

# Angier, North Carolina



PACKAGE

# **CONSTRUCTION DOCUMENTS**

OWNER

### HIGHMARK

746 East Winchester Street Suite 150 Murray, Utah 84107 (801)-256-9550

S-302

SECTIONS

DRAWI	NG INDEX	DRAWING INDEX (CONT)				
Sheet #	Sheet Name	Sheet #	Sheet Name			
GENERAL		S-501	TYPICAL DETAILS			
G-002	SHEET INDEX, AND PROJ LOCATION	S-502	TYPICAL DETAILS			
G-003	APPENDIX B 2018	S-503	TYPICAL DETAILS			
G-004 G-005	LIFE SAFETY PLANS AND CODE SUMMARY ENERGY CODE - COMCHECK REPORT	S-504	TYPICAL DETAILS			
		ARCHITEC	TURAL			
CIVIL C-0.0	COVER	A-001	GENERAL NOTES, SYMBOLS, AND STANDARD MOUNTING HEIGHTS			
C-1.0 C-2.0	EXIST CONDITIONS & DEMOLITION PLAN	A-002	INTERIOR PARTITION TYPES AND STANDARD PARTITION DETAILS			
C-2 1	PHASE IL FROSION CONTROL PLAN	A-101	FIRST FLOOR PLAN			
C-2.2	FROSION CONTROL NOTES & DETAILS	A-102	SECOND FLOOR PLAN			
C-2.3	EROSION CONTROL NOTES & DETAILS	A-105	ROOF PLAN			
C-3.0	SITE PLAN	A-131	FIRST FLOOR REFLECTED CEILING PLAN			
C-4 0	GRADING & DRAINAGE PLAN	A-151	FIRST FLOOR FINISH PLAN			
C-5.0	NOTES & DETAILS	A-171	FIRST FLOOR EQUIPMENT PLAN			
		A-201	EXTERIOR ELEVATIONS			
STRUCTU	RAL	A-301	BUILDING SECTIONS			
S-001	GENERAL NOTES	A-321	WALL SECTIONS			
S-002	GENERLA NOTES. ABBREVIATIONS & PLAN	A-322	WALL SECTIONS			
	LEGEND	A-350	EXTERIOR DETAILS			
S-011	SPECIAL INSPECTIONS	A-501	INTERIOR ELEVATIONS			
S-012	SPECIAL INSPECTIONS	A-502	INTERIOR ELEVATIONS			
S-101A	FOUNDATION AND SLAB-ON-GRADE PLAN - GYMNASIUM	A-601	WINDOW & DOOR ELEVATIONS AND DETAILS			
S-102A	ROOF FRAMING PLAN - GYMNASIUM					
S-301	SECTIONS	PLUMBING	5			

### DRAWING INDEX (CONT)

PLUMBING P-001 MECHANICAL M-1.1 HVAC 1ST LEV PLAN M-2.0 HVAC ROOF LEV PLAN ELECTRICAL E-101 ELECTRICAL - SYMBOLS & LEGENDS, NOTES & DETAILS

Sheet #

E-201

Sheet Name

ELECTRICAL - LIGHTING PLAN, LUMINAIRE

SCHEDULES, NOTES & DETAILS

### **GENERAL PROJECT NOTES**

A. THE FOLLOWING GENERAL NOTES APPLY TO THESE CONTRACT DOCUMENTS AND ARE NOT SPECIFIC TO ANY ONE DISCIPLINE.

B. IT IS THE CONTRACTORS RESPONSIBILITY TO REVIEW AND COORDINATE THE WORK OF ALL SUB-CONTRACTORS, TRADES AND SUPPLIERS WITH THE REQUIREMENTS OF THE CONTRACT BEFORE COMMENCING CONSTRUCTION, AND TO ASSURE THAT ALL PARTIES ARE AWARE OF ALL REQUIREMENTS, REGARDLESS OF WHERE THE REQUIREMENTS OCCUR IN THE CONTRACT DOCUMENTS, WHICH MIGHT AFFECT THE WORK OF THAT PARTY. 2. PARTIAL SETS OF DRAWINGS ARE INCOMPLETE AND SHOULD NOT BE DISTRIBUTED OR

UTILIZED BY THE CONTRACTOR. D. THE CONSTRUCTION DOCUMENTS ESTABLISH DETAILED MINIMUM REQUIREMENTS FOR THE CONSTRUCTION OF THE PROJECT. . THE GENERAL NOTES, SYMBOLS AND DEFINITIONS APPLICABLE ONLY TO EACH DISCIPLINE

CAN BE FOUND AT THE FRONT OF EACH DISCIPLINES PORTION OF THE SET OF DRAWINGS AND IS LISTED AS PART OF THE OVERALL PROJECT INDEX OF DRAWINGS. BASIC FIRE PROTECTION AND THE EXITING SCHEME ARE ILLUSTRATED BY THE LIFE SAFETY PLAN(S) AND APPLICABLE FIRE AND BUILDING CODE SUMMARY ON SHEET G-002 G. THE ARCHITECTURAL DRAWINGS ESTABLISH, COORDINATE, AS WELL AS TAKE PRECEDENCE FOR THE FINISH APPEARANCE OF ALL EXPOSED ELEMENTS OF THE WORK OF ALL TRADES INCLUDING THAT WORK WHICH IS ILLUSTRATED PRIMARILY ON DRAWINGS OF OTHER DISCIPLINES. IF THERE IS A DESCREPANCY IN THE NUMBER OF FIXTURES, DEVICES, ETC. SHOWN ON ARCHITECTURAL DOCUMENTS AND THE DOCUMENTS OF OTHER DISCIPLINES CONTRACTOR'S PRICING SHALL ACCOUNT FOR THE GREATER QUANTITY SHOWN. I. THE DRAWINGS MAY MAKE REFERENCE TO AND/OR ILLUSTRATE ITEMS WHICH ARE NOT PART OF THE WORK OF THE CONTRACT. THESE NOT IN CONTRACT ITEMS ARE REFERENCED AND/OR ILLUSTRATED FOR THE CONTRACTORS REFERENCE, INFORMATION, AND COORDINATION ONLY.

THE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH APPLICABLE LAWS, CODES, REGULATIONS, AND ORDINANCES OF THE PLACE (CITY, COUNTY, DISTRICT AND STATE) WHERE THE PROJECT IS LOCATED. SUCH REQUIREMENTS MAY NOT BE REFLECTED BY THESE CONTRACT DOCUMENTS.

EXISTING CONDITIONS SHOWN ARE FROM AVAILABLE RECORD DRAWINGS AND OR VISUAL FIELD SURVEYS. THE CONTRACTOR SHALL VERIFY ACTUAL EXISTING CONDITIONS AT THE SITE PRIOR TO SUBMITTING A BID. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.

K. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND SIMILAR RELEASES REQUIRED FOR THE CONSTRUCTION AND OCCUPANCY OF THE PROJECT. THE CONTRACTOR SHALL FURNISH COPIES OF ALL SUCH ITEMS TO THE OWNER AND ARCHITECT WITHIN 10 DAYS OF RECEIPT OF SUCH ITEMS. IF PERMITS ARE ISSUED SUBJECT TO CERTAIN CONDITIONS OR REVISIONS TO THE WORK OR IF PERMITS ARE DELAYED FOR ANY REASON, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ARCHITECT.

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO MAINTAIN AND PROTECT NEW WORK AS WELL AS EXISTING SYSTEMS AND ELEMENTS WHICH ARE TO REMAIN. ANY DAMAGE TO SUCH SYSTEMS AND ELEMENTS SHALL BE IMMEDIATELY REPAIRED IN A MANNER ACCEPTABLE TO THE ARCHITECT. IF SATISFACTORY REPAIRS CANNOT BE MADE, THE CONTRACTOR SHALL REPLACE SYSTEMS AND ELEMENTS WITH LIKE NEW QUALITY ACCEPTABLE TO THE ARCHITECT. ALL REPAIRS AND REPLACEMENT COST SHALL BE THE FINANCIAL RESPONSIBILITY OF THE CONTRACTOR.



Carolina Charter Academy

Carolina Charter Academy GYMNASIUM 8529 Highway 55 Angier, North Carolina 27501

Owner Highmark School Deparment 746 East Winchester Street, Suite 150 Murray, Utah 84107 801-256-9550 Architect RATIO 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601

919-821-0805

Structural Engineer Lynch Mykins Structural Engineers, PC 301 North West St. Suite 105 Raleigh, North Carolina 27603 919-782-1833

**Civil Engineer** Timmons Group 5410 Trinity Road, Suite 102 Raleigh, North Carolina 27607 919-866-4938

SEAL | DATE



SHEET ISSUE								
1	CONSTRUCTION DOCUMENTS	07/19/21						
<u> </u>								
F	COPYRIGHT NOTICE: THIS AR AND ENGINEERING DRAWING CONFIDENCE AND SHALL BE PURSUANT TO THE AGREEMI NO OTHER USE, DISSEMINAT DUPLICATION MAY BE MADE WRITTEN CONSENT OF RATIO LAW RIGHTS OF COPYRIGHT ARE HEREBY SPECIFICALLY F	CHITECTURAL IS GIVEN IN USED ONLY ENT WITH RATIO. ION OR WITHOUT PRIOR D. ALL COMMON AND OTHERWISE RESERVED.						
PRO	DJECT NO.	20408						
SHE S P	HEET INDEX, AN ROJ LOCATION	D						
SHE	ET NUMBER							
	$\frown$							
	G-002							

Idress: 8529 High	JM way 55										
Angier, No	rth Carolina 27501										
vner/Authorized Agent:PA pa	TRICK ALCORN - lcorn@highmarksc	-iDIRECTOR OF FA0 chools.com (80	CILITY DEVE 1)335-6514	ELOPEMENT							
Owned by: Code Enforcement Juris	diction: CITY	COUNTY IN PR	RIVATE DUNTY: HAI	STAT	E						
LEAD DESIGN PROFES	SIONAL: Harold	M Bowen, RATIO						CUPANCY:	SEPARAT		
GROSS BUILDING ARE	:A:						⊠ Non-S	eparated Use	(508.3)		
DESIGNER	FIRM	NAME	LICENSE	# PHONE #	EMAIL		Separa	ated Use (508	(	elow fo	rare
<u>Architectural</u>	RATIO TIMMONS	Harold M Bowen	<u> </u>	(919)821-0805	hbowen@ratiodesign.com		For ea	ch story, the a	area of the oc	cupano	;y sl
Electrical						01.001	each d	ctual Area of	Occupancy A	4 .	A
Fire Alarm							Allo	owable Area c	of Occupancy	A T	Allo
Mechanical						<u></u>	$\sim$		$\searrow$		~
Sprinkler/Standpipe						(	Story No.	De	escription		
Structural	LYNCH MYKINS	JEFF MORRISON	027813	(919)782-1822	jmorrison@lynchmykins.com	}	otory No.	6	and Use		В
Other						(					Р (
Other						2					
						(	FIRST	EDUCATION			3
2018 NC BUILDING CO						کر	SECOND	EDUCATION			2
				RUCTION*		5					
*CONTACT THE LO			R POSSIBI F		S AND REQUIREMENTS	7	Notes:				
2018 NC EXISTING BUI						Y	1. Frontage	e area increas neter which fr	es from Secti	ion 506 way or	.2 a
20101102/00101020				ON LEVEL II		4	b. Total	Building Peri	meter = $1$	1240'-0	<u>"</u> (P
						>	c. Ratic d. W =	(F/P)= Minimum widt	1 (⊢ th of public wa	·/P) ay =	
CONSTRUCTED (DATE	=)			• (CH 3)			e. Perc	ent of frontage	e increase If	= 100	[ F/
	=)			S)· (CH 3)		Z	2. Unlimited 3 Maximur	d area applica n Building Are	ble under cor	nditions ober of	of stor
	-) PV· (TABLE 1604				 רי	(	4. The max	imum area of	open parking	garag	es n
OCCUPANCI CALEGO						्रे	5. Frontage	increase is b	t comply with ased on the t	unsprin	412 kler
							ىر بىر	$\sim$	$\sim$	مر	$\sim$
BASIC BUILDING DATA	`			_			ALLOWAB	LE HEIGHT	Provide code	e refere	ence
CONSTRUCTION TYPE (check all that apply)	.: 🗌 I-A 🔛	II-A 🛄 III-A									
(, , , , , , , , , , , , , , , , , , ,	□ I-B □	II-B 🗌 III-B		$\left( \boxtimes V \cdot B \right)^{2}$	2			<i></i>			
SPRINKLERS: NO	🗌 PARTIAL 🖂	YES NFPA 1	13 🗌 NFP	A 13R 🗌 NFF	PA 13D		Building He	i <u>ght in Feet (T</u> ight in Stories	<u>able 504.3)</u> (Table 504.4	)	
STANDPIPES: NO	YES CI			Г 🗌 DRY		:				·)	
FIRE DISTRICT: NO	YES (PRIMA	ARY) FLOOD H	AZARD AR	EA 🛛 NO 🛛	YES		FIRE PROT	ECTION REC		S	
SPECIAL INSPECTION	3 REQUIRED:		PECIAL INS	STRUCTIONS A	RE REQUIRED,		BUILDING I	ELEMENT	Fire		R
BUILDING HEIGHT: (fee	et) <u>32'-8"</u>								Separation Distance	Req'd	
			τ\						(feet)		(w
6th Floor	0 SF	<u>1) NEW (SQ F</u> 0 SF	1)	0 SF			Structural F	rame,			<u> </u>
5th Floor	0 SF	0 SF		0 SF			including co	lumns,			
4th Floor	0 SF	0 SF		0 SF				ses	0"	0	-
<u>3rd Floor</u>	0 SF	0 SF		0 SF			Bearing Wa	lls	0"	0	-
<u>∠nu rioor</u> Mezzanine	23090 SF	<u> </u>		23090 SF 0 SF			North		0"	0	
1st Floor	31670 SF	7395 SF		39065 SF			East		0"	0	
Basement	0 SF	0 SF		0 SF			West		0"	0	<u> </u>
TOTAL	: 55360 SF	7395 SF		62755 SF			<u>South</u>		0"	0	-
							Nonbearing	Walls and	0		
ALLOWABLE AREA							Partitions		0"	0	
PRIMARY OCCUPANC		N(S):					Exterior		0"	0	<u> </u>
	A-1A-2	∐ A-3 ≥	A-4	_ A-5			<u>North</u>		30'-0"	0	-
BUSINESS:							<u>East</u> West		30'-0"	0	
EDUCATIONAL:	≤I 						South		30'-0"	0	
FACTORY:	_ F-1 MODERATE	F-2 LOW					Interior pa	artitions	0"	0	$\vdash$
HAZARDOUS:	H-1 DETONATE	H-2 DEFLA	GRATE	H-3 COMBUS	Т		Floor Const including su	ruction pporting			
	] H-4 HEALTH	H-5 HPM					beams and	joists		0	
INSTITUTIONAL:	_ I-1	1-3	] I-4				Floor Ceiling	g Assembly	_	Ť	
I-1 AND I-2 CONE	ITION: 1	<b>2</b>					<u>Columns St</u>	upporting Flrs			-
	1 2	3 4	] 5				Roof Const	ruction			
I-3 CONDITION:							beams and	joists			
I-3 CONDITION: MERCANTILE:										0	-
I-3 CONDITION: MERCANTILE:	_ ] R-1   □ R-2	R-3	」R-4				Poof Calling	Accombly			-
I-3 CONDITION: MERCANTILE:		□ R-3 □ □ S-2 LOW	] R-4	HIGH-PILI	ED		Roof Ceiling	Assembly			
I-3 CONDITION: MERCANTILE:	_ ] R-1   □ R-2 ] S-1 MODERATE ] PARKING GAR4	AGE □ OPEN □	] R-4 ] ENCLOSF	D REPAIR (	ED GARAGE		Roof Ceiling Columns Su Shaft Enclo	a Assembly apporting Rf sures- Exit		0	
I-3 CONDITION: MERCANTILE: [ RESIDENTIAL: [ STORAGE: [ UTIL ITY AND	R-1R-2 S-1 MODERATE PARKING GARA	R-3	] R-4 ] ENCLOSE	☐ HIGH-PILI D	ED GARAGE		Roof Ceiling Columns Su Shaft Enclo Shaft Enclo	g Assembly upporting Rf sures- Exit sures- Other		0	
I-3 CONDITION: MERCANTILE: RESIDENTIAL: STORAGE: UTILITY AND MISCELLANEOUS:	R-1R-2 S-1 MODERATE PARKING GARA	AGE OPEN	] R-4 ] ENCLOSE	☐ HIGH-PILI D	ED GARAGE		Roof Ceiling Columns Su Shaft Enclo Shaft Enclo Corridor Se	Assembly upporting Rf sures- Exit sures- Other paration		0 0 0	
I-3 CONDITION: MERCANTILE: [ RESIDENTIAL: [ STORAGE: [ UTILITY AND MISCELLANEOUS: [ ACCESSORY OCCUPA	☐ ☐ R-1 ☐ R-2 ] S-1 MODERATE ] PARKING GARA ] NCY CLASSIFICA	R-3 S-2 LOW AGE OPEN AGE APEN	] R-4 ] ENCLOSE	□ HIGH-PILI D □ REPAIR G	ED GARAGE		Roof Ceiling Columns Su Shaft Enclo Shaft Enclo Corridor Se Occupancy Separation	a Assembly upporting Rf sures- Exit sures- Other paration /Fire Barrier		0 0 0	
I-3 CONDITION: MERCANTILE: RESIDENTIAL: STORAGE: UTILITY AND MISCELLANEOUS: ACCESSORY OCCUPA	R-1     R-2       S-1 MODERATE       PARKING GARA       NCY CLASSIFICA       ABLE 509)	R-3 S-2 LOW AGE OPEN ATION(S):	] R-4	☐ HIGH-PILI D	ED GARAGE		Roof Ceiling Columns Su Shaft Enclo Shaft Enclo Corridor Se Occupancy Separation	a Assembly upporting Rf sures- Exit sures- Other paration /Fire Barrier		0 0 0	
I-3 CONDITION: MERCANTILE: RESIDENTIAL: STORAGE: UTILITY AND MISCELLANEOUS: ACCESSORY OCCUPA INCIDENTAL USES: (7)	R-1       R-2         S-1 MODERATE         PARKING GARA         NCY CLASSIFICA         ABLE 509)	R-3	] R-4	☐ HIGH-PILI D	ED GARAGE		Roof Ceiling Columns Su Shaft Enclo Shaft Enclo Corridor Se Occupancy Separation Party/Fire V Separation	Assembly upporting Rf sures- Exit sures- Other paration /Fire Barrier		0 0 0	
I-3 CONDITION: MERCANTILE: RESIDENTIAL: STORAGE: UTILITY AND MISCELLANEOUS: ACCESSORY OCCUPA INCIDENTAL USES: (T SPECIAL USES (CHAP	R-1       R-2         S-1 MODERATE         PARKING GAR/         NCY CLASSIFICA         ABLE 509)         FER 4 - LIST COD	R-3     S-2 LOW     GE     OPEN     TION(S):       E SECTION):	] R-4 ] ENCLOSE	☐ HIGH-PILI D	ED GARAGE		Roof Ceiling Columns Su Shaft Enclo Shaft Enclo Corridor Se Occupancy, Separation Party/Fire V Separation Smoke Barr	a Assembly upporting Rf sures- Exit sures- Other paration /Fire Barrier /all		000000000000000000000000000000000000000	

Smoke Partition Tenant Separation

Incidental Use Separation

\_\_\_\_\_

0

HR EXCEPTION:

rea calculations shall be such that the sum of the ratios of the actual floor area of a for each use shall not exceed 1.

# <u>Actual Area of Occupancy B</u> lowable Area of Occupancy B

(A) Bldg Area Per Story (Actual)	(B) Table 506.2 Area (Note 4)	(C) Area for Frontage Increase (note 1,5)	(D) Allowable Area or Unlimited (note 2,3)	
39065 SF	28500 SF	21375 SF	49875 SF	
23689 SF	28500 SF	21375 SF	49875 SF	
0 SF	0 SF	0 SF	0 SF	
0 SF	0 SF	0 SF	0 SF	

en space having 20 feet minimum width = <u>1240'-0"</u> (F)

 $\frac{30'-0''}{7/P - 0.25} (W) = 75.00 (\%)$ 

f Section 507 pries in the building x D (506.2).

must comply with Table 406.5.4. The maximum area of air

2.3.1. ered area value in Table 506.2

e if	"Shown on Plans" quantit	ty is not based on Tab	le 504.3 or 504.4
	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE

	PLANS	REFERENCE
40'-0"	32'-8"	504.2
2	2	504.2

Rating Provided // Reduction) *	Detail No. / Sheet No.	Design No. for Rated Assembly	Design No. for Rated Penetration	Design No. for Rated Joints

#### LIFE SAFETY SYSTEM REQUIREMENTS

EMERGENCY LIGHTING:	□ NO	🛛 YES	
EXIT SIGNS:	□ NO	🛛 YES	
FIRE ALARM:	□ NO	🛛 YES	
SMOKE DETECTION SYSTEMS:	□ NO	🛛 YES	PARTIAL DUCT & ELEVATOR DETECTION
PANIC HARDWARE:		🛛 YES	

LIFE SAFETY PLAN REQUIREMENTS

LIFE SAFETY PLAN SHEET #:G-004

FIRE AND/OR SMOKE RATED WALL LOCATIONS (CHAPTER 7)

ASSUMED AND REAL PROPERTY LINE LOCATIONS (IF NOT ON THE SITE PLAN)

EXTERIOR WALL OPENING AREA WITH RESPECT TO DISTANCE TO ASSUMED PROPERTY LINES (705.8)

OCCUPANCY USE FOR EACH AREA AS IT RELATES TO OCCUPANT LOAD CALCULATION (TABLE 1004.1.2)

EXISTING STRUCTURES WITHIN 30' OF THE PROPOSED BUILDING OCCUPANCY TYPES FOR EACH AREA AS IT RELATES TO OCCUPANT LOAD CALCULATION

(TABLE 1004.1.1)

OCCUPANT LOADS FOR EACH AREA

⊠ EXIT ACCESS TRAVEL DISTANCES (1017)

COMMON PATH OF TRAVEL DISTANCES (1006.2.1, 1006.3.2(1))

🛛 DEAD END LENGTHS (1020.4)

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

A SEPARATE SCHEMATIC PLAN INDICATING WHERE FIRE RATED FLOOR/CEILING AND/OR ROOF STRUCTURE IS PROVIDED FOR PURPOSES OF OCCUPANCY SEPARATION

□ LOCATION OF DOORS WITH PANIC HARDWARE (1010.1.10)

LOCATION OF DOORS WITH DELAYED EGRESS LOCKS AND THE AMOUNT OF DELAY (1010.1.9.7) □ LOCATION OF DOORS WITH ELECTROMAGNETIC EGRESS LOCKS (1010.1.9.9)

☐ LOCATION OF DOORS EQUIPPED WITH HOLD-OPEN DEVICES

□ LOCATION OF EMERGENCY ESCAPE WINDOWS (1030) THE SQUARE FOOTAGE OF EACH FIRE AREA (202)

THE SQUARE FOOTAGE OF EACH SMOKE COMPARTMENT FOR OCCUPANCY

CLASSIFICATION 1-2 (407.5)

□ NOTE ANY CODE EXCEPTIONS OR TABLE NOTES THAT MAY HAVE BEEN UTILIZED REGARDING THE ITEMS ABOVE

SEE SHEET C-0.0 FOR PARKING REQUIREMENTS

#### PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

USE		WATERCLOSETS		URINALS	LAVATORIES			SHOWERS/	DRINKING FOUNTAINS		
		(1	OILETS	S)			(SINKS)		TUBS	REGULAR	ACCESSIBLE
		MALE	FEMALE	UNISEX	*ALLOWE	MALE	FEMALE	UNISEX			
SPACE	EXISTING	14	27	7	12	14	23	7			12
	NEW	0	0	0	0	0	0	0			2
	REQUIRED	22	22		*	9	9				10

#### SPECIAL APPROVALS

Special Approvals: (Local Ju	irisdictior	n, Depar	tment of	Insurance	, OSC, I	DPI, DH	HS, ICC,	etc., describe	e below)	
TOWN OF ANGIER	0	0	0	0	0	0	0	0	0	0
HARNETT COUNTY	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0

COMP EXEMP

THERMA

#### ENERGY SUMMARY

#### ENERGY REQUIREMENTS:

Description of assembly:

The following data shall be considered minimum and any special attribute required to meet the energy 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:	🗌 No 🛛 🖂 Y	es (If checked, the remainder of this section is not applicable)
EXEMPT BUILDING: No	Yes (Provide	e code or statutory reference):
CLIMATE ZONE: 3A	⊠ 4A □ 5	A
METHOD OF COMPLIANCE:		
Prescriptive (Energy Code)	Perform (Energy	ance Other, Specify Source Here: Code)
Prescriptive (ASHRAE 90.1)	Perform (ASHRA	ance E 90.1)
HERMAL ENVELOPE (Prescriptive	Method Only):	
ROOF/CEILING ASSEMBLY (ea	ch assembly)	T.P.O. MEMBRANE; POLYISO INSULATION; 1/2" SHEATHING ON OPEN WEB WOOD TRUSSES

U-Value of total assembly:	0.039
R-Value of insulation:	25
Skylights in each assembly: U-Value of Skylight: Total square footage of skylights in each assembly	0 0 SF
EXTERIOR WALLS (each assembly) Description of assembly:	EIFS SYSTEM, 3" EPS INSULATION, 12" CMU
U-Value of total assembly:	SEE G-500 - COMCHECK REPORT
R-Value of insulation:	SEE G-500 - COMCHECK REPORT
Openings (windows or doors with gla U-Value of Assembly: Solar heat gain coefficient: Projection Factor: Door R-Values:	azing) SEE G-500COMCHECK REPORT SEE G-500COMCHECK REPORT SEE G-500COMCHECK REPORT SEE G-500COMCHECK REPORT
WALLS BELOW GRADE (each assembly) Description of assembly:	<u>N/A</u>
U-Value of total assembly:	<u>0</u>
R-Value of insulation:	0
FLOORS OVER UNCONDITIONED SPACE (eac Description of assembly:	:h N/A
U-Value of total assembly:	0
R-Value of insulation:	0
FLOORS SLAB ON GRADE Description of assembly:	4" CONCRETE SLAB OVER VAPOR RETARDER; 4" DEPTH OF POROUS FILL
U-Value of total assembly:	0.1
R-Value of insulation:	10
Horizontal/Vertical Requirement:	
Slab Heated:	

SEE SHEET S-001 FOR STRUCTURAL DESIGN LOADS

SEE SHEET S-011 FOR SPECIAL INSPECTIONS

# GYMNASIUM 8529 Highway 55 Angier, North Carolina 27501

Owner Highmark School Deparment 746 East Winchester Street, Suite 1 Murray, Utah 84107 801-256-9550 Architect RATIO	50		
<b>RATIO</b> 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805			
Structural Engineer Lynch Mykins Structural Engi 301 North West St. Suite 105 Raleigh, North Carolina 27603 919-782-1833	neers,PC		
Civil Engineer Timmons Group 5410 Trinity Road, Suite 102 Raleigh, North Carolina 27607 919-866-4938			
SEAL   DATE 09/10/21	CODE CERT. I HEREBY CERTIFY THAT THE BUILDING CODE SUMMARY COMPLETED ON THIS PAGE IS ACCURATE FOR THE TYPE OF BUILDING AND OCCUPANCY INTENDED FOR THIS PROJECT AND THAT THESE DI ANS APE		
	COMPLETE AND COMPLY WITH ALL APPLICABLE STATE AND LOCAL BUILDING REGULATIONS		
SHEET ISSUE	COMPLETE AND COMPLY WITH ALL APPLICABLE STATE AND LOCAL BUILDING REGULATIONS		
SHEET ISSUE          1       CONSTRUCTION DOCUMENTS         2       NCDOI Review	COMPLETE AND COMPLY WITH ALL APPLICABLE STATE AND LOCAL BUILDING REGULATIONS 07/19/21 09/10/21		
SHEET ISSUE         1       CONSTRUCTION DOCUMENTS         2       NCDOI Review	OMPLETE AND COMPLETE AND COMPLY WITH ALL APPLICABLE STATE AND LOCAL BUILDING REGULATIONS 07/19/21 09/10/21		
SHEET ISSUE         1       CONSTRUCTION DOCUMENTS         2       NCDOI Review         -       -     <	Initial Problem       COMPLETE AND       COMPLY WITH ALL       APPLICABLE STATE       AND LOCAL       BUILDING       REGULATIONS		
SHEET ISSUE         1       CONSTRUCTION DOCUMENTS         2       NCDOI Review         -       -         -	Initial Problem Problem       COMPLETE AND       COMPLY WITH ALL       APPLICABLE STATE       AND LOCAL       BUILDING       REGULATIONS		
SHEET ISSUE         1       CONSTRUCTION DOCUMENTS         2       NCDOI Review         2       Image: Stress of the str	Initial Presentation         COMPLETE AND         COMPLY WITH ALL         APPLICABLE STATE         AND LOCAL         BUILDING         REGULATIONS		
SHEET ISSUE          1       CONSTRUCTION DOCUMENTS         2       NCDOI Review         2	OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALLE SUSED OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALLE SUSED ONLY DTHE AGREEMENT WITH RATIO. E, DISSEMINATION OR MAY BE MADE WITHOUT PRIOR ISENT OF RATIO. ALL COMMON DF COPYRIGHT AND OTHERWISE SPECIFICALLY RESERVED. 20408		
SHEET ISSUE          1       CONSTRUCTION DOCUMENTS         2       NCDOI Review         2       NCDOI Review         2	OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY OTICE: THIS ARCHITECTURAL RING DRAWING IS GIVEN IN AND SHALL BE USED ONLY DI HE ACREEMENT WITH RATIO. COMPANY BE MADE WITHOUT PRIOR SECOPPRICENTIAL AND OTHERWISE SPECIFICALLY RESERVED.		



### FIRST LEVEL LIFE SAFETY PLAN 1/16" = 1'-0"



![](_page_3_Figure_6.jpeg)

### COMcheck Software Version COMcheckWeb **Envelope Compliance Certificate**

Owner/Agent:

#### Project Information

Energy Code: Project Title: Location: Climate Zone: Project Type: Vertical Glazing / Wall Area:

2015 IECC Carolina Charter Academy Gym Addition Angier, North Carolina 4a New Construction 5%

Designer/Contractor:

Proposed

Budget U-

Floor Area

8000

Gross Area Cavity Cont.

