COMPONENTS & CLADDING WIND PRESSURE (PSF)

MEAN ROOF HEIGHT, "h" (FT)	EFFECTIVE WIND AREA (SQ FT)	ROOF										WALLS			
		ZONE 1'		ZONE 1		ZONE 1/1'	ZONE 2			ZONE 3			ZONE 4		ZONE 5	
		MIDDLE INTERIOR		INTERIOR		OVERHANG	EDGE		OVERHANG	CORNER		OVERHANG	INTERIOR		CORNER	
30.00	≤ 10	-33.2	16.0	-57.9	16.0	-52.3	-76.3	33.2	-70.8	-76.3	33.2	-70.8	-36.0	33.2	-44.3	33.2
	20	-33.2	16.0	-54.0	16.0	-51.4	-71.4	31.8	-64.2	-71.4	31.8	-64.2	-34.5	31.8	-41.4	31.8
	50	-33.2	16.0	-49.0	16.0	-50.2	-64.9	29.8	-55.6	-64.9	29.8	-55.6	-32.6	29.8	-37.5	29.8
	100	-33.2	16.0	-45.2	16.0	-49.2	-60.0	28.3	-49.1	-60.0	28.3	-49.1	-31.1	28.3	-34.5	28.3
	≥ 500	-22.5	16.0	-36.3	16.0	-33.9	-48.6	24.9	-33.9	-48.6	24.9	-33.9	-27.7	24.9	-27.7	24.9

NOTES:

1. MEAN ROOF HEIGHT IS MEASURED ABOVE DATUM FFE, ELEVATION = 100'-0".

2. REFER TO ASCE 7-16 FOR DEFINITION OF TERMS. FOR THE DIMENSIONS OF EACH ZONE, REFERENCE FIGURE 30.4-1 IN ASCE 7-16 AND USE "h" FROM ABOVE TABLE TO DETERMINE 0.6h AND 0.2h.

3. THESE TABLES ARE TO BE USED FOR WIND LOAD CONTRIBUTION TO TOTAL LOAD ACTING ON ANY COMPONENT OR CLADDING MEMBER WHICH IS PART OF A ROOF OR EXTERIOR WALL ASSEMBLY. EXAMPLES OF COMPONENTS AND CLADDING INCLUDE, BUT ARE NOT LIMITED TO ROOF JOISTS, WALL STUDS, ROOF DECK FASTENERS, VENEER TIES, WINDOWS, AND THEIR ATTACHMENTS.

4. FOR EFFECTIVE WIND AREA VALUES LISTED IN THE TABLE ABOVE, PRESSURE VALUES MAY INTERPOLATED; OTHERWISE USE THE VALUE ASSOCIATED WITH THE LOWER EFFECTIVE WIND AREA.

5. POSITIVE PRESSURES (+) ACT TOWARDS THE BUILDING, NEGATIVE PRESSURES (-) ACT AWAY FROM THE BUILDING, POSITIVE AND NEGATIVE PRESSURES DO NOT ACT SIMULTANEOUSLY. PRESSURES ARE APPLIED TO THE SURFACE OF THE COMPONENT OR CLADDING.

6. DESIGN VALUES SHOWN IN THIS TABLE ARE ULTIMATE VALUES FOR USE WITH LRFD DESIGN. VALUES MAY BE MULTIPLIED BY 0.6 FOR USE WITH SERVICE LEVEL OR ASD DESIGN. REFER TO THE BUILDING CODE FOR APPLICABLE LOAD COMBINATIONS.

Structural Loads:

A. ROOF LIVE LOADS PER BCNYS 1607.13
MINIMUM ROOF LIVE LOAD — 20 PSF

B. RAIN LOADS PER BCNYS 1611
RAIN INTENSITY, i — 2.86 IN/HR

RAIN SURCHARGE LOAD HAS BEEN APPLIED TO AREAS WHERE PONDING OCCURS IN ACCORDANCE WITH BCNYS 1611.1.

C. SNOW LOADS PER BCNYS 1608
GROUND SNOW, P_g (FIGURE 1608.2) — 40 PSF
FLAT ROOF SNOW LOAD, P_f (ASCE 7) — 30.8 PSF
SNOW EXPOSURE FACTOR, C_e — 1.0
THERMAL FACTOR, C_t — 1.0
SLOPE FACTOR, C — 1.0
SNOW LOAD IMPORTANCE FACTOR, I_S — 1.1
DRIFT SURCHARGE, P_d
DRIFT A — 56.3 PSF
DRIFT B — 87.3 PSF

DRIFT WIDTH, w
DRIFT A — 11.74 FT
DRIFT B — 18.19 FT

ADDITIONAL SNOW LOADS HAVE BEEN APPLIED TO AREAS WHERE DRIFTING OCCURS IN ACCORDANCE WITH BCNYS 1608.

