUNTING DETAILS

NO SCALE

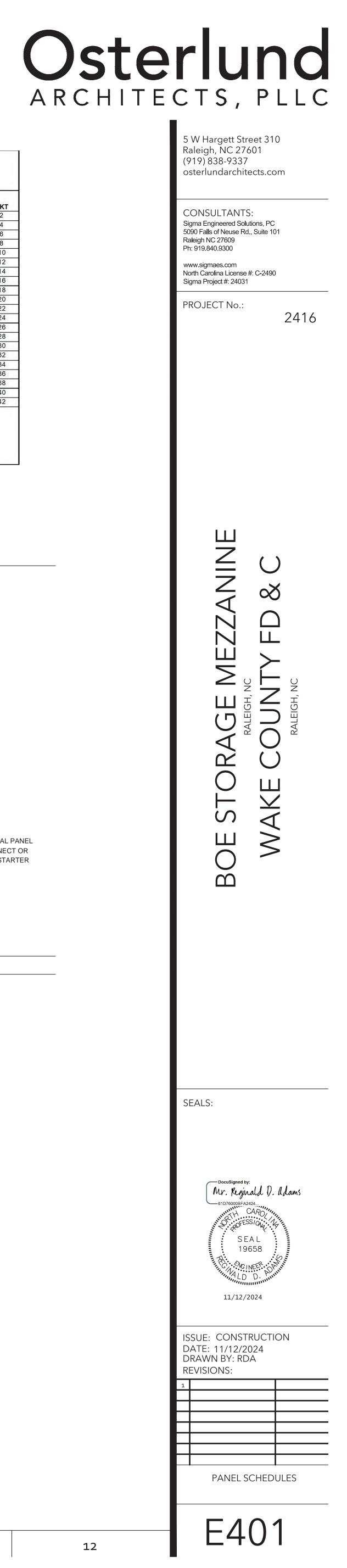
4	5	6	7	8	9	10	11	12

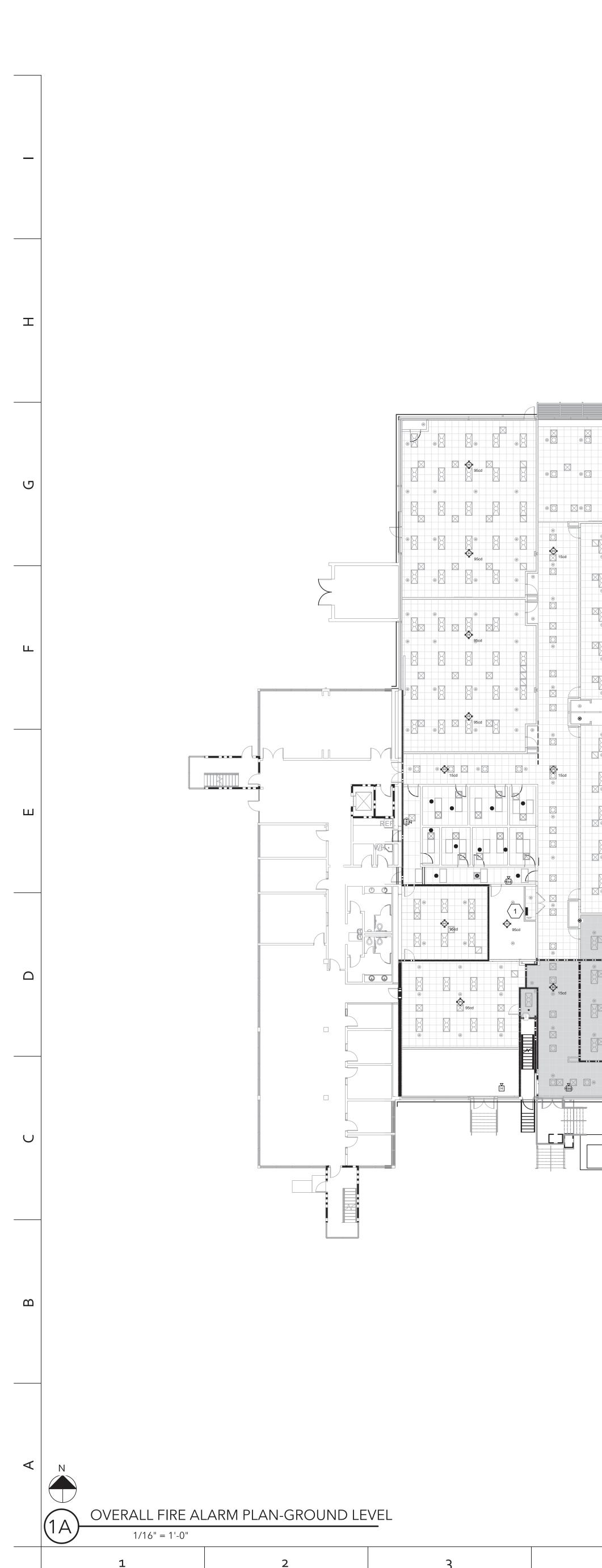


F	PANEL "UP3A			PANEL BUS S	. TYPE: IZE:			NQOD 100A				MCB of MOUN			MLO SURFACE NEMA 1	
_		1.5		VOLTA	GE:	ia di seconda di secon		208Y/120	ko _==			MINIM	UM AI	C:	10,000	
		- (x, t)					kV	A PER PHA	SE	i u u i			2.3			11.7.6
	LOAD SERVED	TRIP	POLE	kVA	WIRE*	CON.	Α	В	С	CON.	WIRE*	kVA	POLE	TRIP	LOAD SERVED	CKT
1	PALLET WRAPPER	20	1	0.50	#12	3/4"	1.77			3/4"	#12	1.27	1	20	LIGHTING	2
	TOWMOTOR	20	1	0.30	#12	3/4"		1.02		3/4"	#12	0.72	1	20	RECEPTACLES	4
	SCALE	20	1	0.30	#12	3/4"			0.30		<u></u>		1	20	SPARE	6
- 11	SPARE	20	1				0.00						1	20	SPARE	8
	SPARE	20	1					0.00					1	20	SPARE	10
	SPARE	20	1				100000		0.00	1			1	20	SPARE	12
	SPARE	20	1	-			0.00						1	20	SPARE	14
	SPARE	20	1					0.00					1	20	SPARE	16