Construction Site:

-

 $\sim$ 

~\_

#### Additional Efficiency Package(s)

Credits: 1.5 Required 1.0 Proposed Reduced Lighting Power, 1.0 credit Building Area

### 1-New Gym (Gymnasium) : Nonresidential

Envelope	Assemblies
	Assembly

	or Perimeter	R-Value	R-Value	U-Factor	Factor(a)
Roof: Insulation Entirely Above Deck, [Bldg. Use 1 - New Gym]	8000		25.0	0.039	0.032
Floor: Unheated Slab-On-Grade, Horizontal with vertical 1 ft., [Bldg. Use 1 - New Gym] (b)	360		3.7	0.723	0.540
<u>NORTH</u> Ext. Wall: Concrete Block, 12in., Solid Grouted, Light Density, Furring: None, [Bldg. Use 1 - New Gym]	2000		11.3	0.071	0.104
Window: Metal Frame with Thermal Break: Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym]	19			0.650	0.380
Window: Metal Frame with Thermal Break: Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym]	19			0.650	0.380
Window: Metal Frame with Thermal Break: Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym]	19			0.650	0.380
Window: Metal Frame with Thermal Break: Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym]	19			0.650	0.380
Door: Insulated Metal, Swinging, [Bldg. Use 1 - New Gym]	21			0.330	0.610
Door: Insulated Metal, Swinging, [Bldg. Use 1 - New Gym]	21			0.330	0.610
EAST Ext. Wall: Concrete Block, 12in., Solid Grouted, Light Density, Furring: None, [Bldg. Use 1 - New Gym]	2500		11.3	0.071	0.104
Window: Metal Frame with Thermal Break: Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym]	19			0.650	0.380
Window: Metal Frame with Thermal Break: Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym]	19			0.650	0.380

Project Title: Carolina Charter Academy Gym Addition Data filename:

Report date: 05/12/21 Page 1 of 12

Furring: None, [Bldg. Use 1 - New Gym]

Furring: None, [Bldg. Use 1 - New Gym]

Envelope PASSES: Design 5% better than code Envelope Compliance Statement

Project Title: Carolina Charter Academy Gym Addition Data filename:

Report date: 05/12/21 Page 2 of 12

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2015 IECC requirements in COM*check* Version COM*checkWeb* and to comply with any applicable

Window: Metal Frame with Thermal Break: Fixed, Perf. Type: 0.380 0.650 Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym] Window: Metal Frame with Thermal Break: Fixed, Perf. Type: 0.650 0.380 19 ------Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym] Window: Metal Frame with Thermal Break: Fixed, Perf. Type: 19 0.650 0.380 ------Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym] Window: Metal Frame with Thermal Break: Fixed, Perf. Type: 0.650 19 ------0.380 Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym] SOUTH Ext. Wall: Concrete Block, 12in., Solid Grouted, Light Density, 0.071 2000 --- 11.3 0.104 Window: Metal Frame with Thermal Break: Fixed, Perf. Type: 0.650 0.380 19 -------Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym] Window: Metal Frame with Thermal Break: Fixed, Perf. Type: 0.650 0.380 19 -------Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym] Window: Metal Frame with Thermal Break: Fixed, Perf. Type: 0.650 0.380 19 ----Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym] Window: Metal Frame with Thermal Break: Fixed, Perf. Type: 0.650 19 ------0.380 Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym] Door: Insulated Metal, Swinging, [Bldg. Use 1 - New Gym] 0.330 0.610 21 --- ---Door: Insulated Metal, Swinging, [Bldg. Use 1 - New Gym] 0.330 0.610 21 --- ---WEST Ext. Wall: Concrete Block, 12in., Solid Grouted, Light Density, 0.071 2500 --- 11.3 0.104 Window: Metal Frame with Thermal Break: Fixed, Perf. Type: 0.650 0.380 19 ------Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym] Window: Metal Frame with Thermal Break: Fixed, Perf. Type: 0.650 0.380 19 -------Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym] Window: Metal Frame with Thermal Break: Fixed, Perf. Type: 0.650 0.380 19 -------Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym] Window: Metal Frame with Thermal Break: Fixed, Perf. Type: 0.650 0.380 19 ------Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym] Window: Metal Frame with Thermal Break: Fixed, Perf. Type: 19 0.650 0.380 ------Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym] Window: Metal Frame with Thermal Break: Fixed, Perf. Type: 19 0.650 0.380 --- ---Energy code default, Double Pane with Low-E, Tinted , SHGC 0.64, PF 0.80, VT 0.30, [Bldg. Use 1 - New Gym] (a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements. (b) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Gross Area Cavity

or

Perimeter

R-Value

R-Value

U-Factor

Factor

# Carolina Charter Academy GYMNASIUM 8529 Highway 55 Angier, North Carolina 27501

27001
Owner Highmark School Deparment 746 East Winchester Street, Suite 150 Murray, Utah 84107
801-256-9550 Architect RATIO
227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805
Structural Engineer Lynch Mykins Structural Engineers,PC 301 North West St. Suite 105 Raleigh, North Carolina 27603 919-782-1833
Civil Engineer Timmons Group 5410 Trinity Road, Suite 102 Raleigh, North Carolina 27607 919-866-4938
SEAL LDATE 07/19/21
SEAL   DATE 07/19/21
SHEET ISSUE         1       CONSTRUCTION DOCUMENTS       07/19/21         -       -       -
COPYRIGHT NOTICE: THIS ARCHITECTURAL AND ENGINEERING DRAWING IS GIVEN IN CONFIDENCE AND SHALL BE USED ONLY PURSUANT TO THE AGREEMENT WITH RATIO. NO OTHER USE, DISSEMINATION OR DUPLICATION MAY BE MADE WITHOUT PRIOR
WRITTEN CONSENT OF RATIO. ALL COMMON LAW RIGHTS OF COPYRIGHT AND OTHERWISE ARE HEREBY SPECIFICALLY RESERVED. PROJECT NO. 20408
SHEET TITLE ENERGY CODE - COMCHECK REPORT
SHEET NUMBER

# TRC SUBMITTAL CAROLINA CHARTER ACADEMY GYM ADDITION

OWNER:	CAROLINA CHARTER ACADEMY HOLDINGS LLC 8529 HIGHWAY 55 S ANGIER NC 27501
ENGINEER:	WILL ALTMAN, PE TIMMONS GROUP 5410 TRINITY ROAD; SUITE 102 RALEIGH, NC 27607 PHONE: 919-866-4938 FAX: 919-859-5663 EMAIL: WILLIAM.ALTMAN@TIMMONS.COM
ARCHITECT:	BRENT COVINGTON RATIO DESIGN 227 FAYETTEVILLE STREET; SUITE 301 RALEIGH, NC 27601 919-256-4994 EMAIL: BCOVINGTON@RATIODESIGN.COM

I

1

\_

![](_page_5_Figure_2.jpeg)

I.

# 8529 S NC 55 HWY ANGIER, NC

KENNEBER ACRES BORD FALCON BORD FALCON BORD FALCON BORD FALCON BORD FALCON CREST STTE BORD FALCON CREST STTE BORD FALCON CREST CORESTENCE CORES
2,000'
_,

VICINITY MAP

1

1

### SHEET LIST

SHEET

NUMBER

C0.0

C1.0

C2.0

C2.1

C2.2

C2.3

C3.0

C4.0

C5.0

SITE DATA

PROJECT:

PIN:

PROJECT #.:

PROJECT ADDRESS:

CURRENT ZONING:

TOTAL TRACT AREA:

DISTURBED AREA:

EXISTING BUILDING AREA:

PROPOSED BUILDING AREA:

H/C SPACES REQ'D:

IMPERVIOUS:

H/C SPACES (EXISTING):

### SHEET TITLE

COVER SHEET **EXISTING CONDITIONS & DEMOLITION PLAN** PHASE I EROSION CONTROL PLAN PHASE II EROSION CONTROL PLAN **EROSION CONTROL NOTES & DETAILS EROSION CONTROL NOTES & DETAILS** SITE PLAN **GRADING & DRAINAGE PLAN** NOTES & DETAILS

> CAROLINA CHARTER ACADEMY 42087 8529 S NC 55 HWY ANGIER, NC 0674690126 RA-30 10 ACRES 3.0 ACRES 3.0 ACRES 3.0 ACRES

PARKING: SCHOOLS (PUBLIC AND PRIVATE ELEMENTARY AND MIDDLE) - 2 SPACE PER CLASSROOM TOTAL NUMBER OF CLASSROOMS 43 CLASSROOMS (K-8TH GRADE) EXISTING: PARKING SPACES REQUIRED: 86 PARKING SPACES EXISTING: PARKING SPACES PROVIDED: EXISTING: 86 PARKING SPACES

4 (WITH 1 BEING VAN ACCESSIBLE) 4 (WITH 1 BEING VAN ACCESSIBLE) TOTAL EXISTING PARKING SPACES: 86 SPACES (INCLUDING 4 H/C)

EXISTING IMPERVIOUS: 3.33 ACRES

PROPOSED IMPERVIOUS: 0.41 ACRES

TOTAL IMPERVIOUS: 3.33 AC (EXISTING) - 0.23 AC (DEMO) +0.41 AC (PROPOSED) = 3.51 AC

I

\*THE EXISTING STORMWATER CONTROL MEASURE WAS DESIGNED TO TREAT 3.54 ACRES OF IMPERVIOUS AREA

# CAROLINA CHARTER ACADEMY GYM ADDITION 8529 S NC 55 HWY, ANGIER NC 27501

#### Owner

**Highmark School Development** 746 East Winchester Street Suite 150 Murray, Utah 84107 801-256-9550

Architect RATIO 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805

Structural Engineer Lynch Mykins Structural Engineers, PC 301 North West Street Suite 105 Raleigh, North Carolina 27603 919-782-1833

Civil Engineer **Timmons Group** 5410 Trinity Road Suite 102 Raleigh, North Carolina 27607 919-866-4938

### SEAL | DATE

![](_page_5_Picture_24.jpeg)

#### SHEET ISSUE

POPYRIGHT NOTICE: THIS ARCHITECTURAL AND ENGINEERING DRAWING IS GIVEN IN CONFIDENCE AND SHALL BE USED ONLY PURSUANT TO THE AGREEMENT WITH RATIO. NO OTHER USE, DISSEMINATION OR DUPLICATION MAY BE MADE WITHOUT PRIOR WRITTEN CONSENT OF RATIO. ALL COMMON LAW RIGHTS OF COPYRIGHT AND OTHERWISE ARE HEREBY SPECIFICALLY RESERVED. PROJECT NO. 20408.000

C0.0

SHEET TITLE

COVER SHEET

SHEET NUMBER

![](_page_6_Figure_0.jpeg)

![](_page_7_Figure_0.jpeg)

![](_page_8_Figure_0.jpeg)

![](_page_9_Figure_0.jpeg)

![](_page_9_Picture_3.jpeg)

![](_page_10_Figure_0.jpeg)

and entrance and exit channel slopes are critical to the successful operation temporary slope drains or diversions with outlet protection to divert sedimentladen water to the upper end of the pool area to improve basin trap efficiency (References: Runoff Control Measures and Outlet Protection). 9. Erosion control--Construct the structure so that the disturbed area is embankment before the area is cleared. Stabilize the emergency spillway

SCREEN

BARREL PIPE LONGER THAN SHOWN.

ACCESSIBLE

THROUGH DOOR

- embankment and all other disturbed areas above the crest of the principal spillway immediately after construction (References: Surface Stabilization) 10. Install porous baffles as specified in Practice 6.65 11. After all the sediment-producing areas have been permanently stabilized, remove the structure and all the unstable sediment. Smooth the area to
- blend with the adjoining areas and stabilize properly (References: Surface

TOP OF BERM EMERGENCY SPILLWAY BOTTOM OF BASIN ELEV. ELEV. 327.75 326.00

mplementing the details a activity being considered a sections of the NCG01 Cor permittee shall comply wi delegated authority havin nay not apply depending	and specifications on compliant with the Gr nstruction General Pe th the Erosion and Se g jurisdiction. All deta on site conditions and	this plan sheet will result in the construction round Stabilization and Materials Handling rmit (Sections E and F, respectively). The diment Control plan approved by the hils and specifications shown on this sheet d the delegated authority having jurisdiction	<ol> <li>Provide drip pans under any stored equipment.</li> <li>Identify leaks and repair as soon as feasible, or reproject.</li> <li>Collect all spent fluids, store in separate containent hazardous waste (recycle when possible).</li> <li>Bemove leaking vehicles and construction equipment.</li> </ol>
SECTION E: GROUND STA	BILIZATION		has been corrected.
R	equired Ground Stab	ilization Timeframes	6. Bring used fuels, lubricants, coolants, hydraulic fl
	Stabilize within thi	s	to a recycling or disposal center that handles the
Site Area Description	many calendar	Timeframe variations	
Site Area Description	days after ceasing	Timename variations	LITTER, BUILDING MATERIAL AND LAND CLEARING WA
	land disturbance		1. Never bury or burn waste. Place litter and debris
<ul> <li>Perimeter dikes, swales, ditches, and</li> </ul>	7	None	<ol> <li>Provide a sufficient number and size of waste contract receptacle) on site to contain construction and do</li> </ol>
perimeter slopes			3. Locate waste containers at least 50 feet away from
) High Quality Water			waters unless no other alternatives are reasonable
(HQW) Zones	7	None	4. Locate waste containers on areas that do not rece
		If slopes are 10' or less in length and are	from upland areas and does not drain directly to a
Slopes steeper than 3:1	7	not steeper than 2:1, 14 days are	<ol> <li>Cover waste containers at the end of each workda provide secondary containment. Repair or replace</li> </ol>
		-7 days for slones greater than 50' in	6. Anchor all lightweight items in waste containers d
		length and with slopes steeper than 4:1	<ol> <li>Empty waste containers as needed to prevent ove containers overflow</li> </ol>
Slones 3.1 to 4.1	14	-/ days for perimeter dikes, swales,	8 Dispose waste off-site at an approved disposal fac
510000 511 10 111		Zones	9 On husiness days clean up and dispose of waste in
		-10 days for Falls Lake Watershed	5. On business days, clean up and dispose of wastern
		-7 days for perimeter dikes swales	PAINT AND OTHER LIQUID WASTE
A		ditches, perimeter slopes and HQW Zones	1. Do not dump paint and other liquid waste into sto
Areas with slopes	14	-10 days for Falls Lake Watershed unless	2. Locate paint washouts at least 50 feet away from
		there is zero slope	waters unless no other alternatives are reasonable
d stabilization shall l able but in no case y. Temporary grour e stable against acce ND STABILIZATION	be converted to perm longer than 90 calend ad stabilization shall b elerated erosion until SPECIFICATION	anent ground stabilization as soon as dar days after the last land disturbing be maintained in a manner to render the permanent ground stabilization is achieved	Containment must be labeled, sized and placed a     S. Prevent the discharge of soaps, solvents, deterge     construction sites.      PORTABLE TOILETS     Install portable toilets on level ground at least 50
bilize the ground suffic hniques in the table be	iently so that rain wil low:	I not dislodge the soil. Use one of the	streams or wetlands unless there is no alternative
Temporary Stat	oilization	Permanent Stabilization	on a gravel pad and surround with sand bags.
mporary grass seed cov	ered with straw or 🔹	Permanent grass seed covered with straw or	2. Provide staking or anchoring of portable toilets du
ner mulches and tackifie	ers	other mulches and tackifiers	foot traffic areas.
Hydroseeding	-	Geotextile fabrics such as permanent soil	3. Monitor portable toilets for leaking and properly of
volled erosion control pro without temporary grass s	eed	Hydroseeding	Utilize a licensed sanitary waste hauler to remove
Appropriately applied stra	w or other mulch	Shrubs or other permanent plantings covered	with properly operating unit.
Plastic sheeting		with mulch	
Ū	•	Uniform and evenly distributed ground cover	EARTHEN STOCKPILE MANAGEMENT
		sufficient to restrain erosion	1. Show stockpile locations on plans. Locate earther
	•	Structural methods such as concrete, asphalt or	50 feet away from storm drain inlets, sediment ba
		retaining walls Rolled erosion control products with grass cood	and surface waters unless it can be shown no oth
	•	Honey crosion control products with grass seed	2 Protect stocknile with silt fence installed along to
DLYACRYLAMIDES (PAM	IS) AND FLOCCULANT	rs	2. FIGUECE STOCKPILE WITH SHITTERICE INSTALLED Along to five feet from the top of stocknile
L. Select flocculants th	at are appropriate fo	 or the soils being exposed during	3 Provide stable stone access point when feasible
construction, select	ing from the NC DWR	List of Approved PAMS/Flocculants.	4. Stabilize stockpile within the timeframes provider
<ol><li>Apply flocculants at</li></ol>	or before the inlets t	o Erosion and Sediment Control Measures.	with the approved plan and any additional require
<ol> <li>Apply flocculants at</li> </ol>	the concentrations s	pecified in the NC DWR List of Approved	as vegetative, physical or chemical coverage tech
PAMS/Flocculants a	nd in accordance wit	h the manufacturer's instructions.	erosion on disturbed soils for temporary or perma
<ol> <li>Provide ponding are offsite.</li> </ol>	ea for containment of	treated Stormwater before discharging	
5. Store flocculants in	leak-proof containers	s that are kept under storm-resistant cover	

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH

THE NCG01 CONSTRUCTION GENERAL PERMIT

or surrounded by secondary containment structures.

### NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EQUIPMENT AND VEHICLE MAINTENANCE

	SELF-INSPECTIO	PART III DN, RECORDKEEPING AND REPORTING	SELF-INSPECTION, REC	PART III CORDKEEPING AND RE
ECTION A: SEL elf-inspections elow. When a ersonnel to be which it is safe to reater than 1.0 erformed upor	F-INSPECTION are required duri dverse weather or in jeopardy, the i co perform the ins o inch occurs outsi the commencem	ng normal business hours in accordance with the table r site conditions would cause the safety of the inspection nspection may be delayed until the next business day on pection. In addition, when a storm event of equal to or ide of normal business hours, the self-inspection shall be nent of the next business day. Any time when inspections	SECTION B: RECORDKEEPING 1. E&SC Plan Documentation The approved E&SC plan as well as any ap approved E&SC plan must be kept up-to-or The following items pertaining to the E&S inspection at all times during normal busi	pproved deviation sha Jate throughout the c C plan shall be kept o ness hours.
vere delayed sl	nall be noted in th	e Inspection Record.	Item to Document	Documentati
Inspect	Frequency (during normal business hours)	Inspection records must include:	(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations	Initial and date each E of the approved E&SC and sign an inspection
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those un- attended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "reno". The permittee may use another rain-monitoring device	shown on the approved E&SC plan.	E&SC measure shown plan. This documenta initial installation of the the E&SC measures a installation.
(2) E&SC Measures	At least once per 7 calendar days and within 24	1. Identification of the measures inspected,     2. Date and time of the inspection,     3. Name of the person performing the inspection,     4. Indication of the the the measures upon eccentrics	(b) A phase of grading has been completed.	Initial and date a copy plan or complete, dat report to indicate con construction phase.
(3) Stormwater	event ≥ 1.0 inch in 24 hours At least once per	<ol> <li>Indication of Whether the measures were operating properly,</li> <li>Description of maintenance needs for the measure,</li> <li>Description, evidence, and date of corrective actions taken.</li> <li>Identification of the discharge outfalls inspected,</li> </ol>	(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy plan or complete, dat report to indicate con ground cover specific
discharge outfalls (SDOs)	7 calendar days and within 24 hours of a rain event $\geq$ 1.0 inch in 24 hours	<ol> <li>Date and time of the inspection,</li> <li>Name of the person performing the inspection,</li> <li>Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration,</li> <li>Indicating of utility confinement leaving the site</li> </ol>	(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and si
(4) Perimeter of site	At least once per 7 calendar days and within 24	<ol> <li>b. Indicator of visible sediment leaving the site,</li> <li>b. Description, evidence, and date of corrective actions taken.</li> <li>If visible sedimentation is found outside site limits, then a record of the following shall be made:</li> <li>Actions taken to clean up or stabilize the sediment that has left</li> </ol>	(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy plan or complete, date report to indicate the corrective action.
	hours of a rain event ≥ 1.0 inch in 24 hours	the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.	<ol> <li>Additional Documentation to be Kept on In addition to the E&amp;SC plan documents a site and available for inspectors at all time</li> </ol>	<b>Site</b> bove, the following ite s during normal busir
(5) Streams or wetlands onsite or offsite (where	At least once per 7 calendar days and within 24 hours of a rain	If the scream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and	Division provides a site-specific exemption this requirement not practical:	n based on unique site
accessible)	event≥1.0 inch in 24 hours	2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.	(a) This General Permit as well as the Cer	rtificate of Coverage, a
(6) Ground stabilization measures	After each phase of grading	<ol> <li>The phase of grading (installation of perimeter E&amp;SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover).</li> <li>Documentation that the required ground stabilization measures have been provided within the required the required</li> </ol>	(b) Records of inspections made during the record the required observations on the Division or a similar inspection form the electronically-available records in lieuting shown to provide equal access and utility of the records are accessed as a second	he previous twelve m the Inspection Record hat includes all the re I of the required pape sility as the hard-copy
NOTE: The rai	n inspection reset	soon as possible.	3. Documentation to be Retained for Three All data used to complete the e-NOI and al of three years after project completion and	Years Il inspection records s d made available upor

PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- (a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
- (b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit, (c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include
- properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems, (d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
- (e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and (f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States
  - NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

![](_page_10_Picture_19.jpeg)

SHEET	NUMBER

![](_page_11_Figure_0.jpeg)

![](_page_12_Figure_0.jpeg)

![](_page_13_Figure_0.jpeg)

![](_page_13_Picture_2.jpeg)

![](_page_13_Picture_3.jpeg)

# CHARTER ACADEMY GYM ADDITION 8529 S NC 55 HWY, ANGIER NC 27501 Highmark School Development 746 East Winchester Street 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 Lynch Mykins Structural Engineers, PC Raleigh, North Carolina 27603 Raleigh, North Carolina 27607 NO OFESSION RATIO PYRIGHT NOTICE: THIS ARCHITECTURAL AND ENGINEERING DRAWING IS GIVEN IN CONFIDENCE AND SHALL BE USED ONLY PURSUANT TO THE AGREEMENT WITH RATIO. NO OTHER USE, DISSEMINATION OR DUPLICATION MAY BE MADE WITHOUT PRIOR WRITTEN CONSENT OF RATIO. ALL COMMON LAW RIGHTS OF COPYRIGHT AND OTHERWISE ARE HEREBY SPECIFICALLY RESERVED. 20408.000 NOTES & DETAILS C5.0

## GENERAL NOTES:

- 1. 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 WORK.
- 2. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE PROVISIONS OF THE NORTH CAROLINA STATE BUILDING CODE, 2018 EDITION AND THE NORTH CAROLINA EXISTING BUILDING CODE, 2018 EDITION.
- 3. THE WORK OUTLINED IN SPECIFICATION SECTION 014100 IS SUBJECT TO SPECIAL INSPECTIONS AS DESCRIBED IN THE TECHNICAL SPECIFICATIONS AND BUILDING CODE.
- 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.
- PORTIONS OF THE STRUCTURE NOT ALTERED AND NOT AFFECTED BY THE ALTERATION HAVE NOT BEEN REVIEWED FOR COMPLIANCE WITH THE CODE **REQUIREMENTS FOR A NEW STRUCTURE.**
- 6. THE CONTRACTOR MUST SUBMIT A DETAILED PLAN, INCLUDING WORK SEQUENCE, PREPARED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA FOR SHORING, BRACING, AND OTHER SAFEGUARDS TO MAINTAIN ALL PARTS OF THE STRUCTURE IN A SAFE CONDITION AT ALL TIMES DURING THE PROCESS OF DEMOLITION AND CONSTRUCTION AND TO PROTECT FROM DAMAGE THOSE PORTIONS OF THE EXISTING STRUCTURE WHICH ARE TO REMAIN. SUBMIT PLAN PRIOR TO BEGINNING WORK.
- THE CONTRACTOR MUST FIELD VERIFY THE DIMENSIONS, ELEVATIONS, AND OTHER REQUIREMENTS NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW PORTIONS OF THE STRUCTURE TO THE EXISTING. ANY DIMENSIONS SHOWN OF EXISTING STRUCTURES MUST BE CONSIDERED AS APPROXIMATE AND ADEQUATE FOR BIDDING PURPOSES ONLY. THE CONTRACTOR MUST MAKE ALL MEASUREMENTS NECESSARY FOR THE FABRICATION AND ERECTION OF STRUCTURAL MEMBERS. DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- 8. IF INCONSISTENCIES, DISCREPANCIES OR CONTRADICTIONS IN THE CONTRACT DOCUMENTS ARE DISCOVERED AFTER THE CLOSE OF BIDDING QUESTIONS, THE CONTRACTOR SHALL BE DEEMED BY SUBMITTAL OF THEIR BID, TO HAVE BID THE MOST COSTLY AS TO LABOR, MATERIALS, DURATION, SEQUENCE AND METHOD OF CONSTRUCTION TO PROVIDE THE WORK.

DESIGN CRITERIA: <u>CLASSIFICATION OF BUILDING</u> RISK CATEGORYIII	
SUPER IMPOSED ROOF DEAD LOADS - UNIFORM:         1 1/2" INSULATION AND ROOF MEMBRANE         3 PSF         SPRINKLERS         DUCTS, LIGHTS, MISC. MECHANICAL         5 PSF	
LIVE LOADS - UNIFORM: SLAB ON GRADE 100 PSF ROOF 20 PSF	
LIVE LOADS - CONCENTRATED: FLOORS1,000# ROOFS300#	
UNLESS OTHERWISE NOTED, CONCENTRATED LOADS ARE APPLIED UNIFORMLY OVER 2'-6" x 2'-6" AREA.	
SNOW LOADS:	

GROUND SNOW LOAD	15 PSF
FLAT ROOF LOAD	16.5 PSF
IMPORTANCE FACTOR (Is)	
THERMAL FACTOR (Ct)	1.0
EXPOSURE FACTOR (Će)	1.0
DRIFT SURCHARGE (Pd)	REF PLAN

#### WIND LOADS:

NOMINAL DESIGN (VASD) WIND SPEED EXPOSURE CATEGORY	_96 MPH
INTERNAL PRESSURE COEFFICIENT	_ ±0.18
COMPONENT AND CLADDING PRESSURES:	
WALLS, ZONE 5 (10 SF)	46 PSF
ROOF, ZONE 3 (10 SF)	_ 94 PSF
PARAPET, END/CORNER (10 SF)	119 PSF
<u>ULTIMATE WIND BASE SHEARS (FOR MWFRS):</u>	
Vx	80 KIPS
Vy	108 KIPS

SEISMIC LOADS:	
SITE CLASSIFICATION	D(ASSUMED)
SEISMIC DESIGN CATEGORY	B
IMPORTANCE FACTOR (JE)	
SPECTRAL RESPONSE ACCELERATIONS	<u>S:</u>
S <sub>S</sub> 0.171	S <sub>1</sub>
S <sub>MS</sub> 0.274	S <sub>M1</sub>
S <sub>DS</sub> 0.182	S <sub>D1</sub>
ANALYSIS PROCEDURE EQU	IVALENT LATERAL FORCE
LATERAL FORCE RESISTING SYSTEM_	_ORDINARY REINFORCED
	MASONRY SHEAR WALLS

RESPONSE MODIFICATION COEFFICIENT (R)\_ SEISMIC RESPONSE COEFFICIENT (Cs) \_\_\_\_\_0.114 ULTIMATE SEISMIC BASE SHEAR (V)\_\_\_\_\_158 KIPS

LATERAL DESIGN CONTROL CONTROLLING LATERAL LOADS \_\_\_\_\_\_SEISMIC

# FOUNDATION NOTES:

# **CAST-IN-PLACE CONCRETE NOTES:**

- (ACI) 301 AND 318.
- A. SLAB-ON-GRADE FOUNDA B CONCRE С

- COVER REQUIREMENTS.
- OTHERWISE NOTED.

		WALL FO
	SIZE	
MARK	WIDTH	DEPTH
WF4A	4'-0"	1'-3"
WF4B	4'-0"	1'-0"

1. FOUNDATIONS HAVE BEEN DESIGNED FOR AN ASSUMED NET ALLOWABLE SOIL BEARING PRESSURE OF 3000 PSF.

2. PRIOR TO PLACING FOUNDATION CONCRETE, ALL FOUNDATION EXCAVATIONS MUST BE INSPECTED BY THE SPECIAL INSPECTOR 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 WHERE REQUIRED.

NO UNBALANCED BACKFILLING MUST BE DONE AGAINST MASONRY OR CONCRETE WALLS UNLESS WALLS ARE SECURELY BRACED AGAINST OVERTURNING, EITHER BY TEMPORARY CONSTRUCTION BRACING OR BY PERMANENT CONSTRUCTION.

4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONTROL OF GROUNDWATER AND SURFACE RUNOFF THROUGHOUT THE CONSTRUCTION PROCESS. INUNDATION AND LONG TERM EXPOSURE OF BEARING SURFACES WHICH RESULT IN DETERIORATION OF BEARING MUST BE PREVENTED.

1. CONCRETE MUST BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE

CONCRETE MUST BE NORMAL WEIGHT AND MUST OBTAIN 28 DAY COMPRESSIVE STRENGTHS AS FOLLOWS: 

-GRADE	3,500	PSI
ΓΙΟΝS	3,500	PSI
TE NOT OTHERWISE NOTED	3,000	PSI

REINFORCING MATERIALS MUST BE AS FOLLOWS:

REINFORCING BARS - ASTM A 615, GRADE 60, DEFORMED. WELDED REINFORCING BARS - ASTM A 706. GRADE 60.

 $\begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \end{array}$ 

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.

5. CONCRETE COVER TO REINFORCING STEEL MUST CONFORM TO THE MINIMUM COVER RECOMMENDATIONS IN ACI 318, UNLESS THE DRAWINGS SHOW GREATER

6. LAP CONTINUOUS REINFORCING STEEL 57 X BAR DIAMETER, TYPICAL UNLESS

# **POST-INSTALLED ANCHOR NOTES:**

- 1. ALL POST INSTALLED ANCHORS INDICATED ON THE DRAWINGS ARE BY HILTI, INC. AND MUST BE CONSIDERED THE BASIS OF DESIGN PRODUCT. WHERE NOT EXPLICITYLY 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
- 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 VC 40-U) WITH CONTINUOUSLY DEFORMED REBAR PER ICC ESR-3187.
- C. ANCHORAGE TO SOLID GROUTED MASONRY 1. ADHESIVE ANCHORS USE:
  - a. HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM (ICC
  - PENDING).
  - 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 1. 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. THE APPROPRIATE SIZE SCREEN TUBE MUST BE USED PER C.
  - ADHESIVE MANUFACTURER'S RECOMMENDATION.
- 2. 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
- 3. INSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.