D. WIND LOAD DESIGN CRITERIA PER BCNYS 1609
BASIC DESIGN WIND SPEED (3 SECOND GUST), V — 120 MPH
ALLOWABLE STRESS DESIGN WIND SPEED, V_{asd} — 93 MPH
RISK CATEGORY — III
EXPOSURE CATEGORY — C
INTERNAL PRESSURE COEFFICIENT, GCPi — +/- 0.18

E. SEISMIC DESIGN CRITERIA PER BCNYS 1613
RISK CATEGORY — III
SEISMIC IMPORTANCE FACTOR, I_e — 1.25
MAPPED SPECTRAL RESPONSE ACCELERATION
AT SHORT PERIODS, S_S — 20.2 %g
AT 1 SECOND PERIODS, S_1 — 5.40 %g
SITE CLASS — D (ASSUMED)
DESIGN SPECTRAL RESPONSE ACCELERATION
AT SHORT PERIODS, S_{DS} — 21.5 %g
AT 1 SECOND PERIODS, S_{D1} — 8.7 %g
SEISMIC DESIGN CATEGORY — B

G. SPECIAL LOADS PER BCNYS 1603.1.8
MECHANICAL EQUIPMENT DEAD LOADS
RTU-A-1 — 5200 LB
RTU-A-2 — 5200 LB
RTU-A-3 — 2200 LB
RTU-A-4 — 5200 LB
RTU-A-5 — 1218 LB
ERV-A-1 — 972LB

General Notes:

A. DIMENSIONS AND ELEVATIONS SHOWN ON PLAN AS PLUS/MINUS (+/-) AND VIF ARE TO BE CONSIDERED APPROXIMATE. EXACT VALUES FOR ALL (+/-) AND VIF DIMENSIONS ARE TO BE DETERMINED BY THE CONTRACTOR IN THE FIELD THROUGH A PRELIMINARY BUILDING LAYOUT. CONTRACTOR TO VERIFY EXISTING DIMENSIONS, ELEVATIONS AND CONDITIONS AND NOTIFY A/E OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK. COORDINATE INFORMATION WITH OTHER TRADES.

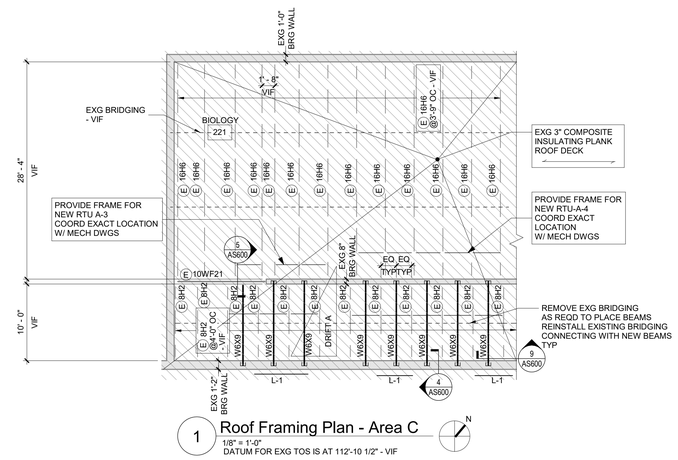
B. REFER TO SHEET AS130 FOR BEAM CONNECTION SCHEDULE.

C. PROVIDE ALL ROOF OPENING FRAMES PER DIV 05 SPEC. COORDINATE QUANTITIES, LOCATION, AND SIZE OF OPENINGS WITH OTHERS AND MECH, PLBG, AND ARCH DWGS.

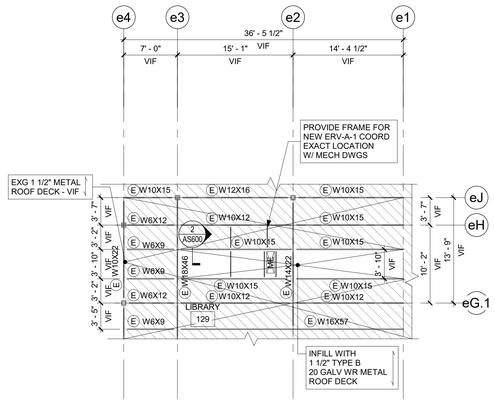
D. ROOF DECK TO BE GALVANIZED 1 1/2" WIDE RIBBED 20 GAUGE CORRUGATED STEEL UNLESS OTHERWISE NOTED

E. ALL BEAM/JOIST ARE SPACED EQUALLY BETWEEN EXISTING FRAMING UNO.

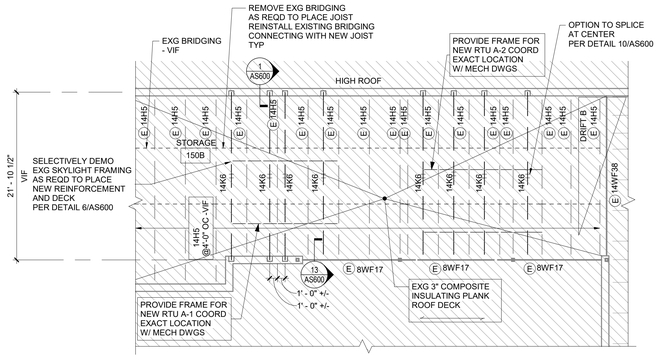
F. CONTRACTOR TO COORDINATE STRUCTURAL WORK WITH OTHER TRADES PER SPEC 01 12 00.



1 Roof Framing Plan - Area C
1/8" = 1'-0"
DATUM FOR EXG TOS IS AT 112'-10 1/2" - VIF



3 Roof Framing Plan - Area D
1/8" = 1'-0"
DATUM FOR EXG TOS IS AT 112'-1 3/4" - VIF



2 Second Floor Framing Plan
1/8" = 1'-0"
DATUM FOR EXG TOS IS AT 112'-10 1/2" - VIF

S.E.D. Control No. 62-18-01-06-0-007-019

Rev. No.:	Date:	Description:
1	Date 1	Revision 1

WALLKILL CENTRAL SCHOOL DISTRICT

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH ARCHITECTS & ENGINEERS

Wallkill Central School District
Wallkill, New York

Reconstruction to:
Wallkill Senior High School

Partial Roof Framing Plan - Areas B, D
Notes and Schedules

Drawn By:	Date:	Drawing Number:
NDC / vmm	06/30/2023	AS130

Project No.: 17597-22002