	SPARE	20	1						0.00	1		1.0	1	20	SPARE	18
	SPARE	20	1				0.00			(1	20	SPARE	20
	SPARE	20	1				1.2.2.2.2.2	0.00			1		1	20	SPARE	22
	SPARE	20	1		(From the fill		0.00				1	20	SPARE	24
	SPARE	20	1	1			0.00						1	20	SPARE	26
	SPARE	20	1	1				0.00	1				1	20	SPARE	28
	SPARE	20	1			(0.00				1	20	SPARE	30
	SPACE	1	1	-		C	0.00	· · · · · · · · · · · · · · · · · · ·		0		100			SPACE	32
	SPACE							0.00							SPACE	34
	SPACE					ð	12.5.00		0.00				1		SPACE	36
	SPACE	-					0.00							1	SPACE	38
	SPACE	-		-				0.00					-		SPACE	40
	SPACE								0.00						SPACE	42
			T	OTALS:		kW	1.77	1.02	0.30					-		
						A	6.40	3.68	1.08							
ON	INECTED kVA :	3.09	KW	8.59	A						NATES				BREAKER	
													DEVIC	L ON		
EM	AND kVA :	3.09	KW	8.59	Α					*-PHASE	-NEUTRA	L/GND				



NOTE: NOT ALL DEVICES MAY BE USED IN CONSTRUCTION.