![](_page_14_Figure_66.jpeg)

-FLAT ROOF LOAD IN SNOW DRIFT CONDITION = 11 PSF

# Academy GYMNASIUM 8529 Highway 55 Angier, North Carolina 27501

Carolina Charter

Owner **Highmark School Development** 746 East Winchester Street Suite 150 Murray, Utah 84107 801-256-9550 Architect RATIO 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805

Structural Engineer Lynch Mykins Structural Engineers, PC 301 North West Street Suite 105 Raleigh, North Carolina 27603 919-782-1833

Civil Engineer **Timmons Group** 5410 Trinity Road Suite 102 Raleigh, North Carolina 27607 919-866-4938

SEAL | DATE 08/20/21

![](_page_14_Picture_88.jpeg)

SHI	EET ISSUE	
1	Addendum 1	08/20/21
OPYRI ND SH ISSEM OMMC	GHT NOTICE: THIS ARCHITECTURAL AND ENGINEERING DRAWING IS GIVEN IN ALL BE USED ONLY PURSUANT TO THE AGREEMENT WITH RATIO. NO OTHER IN NATION OR DUPLICATION MAY BE MADE WITHOUT PRIOR WRITTEN CONSENT N LAW RIGHTS OF COPYRIGHT AND OTHERWISE ARE HEREBY SPECIFICALLY F	Confidence Jse, Of Ratio. All Reserved.
PR	DJECT NO.	20408
SHI	EET TITLE	
G	ENERAL NOTES	

S-001

SHEET NUMBER

# **CONCRETE MASONRY NOTES:**

- CONCRETE MASONRY MATERIALS AND CONSTRUCTION MUST CONFORM TO THE AMERICAN CONCRETE INSTITUTE (ACI) 530
- CONCRETE MASONRY UNITS MUST CONFORM TO ASTM C 90 AND MUST BE MADE 2 WITH LIGHTWEIGHT AGGREGATE. MINIMUM NET AREA COMPRESSIVE STRENGTH OF MASONRY UNITS MUST BE 2,000 PSI AT 28 DAYS.
- COMPRESSIVE STRENGTH OF MASONRY MUST BE DETERMINED BY THE UNIT 3 STRENGTH METHOD AS SET FORTH IN ACI 530.1. THE NET AREA COMPRESSIVE STRENGTH OF MASONRY, f'm, MUST BE 2,000 PSI AT 28 DAYS.
- MORTAR MUST BE TYPE M OR S AND MUST COMPLY WITH ASTM C270, PROPORTIONS OR PROPERTIES SPECIFICATION.
- GROUT MUST COMPLY WITH EITHER THE PROPORTIONS OR PROPERTIES 5. SPECIFICATION OF ASTM C476 AND AS FOLLOWS:
  - A. PROPORTIONS SPECIFICATIONS: THIS MIX CANNOT CONTAIN ADDED IN THE FIELD IN ORDER TO ACHIEVE A SLUMP OF 8-11 INCHES WHEN PLACED IN THE CONCRETE MASONRY UNITS. MORTAR, PEA-GRAVEL CONCRETE, OR "CHAT" MIXES ARE NOT ACCEPTABLE SUBSTITUTES FOR THE SPECIFIED GROUT.
  - PROPERTIES SPECIFICATION: THIS MIX MUST BE PROPORTIONED TO OBTAIN A DOCUMENTED 28 DAY COMPRESSIVE STRENGTH OF 2.000 PSI WITH AN 8-11 INCH SLUMP WHEN PLACED IN THE CONCRETE MASONRY UNITS.
- REINFORCING STEEL MUST COMPLY WITH ASTM A 615, GRADE 60. SHOP 6 FABRICATE REINFORCING BARS WHICH ARE SHOWN TO BE BENT OR HOOKED.
- 7. ALL BOND BEAMS, REINFORCED CELLS AND CELLS WITH EXPANSION BOLTS, EMBED PLATES OR OTHER ANCHORS AND ALL CELLS BELOW GRADE MUST BE GROUTED SOLID. GROUT PROCEDURE MUST COMPLY WITH ACI 530.1
- ALL CMU WALLS MUST BE REINFORCED CONTINUOUSLY FROM FOUNDATION TO TOP OF WALL. WHERE REINFORCING IS INTERRUPTED, OFFSET AND LAP ADDITIONAL BARS PER THE "TYPICAL OFFSET SPLICE AT MASONRY WALL DETAILS."
- PROVIDE REINFORCING BARS OF THE GIVEN SIZE AND SPACING SHOWN. LAP 9 CONTINUOUS REINFORCING STEEL 64 BAR DIAMETERS UNLESS OTHERWISE NOTED.
- 10. PROVIDE ONE VERTICAL BAR EACH SIDE OF ALL OPENINGS AND CONTROL JOINTS, AND AT CORNERS AND INTERSECTIONS OF ALL MASONRY WALLS, BOTH BEARING AND NON-BEARING WALLS. SHOW CONTROL JOINT LOCATIONS ON THE **REINFORCING STEEL SHOP DRAWINGS.**
- 11. PROVIDE REINFORCING STEEL DOWELS OF THE SAME SIZE AND SPACING AS VERTICAL REINFORCING FROM THE SUPPORTING STRUCTURE. DOWELS MUST HAVE STANDARD ACI HOOKS. LAP LENGTH FOR DOWELS FROM FOUNDATION NOT OTHERWISE NOTED MAY BE 36 X BAR DIAMETER.
- 12. PROVIDE STANDARD 9 GAGE LADDER TYPE HORIZONTAL JOINT REINFORCING IN CMU WALLS AT 16 INCHES ON CENTER AND IN TWO JOINTS IMMEDIATELY ABOVE AND BELOW ALL OPENINGS, EXTENDING A MINIMUM OF 2 FEET BEYOND THE JAMB ON EACH SIDE OF THE OPENING, EXCEPT AT CONTROL JOINTS.
- 13. DO NOT LOCATE CONTROL JOINTS WITHIN TWO FEET OF STEEL BEAM OR JOIST **BEARING LOCATIONS.**

# STRUCTURAL STEEL NOTES:

- STRUCTURAL STEEL MUST BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) 360.
- 2. STRUCTURAL STEEL MUST COMPLY WITH THE FOLLOWING SPECIFICATIONS: A. STRUCTURAL STEEL SHAPES, PLATES AND BARS UNLESS OTHERWISE
  - NOTED ASTM A 36, Fy = 36 KSI B. STRUCTURAL STEEL W-SHAPES - ASTM A 992, Fy = 50 KSI
  - C. HIGH STRENGTH BOLTS ASTM A325 (TYPICAL UON)
- D. WASHERS ASTM F 436
- E. NUTS ASTM A 563
- 3 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.
- HIGH STRENGTH BOLTS MAY BE TIGHTENED TO THE "SNUG TIGHT" CONDITION IN LIEU OF FULL PRETENSIONING EXCEPT FOR THE FOLLOWING CONNECTIONS WHICH MUST BE FULLY PRETENSIONED
- A. SLIP-CRITICAL CONNECTIONS IDENTIFIED AS (SC) ON PLAN. B. BOLTED CONNECTIONS USING NON-STANDARD HOLES.
- REFER TO THE SPECIFICATIONS FOR REQUIREMENTS OF "DELEGATED DESIGN" CONNECTIONS
- FOR STRUCTURAL STEEL CONNECTIONS INDICATED AS "DELEGATED DESIGN", 6. INCLUDE STRUCTURAL CALCULATIONS SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA RESPONSIBLE FOR THEIR PREPARATION. IN ADDITION, 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. 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.
- DELEGATED DESIGN CONNECTIONS ARE AS FOLLOWS: A. TRUSS CONNECTIONS
- B. LINTEL AND WIND GIRTS
- HIGH STRENGTH BOLTS MUST BE FULLY PRETENSIONED USING LOAD INDICATOR 8. WASHERS OR TENSION CONTROL "TWIST OFF" BOLTS.

# STRUCTURAL STEEL NOTES (CTD):

- FURNISHED.
- MUST NOT BE PRIME PAINTED.
- WALLS.
- D DRAWINGS.

# STEEL JOIST NOTES:

- STANDARD SPECIFICATIONS.
- 3
- OF 25 PSF.
- **BE PRIME PAINTED**

# STEEL DECK NOTES:

- AT SUPPORTS.
- CODE SHEET STEEL".
- DECK.
- GALVANIZED

8. PROVIDE ANGLE FRAMING AROUND OPENINGS LARGER THAN 6 INCHES IN ANY DIMENSION (INCLUDING ROOF DRAINS) TO SUPPORT STEEL DECK, TYPICAL UNLESS OTHERWISE NOTED OR DETAILED AS FOLLOWS:

JOIST/BEAM SPACING	ANGLE SIZE
TO 6'-0"	L3x3x1/4
6'-1" TO 8'-0"	L4x4x1/4

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.

10. COORDINATE ALL MEMBER LOCATIONS, UNIT WEIGHTS, OPENING SIZES, AND CURB DIMENSIONS FOR MECHANICAL EQUIPMENT WITH THE ACTUAL EQUIPMENT

11. STRUCTURAL STEEL SCHEDULED TO RECEIVE SPRAYED-ON FIREPROOFING

12. HOT-DIP GALVANIZE AFTER FABRICATION THE FOLLOWING: ANGLES AND PLATES SUPPORTING MASONRY IN EXTERIOR WALLS. B. LINTELS AND LINTEL ASSEMBLIES SUPPORTING MASONRY IN EXTERIOR

ALL STEEL EXPOSED TO WEATHER IN THE FINAL CONSTRUCTION ITEMS IDENTIFIED AS GALVANIZED ON ARCHITECTURAL OR STRUCTURAL

13. STEEL MEMBERS MUST BE SPLICED ONLY WHERE INDICATED.

STEEL JOISTS MUST BE IN ACCORDANCE WITH THE STEEL JOIST INSTITUTE (SJI)

2. STEEL JOISTS DESIGNATED "SP" ON PLANS ARE SPECIAL JOISTS WHICH MUST BE DESIGNED FOR THE SPECIAL CRITERIA INDICATED.

JOIST BRIDGING MUST CONFORM TO SJI SPECIFICATIONS, INCLUDING BRIDGING REQUIRED FOR JOISTS SUBJECTED TO UPLIFT LOADS. PROVIDE CROSS-BRIDGING AT ENDS OF BRIDGING LINES AND CHANGES IN JOIST DEPTHS AND AT ROLLED STEEL SHAPES RUNNING PARALLEL TO JOISTS. BRIDGING SHOWN MUST BE PROVIDED. IN ADDITION TO THE REQUIRED STANDARD BRIDGING. ENDS OF ALL BRIDGING LINES MUST BE ANCHORED TO WALLS OR BEAMS.

4. ROOF JOISTS MUST BE DESIGNED FOR A NET UPLIFT LOAD (LRFD) OR (ULTIMATE)

ALL JOISTS MUST BE DESIGNED FOR A CONCENTRATED LOAD OF 400 LBS. HUNG FROM THE JOIST TOP OR BOTTOM CHORD AT ANY POINT ALONG THE SPAN

STEEL JOISTS SCHEDULED TO RECEIVE SPRAYED-ON FIREPROOFING MUST NOT

7. PERMANENT SUSPENDED LOADS MUST NOT BE SUPPORTED BY JOIST BRIDGING.

8. SUBMIT SPRINKLER SHOP DRAWINGS INCLUDING LOADS AND LOCATIONS PRIOR TO FABRICATION OF JOISTS.

COMPLY WITH OSHA SAFETY STANDARDS FOR THE ERECTION OF STEEL JOISTS.

10. THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS AND CALCULATIONS PREPARED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA FOR THE DESIGN OF SPECIAL JOISTS, OR JOISTS INDICATED TO COMPLY WITH SPECIFIC LOADING REQUIREMENTS.

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: ROOF DECK: 1 1/2" x 18 GAGE TYPE B PAINTED NON-CELLULAR. UNLESS OTHERWISE NOTED, ATTACH DECK TO SUPPORTS WITH 5/8 INCH DIAMETER PUDDLE WELDS IN ALL RIBS WHERE END LAPS OCCUR AND AT 12 INCHES ON CENTER ALONG SUPPORTS WITH A 36/4 PATTERN. FASTEN SIDE LAPS 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 B. ALTERNATE ROOF DECK: 3" x 20 GAGE TYPE NA PAINTED CELLULAR UNLESS OTHERWISE NOTED. ATTACH DECK TO SUPPORTS WITH 5/8 INCH DIAMETER PUDDLE WELDS IN ALL RIBS WHERE END LAPS OCCUR AND AT 8 INCHES ON CENTER ALONG SUPPORTS WITH A 24/4 PATTERN. FASTEN SIDE LAPS WITH 9-#10 SELF-TAPPING HEX HEAD SCREWS EQUALLY SPACED BETWEEN SUPPORTS. FASTEN EDGEMOST DECK PANEL TO STEEL FRAMING WITH 5/8 INCH DIAMETER PUDDLE WELDS AT 12 INCHES ON CENTER

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

4. WELDING MUST BE IN ACCORDANCE WITH AWS D1.3 "STRUCTURAL WELDING

5. PERMANENT SUSPENDED LOADS MUST NOT BE SUPPORTED BY STEEL ROOF

6. STEEL DECK SCHEDULED TO RECEIVE SPRAYED-ON FIREPROOFING MUST BE

## ABBREVIATIONS:

AFF ARCH BD BEJ BLDG BM BOD BOT, B BRG BTWN C TO C CJ CL CLR COL CONC CONC CONSTR CONSTR CONT COORD CTR CTRD CW DBL DC DCJ DCJ DIA, Ø DJ DT DWGS	ABOVE FINISHED FLOOR ARCHITECT BAR DIAMETER BUILDING EXPANSION JOINT BUILDING BEAM BOTTOM OF DECK BOTTOM OF DECK BOTTOM BEARING BETWEEN CENTER TO CENTER CONTROL JOINT CENTERLINE CLEAR COLUMN CONCRETE CONNECTION CONSTRUCTION CONSTRUCTION CONSTRUCTION CONTINUOUS COORDINATE CENTER CENTERED CURTAIN WALL DOUBLE DIAPHRAGM CHORD DOWELED CONSTRUCTION JOINT DIAMETER DOUBLE JOIST DRAG TRUSS DRAWINGS	ES EQ EW EXIST EXP EXT FD FDN FO FF EL FIN FIN FLR FOB FOC FOS FRMG FTG FV, ± GEN H HK HORIZ INT JBE JT KCJ L LWC MATL MAX	EACH SIDE EQUAL EACH WAY EXISTING EXPANSION EXTERIOR FLOOR DRA FOUNDATIO FACE OF FINISHED F ELEVATION FINISH FINISHED F FACE OF BU FACE OF SU FACE OF SU F
	JOINT	KCJ	KEYED CON
DJ DJ DT	DOUBLE JOIST DRAG TRUSS	L LWC MATL	
EA	EACH	MAX MECH	MECHANIC
EF		MFR	MANUFACT
EJ		MID	
EMBED	EMBEDMENT	MOD	MODIFY
EOD	EDGE OF DECK	MOS	MIDDEPTH
EOS	EDGE OF SLAB	NOM	NOMINAL

## PLAN LEGEND:

BOD = +X'-X"	=	BOTTOM OF DECK ELEVATION MEASURED FROM REFERENCED FINISHED FIRST FLOOR ELEVATION = 0'-0"
XXX#	=	MECHANICAL UNIT SUPPORTED ABOVE FRAMING (WEIGHT IN POUNDS) - COORDINATE W/ MECH DWGS
	=	FLOOR / ROOF OPENING
(-X'-X")	=	TOP OF FOOTING ELEVATION MEASURED FROM REFERENCED FINISHED FIRST FLOOR ELEVATION = 0'-0"
<u>X'-X"&gt;</u>	=	TOP OF EXISTING FOOTING ELEVATION MEASURED FROM REFERENCED FINISHED FIRST FLOOR ELEVATION = 0'-0"
< <u>SL</u>	=	DIRECTION OF SLOPE
	=	KCJ, CJ, OR SJ LINE ON PLAN
$\langle X \rangle$ or $X$	=	PLAN KEY NOTE MARK
X	=	COLUMN GRID MARK
		SECTION/DETAIL NUMBER/LETTER
$\begin{pmatrix} \mathbf{X} \\ \mathbf{SX} \end{pmatrix}$	=	SECTION/DETAIL MARK
		SHEET NUMBER WHERE SECTION/DETAIL MARK IS DRAWN
WFX	=	WALL FOOTING MARK
CFX	=	COLUMN FOOTING MARK
±	=	FIELD VERIFY
777/777	=	DEPRESSED SLAB

NTS OC OPH OPNG PAF PAR AIN ON PC PEMB FLOOR PERP PL FLOOR REF UILDING REINF ONCRETE LAB/ STUD REQD REQMTS SCHED RIFY SF SIM SJ SL SOG SPF STD RING ELEVATION TBE NSTRUCTION JOINT T&B THK GHT CONCRETE TOC TOF ΤS TYP ΔI **TURER** UON VERT W/ WSP I OF SLAB **WWR** 

NOT TO SCALE ON CENTER **OPPOSITE HAND** OPENING POWDER ACTUATED FASTENER PARALLEL PIECE PRE-ENGINEERED METAL BUILDING PERPENDICULAR PLATE REFERENCE, REFER TO REINFORCE, REINFORCED, REINFORCING REQUIRED REQUIREMENTS SCHEDULE STEPPED FOOTING SIMILAR SAWED JOINT SLOPE SLAB-ON-GRADE SIDEPLATE FRAME STANDARD TRUSS BEARING ELEVATION **TOP & BOTTOM** THICKNESS TOP OF CONCRETE TOP OF FOOTING THICKENED SLAB TYPICAL UNLESS OTHERWISE NOTED VERTICAL WITH WOOD STRUCTURAL PANEL(S) WELDED WIRE REINFORCING

# Carolina Charter Academy GYMNASIUM 8529 Highway 55 Angier, North Carolina 27501

Owner Highmark School Development 746 East Winchester Street Suite 150 Murray, Utah 84107 801-256-9550 Architect RATIO 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805

Structural Engineer Lynch Mykins Structural Engineers, PC 301 North West Street Suite 105 Raleigh, North Carolina 27603 919-782-1833

**Civil Engineer Timmons Group** 5410 Trinity Road Suite 102 Raleigh, North Carolina 27607 919-866-4938

# SEAL | DATE Ling stest out SEAL 050304 MGINEER. SHEET ISSUE **RATIO** AND SHALL BE USED ONLY PURSUANT TO THE AGREEMENT WITH RATIO IN OTHER USE ISSEMINATION OR DUPLICATION MAY BE MADE WITHOUT PRIOR WRITTEN CONSENT OF RATIO. AL COMMON LAW RIGHTS OF COPYRIGHT AND OTHERWISE ARE HEREBY SPECIFICALLY RESERVED. PROJECT NO 20408 SHEET TITLE GENERAL NOTES **ABBREVIATIONS &** PLAN LEGEND SHEET NUMBER

S-002

#### STATEMENT OF SPECIAL INSPECTION SERVICES

PROJECT: CAROLINA CHARTER ACADEMY ADDITION LOCATION: 8529 HIGHWAY 55, ANGIER, NORTH CAROLINA 27501 OWNER'S REPRESENTATIVE: OWNER'S ADDRESS:

THIS STATEMENT OF SPECIAL INSPECTIONS IS SUBMITTED AS A CONDITION FOR PERMIT ISSUANCE IN ACCORDANCE WITH THE SPECIAL INSPECTION REQUIREMENTS OF THE 2018 NORTH CAROLINA STATE BUILDING CODE. IT INCLUDES A SCHEDULE OF SPECIAL INSPECTION SERVICES APPLICABLE TO THIS PROJECT, THE NAME OF THE SPECIAL INSPECTOR, THE IDENTITY OF OTHER APPROVED AGENCIES RETAINED FOR CONDUCTING SPECIAL INSPECTIONS, AND THE REQUIRED INSPECTOR QUALIFICATIONS. THIS STATEMENT OF SPECIAL INSPECTIONS WAS PREPARED BY THE FOLLOWING DESIGNERS OF RECORD:

STRUCTURAL	KRISTINA K. WARNAAR, P.E.		07/14/2021
	(Type or print name)	(Signature)	(Date)
ARCHITECTURAL			
	(Type or print name)	(Signature)	(Date)
MECHANICAL			
	(Type or print name)	(Signature)	(Date)
OTHER			
	(Type or print name)	(Signature)	(Date)

THE SPECIAL INSPECTOR MUST KEEP RECORDS OF ALL SPECIAL INSPECTIONS AND TESTS AND MUST FURNISH REPORTS TO THE STATE CONSTRUCTION OFFICE AND THE DESIGNERS OF RECORD. REPORTS MUST INDICATE IF THE WORK INSPECTED OR TESTED WAS OR WAS NOT COMPLETED IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. DISCOVERED DISCREPANCIES MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF SUCH DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE STATE CONSTRUCTION OFFICE AND THE DESIGNERS OF RECORD. THE SPECIAL INSPECTIONS PROGRAM DOES NOT RELIEVE THE CONTRACTOR OF HIS OR HER RESPONSIBILITIES.

INTERIM REPORTS MUST BE SUBMITTED TO THE STATE CONSTRUCTION OFFICE, OWNER, AND THE DESIGNERS OF RECORD.

INTERIM REPORT FREQUENCY: MONTHLY

A FINAL REPORT OF SPECIAL INSPECTIONS DOCUMENTING COMPLETION OF ALL REQUIRED SPECIAL INSPECTIONS, TESTING, AND CORRECTION OF ANY DISCREPANCIES SHOULD BE SUBMITTED PRIOR TO ISSUANCE OF A CERTIFICATE OF USE AND OCCUPANCY.

JOB SITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.

OWNER'S AUTHORIZATION

(Signature)

ACCEPTED FOR THE SCO BY:

(Date)

#### SCHEDULE OF SPECIAL INSPECTION SERVICES A

(Date

THE FOLLOWING COMPRISES THE REQUIRED SCHEDULE OF SPECIAL INSPECTIONS FOR THIS PROJECT. THE CONSTRUCTION DIVISIONS WHICH REQUIRE SPECIAL INSPECTIONS FOR THIS PROJECT ARE AS FOLLOWS.

STRUCTURAL STEEL & HIGH STRENGTH BOLTING 
HELICAL PILE FOUNDATIONS

WELDING OF STRUCTURAL STEEL COLD-FORMED STEEL DECK

OPEN-WEB STEEL JOISTS & JOIST GIRDERS

COLD-FORMED STEEL FRAMING CONCRETE CONSTRUCTION

MASONRY CONSTRUCTION B

WOOD CONSTRUCTION SOILS

\_

DRIVEN DEEP FOUNDATIONS CAST-IN-PLACE DEEP FOUNDATIONS RAMMED AGGREGATE PIERS & STONE COLUMNS SPRAYED FIRE-RESISTANT MATERIAL

(Signature)

X MASTIC & INTUMESCENT FIRE-RESISTANT COATINGS EXTERIOR INSULATION & FINISH SYSTEM

FIRE-RESISTANT PENETRATIONS & JOINTS

SMOKE CONTROL

RETAINING WALL & SYSTEMS > 5 FEET SPECIAL INSPECTIONS FOR WIND RESISTANCE SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE

A. THE INSPECTION FREQUENCY INDICATED ON THE FOLLOWING INSPECTION TABLES ARE "C" CONTINUOUS, "P" PERIODIC, & "O" RANDOM ON A DAILY BASIS. B. LEVEL A IS THE MINIMUM INSPECTION PROGRAM FOR EMPIRICALLY / PRESCRIPTIVELY DESIGNED MASONRY IN RISK CATEGORY I, II OR III STRUCTURES. LEVEL B IS THE MINIMUM INSPECTION PROGRAM FOR EMPIRICALLY / PRESCRIPTIVELY DESIGNED MASONRY IN RISK CATEGORY IV STRUCTURES AND ENGINEERED MASONRY IN RISK CATEGORY I, II OR III STRUCTURES. LEVEL C IS THE MINIMUM INSPECTION PROGRAM FOR ENGINEERED MASONRY IN RISK CATEGORY IV STRUCTURES. ENGINEERED MASONRY STRUCTURES ARE THOSE DESIGNED IN ACCORDANCE WITH PORTIONS OF THE TMS 402-13 / ACI 530-13/ASCE 5-13 OTHER THAN PART 4 OR APPENDIX A.

	INSPECTION AGENTS	FIRM NAME & POINT OF CONTACT	ADDRESS / PHONE / E-MAIL
1.	SPECIAL INSPECTOR (SI-1)		
2.	TESTING AGENCY (TA-1)		
3.	TESTING AGENCY (TA-2)		
4.	GEOTECHNICAL ENGINEER (GE-1)		
5.	OTHER (O-1)		

NOTE: THE INSPECTION AND TESTING AGENT(S) MUST BE ENGAGED BY THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL OF RECORD ACTING AS THE OWNER'S AGENT, AND NOT BY THE CONTRACTOR OR SUBCONTRACTOR WHOSE WORK IS TO BE INSPECTED OR TESTED. ANY CONFLICT OF INTEREST MUST BE DISCLOSED TO THE STATE CONSTRUCTION OFFICE, PRIOR TO COMMENCING WORK.

\_\_\_\_

SEISMIC DESIGN CATEGORY:	□ A	□В	C	🗌 D
BASIC WIND SPEED (VASD):	🗌 90-109 MPH	🗌 110-119 MPH	I	
WIND EXPOSURE CATEGORY:	🗌 В	□C	□ D	

		TASK	FREQ	REFERENCE FOR CRITERIA			
	INSPECTION TASK	REQD		STANDARD	NCBC		
	PRIOR TO APPLICATION, VERIFY PREPARATION OF SUBSTRATE AND SUITABILITY OF PRIMERS, IF PRESENT, ARE IN ACCORDANCE WITH APPROVED FIRE RESISTANCE DESIGN, APPROVED MANUFACTURER'S WRITTEN INSTRUCTIONS, AND THE REQUIREMENTS OF AWCI 12-B	X	Ρ	AWCI 12-B	1705.15		
-	OBSERVE THE APPLICATION OF FIRE-RESISTANT COATINGS ENSURING COMPLIANCE WITH APPROVED FIRE RESISTANCE DESIGN, APPROVED MANUFACTURER'S WRITTEN INSTRUCTIONS, AND THE REQUIREMENTS OF AWCI 12-B	X	Ρ	AWCI 12-B	1705.15		
	AFTER ADEQUATE DRYING BUT PRIOR TO THE APPLICATION OF ANY TOPCOAT, MEASURE THE FINAL MASTIC / INTUMESCENT MATERIAL THICKNESS ENSURING COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS AND APPROVED MATERIAL / INSTALLATION SUBMITTALS. MEASUREMENTS MUST CONSIDER THE THICKNESS OF PRIMERS OR OTHER EXISTING COATINGS ON THE SURFACE OF THE SUBSTRATE.		Ρ	AWCI 12-B	1705.15		
	FIRE-RESISTANT PENETRATION	S AND J	OINTS <b></b> ₄	<b>N</b>			
				REFERENCE FOR CRITERIA			
	INSPECTION TASK	REQD		STANDARD	NCBC		
			В		1705 17 1		

				REFERENCE FOR CRITERIA		
	INSPECTION TASK	REQD	FREQ	STANDARD	NCBC	
1.	INSPECT THROUGH-PENETRATION FIRESTOP SYSTEMS AT FIRE WALLS, FIRE BARRIERS, SMOKE BARRIERS AND FIRE PARTITION WALLS IN ACCORDANCE WITH ASTM E2174	X	Р		1705.17.1, 714.3.1.2	
2.	INSPECT PENETRATION FIRESTOP SYSTEMS AT PENETRATIONS THROUGH MEMBRANES THAT ARE PART OF A HORIZONTAL ASSEMBLY IN ACCORDANCE WITH ASTM E2174	X	Ρ		1705.17.1, 714.4.2	
3.	INSPECT FIRE-RESISTANT JOINT SYSTEMS IN ACCORDANCE WITH ASTM 2393	X	Р		1705.17.2, 715.3, 715.4	
A.	THE INSPECTION OF FIRE-RESISTANT PENETRATIONS AND JO OR BUILDINGS ASSIGNED TO RISK CATEGORY III OR IV	INTS APPI	LIES ONL	Y TO HIGH-RISE	BUILDINGS	

### INSP

1.	INSF TEN	PECT REINFORCEME DONS, AND VERIFY
2.	REIN	IFORCING BAR WEL
	a.	VERIFY WELDABILI THAN ASTM A706 A
	b.	INSPECT SINGLE-F
	C.	INSPECT ALL WELI WELDS ≤ 5/16"
3.	CON	CRETE ANCHORS:
	a.	INSPECT ANCHOR
	b.	INSPECT ADHESIV HARDENED CONCE UPWARDLY INCLIN SUSTAINED TENSI
	C.	INSPECT ADHESIV HARDENED CONCF DIFFERENT FROM
	d.	INSPECT MECHAN
4.	COL DUR	LECT MIX DESIGNS A
5.	PRIC FOR TES CON	OR TO CONCRETE PI STRENGTH TESTS, TS, AND DETERMINE ICRETE
6.	INSF PRO	PECT CONCRETE AN PER APPLICATION T
7.	COL SHO REQ	LECT REPORTS OF TCRETE WHEN PRE UIRED BY NCBC SE
8.	VER TEM	IFY MAINTENANCE ( PERATURE AND TEC
9.	INSF	PECTIONS FOR PRES
	a.	OBSERVE APPLICA
	b.	INSPECT GROUTIN
10.	VER TEN FRO	IFY CONCRETE STR DONS AND PRIOR TO M PT & MILD BEAMS
11.	INSF	PECT ERECTION OF
12.	INSF DIME	PECT FORMWORK FO
13.	COL BY S WAL	LECT MILL TEST REI FRS SPECIAL MOME LS OR COUPLING BI
Α.	REF	ERENCES TO "ACI" I
		INSPE

1.	VERIFY MATERIALS BELOW MUSTOW FOUNDAT ADEQUATE TO ACHIEVE THE DESIGN BEARING (
2.	VERIFY EXCAVATIONS EXTEND TO PROPER DEF HAVE REACHED THE CORRECT SOIL MATERIAL
3.	PERFORM CLASSIFICATION AND TESTING OF CO FILL MATERIALS
4.	VERIFY THAT MATERIALS USED, DENSITIES, LIF THICKNESS AND PROCEDURES USED DURING P AND COMPACTION OF COMPACTED FILL ARE IN ACCORDANCE WITH THE APPROVED SOILS REP THE CONSTRUCTION DOCUMENTS
5.	PRIOR TO PLACEMENT OF COMPACTED FILL, VE THE SUBGRADE HAS BEEN PREPARED IN ACCO WITH THE APPROVED SOILS REPORT AND THE CONSTRUCTION DOCUMENTS

#### MASTIC AND INTUMESCENT FIRE RESISTANT COATINGS

CONCRETE CONSTRUCTION							
	TASK		REFERENCE FOR CRITERIA				
ECTION TASK	REQD	FREQ	STANDARDA	NCBC			
ENT, INCLUDING PRESTRESSING PLACEMENT	X	Р	ACI CH.20, 25.2, 25.3, 26.6.1-26.6.3	1908.4			
_DING:			AWS D1.4				
ITY OF REINFORCING BARS OTHER AND COLLECT REPORTS	X	Р	ACI 26.6.4	1704.5			
PASS FILLET WELDS ≤ 5/16"	X	Р	ACI 26.6.4				
DS OTHER THAN SINGLE-PASS FILLET	X	С	ACI 26.6.4				
S CAST IN CONCRETE	X	P	ACI 17.8.2				
/E ANCHORS INSTALLED IN RETE WITH HORIZONTALLY OR NED ORIENTATIONS THAT RESIST ION LOADS	X	С	ACI 17.8.2.4				
/E ANCHORS INSTALLED IN RETE WITH ORIENTATIONS ITEM 3.B	X	Р	ACI 17.8.2				
IICAL ANCHORS INSTALLED IN RETE	X	Р	ACI 17.8.2				
AND VERIFY THE CORRECT MIX USED	X	Р	ACI CH 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3			
PLACEMENT, FABRICATE SPECIMENS , PERFORM SLUMP AND AIR CONTENT E THE TEMPERATURE OF THE	X	С	ASTM C172, ASTM C31, ACI 26.4, 26.12	1908.10			
ND SHOTCRETE PLACEMENT FOR TECHNIQUES	X	С	ACI 26.5	1908.6, 1908.7, 1908.8			
PRECONSTRUCTION TESTS FOR ECONSTRUCTION TESTS ARE CTION 1908.4	X	С		1704.5, 1908.5			
OF SPECIFIED CURING CHNIQUES	X	Р	ACI 26.5.3-26.5.5	1908.9			
STRESSED CONCRETE							
ATION OF PRESTRESSING FORCE	X	С	ACI 26.10				
NG OF BONDED PRESTRESSING	X	С	ACI 26.10				
RENGTH PRIOR TO STRESSING OF PT O REMOVAL OF SHORES AND FORMS S AND STRUCTURAL SLABS	X	Р	ACI 26.11.2				
PRECAST MEMBERS	X	Р	ACI 26.8				
OR SHAPE, LOCATION AND ONCRETE MEMBER BEING FORMED	X	Р	ACI 26.11.1.2(B)				
PORTS FOR ASTM A615 REBAR USED ENT FRAMES, SPECIAL STRUCTURAL EAMS		С	ACI 20.2.2.5	1704.5			

N THIS TABLE ARE TO THE ACI 318-14.						
SOILS						
	TASK		REFERENCE FOR CRITERIA			
ECTION TASK	REQD		STANDARD	NCBC		
OW MUSTOW FOUNDATIONS ARE THE DESIGN BEARING CAPACITY	X	Р		1705.6		
EXTEND TO PROPER DEPTH AND DRRECT SOIL MATERIAL	X	Р		1705.6		
TION AND TESTING OF COMPACTED	X	Р		1705.6		
LS USED, DENSITIES, LIFT EDURES USED DURING PLACEMENT COMPACTED FILL ARE IN IE APPROVED SOILS REPORT AND OCUMENTS	X	С		1705.6		
OF COMPACTED FILL, VERIFY THAT EEN PREPARED IN ACCORDANCE	X	Р		1705.6		