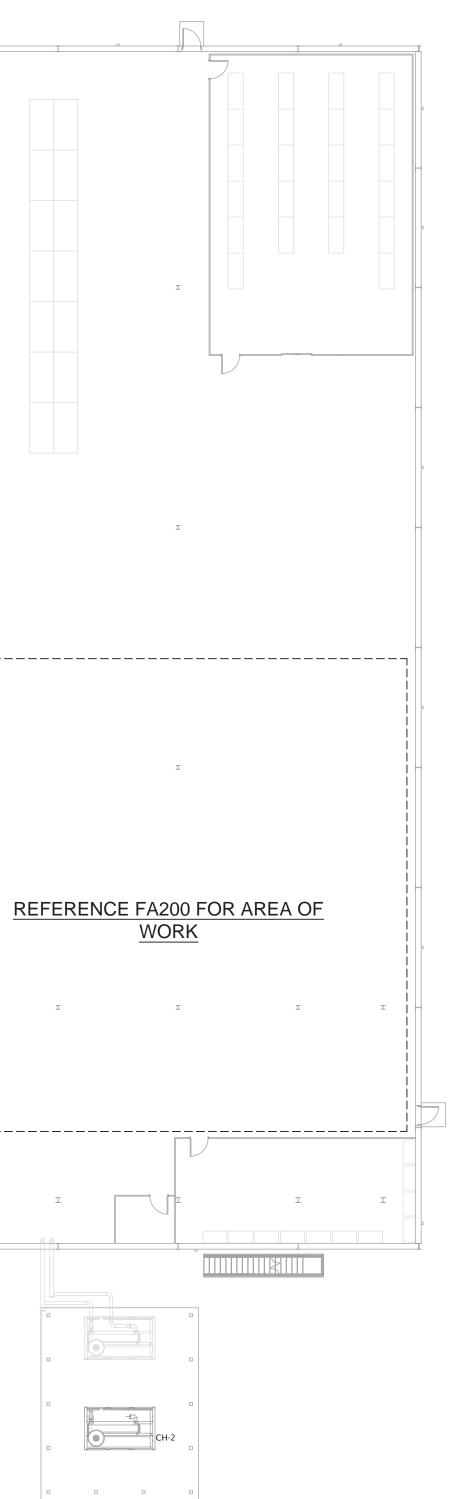




	I	
	I I	<u>R</u>

7

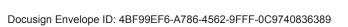


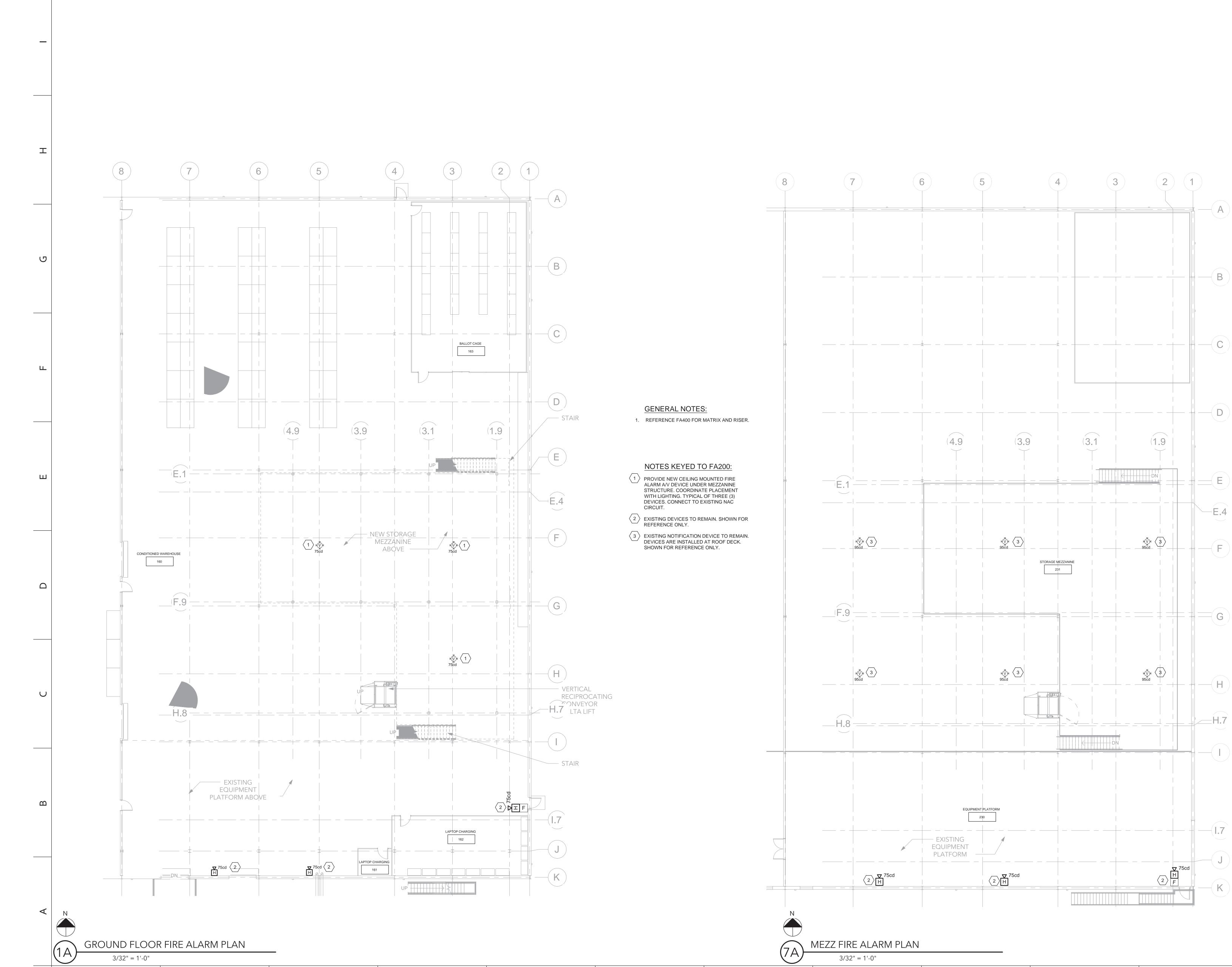


NOTES KEYED TO FA100: $\langle 1 \rangle$ EXISTING FIRE-LITE FIRE ALARM PANEL.

8	9	10	11	12







1'-0"				
8	9	10	11	12



(ワ

 \square

Docusign Envelope ID: 4BF99EF6-A786-4562-9FFF-0C9740836389

FACP WALL MTD FIRE ALARM CONTROL PANEL SMOKE DETECTOR, CEILING OR WALL MTD $\langle H \rangle$ HEAT DETECTOR, CEILING OR WALL MTD ⟨Hc⟩ HEAT DETECTOR, CONENTIONAL EXIST. CELL. DIALER DUCT MOUNTED SMOKE DETECTOR MD MAGNETIC DOOR HOLD MM MONITOR MODULE DACT CM CONTROL MODULE IM ISOLATION MODULE SP SURGE PROTECTOR FIRE ALARM VISUAL DEVICE FIRE ALARM AUDIO/VISUAL DEVICE REMOTE INDICATOR LAMP WITH TEST SWITCH J-BOX SURGE CEILING MOUNTED FIRE ALARM AUDIO/VISUAL DEVICE ⊳(**H**)⊲ 75cd PROTECTION ▷ (V) ■ CEILING MOUNTED FIRE ALARM VISUAL-ONLY DEVICE 120V 🔫 SP5-35 SP5-37 EXISTING FIRE ALARM RISER NO SCALE