	STRUCTURAL STEEL AND HIGH-STRENGTH BOLTING					
					REFERENCE F	OR CRITERIA
		INSPECTION TASK	REQD	FREQ	AISC 360	NCBC
1.	FAB QUA	RICATOR CERTIFICATION / VERIFICATION OF LITY CONTROL PROCEDURES				
	a.	VERIFY FABRICATOR QUALIFICATIONS	X	С		1704.2.5.1
	b.	<b>REVIEW MATERIAL TEST REPORTS &amp; CERTIFICATIONS</b>	X	С	N5.2	
	C.	COLLECT CERTIFICATES OF COMPLIANCE FROM THE STEEL FABRICATOR AT COMPLETION OF FABRICATION	X	С		1704.5
2.	INSF PRE	PECTIONS PRIOR TO HIGH-STRENGTH BOLTING AT TENSIONED AND SLIP-CRITICAL JOINTS				
	a.	COLLECT MANUFACTURER'S CERTIFICATIONS FOR FASTENER MATERIALS	X	С	TBL N5.6-1	
	b.	FASTENERS ARE MARKED PER ASTM REQUIREMENTS	X	Р	TBL N5.6-1	
	C.	ENSURE CORRECT FASTENERS AND BOLTING PROCEDURES ARE SELECTED FOR JOINT DETAILS	X	Р	TBL N5.6-1	
	d.	VERIFY CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION WHEN SPECIFIED, COMPLY WITH THE CONSTRUCTION DOCUMENTS	X	Р	TBL N5.6-1	
	e.	OBSERVE AND DOCUMENT PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONAL FOR FASTENER ASSEMBLIES AND METHODS	X	Р	TBL N5.6-1	
	f.	VERIFY PROPER STORAGE PROVIDED FOR ALL FASTENER COMPONENTS	X	Р	TBL N5.6-1	
3.	INSF PRE	PECTIONS DURING HIGH-STRENGTH BOLTING AT TENSIONED AND SLIP-CRITICAL JOINTS				
	a.	ENSURE CORRECT FASTENER ASSEMBLIES PLACED IN ALL HOLES AND WASHERS, WHEN SPECIFIED, ARE POSITIONED AS REQUIRED	X	Р	TBL N5.6-2	
	b.	VERIFY JOINT BROUGHT TO SNUG-TIGHT CONDITION PRIOR TO PRETENSIONING	X	Р	TBL N5.6-2	
	C.	VERIFY FASTENER COMPONENTS NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	X	Р	TBL N5.6-2	
	d.	ENSURE FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH RCSC, PROGRESSING FROM THE MOST RIGID POINT TOWARDS FREE EDGES	X	Р	TBL N5.6-2	
4.	DOC CON CON	CUMENT ACCEPTANCE OR REJECTION OF BOLTED INECTIONS AFTER HIGH-STRENGTH BOLTING IS IPLETE	X	С	TBL N5.6-3	
5.	STR	UCTURAL DETAILS				
	a.	VERIFY DIAMETER, GRADE, TYPE AND LENGTH OF ANCHOR RODS AND OTHER EMBEDDED ITEMS SUPPORTING STRUCTURAL STEEL		Р	N5.7	
	b.	INSPECTION OF FABRICATED ASSEMBLIES & ERECTED STEEL FRAMING VERIFYING COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS	X	Р	N5.7	
6.	CON					
	a.	VERIFY PLACEMENT & INSTALLATION OF STEEL DECK	X	Р	TBL N6.1	
	b.	OBSERVE PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	X		TBL N6.1	
	C.	DOCUMENT ACCEPTANCE OR REJECTION OF COMPOSITE CONSTRUCTION ELEMENTS		Р	TBL N6.1	

# Carolina Charter Academy GYMNASIUM 8529 Highway 55 Angier, North Carolina 27501

Owner Highmark School Development 746 East Winchester Street Suite 150 Murray, Utah 84107 801-256-9550 Architect RATIO 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805

Structural Engineer Lynch Mykins Structural Engineers, PC 301 North West Street Suite 105 Raleigh, North Carolina 27603 919-782-1833

Civil Engineer Timmons Group 5410 Trinity Road Suite 102 Raleigh, North Carolina 27607 919-866-4938

SEAL   DATE				
SEAL 050304 WA K. WARTHING STRUCT	NO ON O			
SHEET ISSUE				
COPYRIGHT NOTICE: THIS ARCHITECTURAL AND ENGINEERING DRAWING IS GIVEN I AND SHALL BE USED ONLY PURSUANT TO THE AGREEMENT WITH RATIO. NO OTHER DISSEMINATION OR DUPLICATION MAY BE MADE WITHOUT PRIOR WRITTEN CONSEN COMMON LAW RIGHTS OF COPYRIGHT AND OTHERWISE ARE HEREBY SPECIFICALLY PROJECT NO.	N CONFIDENCE R USE, IT OF RATIO. ALL Y RESERVED. 20408			
SHEET TITLE				
SPECIAL				
INSPECTIONS				

S-011

		WELDING OF STRUCTUR	AL STEE	EL			
			TASK			OR CRITERIA	_
		INSPECTION TASK	REQD	FREQ	AISC 360	NCBC	
1.	INS	PECTIONS PRIOR TO WELDING			N5.4		_
	a.	COLLECT & REVIEW WELDING PROCEDURE SPECIFICATION (WPS) AND VERIFY MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES	X	С	TBL N5.4-1		-
	b.	CONFIRM WELD MATERIAL TYPE & GRADE	X	P	TBL N5.4-1		
	C.	CONFIRM METHOD OF WELDER IDENTIFICATION	X	P	TBL N5.4-1		-
	d.	INSPECTION OF FIT-UP FOR GROOVE & FILLET WELDS INCLUDING ACCESS HOLE CONFIGURATION & FINISH	X	Р	TBL N5.4-1		-
2.	INS	PECTIONS DURING WELDING			N5.4		_
	a.	VERIFY WELDER QUALIFICATIONS	X	Р	TBL N5.4-2		-
	b.	VERIFY PROPER CONTROL AND HANDLING OF WELDING CONSUMABLES	X	Р	TBL N5.4-2		_
	C.	MONITOR ENVIRONMENTAL CONDITIONS	X	Р	TBL N5.4-2		_
	d.	MONITOR PROPER IMPLEMENTATION OF WPS	X	Р	TBL N5.4-2		_
	e.	INSPECTION OF WELDING TECHNIQUES INCLUDING NO WELDING OVER CRACKED TACK WELDS	X	Р	TBL N5.4-2		
3.	INS	PECTIONS AFTER WELDING			N5.4, N5.5		
	a.	VERIFY WELDS HAVE BEEN CLEANED	X	Р	TBL N5.4.3		_
	b.	CONFIRM THE INSTALLED SIZE, LENGTH AND LOCATION OF WELDS MATCHES THE CONTRACT DOCUMENTS	X	С	TBL N5.4.3		
	C.	VERIFY WELDS MEET VISUAL ACCEPTANCE CRITERIA	X	С	TBL N5.4.3		_
	d.	CONFIRM ARC STRIKES COMPLY WITH PART 5.28 OF AWS D1.1	X	С	TBL N5.4.3		-
	e.	VISUALLY OBSERVE WEB K-AREA FOR CRACKS WITHIN 3" OF WELDED DOUBLER PLATES, CONTINUITY PLATES AND STIFFENERS	X	С	TBL N5.4.3		-
	f.	BACKING AND WELD TABS REMOVED PER CONTRACT DOCUMENTS	X	С	TBL N5.4.3		-
	g.	OBSERVE AND INSPECT WELD REPAIR ACTIVITIES	X	С	TBL N5.4.3		
	h.	FOR RISK CATEGORY III OR IV STRUCTURES, CONDUCT ULTRASONIC TESTING (UT) OF CJP GROOVE WELDS IN MATERIALS ≥ 5/16" AT BUTT, T- AND CORNER JOINTS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING		С	N5.5B, N5.5E		-
	i.	FOR RISK CATEGORY II STRUCTURES, CONDUCT ULTRASONIC TESTING (UT) OF CJP GROOVE WELDS IN MATERIALS ≥ 5/16" AT BUTT, T- AND CORNER JOINTS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING		P	N5.5.B, N5.5F		-
	j.	CONDUCT MAGNETIC PARTICLE TESTING (MT) OR LIQUID PENETRANT TESTING (PT) AT THERMALLY CUT SURFACES OF ACCESS HOLES FOR ROLLED SECTION WITH TF > 2" AND BUILT-UP SHAPE WITH TW > 2"		С	N5.5C		-
	k.	RADIOGRAPHIC OR ULTRASONIC INSPECTION AT JOINTS SUBJECT TO FATIGUE	X	С	N5.5D, TBL A-3.1		_
	Ι.	DOCUMENT ACCEPTANCE / REJECTION OF WELDED JOINTS AND MEMBERS	X	С	TBL N5.4-3, N5.5G		

— I —

8/2

COLD-FORMED STEEL DECK						
INSPECTION TASK			5050	REFERENCE FOR CRITERIA		
	INSPECTION TASK	REQD	FREQ	SDI QA/QC	NCBC	
PRIC ACCI DOC	OR TO DECK PLACEMENT, VERIFY DECK AND DECK ESSORIES COMPLY WITH THE CONSTRUCTION UMENTS	X	С	TBL 1.1		
INSP	ECTION TASKS AFTER DECK PLACEMENT					
a.	VERIFY THE INSTALLATION OF DECK & DECK ACCESSORIES COMPLIES WITH THE CONSTRUCTION DOCUMENTS	X	С	TBL 1.2		
b.	VERIFY THAT DECK MATERIALS' MILL CERTIFICATIONS COMPLY WITH THE CONSTRUCTION DOCUMENTS	X	С	TBL 1.2		
INSP	ECTION TASKS PRIOR TO DECK WELDING					
a.	COLLECT WELDING PROCEDURE SPECIFICATION (WPS)	X	Р	TBL 1.3		
b.	COLLECT MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES	X	Р	TBL 1.3		
C.	VERIFY MATERIAL TYPE AND GRADE	X	Р	TBL 1.3		
d.	CHECK WELDING EQUIPMENT	X	Р	TBL 1.3		
INSP	ECTION TASKS DURING DECK WELDING					
a.	VERIFY WELDER QUALIFICATIONS	X	Р	TBL 1.4		
b.	VERIFY PROPER CONTROL AND HANDLING OF WELDING CONSUMABLES	X	Р	TBL 1.4		
C.	MONITOR ENVIRONMENTAL CONDITIONS	X	Р	TBL 1.4		
d.	MONITOR PROPER IMPLEMENTATION OF WPS	X	Р	TBL 1.4		
INSP	ECTION TASKS AFTER WELDING					
a.	VERIFY SIZE AND LOCATION OF WELDS, INCLUDING SUPPORT, SIDELAP AND PERIMETER WELDS	X	С	TBL 1.5		
b.	VERIFY WELDS MEET VISUAL ACCEPTANCE CRITERIA	X	С	TBL 1.5		
C.	OBSERVE WELD REPAIR ACTIVITIES	X	С	TBL 1.5		
INSP	ECTION TASKS PRIOR TO MECHANICAL FASTENING					
a.	VERIFY MANUFACTURER INSTALLATION INSTRUCTIONS AVAILABLE FOR MECHANICAL FASTENERS	X	Р	TBL 1.6		
b.	PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION	X	Р	TBL 1.6		
C.	VERIFY PROPER STORAGE OF MECHANICAL FASTENERS	X	Р	TBL 1.6		
INSP	ECTION TASKS DURING MECHANICAL FASTENING					
a.	OBSERVE FASTENER SPACING AND POSITION	X	Р	TBL 1.7		
b.	VERIFY FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS	X	Р	TBL 1.7		
INSP	ECTION TASKS AFTER MECHANICAL FASTENING					
a.	CHECK SPACING, TYPE AND INSTALLATION OF SUPPORT FASTENERS	X	С	TBL 1.8		
b.	CHECK SPACING, TYPE, AND INSTALLATION OF SIDELAP FASTENERS	X	С	TBL 1.8		
C.	CHECK SPACING, TYPE, AND INSTALLATION OF PERIMETER FASTENERS	X	С	TBL 1.8		
d.	VERIFY REPAIR ACTIVITIES	X	С	TBL 1.8		
DOC ACCI	UMENT ACCEPTANCE OR REJECTION OF DECK & DECK ESSORIES FOR ALL PHASES OF CONSTRUCTION	X	С	TBLS 1.1 THRU 1.8		

\_\_\_\_

#### **OPEN-WEB STEEL JOISTS AND JOISTS GIRDERS**

		TASK		REFERENCE I	FOR CRITERIA
	INSPECTION TASK	REQD	FREQ	STANDARD	NCBC
1.	FABRICATOR CERTIFICATION / VERIFICATION OF QUALITY CONTROL PROCEDURES				
	a. VERIFY FABRICATOR QUALIFICATIONS	X	С		1704.2.5.1
	b. COLLECT CERTIFICATE OF COMPLIANCE FROM STEEL JOIST PRODUCER AT COMPLETION OF MANUFACTURE	X	С		1704.2, 2207.5
2.	OBSERVE BOLTED AND WELDED JOIST END CONNECTIONS		Ρ	SJI-K 5.3, 5.6, SJI- LH/DLH 104.4, 104.7, SJI-JG 1004.4, 1004.6, SJI- CJ 104.4, 104.7	TBL 1705.2.3
3.	VERIFY SIZE, SPACING AND CONNECTION OF STANDARD HORIZONTAL AND DIAGONAL BRIDGING	X	Р	SJI-K 5.4, SJI-LH/DLH 104.5, SJI- JG 1004.5, 1004.9, SJI- CJ 104.5	TBL 1705.2.3
4.	VERIFY SIZE, SPACING AND CONNECTION OF BRIDGING THAT DIFFERS FROM THE SJI SPECIFICATIONS LISTED BY PART 2207.1 OF THE NCBC	X	Р		TBL 1705.2.3

#### MASONRY - LEVEL B

		MASONRT - LEVEL	D			
			TASK	FREO	REFERENCE	
		INSPECTION TASK	REQD	FREQ	TMS 402 <sub>A</sub>	TMS 602 <sub>A</sub>
1.	TES DEL	T & VERIFY SLUMP FLOW & VISUAL STABILITY INDEX AS IVERED TO SITE FOR SELF-CONSOLIDATING GROUT	X	С	TBL 3.1.2	ART. 1.5B.1.B.3
2.	TES	T & VERIFY F'M & F'AAC PRIOR TO CONSTRUCTION	X	С	TBL 3.1.2	ART. 1.4B
3.	VER	IFY COMPLIANCE WITH THE APPROVED SUBMITTALS	X	Р	TBL 3.1.2	ART. 1.5
4.	AS N FOL	ASONRY CONSTRUCTION BEGINS, VERIFY THAT THE LOWING ARE IN COMPLIANCE:				
	a.	PROPORTIONS OF SITE-PREPARED MORTAR	X	Р		ART. 2.1,
	b.	CONSTRUCTION OF MORTAR JOINTS	X	Р		2.6A ART. 3.3B
	C.	GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES	X	Р		ART. 2.4B, 2.4H
	d.	LOCATION OF REINFORCEMENT, CONNECTORS AND PRESTRESSING TENDONS AND ANCHORAGES	X	Р		ART. 3.4, 3.6A
	e.	PRESTRESSING TECHNIQUE	X	Р		ART. 3.6B
	f.	TEST & VERIFY F'M & F'AAC PRIOR TO CONSTRUCTION	X	C/P <sub>A</sub>		ART. 2.1C
5.	PRIC CON	OR TO GROUTING, VERIFY THAT THE FOLLOWING	X			
	a.	GROUT SPACE IS CLEAN, AND CLEANOUTS PROVIDED WHEN REQUIRED	X	Р		ART. 3.2D, 3.2F
	b.	GRADE, TYPE & SIZE OF REINFORCEMENT & ANCHOR BOLTS, & PRESTRESSING TENDONS & ANCHORAGE	X	Р	SEC 6.1	ART. 2.4, 3.4
	C.	PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGE	X	Р	SEC 6.1, 6.2.1 ,6.2.6, 6.2.7	ART. 3.2E, 3.4, 3.6A
	d.	PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	X	Р		ART. 2.6B, 2.4G.1.B
	e.	CONSTRUCTION AND SIZE OF MORTAR JOINTS	X	Р		ART. 3.3B
6.	VER	IFY DURING CONSTRUCTION:				
	a.	SIZE AND LOCATION OF STRUCTURAL ELEMENTS	X	Р		ART. 3.3F
	b.	TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION	X	Р	SEC1.2.1(E), 6.1.4.3, 6.2.1	
	C.	WELDING OF REINFORCEMENT	X	С	SEC 8.1.6.7.2, 9.3.3.4(C), 11.3.3.4(B)	
	d.	PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE < 40°F) OR HOT WEATHER (TEMPERATURE > 90°F)	X	Р		ART. 1.8C, 1.8D
	e.	APPLICATION & MEASUREMENT OF PRESTRESS FORCE	X	С		ART. 3.6B
	f.	VERIFY PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	X	С		ART. 3.5. 3.6C
	g.	PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	X	C/P <sub>A</sub>		ART. 3.3B.9, 3.3F.1.B
7.	OBS SPE	ERVE PREPARATION OF GROUT SPECIMENS, MORTAR CIMENS, AND OR PRISMS	X	Ρ		ART. 1.4.B.2.A.3, 1.4.B.2.B.3, 1.4.B.2.C.3, 1.4.B.3, 1.4.B.4
Α.	REF	ERENCES TO "TMS402" IN THIS TABLE ARE TO THE TMS402	2/ACI530/A	SCE5-13	REFERENCES	TO "TMS602"

ARE TO TMS602/ACI530.1/ASCE6-13. B. AAC MASONRY MUST BE CONTINUOUSLY INSPECTED FOR THE FIRST 5000-SQUARE FEET AND

PERIODICALLY INSPECTED AFTERWARDS.

# Carolina Charter Academy GYMNASIUM 8529 Highway 55 Angier, North Carolina 27501

Owner Highmark School Development 746 East Winchester Street Suite 150 Murray, Utah 84107 801-256-9550 Architect RATIO 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805

Structural Engineer Lynch Mykins Structural Engineers, PC 301 North West Street Suite 105 Raleigh, North Carolina 27603 919-782-1833

Civil Engineer Timmons Group 5410 Trinity Road Suite 102 Raleigh, North Carolina 27607 919-866-4938

#### SEAL | DATE

![](_page_17_Picture_16.jpeg)

SHEET ISSUE

COPYRIGHT NOTICE: THIS ARCHITECTURAL AND ENGINEERING DRAWING IS GIVEN IN CONFIDENCE AND SHALL BE USED ONLY PURSUANT TO THE AGREEMENT WITH RATIO. NO OTHER USE, DISSEMINATION OR DUPLICATION MAY BE MADE WITHOUT PRIOR WRITTEN CONSENT OF RATIO. ALL COMMON LAW RIGHTS OF COPYRIGHT AND OTHERWISE ARE HEREBY SPECIFICALLY RESERVED.

S-012

20408

### SHEET TITLE SPECIAL INSPECTIONS

SHEET NUMBER

PROJECT NO.

![](_page_18_Figure_0.jpeg)

### FOUNDATION / SLAB-ON-GRADE ...

- 1. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO NONBEARING WALLS, WALL CONTROL JOINTS AND OPENINGS.
- 2. UNLESS OTHERWISE NOTED, ALL ELEVATIONS ARE BASED ON A FINISHED FIRST FLOOR REFERENCE OF 100'-0". ACTUAL FINISHED FLOOR ELEVATION IS 334.00'. REFER TO ARCHITECTURAL DRAWINGS FOR FINISHED FLOOR MATERIAL.
- 3. TOP OF ALL FOOTINGS SHALL BE AT ELEVATION 98'-4" UNLESS OTHERWISE NOTED.
- 4. NOT ALL UTILITY LOCATIONS ARE SHOWN ON PLAN. THE CONTRACTOR SHALL 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 "STEPPED FOOTING DETAIL" AND SLEEVE THE UTILITY THROUGH THE FOUNDATION WALL. THE CONTRACOTR MAY, AT THEIR OPTION, SLEEVE THE UTILITY THROUGH THE FOUNDATION PER THE "UTILITY SLEEVE DETAIL."
- 5. UNLESS OTHERWISE INDICATED, EXTEND WALL FOOTINGS A MINIMUM OF 6 INCHES BEYOND ENDS OF WALLS.
- 6. SLAB-ON-GRADE JOINTS SHALL BE SAWED JOINTS CONTROL JOINTS OR KEYED CONSTRUCTION JOINTS UNLESS SPECIFICALLY DENOTED TO BE KEYED CONSTRUCTION JOINTS. CONTRACTOR SHALL COORDINATE ALL SLAB JOINTS WITH JOINTS IN BONDED FLOOR FINISHES. REFER TO ARCHITECTURAL DRAWINGS FOR FLOOR FINISH JOINT LOCATIONS.
- 7. PLACE 1 #4 x 3'-0" IN MIDDLE OF SLAB AT REENTRANT CORNERS WHERE A SLAB CONTROL JOINT DOES NOT OCCUR.
- 8. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LIMITS OF SLAB DEPRESSIONS.
- 9. FLOOR DRAINS AND FLOOR SINKS ARE NOT SHOWN ON PLAN. REFER TO PLUMBING DRAWINGS FOR LOCATIONS.
- 10. REFER TO CIVIL DRAWINGS FOR EXTERIOR CONCRETE SLABS AND PAVING.

### KEY NOTES

- 01 4" CONCRETE SLAB-ON-GRADE OVER VAPOR RETARDER AND 4" DEPTH OF POROUS FILL UNLESS OTHERWISE INDICATED. REINFORCE SLAB WITH 6x6 W2.9xW2.9 WELDED WIRE REINFORCING PLACED 1" CLEAR BELOW TOP OF SLAB. MAINTAIN REINFORCEMENT IN POSITION ON BOLSTERS, CHAIRS OR SPACERS DURING CONCRETE PLACEMENT.
- 02 12" NOMINAL CMU WALL W/ 1 LAYER OF #5 VERTICAL REINFORCEMENT AT 16" OC 1 (LOCATED IN WALL AS SHOWN IN SECTIONS. FULLY GROUT REINFORCED CELLS, BOND
- BEAMS AND ALL CELLS BELOW GRADE.
  03 VOLLEYBALL POST SLEEVE IN THIS AREA. REFERENCE TYPICAL DETAIL ON SHEET
- S-503 AND ARCHITECTURAL DRAWINGS FOR LOCATION.
  04 NON LOAD-BEARING 8" CMU WALL W/ 1 LAYER OF #4 VERTICAL REINFORCEMENT
- LAYER OF #4 VERTICAL REINFORCEMENT IN EACH CELL. FULLY GROUT REINFORCED CELLS AND ALL CELLS BELOW GRADE. REFERENCE ARCHITECTURAL DRAWINGS FOR EXACT PLAN LOCATION AND WALL HEIGHT.
- 11 SCUPPER IN THIS AREA. STEP FOOTING AS REQUIRED PER TYPICAL DETAIL. REFERENCE PLUMBING DRAWINGS FOR
- 12 PRE-ENGINEERED ALUMNIUM CANOPY FOOTINGS BY OTHERS. REFERENCE ARCH DRAWINGS FOR LOCATIONS. CONTRACTOR TO COORDINATE FINAL DETAILS WITH SUPPLIER. TYPICAL DETAIL PROVIDED IS SHOWN FOR SCHEMATIC REPRESENTATION ONLY. SUPPLIER TO
  - PROVIDE CALCULATIONS SIGNED AND SEALED BY A LICENSED ENGINEER IN THE STATE OF NORTH CAROLINA. REFERENCE SHEET S-001 FOR DESIGN LOADS.
  - 13 THICKENED SLAB AT BLEACHER CONNECTION IN THIS AREA TO SLAB ON GRADE. COORDINATE FINAL LOCATION AND CONNECTION WITH SUPPLIER.
  - 15 WALL FOOTING FOR PREVIOUS PHASE (CLASSROOM ADDITION).

# Carolina Charter Academy GYMNASIUM 8529 Highway 55 Angier, North Carolina 27501

Owner Highmark School Development 746 East Winchester Street Suite 150 Murray, Utah 84107 801-256-9550 Architect RATIO 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805

Structural Engineer Lynch Mykins Structural Engineers, PC 301 North West Street Suite 105 Raleigh, North Carolina 27603 919-782-1833

**Civil Engineer Timmons Group** 5410 Trinity Road Suite 102 Raleigh, North Carolina 27607 919-866-4938

SEAL | DATE 08/20/21

![](_page_18_Picture_28.jpeg)

°. V	"C' °.	
A	C:	
5.0 1	700 2:	ပ
ニ しー4	360 🛬 :	E CE
S.		
Les a	A.:	$\geq$
····	NO/ °°°	Ch .
°.~~ (7	N	
A. *****	•••° 、 X	
VS an	TIPAL	
STRI		

![](_page_18_Picture_30.jpeg)

S-101A

SHEET NUMBER

![](_page_19_Figure_0.jpeg)

DUUE		
<u>ROOF</u> 1.	REFER TO FOUNDATION PLAN AND	Carolina Charter
0	ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.	Academy
Ζ.	SHOWN OF DECK ELEVATIONS ARE SHOWN ON PLAN. INTERMEDIATE ELEVATIONS SHALL BE STRAIGHT	GYMNASIUM
	LINES BETWEEN GIVEN ELEVATIONS. INTERPOLATE AS REQUIRED FOR	8529 Highway 55
	INTERMEDIATE BEARING ELEVATIONS, UNLESS OTHERWISE NOTED.	Angier, North Carolina
3.	TOP OF PARAPET + 132-8" UNLESS OTHERWISE NOTED	27501
	TOP OF EXISTING PARAPET = 127'-0" VIF.	Owner Highmark School Development
4.	COORDINATE AND VERIFY ALL MEMBER LOCATIONS, DIMENSIONS, WEIGHTS,	Suite 150 Murray, Utah 84107
	OPENING SIZES, AND CURB DIMENSIONS FOR ALL MECHANICAL	801-256-9550 Architect
	EQUIPMENT FURNISHED. INCLUD THIS INFORMATION ON THE JOIST AND	RATIO 227 Fayetteville Street, Suite 301
5.	STRUCTURAL STEEL SHOP DRAWINGS. ROOF JOISTS ARE EQUALLY SPACED	Raleigh, North Carolina 27601 919-821-0805
	UNLESS OTHERWISE NOTED, NOT TO EXCEED 8'-0" ON CENTER.	Structural Engineer Lynch Mykins Structural Engineers, PC
6.	PROVIDE BOND BEAMS AND STEEL LINTELS FOR FACADE OVER ALL	301 North West Street Suite 105
	OPENINGS PER SCHEDULE. REFERENCE ARCHITECTURAL	Raleigh, North Carolina 27603 919-782-1833
	DRAWINGS FOR LOCATIONS AND SIZES.	Civil Engineer Timmons Group
	ΟΤΓΟ	5410 Trinity Road Suite 102
<u>ket n</u>	<u>UIES</u>	Raleigh, North Carolina 27607 919-866-4938
06	BASKETBALL GOAL SUSPENDED FROM JOISTS. COORDINATE WITH BASKETBALL GOAL MANUFACTURER FOR REQUIRED ATTACHMENT	
07	DETAILS. REFERENCE ARCHITECTURAL	
	DRAWINGS FOR SCOREBOARD IN THIS AREA. PROVIDE BOND BEAM AT	
	LOCATIONS. CONTRACTOR TO COORDINATE FINAL PLACEMENT.	
08	REFERENCE TYPICAL DETAIL FOR STEEL DECK CONNECTION.	
09	1 1/2" ROOF DECK. BOTTOM OF DECK ELEVATIONS ARE SHOWN ON PLAN.	
	REFERENCE STEEL DECK NOTES FOR ATTACHMENT AND ALTERNATE ROOF	SEAL   DATE 08/20/21
10	DECK. ROOFTOP ACCESS LADDER.	TH CAROLINA THE CAROLINA
	LOCATION.	FISSION SEAL
14	BASKETBALL GOAL. BASIS OF DESIGN	050304
	SYSTEMS 1350FF FORWARD FOLD REAR BRACED CEIING ATTACHED	A K. WARTING STRUCTURATION
	HOOP SYSTEM WITH AN ESTIMATED TOTAL WEIGHT OF 400#. JOIST	SHEET ISSUE
	MANUFACTURER TO COORDINATE CONNECTION OF ANGLE SUPPORT STEEL AND DESIGN FOR FINAL LOADS	1 Addendum 1 08/20/21
	PROVIDED BY SUPPLIER.	
		COPTRIGHT NUTICE: THIS ARCHITECTURAL AND ENGINEERING DRAWING IS GIVEN IN CONFIDENCE AND SHALL BE USED ONLY PURSUANT TO THE AGREEMENT WITH RATIO. NO OTHER USE, DISSEMINATION OR DUPLICATION MAY BE MADE WITHOUT PRIOR WRITTEN CONSENT OF RATIO. ALL COMMON LAW RIGHTS OF COPYRIGHT AND OTHERWISE ARE HEREBY SPECIFICALLY RESERVED.
		PROJECT NO. 20408 SHEET TITLE
		ROOF FRAMING
		PLAN - GYMNASIUM
		SHEET NUMBER
		S-102A

![](_page_20_Figure_0.jpeg)

![](_page_20_Figure_2.jpeg)

maxxx

8"

	Carolina Charter Academy GYMNASIUM 8529 Highway 55 Angier, North Carolina 27501
	OwnerHighmark School Development746 East Winchester StreetSuite 150Murray, Utah 84107801-256-9550ArchitectRATIO227 Fayetteville Street, Suite 301Raleigh, North Carolina 27601919-821-0805Structural EngineerLynch Mykins Structural Engineers, PC301 North West StreetSuite 105Raleigh, North Carolina 27603919-782-1833Civil EngineerTimmons Group
	SEAL   DATE 08/20/21
	SHEET ISSUE
CMU WALL - REF PLAN - 1/2" PEJ	
SOG - REF PLAN WWF VAPOR BARRIER, POROUS FILL AND GRADE 3" CLR 4'-0" WALL FTG - REF PLAN	Image: Constraint of the second state of the second sta
	SHEET NUMBER S-301

![](_page_21_Figure_0.jpeg)

õ

\_\_\_\_\_

![](_page_21_Figure_3.jpeg)

# Carolina Charter Academy GYMNASIUM 8529 Highway 55 Angier, North Carolina 27501

Owner Highmark School Development 746 East Winchester Street Suite 150 Murray, Utah 84107 801-256-9550 Architect RATIO

Lynch Mykins Structural Engineers, PC

08/20/21

20408

![](_page_22_Figure_0.jpeg)

![](_page_22_Figure_2.jpeg)

![](_page_22_Figure_4.jpeg)

![](_page_22_Figure_6.jpeg)

![](_page_23_Figure_0.jpeg)

![](_page_24_Figure_0.jpeg)

õ

# Carolina Charter Academy GYMNASIUM 8529 Highway 55 Angier, North Carolina 27501

Owner Highmark School Development 746 East Winchester Street Suite 150 Murray, Utah 84107 801-256-9550 Architect RATIO 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805

Structural Engineer Lynch Mykins Structural Engineers, PC 301 North West Street Suite 105 Raleigh, North Carolina 27603 919-782-1833

**Civil Engineer** Timmons Group 5410 Trinity Road Suite 102 Raleigh, North Carolina 27607 919-866-4938

08/20/21 SEAL | DATE

![](_page_24_Picture_10.jpeg)

;	SHE	ET ISSUE	
	1	Addendum 1	08/20/21
+			
+			
ł			
ł			
ł			
ľ			
	DPYRIG ND SHAI SSEMIN DMMON	HT NOTICE: THIS ARCHITECTURAL AND ENGINEERING DRAWING IS GIVEN IN L BE USED ONLY PURSUANT TO THE AGREEMENT WITH RATIO. NO OTHER ATION OR DUPLICATION MAY BE MADE WITHOUT PRIOR WRITTEN CONSENT LAW RIGHTS OF COPYRIGHT AND OTHERWISE ARE HEREBY SPECIFICALLY	CONFIDENCE USE, OF RATIO, ALL RESERVED.
Ī	PRC		20408
			20100
•	<b>T</b> \	PICAL DETAILS	

S-503

SHEET NUMBER

![](_page_25_Figure_0.jpeg)

![](_page_25_Figure_2.jpeg)

JOIST LOADING DIAGRAM 48LH - SP2 NTS

![](_page_25_Figure_4.jpeg)

JOIST LOADING DIAGRAM 48LH - SP4 NTS

# Carolina Charter Academy GYMNASIUM 8529 Highway 55 Angier, North Carolina 27501

Owner Highmark School Development 746 East Winchester Street Suite 150 Murray, Utah 84107 801-256-9550 Architect RATIO 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805