FIRE ALARM SYMBOLS

F WALL MTD FIRE ALARM PULL STATION

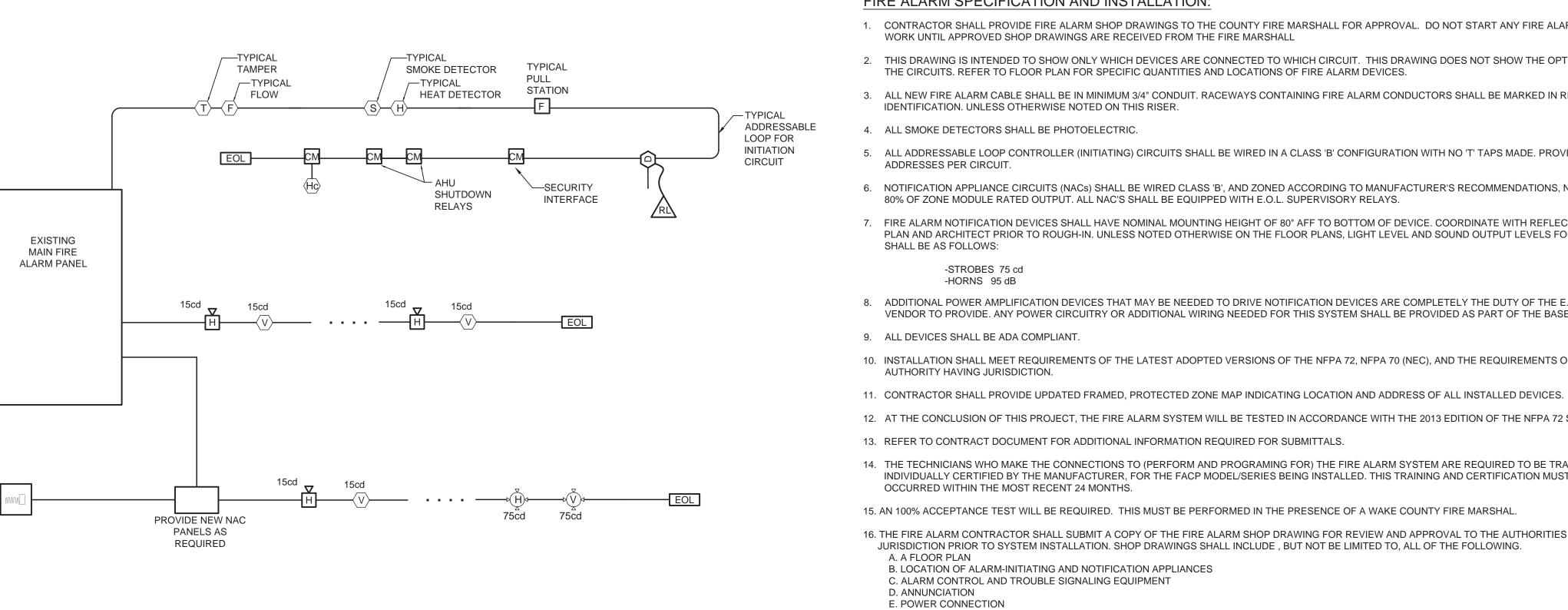
								1								ing and a second	1			
		C	ontrol l	Jnit An	nuciati	on			-	Notifi	cation			Security			Safety			
	Common Alarm Indicator	Audible Alarm Signal	Common Supervisory Signal Indicator	Audible Common Supervisory Signal	Common Trouble Signal Indicator	Audible Common Trouble Signal	Floor Alarm Indicators	Activate Floor Evacuation Signals	Activate Sprinkler Bell	Print Change of Status	Transmit Alarm Signal	Transmit Supervisory Signal	Transmit Trouble Signal	Activate Control Module #1 at Sec. Panel	Activate Control Module #2 at Sec. Panel	Unlock Door 157.1	Shut Down Elevator	Recall Elevator-Recall Floor	Recall Elevator-Non Recall Floor	AHU Shutdown
Manual Pull Stations	X	X		-			X	х		X	X			X		х		X		X
Smoke Detectors-Floor	X	X					X	X		X	X			X		X		X		X
Heat Detectors-Floor	X	X			1		X	X		X	X			X		X				X
Smoke Detectors-Elevator Non Recall Floors	X	X						х		X	X			X	1	X		Х		X
Smoke Detectors-Elevator Recall Floors	X	X						X		X	X			X		X			X	X
Heat Detectors-Elevator	X	X						X		X	X			X		X	X		1.1.1	
Ductmounted Smoke Detectors			X	X				X		X		X		X		X				X
Low Temperature-Hot Box			X	X						X		X								
Tamper Switch-Hot Box			X	X								X								
Tamper Switch	1		X	X				1.00				X		100						
Flow Switch	X	X					X	X	X	X	X			X		X		X		X
Fire Alarm Loss of AC Power				1	Х	X				X			Х		X					
Fire Alarm Low Battery			-		X	X				X			X		X					1
FARP Trouble					X	X				X			X		X					
Shunt Trip Loss of Power															X					
Open Circuit					X	X				X			X	1.2.1.1	X					
Ground Fault					X	X				X			X		X					
Notification Appliance circuit short					X	X				X			X		X					



FIRE ALARM MATRIX

NO SCALE

2



FIRE ALARM SPECIFICATION AND INSTALLATION:

1. CONTRACTOR SHALL PROVIDE FIRE ALARM SHOP DRAWINGS TO THE COUNTY FIRE MARSHALL FOR APPROVAL. DO NOT START ANY FIRE ALARM ROUGH-IN WORK UNTIL APPROVED SHOP DRAWINGS ARE RECEIVED FROM THE FIRE MARSHALL

2. THIS DRAWING IS INTENDED TO SHOW ONLY WHICH DEVICES ARE CONNECTED TO WHICH CIRCUIT. THIS DRAWING DOES NOT SHOW THE OPTIMUM PATH FOR THE CIRCUITS. REFER TO FLOOR PLAN FOR SPECIFIC QUANTITIES AND LOCATIONS OF FIRE ALARM DEVICES.

3. ALL NEW FIRE ALARM CABLE SHALL BE IN MINIMUM 3/4" CONDUIT. RACEWAYS CONTAINING FIRE ALARM CONDUCTORS SHALL BE MARKED IN RED FOR READY IDENTIFICATION. UNLESS OTHERWISE NOTED ON THIS RISER.

5. ALL ADDRESSABLE LOOP CONTROLLER (INITIATING) CIRCUITS SHALL BE WIRED IN A CLASS 'B' CONFIGURATION WITH NO 'T' TAPS MADE. PROVIDE 20% SPARE

6. NOTIFICATION APPLIANCE CIRCUITS (NACs) SHALL BE WIRED CLASS 'B', AND ZONED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS, NOT TO EXCEED 80% OF ZONE MODULE RATED OUTPUT. ALL NAC'S SHALL BE EQUIPPED WITH E.O.L. SUPERVISORY RELAYS.

7. FIRE ALARM NOTIFICATION DEVICES SHALL HAVE NOMINAL MOUNTING HEIGHT OF 80" AFF TO BOTTOM OF DEVICE. COORDINATE WITH REFLECTED CEILING PLAN AND ARCHITECT PRIOR TO ROUGH-IN. UNLESS NOTED OTHERWISE ON THE FLOOR PLANS, LIGHT LEVEL AND SOUND OUTPUT LEVELS FOR NEW DEVICES

-STROBES 75 cd -HORNS 95 dB

8. ADDITIONAL POWER AMPLIFICATION DEVICES THAT MAY BE NEEDED TO DRIVE NOTIFICATION DEVICES ARE COMPLETELY THE DUTY OF THE E.C./FIRE ALARM VENDOR TO PROVIDE. ANY POWER CIRCUITRY OR ADDITIONAL WIRING NEEDED FOR THIS SYSTEM SHALL BE PROVIDED AS PART OF THE BASE BID ON BID DAY.

10. INSTALLATION SHALL MEET REQUIREMENTS OF THE LATEST ADOPTED VERSIONS OF THE NFPA 72, NFPA 70 (NEC), AND THE REQUIREMENTS OF THE LOCAL

12. AT THE CONCLUSION OF THIS PROJECT, THE FIRE ALARM SYSTEM WILL BE TESTED IN ACCORDANCE WITH THE 2013 EDITION OF THE NFPA 72 SECTION 10.4.1.2. 13. REFER TO CONTRACT DOCUMENT FOR ADDITIONAL INFORMATION REQUIRED FOR SUBMITTALS.

14. THE TECHNICIANS WHO MAKE THE CONNECTIONS TO (PERFORM AND PROGRAMING FOR) THE FIRE ALARM SYSTEM ARE REQUIRED TO BE TRAINED AND INDIVIDUALLY CERTIFIED BY THE MANUFACTURER, FOR THE FACP MODEL/SERIES BEING INSTALLED. THIS TRAINING AND CERTIFICATION MUST HAVE OCCURRED WITHIN THE MOST RECENT 24 MONTHS.

15. AN 100% ACCEPTANCE TEST WILL BE REQUIRED. THIS MUST BE PERFORMED IN THE PRESENCE OF A WAKE COUNTY FIRE MARSHAL.

16. THE FIRE ALARM CONTRACTOR SHALL SUBMIT A COPY OF THE FIRE ALARM SHOP DRAWING FOR REVIEW AND APPROVAL TO THE AUTHORITIES HAVING JURISDICTION PRIOR TO SYSTEM INSTALLATION. SHOP DRAWINGS SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL OF THE FOLLOWING. B. LOCATION OF ALARM-INITIATING AND NOTIFICATION APPLIANCES

C. ALARM CONTROL AND TROUBLE SIGNALING EQUIPMENT

F. BATTERY CALCULATIONS

G. CONDUCTOR TYPE AND SIZES H. VOLTAGE DROP CALCULATIONS

I. MANUFACTURERS, MODEL NUMBERS AND LISTING INFORMATION FOR EQUIPMENT, DEVICES AND MATERIALS

J. DETAILS CO CEILING HEIGHT AND CONSTRUCTION K. THE INTERFACE OF FIRE SAFETY CONTROL FUNCTIONS.

17. REFER TO CONTRACT DOCUMENT FOR ADDITIONAL INFORMATION REQUIRED FOR SUBMITTALS.

		9