Structural Engineer Lynch Mykins Structural Engineers, PC 301 North West Street Suite 105 Raleigh, North Carolina 27603 919-782-1833

**Civil Engineer** Timmons Group 5410 Trinity Road Suite 102 Raleigh, North Carolina 27607 919-866-4938

SEAL   DATE	
SEAL 050304	LINDER C-4360
VAK WANA	STRUCTUR

			1111
SHE	ET ISSUE		
COPYRIG AND SHA DISSEMIN COMMON	HT NOTICE: THIS ARCHITECTURAL AND ENG LL BE USED ONLY PURSUANT TO THE AGRE VATION OR DUPLICATION MAY BE MADE WIT LAW RIGHTS OF COPYRIGHT AND OTHERW	ATIO INEERING DRAWING IS GIVEN IN EMENT WITH RATIO. NO OTHER HOUT PRIOR WRITTEN CONSEN ISE ARE HEREBY SPECIFICALLY	I CONFIDENCE USE, T OF RATIO, ALL RESERVED.
PRC	JECT NO.		20408
SHE	ET TITLE		
T١	YPICAL DI	ETAILS	

S-504

SHEET NUMBER

### ABBREVIATIONS

Μ

ΜΔΥ	
INIB	
M.C.	MECHANICAL CONTRACTOR
M.D.F.	MEDIUM DENSITY FIBERBOARD
M.E.P.	MECH./ELECT./PLUMBING
MFR.	MANUFACTURER(ING)
мн	
IVI.I I.	
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MO	
IWI.O.	
MIL.	METAL
N	
N.A.F.	NO APPLIED FINNISH
N.I.C.	NOT IN CONTRACT
NO	NUMBER
N.I.S.	NOT TO SCALE
0	
0.4	
0.7.	
0.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
0.1.0.1.	
	INSTALLED
0.F.O.I.	OWNER FURNISHED-OWNER
	INSTALLED
0.11.	
UPG.	OPENING
OPP.	OPPOSITE
п	
Р 	
P.L.	
P. LAM	PLASTIC LAMINATE
I LAU.	
PR.	PAIR
PR. PREFAB.	PAIR PREFABRICATED
PR. PREFAB.	PAIR PREFABRICATED
PR. PREFAB. PT. BD.	PAIR PREFABRICATED PARTICLE BOARD
PR. PREFAB. PT. BD. PTD.	PAIR PREFABRICATED PARTICLE BOARD PAINTED
PR. PREFAB. PT. BD. PTD. PWD.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD
PR. PREFAB. PT. BD. PTD. PWD. Q. Q.T.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD
PR. PREFAB. PT. BD. PTD. PWD. Q. Q.T. R	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD
PR. PREFAB. PT. BD. PTD. PWD. Q. Q.T. R	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE
PR. PREFAB. PT. BD. PTD. PWD. Q. Q. T. R R	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING DUAN
PR. PREFAB. PT. BD. PTD. PWD. Q. Q. T. R R. R.C.P.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN
PR. PREFAB. PT. BD. PTD. PWD. Q. Q. Q. T. R R. R. C.P. R.D.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN
PR. PREFAB. PT. BD. PTD. PWD. Q.T. Q.T. R R.C.P. R.D. REF.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE
PR. PREFAB. PT. BD. PTD. PWD. Q.T. Q.T. R. R.C.P. R.D. REF.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE PEELECTED
PR. PREFAB. PT. BD. PTD. PWD. Q. Q. Q. T. R. R. R. C. P. R. C. P. REF. REFL.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED
PR. PREFAB. PTD. PTD. PWD. Q Q. Q. T. R R R. C.P. REF. REF. REFL. REINF.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REFLECTED REINFORCED
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. C. P. REF. REFL. REFL. RESIL.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REFLECTED REINFORCED RESILIENT
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. R. R. R.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REFLECTED REINFORCED RESILIENT PIGHT HAND
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. R. R. R.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REFLECTED REINFORCED RESILIENT RIGHT HAND
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. REF. REFL. REFL. RESIL. RESIL. R.H. RM	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED REINFORCED RESILIENT RIGHT HAND ROOM
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. R. R. REF. REF	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. R. R. REF. REF	PAIR         PREFABRICATED         PARTICLE BOARD         PAINTED         PLYWOOD         QUARRY TILE         RADIUS         REFLECTED CEILING PLAN         ROOF DRAIN         REFERENCE         REFLECTED         REINFORCED         RESILIENT         RIGHT HAND         ROUGH OPENING
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. R. REF. REF	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. R. R. REFL. REFL. RESIL. RESIL. R. H. R. R. R. S	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. REF. REFL. RESIL. RESIL. RESIL. R. H. RM R.O. S SCHED.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. REF. REF	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. REF. REF	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. REFL. REFL. RESIL. RESIL. R. H. R. R. S. S. S. CHED. S. D. SECT.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. REF. REFL. REFL. RESIL. RESIL. R. R. R. S. S. S. S. S. S. S. S. S. S. S. S. S.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION SQUARE FEET
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. REF. REFL. REFL. RESIL. RESIL. RESIL. R. R. R. S. S. S. S. S. S. S. S. S. S. S. S. S.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION SQUARE FEET SHEET
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R.C.P. REF. REFL. REFL. REINF. RESIL. R.H. RM R.O. S SCHED. S.D. SECT. S.F. SHT. SIM	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION SQUARE FEET SHEET SIMILAR
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. R. R. R.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION SQUARE FEET SHEET SIMILAR
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R.C.P. REF. REF. REF. REFL. REINF. RESIL. RESIL. R.H. R. S. S. S. S. S. S. S. S. S. S. S. S. S.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION SQUARE FEET SHEET SIMILAR SPECIFICATION
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. R. REF. REF	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION SQUARE FEET SIMILAR SPECIFICATION SQUARE
PR.           PREFAB.           PT. BD.           PTD.           PWD.           Q           Q.T.           R           R.C.P.           REF.           REF.           REFL.           RESIL.           R.H.           SCHED.           S.D.           SECT.           S.F.           SHT.           SIM.           SPEC.           SQ.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION SQUARE FEET SIMILAR SPECIFICATION SQUARE STAINLESS STEFL
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. R. R. REF. REF	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION SQUARE FEET SIMILAR SPECIFICATION SQUARE STAINLESS STEEL STAINLESS STEEL
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. REF. REF	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION SQUARE FEET SIMILAR SPECIFICATION SQUARE STAINLESS STEEL STAINLESS STEEL STAINLESS STEEL
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. R. R. REF. REF	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION SQUARE FEET SHEET SIMILAR SPECIFICATION SQUARE STAINLESS STEEL STANDARD STEEL
PR.           PREFAB.           PT. BD.           PTD.           PWD.           Q           Q.T.           R           R.C.P.           REF.           REF.           REFL.           REFL.           SCHED.           SCHED.           S.D.           SECT.           S.F.           SHT.           SIM.           SPEC.           SQ.           STL.           STDR	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION SQUARE FEET SHEET SIMILAR SPECIFICATION SQUARE STAINLESS STEEL STANDARD STEEL STORAGE
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. R. R. REFL. REFL. REFL. RESIL. RESIL. RESIL. R. R. S. C. S. S. CHED. S. C. S. S. CHED. S. C. S. S. S. S. S. S. S. S. S. S. S. S. S.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION SQUARE FEET SHEET SIMILAR SPECIFICATION SQUARE STAINLESS STEEL STANDARD STEEL STORAGE
PR. PREFAB. PT. BD. PTD. PWD. Q Q.T. R. R. R. R. R. R. R. R. R. R. REFL. REFL. REFL. REFL. REFL. RESIL. RESIL. RESIL. R. S. C. S. S. S. S. S. S. S. S. S. S. S. S. S.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION SQUARE FEET SHEET SIMILAR SPECIFICATION SQUARE STAINLESS STEEL STANDARD STEEL STORAGE STRUCTURAL
PR.         PREFAB.         PT. BD.         PTD.         PWD.         Q         Q.T.         R         R.C.P.         REF.         REF.         REFL.         RESIL.         R.H.         SOLHED.         S.D.         SECT.         S.F.         SHT.         SIM.         SPEC.         SQ.         STL.         STRUCT.         SUSP.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION SQUARE FEET SHEET SIMILAR SPECIFICATION SQUARE STAINLESS STEEL STANDARD STEEL STORAGE STRUCTURAL SUSPEND(ED)
PR.         PREFAB.         PT. BD.         PTD.         PWD.         Q         Q.T.         R         R.C.P.         REF.         REF.         REFL.         RESIL.         R.O.         S         SCHED.         S.D.         SECT.         S.F.         SHT.         SIM.         SPEC.         SQ.         STL.         STRUCT.         SUSP.         SYM.	PAIR PREFABRICATED PARTICLE BOARD PAINTED PLYWOOD QUARRY TILE RADIUS REFLECTED CEILING PLAN ROOF DRAIN REFERENCE REFLECTED REINFORCED RESILIENT RIGHT HAND ROOM ROUGH OPENING SCHEDULE SOAP DISPENSER SECTION SQUARE FEET SHEET SIMILAR SPECIFICATION SQUARE STAINLESS STEEL STANDARD STEEL STORAGE STRUCTURAL SUSPEND(ED) SYMMETRICAL

ARCHITECTURAL MATERIAL LEGEND
-------------------------------

	FINISHED WOOD SHOWN CUT AND ELEVATION	
	ENGINEERED WOOD: GLUE LAMINATED	
	WOOD FLOOR, WOOD SHINGLES, OR SIDING	<u></u>
	PLYWOOD	
	GLASS FIBER REINFORCED CONCRETE SIDING OR TRIM	
	EIFS	
	SPRAYED FIREPROOFING SHOWN ON ROLLED SHAPE	
	BATT INSULATION: THERMAL OR ACOUSTICAL, UNO	
	RIGID INSULATION: THERMAL, ACOUSTICAL, OR SAFING	
۲۹ /۲ - , ۵ ۹۰ ۵ ۲ - <u>۱</u> ۰ / -	GYPSUM BOARD	
	PLASTER ON METAL LATH	
<u>EM 212 AU IN MELE AU IN</u>	SHEATHING: GYPSUM, OR AS NOTED	

A/C

ACP

ADAAG

ADA

ADJ.

A/E

A.F.F.

ALUM.

ARCH.

BITUM.

B.O.W.

BSMT.

CAB.

C.G.

C.M.

CMP

COL.

C.M.U.

CONC.

CONT.

CONST.

CONTR.

COOR.

CPT.

C.W.

DEPT.

DET.

DIM.

DISP.

D.M.B.

DWG.

ELEC.

ELEV.

ENGR.

E.P.

EQ.

EXP.

EXT.

C.I.P.

C.F.C.I.

ALT.

ΑP

A.V.

BD

B/O

AIR CONDITIONING

ACOUSTICAL CEILING PANEL

AMERICANS W/DISABILITIES

ARCHITECT/ENGINEER

ABOVE FINISHED FLOOR

ACCESSIBILITY GUIDELINES

ARCHITECT/ARCHITECTURAL

FURNISHED-CONTRACTOR INSTALLED

AMERICANS W/DISABILITIES ACT

A.C.T. ACOUSTICAL CEILING TILE

ADJUSTABLE

ALTERNATE

ALUMINUM

BOARD

BLDG. BUILDING

BITUMINOUS

BOTTOM OF

BASEMENT

CABINET

CONTRACTOR

CORNER GUARD

CAST-IN-PLACE

CONTROL JOINT

CENTERLINE CEILING

CLEAR(ANCE)

COLUMN

CONCRETE

CONSTRUCTION

CONTINUOUS

CONTRACTOR

COORDINATE

CERAMIC TILE COLD WATER

D.E.F.S. DIRECT APPLIED EXTERIOR FINISH

DRINKING FOUNTAIN

DRY MARKER BOARD

ELECTRICAL CONTRACTOR

E.I.F.S. EXTERIOR INSULATION FINISH SYSTEM

EXPANSION JOINT

ELECTRIC/ELECTRICAL

ELEVATOR/ELEVATION

ELECTRICAL PANEL

E.W.C. ELECTRIC WATER COOLER

ELEVATION

ENGINEER

EQUAL

EXPOSED

EXTERIOR

EQUIP. EQUIPMENT

and the second second second

EXIST. EXISTING

CARPET

SYSTEM

DIAMETER

DIMENSION

DISPENSER

DOWNSPOUT

DRAWING

DETAIL

DOWN

EACH

DEPARTMENT

CONSTRUCTION MANAGER

COMPOSITE METAL PANEL

CONCRETE MASONRY UNIT

BOTTOM OF WALL

ACCESS PANEL

AUDIO/VISUAL

ACOUS. ACOUSTICAL

ΥI  $\bowtie$  EARTH

GRANULAR FILL

SAND, GROUT AS NOTED

CAST-IN-PLACE CONCRETE

PRECAST CONCRETE, CAST STONE CONCRETE MASONRY UNIT

BRICK MASONRY

STONE: LIMESTONE, GRANITE, MARBLE OR AS NOTED TERRA COTTA, STRUCTURAL CLAY TILE

METAL: TYPE AS NOTED

METAL: ROLLED SHAPES

WOOD FRAMING / BLOCKING: CONTINOUS WOOD SHIM

<u>+</u>	
F-R	FIRE RESISTIVE
FAB	FABRICATE/FABRICATOR
E C U	
F.C.U.	
F.D.	FLOOR DRAIN
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CABINET
FFF	FINISH FLOOR FLEVATION
F.F.&E.	
	EQUIPMENT
F.H.C.	FIRE HOSE CABINET
FIN.	FINISH(ED)
FIR	FLOOR
FLOOK.	
F/O	FACE OF
F.O.	FINISH OPENING
F.O.B.	FACE OF BLOCK
F.O.BR.	FACE OF BRICK
FOC	
F 0.0.	
F.U.F.	FACE OF FINISH
F.O.G.	FACE OF GYPSUM BD.
F.O.S.	FACE OF STUD
FPRF	FIREPROOF
F.V.	FIELD VERIFY
G	
GA	GAUGE
G.C.	GENERAL CONTRACTOR
GEN.	GENERAL
GL.	GLASS
G.W.B./	GYPSUM WALL BOARD
GWB	
-	
Н	
H H.	HEIGHT
H H. HB	HEIGHT HOSE BIBB
H H. HB HDWR.	HEIGHT HOSE BIBB HARDWARE
H H. HB HDWR. H M	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL
H HB HDWR. H.M.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL
H HB HDWR. H.M. HORIZ.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL
H HB HDWR. H.M. HORIZ. HT.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT
H HB HDWR. H.M. HORIZ. HT. HVAC.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C.
H HB HDWR. H.M. HORIZ. HT. HVAC. H.W.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER
H HB HDWR. H.M. HORIZ. HT. HVAC. H.W.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER
H HB HDWR. H.M. HORIZ. HT. HVAC. H.W.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER
H HB HDWR. H.M. HORIZ. HT. HVAC. H.W.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER
H H. HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER
H HB HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT
H H. HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION
H H. HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUI	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION
H H. HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION
H H. HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INT.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INTERIOR
H H. HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INT.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INTERIOR
H H. HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INT. J	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INTERIOR
H H. HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INT. J JAN.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INTERIOR
H H. HB HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INT. J JAN. J.C.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INSULATION INTERIOR
H H. HB HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INT. J JAN. J.C.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INSULATION INTERIOR
H H. HB HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INT. J JAN. J.C. JST. BRG.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INSULATION INTERIOR JANITOR JANITOR JANITOR CLOSET JOIST BEARING
H H. HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INT. JAN. J.C. JST. BRG. JT.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INSULATION INTERIOR JANITOR JANITOR JANITOR CLOSET JOIST BEARING JOINT
H H. HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INT. JAN. J.C. JST. BRG. JT.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INSULATION INTERIOR JANITOR JANITOR JANITOR CLOSET JOIST BEARING JOINT
H H. HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INT. JAN. J.C. JST. BRG. JT.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INSULATION INTERIOR JANITOR JANITOR JANITOR CLOSET JOIST BEARING JOINT
H H. HB HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INT. J JAN. J.C. JST. BRG. JT.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INSULATION INTERIOR JANITOR JANITOR JANITOR JANITOR JOIST BEARING JOINT
H H. HB HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INT. J JAN. J.C. JST. BRG. JT. L L	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INTERIOR JANITOR JANITOR JANITOR JANITOR JANITOR LENGTH
H H. HB HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INFO. INSUL. INT. JAN. J.C. JST. BRG. JT. L L LAV.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INSULATION INTERIOR JANITOR JANITOR JANITOR JANITOR JANITOR LENGTH LAVATORY
H H. HB HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INFO. INFO. INFO. INSUL. INT. J JAN. J.C. JST. BRG. JT. L L LAV. LB.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INSULATION INTERIOR JANITOR JANITOR JANITOR JANITOR JANITOR LENGTH LAVATORY POUND
H H. HB HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INT. J JAN. J.C. JST. BRG. JT. L L LAV. LB. L.H.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INSULATION INTERIOR JANITOR JANITOR JANITOR JANITOR CLOSET JOIST BEARING JOINT
H H. HB HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INT. J JAN. J.C. JST. BRG. JT. L L LAV. LB. L.H. L.H.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INSULATION INTERIOR JANITOR JANITOR JANITOR JANITOR CLOSET JOIST BEARING JOINT
H H. HB HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INFO. INSUL. INT. J JAN. J.C. JST. BRG. JT. L L LAV. LB. L.H. L.L.H.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INSULATION INTERIOR JANITOR JANITOR JANITOR CLOSET JOIST BEARING JOINT LENGTH LAVATORY POUND LEFT HAND LONG LEG HORIZONTAL LONG LEG OUT
H H. HB HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INFO. INSUL. INT. J JAN. J.C. JST. BRG. JT. L L LAV. LB. L.H. L.L.H. L.L.O.	HEIGHT HOSE BIBB HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENTILATION & A.C. HOT WATER INSIDE DIAMETER INCANDESCENT INFORMATION INSULATION INSULATION INTERIOR JANITOR JANITOR JANITOR CLOSET JOIST BEARING JOINT LENGTH LAVATORY POUND LEFT HAND LONG LEG HORIZONTAL LONG LEG OUT
H H. HB HDWR. H.M. HORIZ. HT. HVAC. H.W. I I.D. INCAN. INFO. INSUL. INFO. INSUL. INT. J JAN. J.C. JST. BRG. JT. L L LAV. LB. L.H. L.L.H. L.L.V.	HEIGHTHOSE BIBBHARDWAREHOLLOW METALHORIZONTALHEIGHTHEATING, VENTILATION & A.C.HOT WATERINSIDE DIAMETERINCANDESCENTINFORMATIONINSULATIONINSULATIONJANITORJANITORJOIST BEARINGJOINTLENGTHLAVATORYPOUNDLEFT HANDLONG LEG HORIZONTALLONG LEG VERTICAL

T			
Т.	THICKNESS		
T.B.	TACK BOARD		
TBD	TO BE DETERMIN	IED	
T.C.	TOP OF CURB		
IEL.	TELEPHONE		
TEMP	. TEMPORARY		
T&G	TONGUE AND GR	ROOVE	
T.M.	TOP OF MASONR	χΥ	
TMPR			
Τ/Ο			
		NT	
T.P.			
1.5.	TOP OF STEEL		
T.W.	TOP OF WALL		
TYP.	TYPICAL		
-			
U			
		THERWISE	
U.V.		R	
V			
VCT	VINYL COMPOSIT	TION TILE	
VERT	VERTICAL		
VEST			
VIF			
W			
W	WIDE/WIDTH		
1			
W/	WITH		
W/			
W/ W.C.	WITH WATER CLOSET		
W/ W.C. WD	WITH WATER CLOSET WOOD		
W/ W.C. WD W.H.	WITH WATER CLOSET WOOD WATER HEATER		
W/ W.C. WD W.H. W/O	WITH WATER CLOSET WOOD WATER HEATER WITHOUT		
W/ W.C. WD W.H. W/O	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT		
W/ W.C. WD W.H. W/O WT. W W F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT F. WELDED WIRE F/	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT T. WELDED WIRE F/	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT WELDED WIRE F/	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT WELDED WIRE F/	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT WELDED WIRE F/ LANEOUS ANGLE CENTER LINE	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ↓	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT 	4BRIC	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ⊊ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT - URLDED WIRE FA ANGLE CENTER LINE NUMBER	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL Z G #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT - WELDED WIRE F/ LANEOUS ANGLE CENTER LINE NUMBER	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ↓ ↓	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT T. WELDED WIRE F/ LANEOUS ANGLE CENTER LINE NUMBER	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT - WELDED WIRE F/ LANEOUS ANGLE CENTER LINE NUMBER	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT - WELDED WIRE F/ LANEOUS ANGLE CENTER LINE NUMBER	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT 	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT 	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT 	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ↓	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT 	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ↓	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT 	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT 	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT 	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ⊈ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT - WELDED WIRE F/ LANEOUS ANGLE CENTER LINE NUMBER	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ↓ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT - WELDED WIRE F/ LANEOUS ANGLE CENTER LINE NUMBER	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ↓ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT T. WELDED WIRE F/ LANEOUS ANGLE CENTER LINE NUMBER	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ↓ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT T. WELDED WIRE F/ LANEOUS ANGLE CENTER LINE NUMBER	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ↓ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT 	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ↓ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT 	ABRIC  ABRIC  COLUMN GRIDS  COLUMN GRIDS  ELEVATION DATUM REFERENCE  ENLARGED DRAWING	REFERE
W/ W.C. WD W.H. W/O WT. W.W.F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT 	ABRIC  ABRIC  COLUMN GRIDS  COLUMN GRIDS  EXISTING  NEW  ELEVATION DATUM REFERENCE  ENLARGED DRAWING BUILDING SECTION C	
₩/ ₩.C. ₩D ₩.H. ₩/Ο ₩T. ₩.W.F MISCEL ∠ ↓ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT 	ABRIC	
W/ W.C. WD W.H. W/O WT. W.W.F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT 	ABRIC  ABRIC  COLUMN GRIDS  COLUMN GRIDS  EXISTING  NEW  ELEVATION DATUM REFERENCE  ENLARGED DRAWING BUILDING SECTION C  DRAWING NUM	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ↓ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT 	ABRIC  ABRIC  COLUMN GRIDS  COLUMN GRIDS  EXISTING  NEW  ELEVATION DATUM REFERENCE  ENLARGED DRAWING BUILDING SECTION C  DRAWING NUM SHEET NUMPER	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ↓ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT 	ABRIC  ABRIC  COLUMN GRIDS  COLUMN GRIDS  EXISTING  NEW  ELEVATION DATUM REFERENCE  BUILDING SECTION C  DRAWING NUM SHEET NUMBER	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ↓ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT T. WELDED WIRE F/ LANEOUS ANGLE CENTER LINE NUMBER (A)	ABRIC  ABRIC  COLUMN GRIDS  COLUMN GRIDS  EXISTING  NEW  ELEVATION DATUM REFERENCE  ENLARGED DRAWING BUILDING SECTION C  DRAWING NUM SHEET NUMBER	REFEREI UT REFER BER R
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ↓ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT .LANEOUS ANGLE CENTER LINE NUMBER (A)	ABRIC  ABRIC  COLUMN GRIDS  COLUMN GRIDS  EXISTING  NEW  ELEVATION DATUM REFERENCE  ENLARGED DRAWING BUILDING SECTION C  DRAWING NUM SHEET NUMBER	
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ↓ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT .LANEOUS ANGLE CENTER LINE NUMBER (A)	ABRIC  ABRIC  COLUMN GRIDS  COLUMN GRIDS  EXISTING  NEW  ELEVATION DATUM REFERENCE  ENLARGED DRAWING BUILDING SECTION C  DRAWING NUM SHEET NUMBER WALL SECTION CUT F	S REFERE UT REFER BER R R €FERENO
W/ W.C. WD W.H. W/O WT. W.W.F MISCEL ∠ ↓ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT E. WELDED WIRE F/ LANEOUS ANGLE CENTER LINE NUMBER (A)	ABRIC  ABRIC  COLUMN GRIDS  COLUMN GRIDS  EXISTING  NEW  ELEVATION DATUM REFERENCE  ENLARGED DRAWING BUILDING SECTION C  DRAWING NUM SHEET NUMBER WALL SECTION CUT F	REFEREI UT REFER BER R EFERENC
₩/ ₩.C. ₩D ₩.H. ₩/Ο ₩T. ₩.W.F <u>MISCEL</u> ∠ ⊈ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT E. WELDED WIRE F/ LANEOUS ANGLE CENTER LINE NUMBER (A)	ABRIC	REFEREI
W/         W.C.         WD         W.H.         W/O         WT.         W.W.F         MISCEL         ∠         ↓	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT T UREDUS ANGLE CENTER LINE NUMBER (A)	ABRIC	REFEREI UT REFEF BER ₹ EFERENO
W/         W.C.         WD         W.H.         W/O         WT.         W.W.F	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT E. WELDED WIRE F/ LANEOUS ANGLE CENTER LINE NUMBER (A)	ABRIC  ABRIC  COLUMN GRIDS  COLUMN GRIDS  EXISTING  NEW  ELEVATION DATUM REFERENCE  ENLARGED DRAWING  BUILDING SECTION C  DRAWING NUM SHEET NUMBER  WALL SECTION CUT F  DRAWING NUM SHEET NUMBER	REFEREI UT REFEF BER ₹ EFERENG BER ₹
₩/ ₩.C. ₩D ₩.H. ₩/Ο ₩T. ₩.W.F <u>MISCEL</u> ∠ ↓ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT F. WELDED WIRE F/ LANEOUS ANGLE CENTER LINE NUMBER (1)	ABRIC	REFEREI UT REFER BER R EFERENC BER R
₩/ ₩.C. ₩D ₩.H. ₩/Ο ₩T. ₩.W.F MISCEL ∠ ↓ #	WITH WATER CLOSET WOOD WATER HEATER WITHOUT WEIGHT F. WELDED WIRE F/ LANEOUS ANGLE CENTER LINE NUMBER (1)	ABRIC	REFEREI UT REFER BER R EFERENC BER R

1 🖛

(A101)

### ARCHITECTURAL SYMBOLS LEGEND

![](_page_26_Figure_25.jpeg)

ACOUSTICAL CEILING TILE

RESINOUS FLOORING: TERRAZO, TROWEL-ON, UNO

TILE: CERAMIC, QUARRY, UNO

CARPET, CARPET TILE (DETAIL)

GRATING SHOWN IN PLAN GRATING

INSULATED GLASS: (SMALL SCALE)

INSULATED GLASS: (DETAIL)

MEMBRANE: WATERPROOF, ROOF, DAMPPROOFING — — — — AIR BARRIER SYSTEM

GI	ENERAL ARCHITECTURAL NOTES	Carolina Charter
۸		Acadomy
A. B.	DRAWINGS. WORK SHOWN ON THE DRAWINGS SHALL BE BASE BID	Academy
C.	UNLESS SPECIFICALLY NOTED TO BE BY ALTERNATE BID. FIELD VERIFY EXISTING FINISH FLOOR ELEVATIONS PRIOR TO	GYMNASIUM
Р	STARTING CONSTRUCTION. MATCH NEW FLOOR ELEVATIONS WITH EXISTING UNLESS NOTED OTHERWISE.	8529 Highway 55
D.	SURFACE. DIMENSIONS TO NEW CONSTRUCTION ARE TO FINISH SURFACE. DIMENSIONS TO NEW CONSTRUCTION ARE TO STRUCTURAL CENTERLINE FACE OF CONCRETE FACE OF	Angier North Carolina
	MASONRY CONSTRUCTION, OR TO FACE OF EXTERIOR OF INTERIOR PARTITION TYPE UNLESS NOTED OTHERWISE.	
	FIELD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO STARTING WORK AND NOTIFY ARCHITECT IMMEDIATELY IF	27501
F	DISCREPANCIES ARE FOUND BETWEEN CONTRACT DOCUMENTS AND ACTUAL FIELD CONDITIONS. DO NOT SCALE DRAWINGS, REFER DIMENSION OUESTIONS	Owner Highmark School Deparment
F.	TO ARCHITECT FOR INTERPRETATION. DOOR AND FRAME NUMBERS CORRESPOND TO RESPECTIVE	746 East Winchester Street, Suite 150
	ROOM NUMBERS. IN ROOMS WITH MULTIPLE OPENINGS, A SUFFIX HAS BEEN ADDED TO DOOR NUMBERS, I.E., A101-B.	801-256-9550
G.	LOCATE INSIDE FACE OF DOOR FRAME JAMBS 6 INCHES FROM FINISH FACE OF ADJACENT WALLS UNLESS NOTED	Architect RATIO
Н.	OTHERWISE. COORDINATE EQUIPMENT WORK WITH MANUFACTURERS AND SUPPLIERS TO INSURE PROPER ROUGH IN CLEARANCES FOR	227 Fayetteville Street, Suite 301
I.	INSTALLATION, USE AND MAINTENANCE. PROTECT EXISTING SURFACES TO REMAIN THAT ARE NOT	919-821-0805
	INCLUDED IN SCOPE OF WORK BUT THAT ARE WITHIN AREAS OF CONSTRUCTION ACTIVITY.	
J.	PATCH, REPAIR AND RESTORE EXISTING FINISHES AND SURFACES TO AS NEW CONDITION AS REQUIRED TO MATCH	Structural Engineer
	SURROUNDING MATERIALS OR TO PROVIDE APPROPRIATE SUBSTRATE PRIOR TO INSTALLING NEW FINISHES. AREAS	Lynch Mykins Structural Engineers,PC
	ARE GIVEN FOR REFERENCE AND SHALL NOT BE INTERPRETED TO LIMIT THE SCOPE OF WORK.	301 North West St. Suite 105 Raleigh, North Carolina 27603
K.	VERTICAL COURSING FOR NEW MASONRY WALL CONSTRUCTION SHALL EQUAL EIGHT INCHES (8") FOR ONE	919-782-1833
	CONCRETE MASONRY UNIT PLUS ONE MORTAR JOINT AND THREE BRICK COURSES PLUS THREE MORTAR JOINTS,	
L.	UNLESS NOTED OTHERWISE. TOOTH NEW MASONRY INTO EVERY OTHER COURSE OF EXISTING MASONRY UNITESS OTHERWISE INDICATED	
	PROVIDE HORIZONTAL ANCHORS BETWEEN NEW AND EXISTING MASONRY AT CONDITIONS THAT PROHIBIT	
	TOOTHED-TYPE CONSTRUCTION. HORIZONTAL JOINTS OF NEW MASONRY SHALL MATCH EXISTING UNLESS OTHERWISE	Civil Engineer Timmons Group
	INDICATED. NEW MASONRY BOND SHALL MATCH EXISTING UNLESS OTHERWISE INDICATED.	5410 Trinity Road, Suite 102 Raleigh, North Carolina 27607
M.	PROVIDE CONTROL JOINTS (C.J.) IN MASONRY CONSTRUCTION AS INDICATED. WHERE NOT SHOWN, PROVIDE MAXIMUM SPACING BETWEEN VERTICAL JOINTS OF	919-866-4938
	30'-0" AND MAXIMUM DISTANCE BETWEEN OUTSIDE CORNERS AND JOINTS OF 8'-0". PROVIDE JOINTS BETWEEN INTERIOR	
	LOAD BEARING AND NON-LOAD BEARING PARTITIONS, AT ALL ABRUPT CHANGES IN WALL HEIGHT, AT CHANGES IN	
	PARTITION THICKNESS AND AT PILASTER LOCATIONS. VERIFY FINAL CONTROL JOINT LOCATIONS WITH ARCHITECT PRIOR	
N.	PROVIDE CONTROL JOINTS (C.J.) IN GYPSUM BOARD WALL	
	LOCATIONS WHETHER OR NOT INDICATED ON THE DRAWINGS WITH ARCHITECT PRIOR TO STARTING WORK, PROVIDE	
	MAXIMUM SPACING BETWEEN JOINTS AS FOLLOWS: a. CEILINGS: INSTALL CONTROL JOINTS IN CEILINGS PER	
	ASTM C840 IN ALL CEILINGS WITH AREA EXCEEDING 250 S.F., SPACED 50'-0" O.C. MAXIMUM. CONTROL JOINTS	
	ALSO TO BE INSTALLED WHERE FRAMING OR FURRING CHANGES DIRECTION. REFER TO REFLECTED CEILING PLANS FOR DESIRED LOCATIONS	SEAL   DATE 07/19/21
	<ul> <li>b. WALLS: INSTALL CONTROL JOINTS IN INTERIOR PARTITIONS AND FURRING PER ASTM C840 IN AREAS</li> </ul>	
	EXCEEDING 30'-0", SPACED 30'-0" O.C. MAXIMUM. REFER TO INTERIOR ELEVATIONS FOR DESIRED LOCATIONS.	M. BOW
0.	WOOD OR METAL STUD SPACING SHALL BE 16" ON CENTER MAXIMUM UNLESS OTHERWISE REQUIRED BY DELEGATED	STERED ARCHINE
Ρ.	VERIFY MOUNTING HEIGHTS OF ACCESSORIES, EQUIPMENT, DOOR HARDWARE CASEWORK FTC. AND PROVIDE SOLID	5950
	BLOCKING BEHIND ITEMS REQUIRING ANCHORAGE. PROVIDE FIRE TREATED WOOD BLOCKING OR METAL STRAPS	PALE H NC.
	BETWEEN FRAMING MEMBERS AS REQUIRED TO SUPPORT WEIGHT AND USE OF ITEMS TO BE SUPPORTED. WHERE	
	ACCORDANCE WITH RECOGNIZED INDUSTRY STANDARDS,	SHEET ISSUE
	SUPPLIER AND REFER MOUNTING HEIGHT QUESTIONS TO ARCHITECT FOR INTERPRETATION.	1 CONSTRUCTION DOCUMENTS 07/19/21
Q.	PROVIDE SEALANT AT PERIMETERS OF METAL FRAMES AT OPENINGS AND AT JOINTS BETWEEN DISSIMILAR MATERIALS	
	SUCH AS GYPSUM BOARD AND MASONRY, MASONRY AND CONCRETE, CASEWORK AND WALLS, ETC. UNLESS	
R.		
	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS	
S.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP	
S.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING.	
S. T.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID	
S. T.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN FUTURE BID PACKAGES IS SHOWN ON THESE CONSTRUCTION DOCUMENTS FOR	
S. T. U.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN FUTURE BID PACKAGES IS SHOWN ON THESE CONSTRUCTION DOCUMENTS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION,	Image: Second
S. T. U.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN FUTURE BID PACKAGES IS SHOWN ON THESE CONSTRUCTION DOCUMENTS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL TO ARCHITECT OF COORDINATION DRAWINGS FOR MEP	
S. T. U.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN FUTURE BID PACKAGES IS SHOWN ON THESE CONSTRUCTION DOCUMENTS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL TO ARCHITECT OF COORDINATION DRAWINGS FOR MEP ITEMS BOTH ABOVE CEIING AND IN CEILING, NOR PRIOR TO RESOLUTION AND APPROVAL OF COORDINATION ISSUES. REFERE TO LIFE SAFETY PLAN DRAWINGS AND CODE	Image: Section of the section of th
S. T. U. V.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN FUTURE BID PACKAGES IS SHOWN ON THESE CONSTRUCTION DOCUMENTS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL TO ARCHITECT OF COORDINATION DRAWINGS FOR MEP ITEMS BOTH ABOVE CEIING AND IN CEILING, NOR PRIOR TO REFER TO LIFE SAFETY PLAN DRAWINGS AND CODE SUMMARY FOR FIRE-RATED FLOOR, WALL, CEILING AND ROOF LOCATIONS. INSTALL FIRESTOPPING AT PENETRATIONS IN	
S. T. U. V. W.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN FUTURE BID PACKAGES IS SHOWN ON THESE CONSTRUCTION DOCUMENTS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL TO ARCHITECT OF COORDINATION DRAWINGS FOR MEP ITEMS BOTH ABOVE CEIING AND IN CEILING, NOR PRIOR TO RESOLUTION AND APPROVAL OF COORDINATION ISSUES. REFER TO LIFE SAFETY PLAN DRAWINGS AND CODE SUMMARY FOR FIRE-RATED FLOOR, WALL, CEILING AND ROOF LOCATIONS. INSTALL FIRESTOPPING AT PENETRATIONS IN RATED CONSTRUCTION AND AT TOPS OF RATED WALLS. REFER TO STRUCTURAL DRAWINGS FOR FOOTING AND	
S. T. U. V. W.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO THIS BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN FUTURE BID PACKAGES IS SHOWN ON THESE CONSTRUCTION DOCUMENTS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL TO ARCHITECT OF COORDINATION DRAWINGS FOR MEP ITEMS BOTH ABOVE CEIING AND IN CEILING, NOR PRIOR TO RESOLUTION AND APPROVAL OF COORDINATION ISSUES. REFER TO LIFE SAFETY PLAN DRAWINGS AND CODE SUMMARY FOR FIRE-RATED FLOOR, WALL, CEILING AND ROOF LOCATIONS. INSTALL FIRESTOPPING AT PENETRATIONS IN RATED CONSTRUCTION AND AT TOPS OF RATED WALLS. REFER TO STRUCTURAL DRAWINGS FOR FOOTING AND FOUNDATION DRAINS, UNDERSLAB DRAINAGE AND BACKFILL REQUIREMENTS.	
S. T. U. V. W. X.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN FUTURE BID PACKAGES IS SHOWN ON THESE CONSTRUCTION DOCUMENTS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL TO ARCHITECT OF COORDINATION DRAWINGS FOR MEP ITEMS BOTH ABOVE CEIING AND IN CEILING, NOR PRIOR TO RESOLUTION AND APPROVAL OF COORDINATION ISSUES. REFER TO LIFE SAFETY PLAN DRAWINGS AND CODE SUMMARY FOR FIRE-RATED FLOOR, WALL, CEILING AND ROOF LOCATIONS. INSTALL FIRESTOPPING AT PENETRATIONS IN RATED CONSTRUCTION AND AT TOPS OF RATED WALLS. REFER TO STRUCTURAL DRAWINGS FOR FOOTING AND FOUNDATION DRAINS, UNDERSLAB DRAINAGE AND BACKFILL REQUIREMENTS. REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE ELEMENTS AND IMPROVEMENTS ADJACENT TO BUILDING EXTERIOR.	
S. T. U. V. W. X. Z.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN FUTURE BID PACKAGES IS SHOWN ON THESE CONSTRUCTION DOCUMENTS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL TO ARCHITECT OF COORDINATION DRAWINGS FOR MEP ITEMS BOTH ABOVE CEIING AND IN CEILING, NOR PRIOR TO RESOLUTION AND APPROVAL OF COORDINATION ISSUES. REFER TO LIFE SAFETY PLAN DRAWINGS AND CODE SUMMARY FOR FIRE-RATED FLOOR, WALL, CEILING AND ROOF LOCATIONS. INSTALL FIRESTOPPING AT PENETRATIONS IN RATED CONSTRUCTION AND AT TOPS OF RATED WALLS. REFER TO STRUCTURAL DRAWINGS FOR FOOTING AND FOUNDATION DRAINS, UNDERSLAB DRAINAGE AND BACKFILL REQUIREMENTS. REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE ELEMENTS AND IMPROVEMENTS ADJACENT TO BUILDING EXTERIOR. REFER TO CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS. REFER TO CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS. REFER TO CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS. REFER TO A-003 FOR PARTITION CONSTRUCTION TYPE.	
S. T. U. V. W. X. Z.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN FUTURE BID PACKAGES IS SHOWN ON THESE CONSTRUCTION DOCUMENTS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL TO ARCHITECT OF COORDINATION DRAWINGS FOR MEP ITEMS BOTH ABOVE CEIING AND IN CEILING, NOR PRIOR TO RESOLUTION AND APPROVAL OF COORDINATION ISSUES. REFER TO LIFE SAFETY PLAN DRAWINGS AND CODE SUMMARY FOR FIRE-RATED FLOOR, WALL, CEILING AND ROOF LOCATIONS. INSTALL FIRESTOPPING AT PENETRATIONS IN RATED CONSTRUCTION AND AT TOPS OF RATED WALLS. REFER TO STRUCTURAL DRAWINGS FOR FOOTING AND FOUNDATION DRAINS, UNDERSLAB DRAINAGE AND BACKFILL REQUIREMENTS. REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE ELEMENTS AND IMPROVEMENTS ADJACENT TO BUILDING EXTERIOR. REFER TO CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS. REFER TO A-003 FOR PARTITION CONSTRUCTION TYPE.	
S. T. U. V. W. X. Z.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN FUTURE BID PACKAGES IS SHOWN ON THESE CONSTRUCTION DOCUMENTS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL TO ARCHITECT OF COORDINATION DRAWINGS FOR MEP ITEMS BOTH ABOVE CEIING AND IN CEILING, NOR PRIOR TO RESOLUTION AND APPROVAL OF COORDINATION ISSUES. REFER TO LIFE SAFETY PLAN DRAWINGS AND CODE SUMMARY FOR FIRE-RATED FLOOR, WALL, CEILING AND ROOF LOCATIONS. INSTALL FIRESTOPPING AT PENETRATIONS IN RATED CONSTRUCTION AND AT TOPS OF RATED WALLS. REFER TO STRUCTURAL DRAWINGS FOR FOOTING AND FOUNDATION DRAINS, UNDERSLAB DRAINAGE AND BACKFILL REQUIREMENTS. REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE ELEMENTS AND IMPROVEMENTS ADJACENT TO BUILDING EXTERIOR. REFER TO CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS. REFER TO CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS. REFER TO CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS. REFER TO CONSTRUCTION CONSTRUCTION TYPE.	Image: Second
S. T. U. V. W. X. Z.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN PREVIOUS BID PACKAGES OR WILL AND NOT HESE CONSTRUCTION DOCUMENTS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL TO ARCHITECT OF COORDINATION DRAWINGS FOR MEP ITEMS BOTH ABOVE CEIING AND IN CEILING, NOR PRIOR TO RESOLUTION AND APPROVAL OF COORDINATION ISSUES. REFER TO LIFE SAFETY PLAN DRAWINGS AND CODE SUMMARY FOR FIRE-RATED FLOOR, WALL, CEILING AND ROOF LOCATIONS. INSTALL FIRESTOPPING AT PENETRATIONS IN RATED CONSTRUCTION AND AT TOPS OF RATED WALLS. REFER TO STRUCTURAL DRAWINGS FOR FOOTING AND FOUNDATION DRAINS, UNDERSLAB DRAINAGE AND BACKFILL REQUIREMENTS. REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE ELEMENTS AND IMPROVEMENTS ADJACENT TO BUILDING EXTERIOR. REFER TO CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS. REFER TO CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS. REFER TO A-003 FOR PARTITION CONSTRUCTION TYPE.	Image: Second
S. T. U. V. W. X. Z.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN PREVIOUS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL TO ARCHITECT OF COORDINATION DRAWINGS FOR MEP ITEMS BOTH ABOVE CEIING AND IN CEILING, NOR PRIOR TO RESOLUTION AND APPROVAL OF COORDINATION ISSUES. REFER TO LIFE SAFETY PLAN DRAWINGS AND CODE SUMMARY FOR FIRE-RATED FLOOR, WALL, CEILING AND ROOF LOCATIONS. INSTALL FIRESTOPPING AT PENETRATIONS IN RATED CONSTRUCTION AND AT TOPS OF RATED WALLS. REFER TO STRUCTURAL DRAWINGS FOR FOOTING AND FOUNDATION DRAINS, UNDERSLAB DRAINAGE AND BACKFILL REQUIREMENTS. REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE ELEMENTS AND IMPROVEMENTS ADJACENT TO BUILDING EXTERIOR. REFER TO COVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS. REFER TO CONSTRUCTION CONSTRUCTION TYPE.	Image: Construction of the second
S. T. U. V. W. X. Z.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO THIS BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN FUTURE BID PACKAGES IS SHOWN ON THESE CONSTRUCTION DOCUMENTS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL TO ARCHITECT OF COORDINATION DRAWINGS FOR MEP ITEMS BOTH ABOVE CEIING AND IN CEILING, NOR PRIOR TO RESOLUTION AND APPROVAL OF COORDINATION ISSUES. REFER TO LIFE SAFETY PLAN DRAWINGS AND CODE SUMMARY FOR FIRE-RATED FLOOR, WALL, CEILING AND ROOF LOCATIONS. INSTALL FIRESTOPPING AT PENETRATIONS IN RATED CONSTRUCTION AND AT TOPS OF RATED WALLS. REFER TO LIFE SAFETY PLAN DRAWINGS FOR FOOTING AND FOUNDATION DRAINS, UNDERSLAB DRAINAGE AND BACKFILL REQUIREMENTS. REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE ELEMENTS AND IMPROVEMENTS ADJACENT TO BUILDING EXTERIOR. REFER TO CANDS FOR FINISH FLOOR ELEVATIONS. REFER TO CANDS FOR PARTITION CONSTRUCTION TYPE.	Image: Strate in the second strate in the
S. T. U. V. W. X. Z.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO THURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN FUTURE BID PACKAGES IS SHOWN ON THESE CONSTRUCTION DOCUMENTS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL TO ARCHITECT OF COORDINATION DRAWINGS FOR MEP ITEMS BOTH ABOVE CEING AND IN CEILING, NOR PRIOR TO RESOLUTION AND APPROVAL OF COORDINATION ISSUES. REFER TO LIFE SAFETY PLAN DRAWINGS AND CODE SUMMARY FOR FIRE-RATED FLOOR, WALL, CEILING AND ROOF LOCATIONS. INSTALL FIRESTOPPING AT PENETRATIONS IN RATED CONSTRUCTION AND AT TOPS OF RATED WALLS. REFER TO STRUCTURAL DRAWINGS FOR FOOTING AND FOUNDATION DRAINS, UNDERSLAB DRAINAGE AND BACKFILL REQUIREMENTS. REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE ELEMENTS AND IMPROVEMENTS ADJACENT TO BUILDING EXTERIOR. REFER TO CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS. REFER TO A-003 FOR PARTITION CONSTRUCTION TYPE.	Image: Construction of the second
S. T. U. V. W. X. Z.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO THIS BID PACKAGE ONLY AND MAY NOT BE APPLICABLE TO THIS BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN FUTURE BID PACKAGES IS SHOWN ON THESE CONSTRUCTION DOCUMENTS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL TO ARCHITECT OF COORDINATION DRAWINGS FOR MEP ITEMS BOTH ABOVE CEING AND IN CEILING, NOR PRIOR TO RESOLUTION AND APPROVAL OF COORDINATION ISSUES. REFER TO LIFE SAFETY PLAN DRAWINGS AND CODE SUMMARY FOR FIRE-RATED FLOOR, WALL, CEILING AND ROOF LOCATIONS. INSTALL FIRESTOPPING AT PENETRATIONS IN RATED CONSTRUCTION AND AT TOPS OF RATED WALLS. REFER TO STRUCTION AND AT TOPS OF RATED WALLS. REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SOTING AND FOUNDATION DRAINS, UNDERSLAB DRAINAGE AND BACKFILL REQUIREMENTS. REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE ELEMENTS AND IMPROVEMENTS ADJACENT TO BUILDING EXTERIOR. REFER TO CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS. REFER TO A-003 FOR PARTITION CONSTRUCTION TYPE.	Image: Construction of the second state of the second s
S. T. U. V. W. X. Z.	STAIRWELLS, ELEVATOR HOISTWAYS, AND SHAFT WALLS SHALL BE ONE-HOUR FIRE-RATED CONSTRUCTION UNLESS OTHERWISE INDICATED. REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE SPECIFIED FIRE RATING. THESE NOTES ARE APPLICABLE TO FINIS BID PACKAGES ONLY AND MAY NOT BE APPLICABLE TO FUTURE BID PACKAGES. SOME WORK WHICH WAS INCLUDED IN PREVIOUS BID PACKAGES OR WILL BE INCLUDED IN PUTURE BID PACKAGES IS SHOWN ON THESE CONSTRUCTION DOCUMENTS FOR REFERENCE PURPOSES ONLY AND IS IDENTIFIED AS SUCH. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILLING INSTALLATION, PRIOR TO FINAL SUBMITTAL TO ARCHITECT OF COORDINATION DRAWINGS FOR MEP ITEMS BOTH ABOVE CEIING AND IN CEILING, NOR PRIOR TO RESOLUTION AND APPROVAL OF COORDINATION ISSUES. REFER TO LIFE SAFETY PLAN DRAWINGS AND CODE SUMMARY FOR FIRE-RATED FLOOR, WALL, CEILING AND ROOF LOCATIONS. INSTALL FIRESTOPPING AT PENETRATIONS IN RATED CONSTRUCTION AND AT TOPS OF RATED WALLS. REFER TO STRUCTURAL DRAWINGS FOR FOOTING AND FOUNDATION DRAINS, UNDERSLAB DRAINAGE AND BACKFILL REQUIREMENTS. REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE ELEMENTS AND IMPROVEMENTS ADJACENT TO BUILDING EXTERIOR. REFER TO CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS. REFER TO CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS. REFER TO A-003 FOR PARTITION CONSTRUCTION TYPE.	RATIO COPYRCHT NOTCE: THIS ARCHTECTURAL ADD PROMETING IN COPYRCHT NOTCE: THIS ARCHTECTURAL ADD PROMETING IN COPYRIFICATION ON COPYRICHT NOTCE: THIS ARCHTECTURAL ADD PROMETING IN COPYRICHT NOTCE: THIS ARCHTECTURAL ADD PROMETING IN COPYRICHT NOTCE: THIS ARCHTECTURAL ADD PROMETING IN COPYRIFICATION ON CO

20408

ACCESSIBLE PLUMBING FIXTURES INDICATED WITH HATCH ON FLOOR PLANS

![](_page_27_Figure_0.jpeg)

\_\_\_\_

![](_page_27_Picture_1.jpeg)

NOTES:

. USE THIS DETAIL TO LOCATE

THE DRAWINGS BUT NOT

ALIGN MULTIPLE DEVICES

VERTICALLY AS DETAILED.

RECEPTACLES SHALL BE

INTERSECTING WALLS AS

DETAILED SO AS NOT TO

HORIZONTALLY AND/OR

DRAWINGS.

DEVICES THAT ARE INDICATED ON

LOCATED BY DIMENSION, OR TO

ITEMS OTHER THAN ELECTRICAL

MOUNTED NEAR DOORWAYS OR

INTERFERE WITH THE PLACEMENT

THAT WHERE THE WALL SEGMENT

OF ART OR FUNITURE - EXCEPT

IS LESS THAN 24" WIDE, CENTER

THE DEVICES AS DETAILED.

LOCATE REQUIRED DEVICES THAT ARE NOT INDICATED ON THE

\_

\_

#### STANDARD-PLUMBING FIXTURE REQUIREMENTS 1/2" = 1'-0"

![](_page_27_Figure_3.jpeg)

### **STANDARD-DEVICE MOUNTING GUIDELINES**

### **INTERIOR PARTITION TYPES**

\* FIRE RATING AND ACOUSTICAL ATTENUATION WHEN REQUIRED BY PARTITION SYMBOL REFER TO WALL SECTION FOR CONSTRUCTION

M8A 7 5/8" CONCRETE MASONRY UNIT, RUNNING BOND

WS

![](_page_27_Figure_8.jpeg)

\_\_\_\_

- A. ALL WALLS ARE TYPE W6A.D UNLESS NOTED OTHERWISE. B. PARTITION SYMBOLS APPEAR ON THE 1/8" = 1'-0" SCALE FLOOR PLANS.
- C. REFER TO FINISH AND CEILING PLANS FOR WALL FINISH, WALL BASE, AND CEILING INFORMATION.
- D. REFER TO WALL SECTIONS FOR EXTERIOR WALL CONSTRUCTION.
- E. PROVIDE MOLD AND MOISTURE RESISTANT GYPSUM BOARD IN ALL ROOMS CONTAINING OPERABLE PLUMBING FIXTURES AND WITHIN 4'-0" OF DRINKING FOUNTAINS / WATER COOLERS, UNLESS NOTED OTHERWISE.
- F. PROVIDE LATERAL BRACING AT 48" ON CENTER FOR NON-STRUCTURAL METAL FRAMED PARTITIONS WHICH EXTEND ABOVE THE CEILING UNLESS NOTED OTHERWISE. LATERAL BRACING NOT REQUIRED FOR PARTITIONS THAT EXTEND TO THE DECK ABOVE UNLESS NOTED OTHERWISE.
- G. PROVIDE FIRE RESISTIVE RATED GYPSUM BOARD AT ALL RATED ASSEMBLIES TO MEET ASSEMBLY REQUIREMENTS. H. PROVIDE FIRE RESISTIVE JOINT SYSTEMS EQUAL TO WALL RATING AT ALL PENETRATIONS AND AT HEAD / FLOOR
- INTERSECTIONS WITH RATED ASSEMBLIES. I. PROVIDE ACOUSTICAL SEALANT AT WALL SILL, HEAD, PENETRATIONS AND ADDITIONAL SPECIFIED SOUND ATTENUATION COMPONENTS AT SOUND RATED WALLS.
- J. PROVIDE SPECIFIED TILE BACKER BOARD AT ALL WALLS INDICATED TO HAVE CERAMIC TILE, REFER TO FINISH PLANS.
- K. ISOLATE NON-LOAD-BEARING STUD FRAMING FROM BUILDING STRUCTURE TO PREVENT TRANSFER OF VERTICAL LOADS WHILE PROVIDING LATERAL SUPPORT AS SPECIFIED. WOOD OR METAL STUD SPACING SHALL BE 16" ON CENTER

MAXIMUM UNLESS OTHERWISE REQUIRED BY DELEGATED DESIGN OR NOTED OTHERWISE

# INTERIOR PARTITION LEGEND

![](_page_27_Figure_20.jpeg)

PARTITION DESIGNATION PARTITION TYPE FIRE RATING (I.E. 1= 1 HOUR) ACOUSTICAL ATTENUATION REQ'D

PARTITION HEIGHT CODE ADDITIONAL PARTITION

DESIGNATION, WHERE

![](_page_27_Picture_23.jpeg)

OCCURS NEW PARTITIONS

EXISTING PARTITIONS TO REMAIN

PARTITIONS TO BE DEMOLISHED

# **INTERIOR PARTITION HEIGHT CODES**

![](_page_27_Figure_28.jpeg)

WALL END OR EDGE (WHERE OCCURS)		
WALL SEGMENT 24" WIDE OR LESS		L
	EQ EQ	
WINDOW, DOOR OR "FEATURE" THAT SEPARATES WALL INTO SEGMENTS		

Carolina Charter
GYMNASIUM
8529 Highway 55
Angler, North Carolina 27501
Owner Highmark School Deparment 746 East Winchester Street, Suite 150 Murray, Utah 84107 801-256-9550 Architect RATIO 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805
Structural Engineer Lynch Mykins Structural Engineers,PC 301 North West St. Suite 105 Raleigh, North Carolina 27603 919-782-1833
Civil Engineer Timmons Group 5410 Trinity Road, Suite 102 Raleigh, North Carolina 27607 919-866-4938
SEAL   DATE 07/19/21
5950 BALCARD CARD
SHEET ISSUE         1       CONSTRUCTION DOCUMENTS         07/19/21
COPYRIGHT NOTICE: THIS ARCHITECTURAL AND ENGINEERING DRAWING IS GIVEN IN CONFIDENCE AND SHALL BE USED ONLY PURSUANT TO THE AGREEMENT WITH RATIO. NO OTHER USE, DISSEMINATION OR DUPLICATION MAY BE MADE WITHOUT PRIOR WRITTEN CONSENT OF RATIO. ALL COMMON LAW RIGHTS OF COPYRIGHT AND OTHERWISE ARE HEREBY SPECIFICALLY RESERVED.
SHEET TITLE INTERIOR PARTITION TYPES AND STANDARD PARTITION DETAILS
SHEET NUMBER A-002

![](_page_28_Figure_0.jpeg)

![](_page_28_Picture_1.jpeg)

-

\_

\_\_\_\_

# ENLARGED PLAN-TELESCOPING SEATING

![](_page_28_Figure_3.jpeg)

\_\_\_\_\_

	-		
24'-0"	4'-6"	24'-0"	4'-6"
	ſ	1	<del>/</del>

![](_page_28_Figure_5.jpeg)

![](_page_28_Picture_6.jpeg)

ENLARGED PLAN-CANOPY

Academy GYMNASIUM 8529 Highway 55 Angier, North Carolina 27501 Owner Highmark School Deparment 746 East Winchester Street, Suite 150 Murray, Utah 84107 801-256-9550 Architect RATIO 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805 Structural Engineer Lynch Mykins Structural Engineers,PC 301 North West St. Suite 105 Raleigh, North Carolina 27603 910 - 282 4923
Civil Engineer Timmons Group 5410 Trinity Road, Suite 102 Raleigh, North Carolina 27607 919-866-4938
SEAL   DATE         07/19/21           M. BOW         5950           5950         5950           SHEET ISSUE         1           CONSTRUCTION DOCUMENTS         07/19/21
CONFIDENCE AND SHALL BE USED ONLY PURSUANT TO THE AGREEMENT WITH RATIO. NO OTHER USE, DISSEMINATION OR DUPLICATION MAY BE MADE WITHOUT PRIOR WRITTEN CONSENT OF RATIO. ALL COMMON LAW RIGHTS OF COPYRIGHT AND OTHERWISE ARE HEREBY SPECIFICALLY RESERVED. PROJECT NO. 20408 SHEET TITLE FIRST FLOOR PLAN SHEET NUMBER

![](_page_29_Picture_0.jpeg)

\_\_\_\_

	Carolina Chart	er
	GYMNASIUN	1
	8529 Highway 5	
	27501	IIIa
	Owner Highmark School Deparment 746 East Winchester Street, Suite 150 Murray, Utah 84107 801-256-9550 Architect RATIO 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805	
	Structural Engineer Lynch Mykins Structural Engineers, 301 North West St. Suite 105 Raleigh, North Carolina 27603 919-782-1833	ъС
	<b>Civil Engineer</b> <b>Timmons Group</b> 5410 Trinity Road, Suite 102 Raleigh, North Carolina 27607 919-866-4938	
	SEAL   DATE 07/19/21	
	SHEET ISSUE           1         CONSTRUCTION DOCUMENTS	07/19/21
	COPYRIGHT NOTICE: THIS AR AND ENGINEERING DRAWING CONFIDENCE AND SHALL BE PURSUANT TO THE AGREEME NO OTHER USE, DISSEMINATI DUPLICATION MAY BE MADE N WRITTEN CONSENT OF RATION LAW RIGHTS OF COPYRIGHT ARE HEREBY SPECIFICALLY F	CHITECTURAL IS GIVEN IN JSED ONLY INT WITH RATIO. ON OR WITHOUT PRIOR D. ALL COMMON AND OTHERWISE RESERVED.
	PROJECT NO. SHEET TITLE SECOND FLOOR PLAN	20408
	SHEET NUMBER	

![](_page_30_Figure_0.jpeg)

A1 A-105 **—** 1/8" = 1'-0"

A1 A-301

ROOF PLAN

REROUTE EXIST

DOWNSPOUT & SCUPPER

PER PLUMBING DRAWINGS

A5 A-350

EXIST.

![](_page_30_Figure_5.jpeg)

<u>PLAN</u>

![](_page_30_Figure_7.jpeg)

![](_page_30_Figure_8.jpeg)

EXIST. EXTERIOR WALL

3/4" = 1'-0"

#### **GENERAL ROOFING NOTES**

- PENETRATIONS INCLUDING VENTS, PIPES, CURBS, ROOF SEAL PENETRATIONS WHETHER OR NOT INDICATED ON THE

- PROTECTION. THIS ALSO INCLUDES INTERIOR DAMAGE TO
- NOT CONCEALED BY CEILINGS WITH WIRE NUTS OR OTHER MEANS ACCEPTABLE TO ARCHITECT UNLESS OTHERWISE INDICATED. AREAS SUCH AS JANITOR CLOSETS, STORAGE

GYMNASIU 8529 Highway 5 Angier, North Card 27501	M 55 olina
Owner Highmark School Deparment 746 East Winchester Street, Suite 150 Murray, Utah 84107 801-256-9550 Architect RATIO 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805	
Structural Engineer Lynch Mykins Structural Engineers 301 North West St. Suite 105 Raleigh, North Carolina 27603 919-782-1833	s,PC
Civil Engineer Timmons Group 5410 Trinity Road, Suite 102 Raleigh, North Carolina 27607 919-866-4938	
SEAL   DATE 07/19/21	
M. BOM	
5950 TOP CARDING	
SHEET ISSUE 1 CONSTRUCTION DOCUMENTS	07/19/21
SHEET ISSUE	07/19/21
SHEET ISSUE	07/19/21
SHEET ISSUE          1       CONSTRUCTION DOCUMENTS	07/19/21
SHEET ISSUE	07/19/21
SHEET ISSUE          1       CONSTRUCTION DOCUMENTS	07/19/21
	O7/19/21
SHEET ISSUE           1         CONSTRUCTION DOCUMENTS           1         CONSTRUCTION DOCUMENTS           1         Image: Construction documents <t< td=""><td>07/19/21</td></t<>	07/19/21

Carolina Charter

![](_page_31_Figure_0.jpeg)

\_\_\_\_ [ \_\_\_\_]

\_

\_

### **GENERAL CEILING PLAN NOTES**

A. THESE GENERAL NOTES APPLY TO SERIES A-130

\_\_\_\_\_

- REFLECTED CEILING DRAWINGS. B. PAINT EXPOSED CEILINGS SURFACES PT-01 UNLESS
- DELETINGS SURFACES PT-01 UNLESS OTHERWISE INDICATED.
  C. REFER TO SERIES A-001 GENERAL INFORMATION
- C. REFER TO SERIES A-001 GENERAL INFORMATION DRAWINGS FOR MATERIAL SYMBOL KEY.
- D. REFER TO SERIES A-150 FINISH PLANS FOR ADDITIONAL CEILING FINISH INFORMATION.
- E. REFER TO ELECTRICAL DRAWINGS FOR CEILING-MOUNTED
- LIGHT FIXTURE TYPES AND QUANTITIES. F. REFER TO MECHANICAL DRAWINGS FOR CEILING-MOUNTED DIFFUSERS, GRILLE TYPES AND QUANTITIES.
- DIFFUSERS, GRILLE TYPES AND QUANTITIES.
   G. REFER TO FIRE PROTECTION DRAWINGS FOR SPRINKLER HEAD TYPES AND QUANTITIES. HEADS HAVE BEEN INTENTIONALLY OMITTED FROM REFLECTED CEILING PLANS FOR CLARITY.

 H. INSTALLATION OF CEILING SYSTEMS SHALL NOT BEGIN PRIOR TO SUBMITTAL AND REVIEW OF CEILING COORDINATION DRAWINGS SHOWING LAYOUT OF CEILING GRIDS OR CONTROL JOINTS AND ITEMS TO BE INSTALLED IN OR ON CEILINGS SUCH AS SPRINKLER HEADS, DIFFUSERS, GRILLES, LIGHT FIXTURES, FIRE DETECTION AND ALARM DEVICES, ACCESS PANELS, ETC.

- I. IN AREAS WHERE STRUCTURE IS EXPOSED, CONTRACTOR TO PROVIDE FANAL LAYOUTS OF ALL DUCTWORK, PIPING, CONDUIT, LIGHTING, ETC. FOR FINAL APPROVAL BY ARCHITECT PRIOR TO INSTALLATION.
- J. PAINT ALL CEILING ELEMENTS INCLUDING BUT NOT LIMITED TO DUCTWORK, STRUCTURE, CABLES, METAL STUDS, PIPING, CEILING HANGERS, AND MECHANICAL DEVICES

### **RCP LEGEND**

ļ	XXX-01 10'-10" A.F.F.	CEILING TAG CEILING TYPE CEILING HEIGHT (ABOVE FINISH FLOOR)
	•	SPOT ELEVATION MARKER
		2 x 4 SUSPENDED LIGHT FIXTURE
	0	DOWNLIGHT
		MECHANICAL RETURN REGISTER
	$\square$	MECHANICAL AIR SUPPLY DIFFUSER

Carolina Cha	arter
Academy	/
GYMNASIL	JM
8529 Highway	55
Angler, North Ca	rolina
Highmark School Deparment	
Murray, Utah 84107 801-256-9550	
Architect RATIO	
227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601	
Structural Engineer	
Lynch Mykins Structural Engine 301 North West St. Suite 105	ers,PC
Raleigh, North Carolina 27603 919-782-1833	
Civil Engineer Timmons Group	
5410 Trinity Road, Suite 102 Raleigh, North Carolina 27607	
७ । ७-०००-४४३०	
SEAL   DATE 07/19/21	
M. BOW	
5950 5950	
Topy CAB	
SHIGH, Winner	
SHEET ISSUE           1         CONSTRUCTION DOCUMENTS	07/19/21
RATIO COPYRIGHT NOTIC AND ENGINEERING CONFIDENCE AND 2 DIPOLIANT TO THE	E: THIS ARCHITECTURAL DRAWING IS GIVEN IN SHALL BE USED ONLY AGREEMENT WITH PATTO
NO OTHER USE, DI DUPLICATION MAY WRITTEN CONSEN LAW RIGHTS OF CO	SSEMINATION OR BE MADE WITHOUT PRIOR T OF RATIO. ALL COMMON OPYRIGHT AND OTHERWISE
	20408
HIKSI FLOOR	
REFLECTED CE PI AN	
SHEET NUMBER	
A-131	

### **FINISH SCHEDULE**

### CT-01

						FINISH DE	SCRIPTION		
LOCATION	FINISH TYPE	TAG	MANUFACTURER	STYLE	SIZE	PRODUCT NUMBER	COLOR	INSTALL NOTES	COMMENTS
WALL	ACOUSTICAL TREATMENT	AT-01	TECTUM	PAINTED	SEE ELEVATIONS FOR SIZES	-	TO MATCH PT-01	GLUE DOWN	1" THICK, ALT. 05
WALL	PAINT	PT-01	SHERWIN WILLIAMS	PER SPECIFICATION	N/A		SW7063 NEBULOUS WHITE		
WALL	PAINT	PT-02	SHERWIN WILLIAMS	PER SPECIFICATION	N/A		SW6321 RED BAY		
WALL	PAINT	PT-03	SHERWIN WILLIAMS	PER SPECIFICATION	N/A		SW6258 TRICORN BLACK		
BASE	WALL BASE-RUBBER	RB-01	TARKETT	ROLLED GOODS, THERMOSET COVE BASE	4"H		CHARCOAL		
FLOOR	RESILIENT FLOOR	RF-01	PATCRAFT	BOUNCE BACK	ROLL: 70.86" W X 49.21"	I208V	BLONDE MAPLE 02001	GLUE DOWN	6.5 MM THICK

FINISH NOTE:

ALT. 03: CUSTOM GRAPHICS APPLIED TO FLOOR AT SCHOOL NAME AT COURT BASELINE & CENTER COURT SCHOOL LOGO ALT. 04: SCHOOL NAME AND SCHOOL LOGO CUSTOM GRAPHICS APPLIEDTO WALLS. ALT. 05: AT-01 TO BE 1" THICK FABRIC WRAPPED WALL MOUNTED ACOUSTICAL PANEL. SIZE: 4'-0" X 8'-0". FABRIC: MOMENTUM TEXTILES, PROVERB, COLOR:: MIST

![](_page_32_Figure_6.jpeg)

![](_page_32_Figure_7.jpeg)

A1 A-151  $\left( - \right)$ 

FIRST LEVEL FINISH PLAN

1/8" = 1'-0"

![](_page_32_Figure_12.jpeg)

![](_page_32_Figure_13.jpeg)

![](_page_32_Picture_14.jpeg)

— — I — — —

			EQUIPMI	ENT SCHEDU	JLE			
				ME-01				
TAG	CODE	CODE DESCRIPTION	DESCRIPTION	MANUFACTURER	MODEL NO.	ELEC REQ.	PLUMB REQ.	COMMENTS
SYM EQU	UIPMENT							
PE-001	PE	GYM EQUIPMENT	Standard Wall Pads, "Z" Track mounting, Upgrade fire coating WPUPFRC	IPI by Bison	Protector Wall Padding	No	No	COLOR: TBD
E-002	PE	GYM EQUIPMENT	Standard Wall Pads, "Z" Track mounting, Upgrade fire coating WPUPFRC	IPI by Bison	Protector Wall Pads	No	No	COLOR: TBD
E-003	PE	GYM EQUIPMENT	Standard Wall Pads, "Z" Track mounting, Upgrade fire coating WPUPFRC	IPI by Bison	Protector Wall Pads	No	No	COLOR: TBD
PE-020	PE	GYM EQUIPMENT	SHERIDAN SEATING, TELESCOPING BLEACHERS, INCLUDE CENTER ISLE AND END RAIL HAND RAIL	Sheridan Seating Inc		Yes	No	Bleacher Aisle Unit
E-021	PE	GYM EQUIPMENT	SHERIDAN SEATING, TELESCOPING BLEACHERS	Sheridan Seating Inc		Yes	No	Bleacher Bank
PE-022	PE	GYM EQUIPMENT	Multi-Sport Scoreboard for VB and BB	Electro-Mech	Model LX2665	Yes	No	ALT 02:ADD 2ND SCOREBOARD
PE-023	PE	GYM EQUIPMENT	Forward Fold Rear Braced Ceiling Attached Basketball Backstop	IP by Bison.	1350FF	Yes	No	INCLUDE BA973LF GOAL WINCH, BA975KS KEY OPERATION FOR HOOPS, 42XL BACKBOARD, BA355 RIM, BA68U DURASKIN SAFEDGE PAD, BA950 SAFE STRAP
PE-024	PE	GYM EQUIPMENT	6000 Match Pont Volleyball Package	IPI	6000			IPI 6000 MATCH POINT VOLLEYBALL PACKAGE, INCLUDE VB26 SLEEVES & COVER PLATES, VB/6 JUDGES STAND, COLOR TBD

![](_page_33_Figure_1.jpeg)

# Carolina Charter Academy GYMNASIUM 8529 Highway 55 Angier, North Carolina 27501

Owner Highmark School Deparment 746 East Winchester Street, Suite 150 Murray, Utah 84107 801-256-9550 Architect RATIO 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805

Structural Engineer Lynch Mykins Structural Engineers,PC 301 North West St. Suite 105 Raleigh, North Carolina 27603 919-782-1833

Civil Engineer Timmons Group 5410 Trinity Road, Suite 102 Raleigh, North Carolina 27607 919-866-4938

SEAL | DATE 08/19/21

![](_page_33_Picture_8.jpeg)

SHE	EET ISSUE		
1	CONSTRUCTION DOCUM	MENTS	07/19/21
2	<b>REVISION 1</b>		08/19/21
F	OITAS	COPYRIGHT NOTICE: THIS AF AND ENGINEERING DRAWING CONFIDENCE AND SHALL BE PURSUANT TO THE AGREEMI NO OTHER USE, DISSEMINAT DUPLICATION MAY BE MADE WRITTEN CONSENT OF RATI LAW RIGHTS OF COPYRIGHT ARE HEREBY SPECIFICALLY I	RCHITECTURAL 5 IS GIVEN IN USED ONLY ENT WITH RATIO. ION OR WITHOUT PRIOR D. ALL COMMON AND OTHERWISE RESERVED.
PR	DJECT NO.		20408
SHE	ET TITLE		
F	RST FI O	0R	
			_
E	QUIPMEN	T PLAN	
			-
SH			
	Λ /		
	A-		

![](_page_34_Figure_0.jpeg)

	I	
	Carolina Chart	٥r
	Academy	Л
	GYMINASIUN	/
	8529 Highway 5	5
	Angler, North Carol	lina
	27501	
	Highmark School Deparment	
	Murray, Utah 84107 801-256-9550	
	Architect RATIO	
	227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601	
	919-021-0000	
	Structural Engineer	
	Lynch Mykins Structural Engineers, 301 North West St. Suite 105	PC
	Raleigh, North Carolina 27603 919-782-1833	
	Civil Engineer	
	<b>Timmons Group</b> 5410 Trinity Road, Suite 102	
	Raleigh, North Carolina 27607 919-866-4938	
	SEAL   DATE 07/19/21	
	M. BOW	
	M. BOW SERED ARCINE 5950	
	5950 ARCINE SUB SUB SUB SUB SUB SUB SUB SUB	
	5950 S950 CARONEC	
	SHEET ISSUE 1 CONSTRUCTION DOCUMENTS	07/19/21
	SHEET ISSUE	07/19/21
	SHEET ISSUE          1       CONSTRUCTION DOCUMENTS	07/19/21
	SHEET ISSUE          1       CONSTRUCTION DOCUMENTS	07/19/21
	SHEET ISSUE          1       CONSTRUCTION DOCUMENTS	07/19/21
		07/19/21
		07/19/21
		07/19/21
		07/19/21
		07/19/21
		O7/19/21
		07/19/21
		07/19/21
		07/19/21
		07/19/21
		07/19/21
		07/19/21

![](_page_35_Figure_0.jpeg)

Carolina Cha Academy GYMNASIU 8529 Highway	arter / JM / 55
Arrigher, North Cell27501OwnerHighmark School Deparment746 East Winchester Street, Suite 150Murray, Utah 84107801-256-9550ArchitectRATIO227 Fayetteville Street, Suite 301Raleigh, North Carolina 27601919-821-0805	
<b>Structural Engineer</b> <b>Lynch Mykins Structural Engine</b> 301 North West St. Suite 105 Raleigh, North Carolina 27603 919-782-1833	ers,PC
<b>Civil Engineer</b> <b>Timmons Group</b> 5410 Trinity Road, Suite 102 Raleigh, North Carolina 27607 919-866-4938	
SEAL   DATE 07/19/21	
HILL CARDING CARDINAL	
SHEET ISSUE         1       CONSTRUCTION DOCUMENTS         -       - <t< td=""><td></td></t<>	
COPYRIGHT NOTIC AND ENGINEERING CONFIDENCE AND PURSUANT TO THI NO OTHER USE, D DUPLICATION MAY WRITTEN CONSEN LAW RIGHTS OF C ARE HEREBY SPECT PROJECT NO. SHEET TITLE	CE: THIS ARCHITECTURAL G DRAWING IS GIVEN IN SHALL BE USED ONLY E AGREEMENT WITH RATIO. ISSEMINATION OR Y BE MADE WITHOUT PRIOR IT OF RATIO. ALL COMMON OPYRIGHT AND OTHERWISE CIFICALLY RESERVED.
BUILDING SECT	IONS
Δ_201	

![](_page_36_Figure_0.jpeg)

![](_page_36_Figure_1.jpeg)

— I—

![](_page_36_Picture_3.jpeg)

# WALL SECTION AT GYM/MULTIPURPOSE

# 3/4" = 1'-0"

— I —

BOARD

EXIST. FOUNDATION

![](_page_36_Figure_10.jpeg)

![](_page_36_Figure_11.jpeg)

١

EXIST. WALL TO REMAIN

EXIST. WALL & ROOF TO REMAIN IN PLACE

MTL CAP AT EXPANSION JOINT

MTL FLASHING

EPS INSULATION BOARD EIFS SYSTEM FINISH COAT

12' REINFORCED CMU FLUID-APPLIED VAPOR PERMEABLE AIR/WATER- RESISTIVE BARRIER

CONTINUOUS BEAD OF SEALANT

CONTINUOUS CLEAT WITH ALL NECESSARY TRIM PIECES

PRE-FINISHED SLOPED METAL COPING W/ DOUBLE DRIP &

> (R-25 MIN.) POLYISOCYANURATE ROOF LEVEL 128'-0"

A3 A-322

SIM

TOP OF PARAPET 132'-8"

PTD MTL ROOF DECK, SEE STRUCT.

SEE ROOF PLANS & SPECS. (TYP.)

ROOF INSULATION - W/ STAGGERED JOINTS AND 6" MINIMUM OVERLAP -

OPEN WEB STEEL ROOF JOISTS - SEE STRUCT.(TYP.)

PTD MTL ROOF DECK, SEE

![](_page_36_Figure_35.jpeg)

![](_page_37_Figure_0.jpeg)

\_\_\_\_

\_\_\_\_

ALL SECTION AT GYM/CLASSROOM

A1 A-322

 $\sim$ 

## 3/4" = 1'-0"

![](_page_37_Figure_6.jpeg)

\_\_\_\_\_

(A3) (A-322)

### SECTION DETAIL AT GYM/CLASSROOM 1 1/2" = 1'-0"

WITH ALL NECESSARY TRIM PIECES

PRE-FINISHED SLOPED METAL COPING
 W/ DOUBLE DRIP & CONTINUOUS CLEAT

Carolina Chartor
Academy
GYMNASIUM
8529 Highway 55
Angier, North Carolina
27501
Owner Highmark School Deparment
746 East Winchester Street, Suite 150 Murray, Utah 84107
Architect
227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601
919-821-0805
Structural Engineer Lynch Mykins Structural Engineers,PC
301 North West St. Suite 105 Raleigh, North Carolina 27603
919-782-1833
Civil Engineer Timmons Group
5410 Trinity Road, Suite 102 Raleigh, North Carolina 27607
919-000-4930
SEAL   DATE 07/19/21
M. BOW
5950
5950 TORD CAROUND
5950 Tom CARONIC
SHEET ISSUE 1 CONSTRUCTION DOCUMENTS 07/19/2
SHEET ISSUE
SHEET ISSUE
SHEET ISSUE
SHEET ISSUE          1       CONSTRUCTION DOCUMENTS       07/19/2
SHEET ISSUE
SHEET ISSUE          1       CONSTRUCTION DOCUMENTS       07/19/2
SHEET ISSUE          1       CONSTRUCTION DOCUMENTS       07/19/2
SHEET ISSUE          1       CONSTRUCTION DOCUMENTS       07/19/2
SHEET ISSUE          1       CONSTRUCTION DOCUMENTS       07/19/2         -       -       -

![](_page_38_Picture_0.jpeg)

\_\_\_\_\_

[\_\_\_\_

![](_page_38_Picture_1.jpeg)

**EXPANSION JOINT DETAIL** 1 1/2" = 1'-0"

![](_page_38_Figure_3.jpeg)

![](_page_38_Picture_5.jpeg)

#### **ENLARGED PLAN - ROOF LADDER** 3/4" = 1'-0"

![](_page_38_Picture_7.jpeg)

07/19/21

20408

![](_page_38_Figure_8.jpeg)

![](_page_39_Figure_0.jpeg)

![](_page_39_Picture_1.jpeg)

\_

\_

\_

A1 A-501

#### **INTERIOR ELEVATION - EAST** 1/4" = 1'-0"

![](_page_39_Figure_3.jpeg)

\_\_\_09-A1 TYP

\_\_\_\_

**INTERIOR ELEVATION - WEST** 1/4" = 1'-0"

EQ 2'-8" EQ \*\* \*\*

SAFTEY WALL PADS PER EQUIPMENT PLAN. WRAPS ALL SIDES OF WALLS

\_\_\_\_

![](_page_39_Figure_8.jpeg)

	Carolina Charter Academy Academy GYMNASIUM 8529 Highway 55 Angier, North Carolina 27501 Owner Highmark School Deparment 746 East Winchester Street, Suite 150 Murray, Utah 84107 801-256-9550 Architect RATIO 227 Fayetteville Street, Suite 301 Raleigh, North Carolina 27601 919-821-0805
	Structural Engineer Lynch Mykins Structural Engineers,PC 301 North West St. Suite 105 Raleigh, North Carolina 27603 919-782-1833
Normal and the second s	Civil Engineer Timmons Group 5410 Trinity Road, Suite 102 Raleigh, North Carolina 27607 919-866-4938
7.8°       8.0°       7.8°       8.0°       7.8°         8.0°       7.8°       8.0°       7.8°         9.0°       7.8°       8.0°       7.8°         1000       1000       1000       1000         1000       1000       1000       1000         1000       1000       1000       1000       1000         1000       1000       1000       1000       1000       1000         1000       1000       1000       1000       1000       1000       1000         1000       1000       1000       1000       1000       1000       1000       1000         1000       1000       1000       1000       1000       1000       1000       1000         1000       1000       1000       1000       1000       1000       1000       1000         1000       1000       1000       1000       1000       1000       1000       1000       1000         1000       1000       1000       1000       1000       1000       1000       1000         1000       1000       1000       1000       1000       10000       10000       10000      <	SEAL   DATE 07/19/21
PMENT PLAN.	Image: contract of the second seco

### **INTERIOR ELEVATION - NORTH** 1/4" = 1'-0"

![](_page_40_Figure_1.jpeg)

![](_page_40_Figure_2.jpeg)

\_

**INTERIOR ELEVATION - SOUTH** 

![](_page_40_Figure_4.jpeg)

\_\_\_\_ I \_\_\_\_

	EQ ις	EQ 1'-6"-		
///////////////////////////////////////			 	©
				2'-8"
				8" 2'-8" 8"

AT-01- ALT. 05 TYP. 8'-0" 2'-2"		
		2'-8" 8"
	PT-03	8-8" 8

\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

\_\_\_\_\_

\_

\_\_\_\_\_

ACOUSTIC PANEL SPACING CENTERED ON BASKETBALL GOAL POST

SAFTEY WALL PADS PER EQUIP. PLAN

	Carolina Chart	er
	Academy	
	GYMNASIUN	1
	8529 Highway 5	5
	Angier, North Caro	lina
	27501	
	Owner Highmark School Deparment 746 East Winchester Street, Suite 150	
-	Murray, Utah 84107 801-256-9550	
	Architect RATIO 227 Equation Street Suite 301	
	Raleigh, North Carolina 27601 919-821-0805	
	Structural Engineer Lynch Mykins Structural Engineers,I	PC
	301 North West St. Suite 105 Raleigh, North Carolina 27603	
	919-702-1033	
	Civil Engineer	
	<b>Timmons Group</b> 5410 Trinity Road, Suite 102 Raleigh North Carolina 27607	
	919-866-4938	
	SEAL   DATE 07/19/21	
	M. BOW	
	K STERED ARCHI	
	5950	
	5950 <sup>1</sup> 0 <sup>m</sup> <sup>1</sup> 0 <sup>1</sup>	
	SHEET ISSUE	
	SHEET ISSUE 1 CONSTRUCTION DOCUMENTS	07/19/21
	SHEET ISSUE 1 CONSTRUCTION DOCUMENTS	07/19/21
	SHEET ISSUE          1       CONSTRUCTION DOCUMENTS	07/19/21
	SHEET ISSUE          1       CONSTRUCTION DOCUMENTS	07/19/21
	SHEET ISSUE          1       CONSTRUCTION DOCUMENTS         -       -	07/19/21
	SHEET ISSUE          1       CONSTRUCTION DOCUMENTS         -       -	07/19/21
	SHEET ISSUE          1       CONSTRUCTION DOCUMENTS         -       - <td>07/19/21</td>	07/19/21
	SHEET ISSUE          1       CONSTRUCTION DOCUMENTS         -       - <td>07/19/21</td>	07/19/21
		07/19/21
		07/19/21
		07/19/21
		07/19/21
		07/19/21
		07/19/21
		07/19/21
	SHEET NUMBER	07/19/21

![](_page_41_Figure_0.jpeg)

![](_page_41_Figure_1.jpeg)

![](_page_41_Figure_2.jpeg)

![](_page_41_Figure_3.jpeg)

\_ \_ \_ \_

\_\_\_\_

		DOC	<b>N</b> R				FRAME						
SI	ZE					HDWR.				DETAIL	S	FIRE	
W2	Н	Т	MTRL.	ELEV.	GLASS	SET	MTRL.	ELEV.	HEAD	JAMB	THRESHOLD	RATING	REMARKS
3'-0"	7'-0"	1 3/4"	AL	FG	GL-01	1	AL	F1	A1/A-621	AI/A-601	D5/A-151	NR	KF, PH
3'-0"	7'-0"	1 3/4"	AL	FG	GL-01	1	AL	F1	A1/A-621	A1/A-601	D5/A-151	NR	KF, PH
	7'-0"	1 3/4"	WD	N1	GL-02	4	HM	F2	A2/A-621	A2/A-601	E5/A-151	NR	
	7'-0"	1 3/4"	WD	N1	GL-02	4	НМ	F2	A2/A-601	A2/A-601	E5/A-151	NR	
3'-0"	7'-0"	1 3/4"	WD	F		3	HM	F2	A2/A-601	A2/A-601	E5/A-151	NR	
3'-0"	7'-0"	1 3/4"	AL	FG	GL-02	2	AL	F1	A3/A-601	A3/A-601	E5/A-151	NR	PH
3'-0"	7'-0"	1 3/4"	AL	FG	GL-02	2	AL	F1	A3/A-601	A3/A-601	E5/A-151	NR	PH

+	8'-0"

DOOR HARDWARE SCHEDULE									
Cylinder	Floor Stop	Silencer	Closer	Other Parameters					
SARGENT, L-SECTION - US26D			LCN, 4110, GRAY	PULLS: ROCKWOOD, BF157, US26D					
NONE			LCN, 4110, GRAY	PULLS: ROCKWOOD, BF157, US26D OR EQUAL					
SARGENT, L-SECTION - US26D	ROCKWOOD, 442	ROCKWOOD, 608, GRAY	SARGENT 351, EN FINISH						
SARGENT, L-SECTION - KEYED BY OWNER, US26D	ROCKWOOD, 442	ROCKWOOD, 608, GRAY							
	OR HARDWARE SCHE Cylinder SARGENT, L-SECTION - US26D NONE SARGENT, L-SECTION - US26D SARGENT, L-SECTION - KEYED BY OWNER, US26D	OR HARDWARE SCHEDULE         Cylinder       Floor Stop         SARGENT, L-SECTION - US26D       NONE         SARGENT, L-SECTION - US26D       ROCKWOOD, 442         SARGENT, L-SECTION - KEYED       ROCKWOOD, 442         SARGENT, L-SECTION - KEYED       ROCKWOOD, 442	OR HARDWARE SCHEDULE         Cylinder       Floor Stop       Silencer         SARGENT, L-SECTION - US26D       Image: Sargent of the section of the sec	OR HARDWARE SCHEDULE         Cylinder       Floor Stop       Silencer       Closer         SARGENT, L-SECTION - US26D       Image: Constraint of the section					

\_\_\_\_\_

A-601

# PLUMBING SPECIFICATIONS

#### SCOPE OF WORK

1. ALL WORK REQUIRED CONSISTS OF PERFORMING ALL LABOR AND FURNISHING ALL MATERIALS, FIXTURES AND EQUIPMENT REQUIRED TO PROVIDE A COMPLETE PLUMBING INSTALLATION AS INDICATED ON THE DRAWINGS. IT SHALL FURTHER INCLUDE FURNISHING AND INSTALLING ALL MISCELLANEOUS ITEMS REQUIRED FOR THE OPERATION OF THE SYSTEMS, WHETHER SPECIFICALLY CALLED FOR OR NOT. CONNECT ALL EQUIPMENT FURNISHED UNDER OTHER TRADES AS REQUIRED. DETERMINE IN ADVANCE THE SHUT-DOWN OF EXISTING UTILITIES.

### CODES

1. ALL MATERIALS, EQUIPMENT AND INSTALLATION MUST COMPLY WITH ALL APPLICABLE LAWS, CODES, RULES, AND REGULATION, REQUIRED BY CITY, COUNTY AND STATE, AS WILL AS FEDERAL REQUIREMENTS.

### PERMITS

1. THIS CONTRACTOR SHALL PAY FOR ALL PERMITS, LICENSES AND FEES REQUIRED BY STATE AND LOCAL AUTHORITIES.

### INSPECTION

1. FURNISH ARCHITECT WITH CERTIFICATE OF INSPECTION AND APPROVAL BY LOCAL AUTHORITIES PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE ARCHITECT. ALL WORK MUST BE INSPECTED. MATERIALS

### 1. WATER PIPING

- A. ALL PIPING SHALL CONFORM TO THE REQUIREMENTS OF THE ANSI SAFETY CODE AND BE FREE FROM ALL DEFECTS AND BE PROPERLY IDENTIFIED.
- B. ABOVE GROUND: SHALL BE TYPE "L" HARD DRAWN COPPER TUBING CONFORMING TO ASTM B 88-72. C. BELOW GROUND: (INSTALLED IN CONCRETE OR UNDER CONCRETE) TYPE "K" SOFT DRAWN COPPER TUBING, CONFORMING TO ASTM B 88-72, SPIRALLY WRAP PIPING BELOW GRADE OR FLOORS WITH 3 LAYERS OF 30 MIL POLYETHYLENE TAPE WITH 1/2 OVERLAP. INSTALL NO PIPING JOINTS BELOW FLOOR. D. ALL COPPER TUBING SHALL UTILIZE SWEAT FITTINGS SOLDERED WITH ASTM B 32, ALLOY SN95, SN94, OR E, LEAD FREE SOLDER.
- E. ALL CONDENSATE PIPING SHALL BE COPPER PIPE. 2. SOIL, WASTE, AND VENT PIPING: A. CAST IRON: NO-HUB CAST IRON, CISPI 301-72T SPECIFICATION FOR ALL SOIL, WASTE AND VENT PIPING 2 INCHES AND LARGER WITH STANDARD
- WEIGHT FITTINGS, USE STAINLESS STEEL NO-HUB CAST IRON COUPLINGS THROUGHOUT THE PROJECT. B. GALVANIZED IRON: SCHEDULE 40 STANDARD WEIGHT CONFORMING TO ASTM A72-68, FOR ALL VENT PIPING 1-1/2" AND SMALLER, USE WROUGHT IRON SCREWED FITTINGS TO MATCH PIPE. MAKE ALL SCREWED JOINTS WITH TEFLON TAPE.
- C. ALL SOIL AND WASTE PIPING 2-1/2" AND SMALLER SHALL SLOPE MINIMUM OF 1/4" PER FOOT, PIPING 3" AND LARGER SHALL SLOPE MINIMUM OF 1/8" PER FOOT.
- 3. GAS PIPING: A. THE PLUMBING CONTRACTOR SHALL SEE THAT THE PROPER GAS METER AND REGULATOR ARE INSTALLED BY THE UTILITY CO., AND PAY FOR ANY FEES CHARGED FOR THE INSTALLATION OF THE METER AND SERVICE LINES. GAS LINES SHALL EXTEND FROM THE METER TO ALL EQUIPMENT REQUIRING GAS.
- B. GAS PIPING: SCREWED STANDARD WEIGHT SCHEDULE 40 BLACK STEEL CONFORMING TO ASTM A53 SPECIFICATIONS FOR GAS PIPING. C. GAS PIPING INSTALLED BELOW GRADE SHALL BE PROVIDED WITH FACTORY WRAPPED PROTECTIVE COATING WITH FITTINGS TRIPLE SPIRALLY WRAPPED WITH 20 MIL POLYETHYLENE TAPE WITH 1/2 OVERLAP. PROVIDE CATHODIC PROTECTION CONSISTING OF ONE 17 POUND MAGNESIUM ANODE PER 100 SQUARE FEET OF GROUND EXPOSED SURFACE, TO THE PIPING. D. GAS PIPE SHALL BE PROVIDED WITH SUITABLE DRIP LEGS ON ALL MAINS AND RISERS AT EQUIPMENT CONNECTIONS. ALL EQUIPMENT
- CONNECTIONS SHALL BE PROVIDED WITH AN AGA APPROVED BUTTERFLY VALVE. CAP WHERE REQUIRED. E. PROVIDE SLEEVES AT ALL PIPING PENETRATING MASONRY WALLS AND PACKED WATERTIGHT WITH APPROVED PACKING.
- 4. VALVES: A. SIZE OF SHUT-OFF VALVE, CONTROL VALVES, BALANCING COCKS, UNIONS ETC., SHALL BE FULL LINE SIZE. 5. PIPE HANGERS:
- A. PIPE HANGERS SHALL BE MICHIGAN #400 FOR STEEL PIPING, #402 FOR GAS AND COPPER PIPING. SUPPORT PIPING 3/4" AND LESS AT 6'-0" O/C, 1-1/4" O/C AND SMALLER 8'-0" O/C, AND PIPING 1-1/2" AND LARGER 10'-0" O/C. WASTE PIPING SHALL BE SUPPORTED AT 5'-0" O/C. PROVIDE 3/8" DIA. THREADED ROD PROPERLY BRACED FOR SEISMIC RESTRAINT ZONE 2. 6. PIPE INSULATION:
- A. ALL HOT WATER PIPING AND HOT WATER RETURN PIPING (IF APPLICABLE) SHALL HAVE 1 INCH THICK FIBERGLASS INSULATION WITH ASJ JACKET, HAVING A THERMAL CONDUCTIVITY (K-FACTOR) OF 0.24 AT 75 DEGREES MEAN TEMPERATURE. B. THE MAXIMUM FIRE HAZARD CLASSIFICATION OF THE INSULATION SYSTEM SHALL NOT HAVE MORE THAN A FLAME SPREAD OF 25, AND A FUEL CONTRIBUTED RATING OF 50, AND A SMOKE DEVELOPED RATING OF 50, WHEN TESTED IN ACCORDANCE WITH U.L. REQUIREMENTS. PIPE COVERING SHALL BEAR THE U.L. LABEL.
- C. INSULATE ALL FITTINGS VALVE BODIES ETC. WITH SINGLE OR MULTIPLE LAYERS OF INSULATION WITH PREFABRICATED FITTINGS WITH P.V.C. JACKETS. D. ALL CONDENSATE PIPING SHALL HAVE 1 INCH THICK FIBERGLASS INSULATION WITH ASJ JACKET, HAVING A THERMAL CONDUCTIVITY (K-FACTOR)
- OF 0.24 AT 75 DEGREES MEAN TEMPERATURE. E. SUBMIT SHOP DRAWINGS FOR ALL INSULATION MATERIALS.
- 7. CLEAN OUTS: (ZURN, JOSAM, SMITH) A. CLEAN OUTS SHALL BE THE SAME SIZE AS THE LARGEST DOWNSTREAM PIPE IT IS SERVING. NO PLASTIC CLEAN OUTS WILL BE ACCEPTED. PLUGS
- SHALL BE BRONZE 8. PIPE INSTALLATION:
- A. INSTALL PIPING TO BEST SUIT FIELD CONDITIONS, COORDINATE LAYER OF PIPING WITH DUCT WORK AND OFFSET PIPING AS REQUIRED TO CLEAR NEW DUCTWORK

#### **EXISTING CONDITIONS**

1. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL UTILITIES PRIOR TO BID. THE CONTRACTOR SHALL VISIT THE SITE AND INSPECT THE WORK THEY MUST PERFORM, IN ADDITION TO WHAT IS SHOWN HEREIN, AND INCLUDE IN THEIR BID AN AMOUNT TO DO SUCH WORK.

### UNIONS

1. PROVIDE A UNION BETWEEN CONNECTIONS TO EACH FIXTURE, DEVICE OR PIECE OF EQUIPMENT FOR DISCONNECTING OF PIPING.

#### STERILIZATION

1. STERILIZE THE ENTIRE WATER DISTRIBUTION SYSTEM THOROUGHLY WITH A SOLUTION CONTAINING NOT LESS THAN 50 PARTS PER MILLION OF AVAILABLE CHLORINE. FOR CHLORINATING MATERIALS USE SODIUM HYPOCHLORITE SOLUTION CONFORMING TO FEDERAL SPEC. 0-8-441, GRADE D, AND INTRODUCE INTO THE SYSTEM BY USE OF A COCK AT A SLOW, EVEN, CONTINUOUS RATE. ALLOW THE STERILIZING SOLUTION TO REMAIN IN THE SYSTEM FOR A PERIOD OF 8 HOURS, DURING WHICH TIME ALL VALVES AND FAUCETS SHALL BE OPENED AND CLOSED SEVERAL TIMES. AFTER STERILIZATION, FLUSH THE SOLUTION FROM THE SYSTEM WITH CLEAN WATER UNTIL THE RESIDUAL CHLORINE CONTENT IS NOT GREATER THAN 0.2 PARTS PER MILLION. PLATE COUNT SHALL INDICATE COUNT LESS THAN 100 BACTERIA PER CC.

#### TESTING

- 1. FILL DOMESTIC WATER SYSTEM WITH WATER AND PRESSURIZE TO 125 PSI AND MAINTAIN FOR FOUR (4) HOURS WITH NO PRESSURE DROP. 2. FILL WASTE, SOIL, AND VENT SYSTEM WITH WATER TO HIGHEST POINT OF THE SYSTEM. HOLD PRESSURE FOR FOUR (4) HOURS WITH NO DROP IN
- WATER LEVEL . TEST AND OBTAIN APPROVAL ON ALL UNDERGROUND PIPING BEFORE COVERING WORK. PROVIDE WRITTEN TESTING REPORT TO ARCHITECT.
- 4. GAS TESTING: A. AIR PRESSURE TEST SYSTEM TO 75 PSI AND MAINTAIN FOR A PERIOD OF EIGHT (8) HOURS WITH NO PRESSURE DROP.
- B. PURGE LINE WITH NITROGEN AT JUNCTION WITH MAIN LINE AT GAS METER TO REMOVE ALL AIR. CLEAR COMPLETE LINE BY ATTACHING A TEST PILOT FIXTURE AT CAPPED STUB-IN LINE AT THE BUILDING LOCATION, AND LET GAS FLOW UNTIL TEST PILOT IGNITES. CAUTION FAILURE TO PURGE SYSTEM MAY RESULT IN EXPLOSION WITHIN LINE WHEN AIR-TO-GAS IS AT CORRECT MIXTURE.

#### CLEANING

1. AT THE COMPLETION OF THE WORK AND PRIOR TO FINAL ACCEPTANCE, ALL PARTS OF THE WORK INSTALLED UNDER THIS SPECIFICATION SHALL BE THOROUGHLY CLEANED. ALL EQUIPMENT, FIXTURES, PIPE, VALVES AND FITTINGS SHALL BE CLEANED OF GREASE, METAL CUTTINGS AND SLUDGE WHICH MAY HAVE ACCUMULATED BY OPERATION OF THE SYSTEM FOR TESTING HEREIN BEFORE SPECIFIED OR FROM OTHER CAUSES.

### GUARANTEE

1. THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS, EQUIPMENT AND WORKMANSHIP FROM DEFECT OF MATERIAL AND WORKMANSHIP, AND SHALL REPLACE OR REPAIR, WITHOUT ADDITIONAL COST TO THE OWNER, ALL DEFECTIVE MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR AFTER COMPLETION AND ACCEPTANCE.

#### COORDINATION

1. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR COORDINATING WORK WITH OTHER TRADES AFFECTED BY EACH OTHERS WORK AND FOR CUTTING AND RE-FINISHING OF EXISTING WALLS, FLOORS, SOLID AND SUSPENDED CEILINGS ETC., WHERE REQUIRED BY WORK SHOWN AND NOTED HEREIN. INSTALL ALL WORK TO CLEAR NEW AND EXISTING ARCHITECTURAL AND STRUCTURAL MEMBERS. ITEMS SUCH AS PIPE, FITTINGS, ETC., SHALL NOT BE INSTALLED IN CONFLICT WITH EQUIPMENT. COORDINATE ALL CUTTING AND PATCHING WITH THE GENERAL CONTRACTOR. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF HIS WORK. OBTAIN WRITTEN PERMISSION OF ARCHITECT BEFORE PROCEEDING WITH ANY CUTTING OR PATCHING OF STRUCTURAL SYSTEMS.

#### SUBSTITUTIONS

- SUBSTITUTIONS OF MATERIALS OR PRODUCTS SHOWN HEREIN SHALL BE AT THE OWNER'S, ARCHITECTS OR ENGINEER'S WRITTEN APPROVAL ONLY WITH COPIES OF APPROVAL SENT TO ARCHITECT FOR PROJECT FILE. DEVIATION FROM THESE DRAWINGS WILL NOT BE ALLOWED. 2. ANY FIELD CHANGES BY THE CONTRACTOR FOR WHICH THE LOCAL AUTHORITY REQUIRES A SEALED LETTER AND/OR DRAWING BY THE ENGINEER SHALL RESULT IN A COST TO THE CONTRACTOR. THE FEE FOR THESE CHANGES SHALL BE PAYABLE UPON DELIVERY OF THE LETTER/DRAWING AND
- UNLESS THE CHANGE WAS INSTITUTED BY THE OWNER. THE CONTRACTOR SHALL NOT CHARGE THE OWNER THIS FEE. . THE FEE FOR THE ABOVE NOTED LETTER/DRAWING SHALL BE \$250.00 PER ITEM. 4. ANY DEVIATIONS FROM THESE PLANS (FOR ANY REASON INCLUDING ACTUAL FIELD CONDITIONS) WITH OUT PRIOR WRITTEN APPROVAL SHALL BE
- THE COMPLETE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. **RECORD DRAWINGS**
- 1. PROVIDE TWO (2) SETS OF "RECORD" DRAWINGS AND TWO (2) BOUND SETS OF ALL OPERATIONS MANUALS, DIAGRAMS, SERVICE CONTRACTS, GUARANTEES, ETC., ONE FOR THE OWNER AND ONE FOR BUILDING OPERATIONS DEPARTMENT. OBTAIN A COMPLETE SET OF RECORD DRAWINGS OF EXISTING CONSTRUCTION FROM THE OWNERS FOR INFORMATION ON EXISTING CONDITIONS. INCORPORATE ANY EXISTING CONDITIONS ON NEW RECORD DRAWINGS REQUIRED TO SHOW THE "INSTALLED" INSTALLATION.

	PLUMBING FIXTURE SCHEDULE									
ТА	G ITEM	MANUFACTURER	NAME	MODEL NO.		DESCRIPTION				
EWO	C-1 ELECTRIC WATER COOLER	ELKAY	BI-LEVEL (38-7/8" & 32 7/8" HEIGHT)	LZSTL8WSLP	FIXTURE	TWO LEVEL WHEELCHAIR ACCESS - BOTTLE FILLING S FINISH, 8 GHP BASE FLOW RATE, 370 WATTS, 5.0 FULL				
WC	O WALL CLEANOUT	ZURN		Z1446	FIXTURE	CLEANOUT WITH ROUND ACCESS COVER.				

W	WASTE WATER DOMESTIC COLD WATER	
	HOT WATER RECIRC.	
	HOT WATER RECIRC.	
	VENT PIPING	
	PIPE TURNING DOWN	
()		
— <del>。</del>		
	BRANCH SIDE CONNECTION	
	BRANCH TOP CONNECTION	
⊙ <u>FCO</u>	CLEANOUT CLEANOUT, FLOOR TYPE	
	FLOOR DRAIN WITH TRAP PRIMER	
	UNION	
	WALL CLEANOUT	
	VENT THROUGH ROOF - DIAGRAMMATIC (VTF	२)
	CONNECT TO EXISTING	
VALVES &	ACCESSORIES	
<b>_</b>	AUTOMATIC AIR VENT	
$-\otimes$	AUTOMATIC FLOW CONTROL VALVE	
— <u>//</u> —	BACKFLOW PREVENTER (BFP)	
—-(Ō	BALL VALVE	
—  <b>¢</b>  —	BUTTERFLY VALVE	
	CAPPED PIPE	
	CHECK VALVE	
	CONCENTRIC REDUCER	
	DIRECTION OF FLOW	
	ECCENTRIC REDUCER	
—   —	FLANGED CONNECTION	
	FLEXIBLE CONNECTION	
	FLOW METER	
	GATE VALVE	
	GLOBE VALVE	
<u></u>	MANUAL AIR VENT	
$- \diamond -$	METERED BALANCING VALVE W/PRESSURE TAPS	
I\$T	GAS COCK	
	PIPE SLEEVE	(
	PRESSURE REDUCING VALVE	
	PRESSURE RELIEF VALVE	
	PRESSURE GAUGE WITH GAUGE COCK	
$\longrightarrow$	SQUARE HEAD COCK	
_+ <del>_+</del>	STRAINER	
	STRAINER W/BLOW DOWN VALVE	
П́.	THERMOMETER	

CORRIDOR 196 P-001 1/4" = 1'-0"

![](_page_42_Figure_52.jpeg)

ENLARGED PLAN PLUMBING PLAN

![](_page_42_Picture_54.jpeg)

P-001 NOT TO SCALE

/ 1/8" = 1'-0"

**\**P-001∕

TATION LEAD FREE, LIGHT GRAY LOAD AMPS, 120V, 1 PH

\_\_\_Ω

-K-

VACUUM BREAKER

SOLENOID VALVE.

![](_page_42_Picture_58.jpeg)

![](_page_42_Figure_59.jpeg)

![](_page_42_Figure_64.jpeg)

**PLUMBING PLAN - GYMNASIUM** 

ELECTRIC WATER COOLER PIPING

![](_page_42_Figure_67.jpeg)

1513 WALNUT ST. eak systems enellneenno IS DOCUMENT IS THE SOLE PROPERTY OF PEAK SYSTEMS ENGINEERING GROUP AND MAY NOT BE

ERMISSION OF THE ENGINEER OF RECORD.

SED FOR ANY PURPOSE OTHER THAN ORIGINALLY INTENDED WITHOUT THE EXPRESSED WRITTEN

SUITE 250 CARY, NC 27511 LICENSE NO: #C-4704 PROJECT NO: 121006

![](_page_42_Figure_70.jpeg)

# VENTILATION CALCULATION

		Supply Air	Floor Area	OA Floor	Timed	People OA	Air Dist Eff.	Space	Breathing	Ventilation
				Rate	Average	Rate		Required OA	Zone OA	Effectiveness
Zone Name / Space Name	Mult.				Occupancy					
		(CFM)	(ft²)	(CFM)		(CFM/Person)	(Ez)	(CFM) Voz	(CFM) Vbz	
GYM ADDITION										
GYM		1 665	9 7512	0.06	200	7.5	0.8	2438		
NOTE: SET BASELINE	VENTILATIO	N TO SCHE	DULED, CO	2 SENSOF	R TO INCRE	ASE OA DUR	ING HIGH O	CCUPANCY F	PERIODS.	

#### GENERAL MECHANICAL NOTES:

- 1. ALL PIPING PENETRATIONS THRU SMOKE AND FIRE WALLS SHALL BE SEALED WITH APPROPRIATE UL RATED/LISTED SEALANT.
- 2. ALL OUTSIDE AIR INTAKES SHALL BE LOCATED 10'-0" MIN. FROM ANY VENT/EXHAUST TERMINAL.
- 3. BRANCH DUCT CONNECTION TO DIFFUSER OR GRILLE MAY HAVE 7'-0" LONG MAX. FLEX DUCT CONNECTOR
- 4. COORDINATE DUCTWORK AND PIPING INSTALLATIONS WITH BUILDING ELEMENTS AND OTHER TRADES. DUCT AND PIPING ROUTING ON PLANS ARE DIAGRAMATIC. ADDITIONAL DUCTWORK AND OFFSETS MAY BE REQUIRED TO INSTALL DUCTWORK AND PIPING IN ACTUAL FIELD CONDITIONS. MAINTAIN MANUFACTURERS SERVICE CLEARANCES FOR ALL EQUIPMENT.
- 5. PROVIDE TEST AND BALANCE. BALANCE ALL FAN AND AIR CONDITIONING SYSTEM TO CFM'S INDICATED ON PLANS. PROVIDE NEW SHEAVES AS REQ'D. & FURNISH BALANCE REPORT TO ENGINEER. PROVIDE "COMFORT BALANCE" TO AIRFLOWS TO ACCOMODATE OCCUPANT COMFORT AFTER OCCUPANCY.
- 6. INSULATE ALL INDOOR SUPPLY DUCTWORK WITH 2.2" FG BLANKET WITH SEALED FSK VAPOR BARRIER. INSUL. NOT REQ'D ON RETURN DUCTS WITHIN BLDG.
- 7. BLANK OFF OPENINGS WHERE DUCTS TRAVEL DOWN TO FIRST LEVEL WITH SHEET METAL AND MINERAL WOOL AT SECOND FLOOR LEVEL.
- 8. INSULATE ALL EXTERIOR SUPPLY DUCTWORK WITH R8.2 CLOSED CELL FOAM WITH ALUM JACKET.

MECHANICAL SUMMARY

![](_page_43_Figure_12.jpeg)

![](_page_43_Picture_14.jpeg)

ROBERT BOUKNIGHT, PE 1507 TALBOT RD PLEASANT GARDEN, NC 27313 336-420-2686 RKB@RKBENG.COM

MECHANICAL TECHNOLIGIES & SOLUTIONS, LLC. 700 Megahertz Drive Winston-Salem, NC 27107 Phone (336) 399-5166 Fax (336) 893-7712 www.mtshvac.com							
		DESCRIPTION					
		REV. BY DATE					
DEVICIONS		DESCRIPTION					D CONFIDENTIAL. ALL USE IS FORBIDDEN EXCEPT BY WRITTEN STEMS & SERVICES
		REV. BY DATE					THIS DRAWING IS PRIVATE ANI COMMENT OF MECHANICAL SY
<b>TITLE: CAROLINA CHARTER ACADEMY</b>			8529 NC-55	ANGIER, NC	CUSTOMER	SWINERTON CONSTRUCTION	JOB No. SHEET No.: SCALE: T
DATE:	DATE:	DATE:	DATE:				EV PLAN
DESIGNED BY: RKB	DRAWN BY: RKB	CHECKED BY:	VPROVED BY: RKB	RAWING NUMBER:			HVAC 1ST L

SYM	IBOLS & LEGEND	
	BRANCH CIRCUIT CONDUIT CONCEALED IN CEILING AND/OR WALLS, 2#12AWG & 1#12AWG EG UNLESS OTHERWISE INDICATED, HASHMARKS INDICATE NO. OF WIRES.	
	BRANCH CIRCUIT CONDUIT EXPOSED ON WALL AND OR CEILING, 2#12AWG & 1#12AWG EG UNLESS OTHERWISE INDICATED. HASHMARKS INDICATE NO. OF WIRES.	
	BRANCH CIRCUIT CONDUIT CONCEALED IN OR UNDER FLOOR OR IN FURRED CEILING BELOW, TWO 2#12AWG & 1#12AWG EG UNLESS OTHERWISE INDICATED. HASHMARKS INDICATE NO. OF WIRES.	
	HOMERUN TO PANELBOARD, NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS	
	PHASE WIRES	
NDT	<ul> <li>NEUTRAL</li> <li>E: ALL CONDUITS TO BE 3/4" C - 2#12AWG &amp; 1#12AWG EG UNLESS</li> <li>DTHERWISE INDICATED BY HASH MARKS OR CONDUIT AND WIRE SCHEDULE</li> <li>CONDUIT FITTINGS TO BE STEEL COMPRESSION TYPE</li> <li>WHERE SUBJECT TO PHYICAL DAMAGE, IMC OR RIGID CONDUIT TO BE UTILIZED</li> </ul>	
**	3-WIRE TIE CONNECTION BETWEEN MASTER/SLAVE LIGHTING FIXTURE COMBINATIONS	
	1/2" FLEXIBLE CONDUIT CONNECTION WITH 3#14 & 1#14 E.G.	
0	FLUDRESCENT LIGHTING FIXTURE, SURFACE.	
	FLUDRESCENT LIGHTING FIXTURE, RECESSED.	
$\bigcirc$ H $\bigotimes$	WALL DR CEILING MOUNTED EXIT LIGHT. SHADE INDICATES FACE.	
$\bigcirc$	RECESSED LIGHTING FIXTURE.	
\$	SINGLE POLE SWITCH, (SEE MOUNTING DETAIL)	
\$3	THREE WAY SWITCH. (SEE MOUNTING DETAIL)	
\$d	DIMMER SWITCH EQUAL TO LUTRON NOVA SERIES, SIZED FOR LOAD. (SEE MOUNTING DETAIL)	
\$f d	FLUDRESCENT DIMMER SWITCH EQUAL TO LUTRON NOVA SERIES. (SEE MOUNTING DETAIL) SIZED FOR LOAD SIZED FOR LOAD, PROVIDE POWER PACKS FOR LOAD	
$\oplus$ $\oplus$	DUPLEX CONVENIENCE DUTLET. (SEE MOUNTING DETAIL) CROSSMARK INDICATES 46″ A.F.F.	
$\Rightarrow$	SINGLE CONVENIENCE OUTLET, MOUNTED AS DETAILED. NEMA TYPE AS NOTED OR REQUIRED.	
€wc	ELECTRIC WATER COOLER OUTLET, VERIFY ROUGH-IN	
G,T WP	DUPLEX CONVENIENCE DUTLET, WP-WITH WEATHER PROOF COVER, G-GFI TYPE, L-LOCKABLE COVER. T - TAMPER RESISTANT	
\$	QUAD. CONVENIENCE OUTLET.	
	TELEPH⊡NE, T∨, S□UND, ETC., CABINET, AS N□TED.	
	LIGHTING AND POWER PANELBOARD 120/208 VOLTS.	KEYED PLAN NOTES 🕞
<b>Z</b> 77	MECHANICAL PANELBOARD 277/480 VOLTS.	1. ALL RECEPTACLES TO BE TAMPER RES 2. INTENT IS TO CONNECT THE NEW RTU DEFAULTE DATE DATE DATE DIRECTORY.
$\bigcirc$	JUNCTION BOX, HEIGHT & SIZE AS NOTED OR REQUIRED.	BREAKER; UPDATE PANEL DIRECTORT;
/F/	EXHAUST FAN DUTLET, VERIFY ROUGH-IN	
	SAFETY SWITCH, RATING AS INDICATED.	
V	TELEPHONE/DATA OUTLET (SEE TYPICAL TELE/DATA RISER; SHEET E01	
©	CEILING RECEPTACLE MOUNTED IN CEILING FOR FUTURE CONNECTION; COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.	LUUKDINATIUN NUTES 1. MOUNTING HEIGHTS SHOWN ARE FROM T
M	CEILING MOUNTED INFRARED AND ULTRASONIC OCCUPANCY SENSOR WITH POWER CONTROL STATION LITHONIA LMTO-H-LPCS WITH EQUALS BY HUBBELL, WATT STOPPER, OR NOVITAS	CENTER OF DEVICE UNLESS OTHERWISE NO 2. ELECTRICAL DEVICES SHALL BE ALIGNED FEATURES OF THE BUILDING. DEVICES FOR SWITCHES, RECEPTACLES, FIRE ALARM HORN LOCATED IN THE SAME GENERAL AREA SHAL RESPECTIVE MOUNTING HEIGHTS. THE E.C.
	RICAL DEVICE NOTES	OTHER TRADES TO ENSURE ALIGNMENT OF SHALL BE MOUNTED ON THE SAME SIDE OF PRESENT AN ALIGNED APPFARANCE. ANY F

ID PLACING URDER FUR ELECTRICAL DEVICES; E.C. ID CUNFIRM WITH ARCHITECH AND DWNER UN EXACT DEVICE CULUR & FACE PLATE; ALL CEILING MOUNTED DEVICES TO HAVE DEVICE PLATE THAT MATCH CEILING; ALL OTHERS TO BE PRICED WITH GREY DEVICES AND STAINLESS COVER PLATE; FINAL COLOR & DEVICE SELECTION BY DWNER/ARCHITECT. ALL DEVICES TO BE SPEC INDUSTRIAL GRADE, MATCH EXISTING

![](_page_44_Figure_2.jpeg)

DRAWING SHALL SUPERSEDE THIS GUIDANCE. A FULL HEIGHT AND DEPTH BARRIER PLATE. EQUIPMENT, PRIOR TO ANY INSTALLATION. 5. WHERE COVER PLATES FOR LIGHT SWITCHES OR RECEPTACLES ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH INS. OF RATED WALLS AND PARTITIONS.

SAFETY SWIT										
* FUSE SIZE ACCORDING TO I * * FUSE SIZE AS NOTED ON P NF NON-FUSED										
MARK	POLE	AMPS	VOLTS							
1	2	30	240							
2	3	100	600							
3	3	30	600							
4	3	60	600							
5	5 3		600							

EXTENSION ARE UTILIZED.

![](_page_44_Figure_7.jpeg)

### <u>IN NOTES</u>

SHOWN ARE FROM THE FINISHED FLOOR TO THE ESS OTHERWISE NOTED (SEE DETAIL). S SHALL BE ALIGNED WITH THE ARCHITECTURAL DING. DEVICES FOR VARIOUS SYSTEMS (LIGHT S, FIRE ALARM HORNS, THERMOSTATS, ETC.) GENERAL AREA SHALL BE ALIGNED AT THEIR HEIGHTS. THE E.C. SHALL COORDINATE WITH THE JRE ALIGNMENT OF ALL DEVICES, BACK BOXES THE SAME SIDE OF THE SAME WALL STUD TO PPEARANCE. ANY DIMENSIONING SHOWN ON THE

3. WHERE A MULTIPLE GANG BOX HAS CIRCUITS OF DIFFERENT VOLTAGES OR SYSTEMS WHICH ARE REQUIRED TO BE SEPARATED. THE BOX SHALL BE PROVIDED WITH THE CODE REQUIRED SEPARATION USING

4. MECHANICAL EQUIPMENT WILL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR. THE LOCATION SHOWN ON THE ELECTRICAL PLANS ARE APPROXIMATE. THE E.C. SHALL FULLY COORDINATE WITH THE M.C. TO DETERMINE THE EXACT LOCATION OF EACH PIECE OF

CONFLICT WITH CASEWORK OR MILLWORK, THE MOUNTING HEIGHTS OF THE WIRING DEVICES SHALL BE ADJUSTED SLIGHTLY SO THAT THE COVER PLATES CLEAR THE BACK SPLASH BY 1/4". THE ELECTRICAL CONTRACTOR SHALL THOROUGHLY REVIEW THE CASEWORK DRAWINGS AND

6. FOR ANY WALL OR FLOOR PENETRATIONS, E.C. TO SHALL PROVIDE FIRE PROOFING TO SEAL ALL THE PENETRATIONS AFTER THE CONDUIT AND WIRING HAS BEEN INSTALLED. E.C. TO USE U.L. SYSTEMS PER PENETRATION MADE. REFER TO ARCHITECTURAL SHEETS FOR LOCATIONS

7. ALL ROUGH-INS BOXES TO BE INSTALLED SO THAT NO BOX

![](_page_44_Figure_15.jpeg)

![](_page_44_Figure_16.jpeg)

#### GENERAL NOTES

CONDUIT RACEWAYS SHOWN ARE DIAGRAMMATIC. CONTRACTOR IS RESPONSIBLE FOR PROVIDING APPROPRIATE

- WIRE COUNTS WITHIN RACEWAYS TO MAKE SYSTEM FUNCTION AS SHOWN/INDICATED ON PLANS. CONTRACTOR TO PROVIDE SEPARATE NEUTRALS PER NEC 2017.
- ALL EXITS AND EMERGENCY LIGHTING UNITS SHALL BE CONNECTED TO UNSWITCHED LIGHTING CIRCUITRY IN AREA WHICH IT IS LOCATED. PROVIDE CIRCUITRY FOR COMPLETE INSTALLATION.
- ALL STAND ALONE WALL BOX DIMMERS TO BE LUTRON NOVA SERIES MATCHED TO LOAD TYPE AND CAPACITY CONTROLLING. E.C. TO VERIFY CAPABILITY OF DIMMER WITH LUMINAIRES; SOME FIXTURES MAY BE LINE VOLTAGE AND SOME MAY REQUIRE 0-10V; E.C. TO VERIFY WITH LIGHTING SUPPLIER/CUT SHEETS PRIOR TO PLACING ORDER.
- 5 ALL CABLING ABOVE LAY-IN CEILING TO BE PLENUM RATED. ALL CABLING TO BE IN CONDUIT (3/4" MINIMUM).
- ALL 120V HOMERUNS OVER 75 FEET IN LENGTH TO HAVE UPSIZED (ONE SIZE LARGER) WIRE FOR VOLTAGE 6
- DROP. SEE ARCHITECTURAL SHEETS FOR RATED WALL ASSEMBLIES; E.C. TO PROVIDE PROPER UL APPROVED METHODS
- FOR MAINTAINING FIRE RATINGS. 8. E.C. TO PROVIDE ALL HARDWARE REQUIRED FOR SUPPORT/INSTALLATION OF LUMINAIRES.

EMERGENCY LIGHTING LEGEND LIGHT FIXTURES WITH 'CROSSHAIRS' TO BE PROVIDED WITH EMERGENCY BATTERY BACK-UP, SEE NOTES  $\supset$   $\bigcirc$   $\sim$   $\sim$ FOR SPECIFIC DETAILS. EMERGENCY LIGHTING NOTES EMERGENCY BATTERIES IN DESIGNATED FIXTURES ARE TO BE WIRED SUCH THAT FIXTURES ARE CONTROLLED BY LOCAL SWITCHING AND OPERATE BY BATTERY DURING POWER DUTAGE UNLESS NOTED OTHERWISE. ALL BATTERIES TO HAVE SELF-DIAGNOSTICS. ALL FIXTURES TO BE PROVIDED WITH REMOTE TEST SWITCH AND SELF-DIAGNOSTICS

INDICATING LIGHT IN FIXTURE. BATTERIES SERVING LED LAMPS ARE TO BE CONNECTED TO TWO ARRAYS (IF AVAILABLE) BATTERIES SHALL HA∨E 1100-1400 LUMEN DUTPUT AND BE FACTDRY INSTALLED WITH 5 YEAR WARRANTY; MINIMUM 90 MINUTES DF BATTERY BACKUP PER CODE

### KEYED LIGHTING PLAN NOTES ()

- 1. PROVIDE TWIN LAMP EXTERIOR REMOTE HEAD CONNECTED TO EXIT/EMERGENCY COMBO UNIT; INTENT IS TO MOUNT 12" ABOVE DOOR; COORDINATE WITH EXISTING CONDITIONS. EXTERIOR TWIN LAMP TO BE EQUAL TO LITHONIA AFN SERIES (DARK BRONZE FINISH).
- CONNECT TO WALL PAK CIRCUITRY THRU PE CELL (DUSK TO DAWN OPERATION); CIRCUITRY TO 2. BE 3/4"C - 2#12 + 1#12 E.G.; COORDINATE PE CELL INSTALLATION AND WALL PAK PER ARCHITECTURAL DETAILS.
- 3. FIXTURES WITH CROSSHAIRS TO BE CONNECTED AS NITE LIGHT (UNSWITCHED LIGHTING LEG); PROVIDE ALL LIGHTING CIRCUITRY FOR COMPLETE INSTALLATION. FIXTURES DENOTED WITH "EM" TO BE PROVIDED WITH FACTORY 90 MINUTE BATTERY BALLAST WITH 1800 LUMENS OF OUTPUT. CONNECT TO BATTERY TO UNSWITCHED LIGHTING LEG TO BATTERY.

LOCATED IN ELEC# 147

	MAKE: <u>SQ D</u> RATING: <u>120/</u> TYPE: <u>NQOD</u> MOUNTING: <u>SURF</u>			120/2	208V 3ø 4W	MLOMAIN CIRCUIT BREAKER (FRAME) EQUIPMENT GROUND BUSYESNO							
EX. PANEL-R1A					MOUNTING: SURFACE								
LOAD	VA PER PHASE						СКТ		VA	PER PH	ASE	LOAD	
SERVED	A	В	С	BRK	R NO.	ABC	NO.	BRKR		A B C		SERVED	
REC-CLASSROOM 150	720			20/1	1		2	20/1		720			REC-CLASSROOM 153
REC-CLASSROOM 152		720		20/1	3		4	20/1			720		REC-CLASSROOM 155
REC-CLASSROOM 154			720	20/1	5		6	20/1				720	HAND DRYER 157
REC-CLASSROOM 156	720			20/1	7		8	20/1		720			HAND DRYER 157
REC-MEDIA 160		720		20/1	9		10	20/1			720		HAND DRYER 159
REC-MEDIA 160			720	20/1	11		12	20/1				1200	HAND DRYER 159
REC-MEDIA 160	720			20/1	13		14	20/1		720			REC-TLT 157,159, EWC
REC-MEDIA 160		720		20/1	15		16	20/1			720		REC-CLASSROOM 163
REC-MEDIA 160			720	20/1	17		18	20/1				720	REC-CLASSROOM 165
REC-MEDIA 160	720			20/1	19		20	20/1		720			REC-CORRIDOR 151
REC-MEDIA 160		720		20/1	21		22	20/1			720		REC-MUSIC 145, 146, 147
GYM 101 - GOALS			720	20/1	23		24	20/1				_	SPARE
GYM 101 - GOALS	_			20/1	25			20/1		_			SPARE
GYM 101 BLEACHERS		_		20/1	27						_		SPARE
REC-GYM 101			_	20/1	29		30	20/1				_	SPARE
REC-GYM 101 - EWC				20/1	31	++-	32	30/2					SPARE
REC-GYM 101		_		20/1	33		34	-			-		_
REC-GYM 101 RTU			_	20/1	35		36	30/2					SPARE
SPARE	_			20/1	37	++-	38	-		_			_
SPARE		_		20/1	39	$ \neg \rightarrow \uparrow \land$	40	30/2			_		SPARE
FIRE NAC			-	20/1	41	$ \neg \neg \varphi \lor$	42	-				_	_
REMARKS	4320	4320	4320	SUB-TOTAL "B"		<u>200A</u> BUS	SUB	SUB-TOTAL '		5040	5040	5040	MIN. <u>18,000</u> A.I.C.
* DENOTES RED CIRCUIT BREAKER LOCKING DEVICE				200A LUGS	SUB	B-TOTAL	. <b>"</b> B"	4320 4320 432		4320	SYM. AMPERES		
GFCI – GROUND FAULT INTERRUPTER CIRCUIT BREAKER					<u>200A</u> S/N	GRA	ND TOT	AL	9360	9360	9360	LUGS/PHASE <u>(1) – #2/0</u>	
-					BOTT FEED	AMF	PS / PH	IASE	78	78	78	LUGS/NEUT. <u>(1) - #2/0</u>	

![](_page_45_Figure_18.jpeg)

SEE DRAWINGS AND EMERGENCY LIGHTING LEGEND FOR EM FIXTURES			LUMINAIRE SCHEDULE								
MARK MANUFACTURFR		CATALOG NUMBER		LAMP(S)			BALLAST(S)		FIX	TURE	_
			#	TYPE	WATT.	#	TYPE	WATT.	WATT.	VOLTAGE	
	LITHONIA	IBE-L48-30000-ATC-MD-MVOLT-40K-WGX									
	DAY-BRITE	EQUAL		LED DRIVER							
F	PRESCOLITE	EQUAL	1	0-10V DIMMING	215	1	LED DRIVER	215	215	120/277	PE
				4000° K			0-10V DIMMING				BO
				MINIMUM 85 CRI							JOI
	WAC LTG	FM-15RN-935-28-BN									
	DAY-BRITE	EQUAL		2550 LUMEN							
G	PATHWAYS	EQUAL	1	LED FIXTURE	30	1	LED DRIVER	30	30	120/277	SU
	-	-		3500° К							
	-	-									
	LITHONIA	WPX2 SERIES									
	DAY-BRITE	Y-BRITE EQUAL		6K LUMEN							
W PRESCOLITE	EQUAL	1	LED OUTLET	45	1	LED DRIVER	IVER 45	45	120/277	WA	
				-							12'
				-							SEE
	LITHONIA	ELM4L SERIES									
	DAY-BRITE	EQUAL		9.6 VOLT							WA
A-P	COOPER	EQUAL	2	2 WATT	12	_	_	-	12	120/277	8'-
				LED							
	LITHONIA	QUANTUM SERIES									
	SURE LITES	CCX SERIES		LED							
$\otimes$	McPHILBEN	CXXL SERIES			5				5	120/277	CEI
	-	-	<b>-</b>	LED EXIT							WA
	LITHONIA	QUANTUM COMBINATION EXIT/EMERGENCY									

![](_page_46_Figure_0.jpeg)

![](_page_46_Figure_5.jpeg)

![](_page_46_Figure_6.jpeg)