

RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT) CITY OF RATON, NEW MEXICO COLFAX COUNTY

SEPTEMBER 2021

construction plans for the

HANGAR

NMDOT: RTM-18-02

City of Raton
224 Savage Avenue
Raton, NM 87747

CIVIL ENGINEERS

Molzen Corbin
Kent Freier, PE

STRUCTURAL ENGINEERS

ABQ Engineering

ARCHITECTS

Molzen Corbin
John Quinn Pate, RLA/RA

MECHANICAL ENGINEERS

Molzen Corbin
Paul Romero, PE

ELECTRICAL ENGINEERS

Molzen Corbin
Daniel Gonzales, PE



INDEX OF DRAWINGS

SEQUENCE	SHEET	DESCRIPTION			
1	G-001	COVER SHEET	12	A-100	CODE EVALUATION, EGRESS, & LIFE SAFETY DETAILS
2	G-101	AIRPORT LAYOUT PLAN	13	A-101	FLOOR PLAN
3	G-102	CONSTRUCTION PHASING/SAFETY PLAN	14	A-102	REFLECTIVE CEILING AND ROOF PLANS
			15	A-201	BUILDING ELEVATIONS
			16	A-301	BUILDING SECTIONS AND WALL SECTIONS
4	C-101	GRADING AND DRAINAGE PLAN			
5	C-102	DRAINAGE SYNOPSIS	17	P-101	PLUMBING PLAN
6	C-501	MISCELLANEOUS DETAILS	18	P-601	PLUMBING SCHEDULES
7	S-001	GENERAL NOTES	19	M-101	HVAC PLAN
8	S-002	GENERAL NOTES	20	M-601	HVAC SCHEDULES
9	S-003	GENERAL NOTES			
10	S-101	FOUNDATION PLAN	21	E-100	ELECTRICAL SITE PLAN
11	S-301	FOUNDATION DETAILS	22	E-101	ELECTRICAL BUILDING PLAN
			23	E-601	ONE-LINE DIAGRAM AND ELECTRICAL

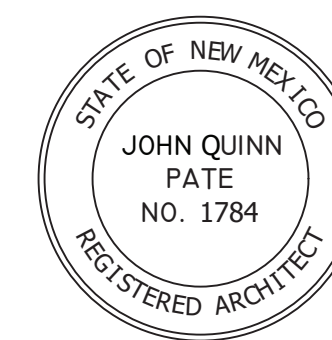
BID CLARIFICATION

BASE BID: INCLUDE ALL ELEMENTS OF DEMOLITION AND CONSTRUCTION SHOWN FOR THE COMPLETE AND OPERATIONAL CONSTRUCTION OF THIS PROJECT EXCEPT ITEMS INDICATED TO BE ADDITIVE ALTERNATES. ADDITIVE ALTERNATES ARE ENUMERATED BELOW AND INDICATED ON THE DRAWINGS.

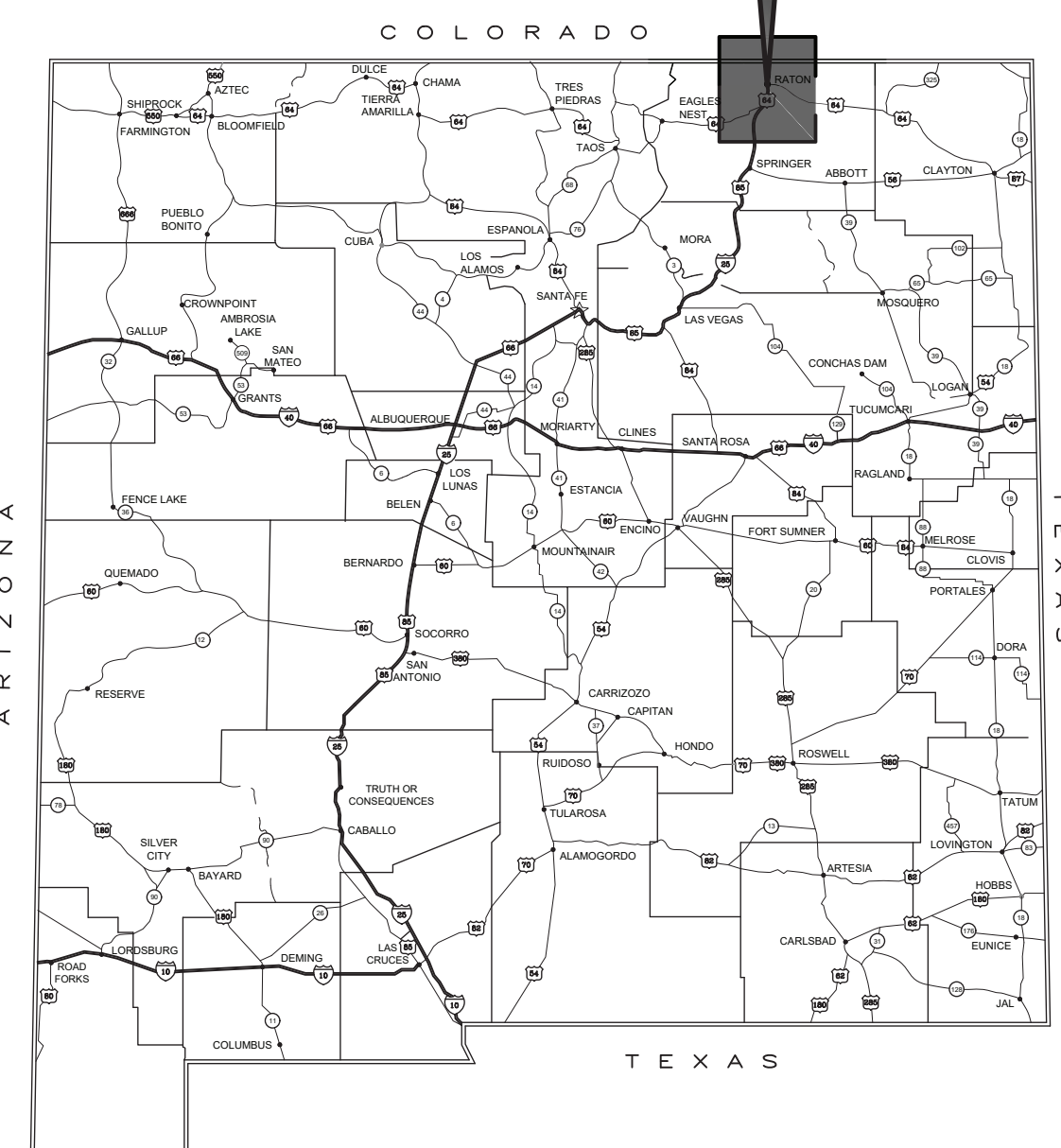
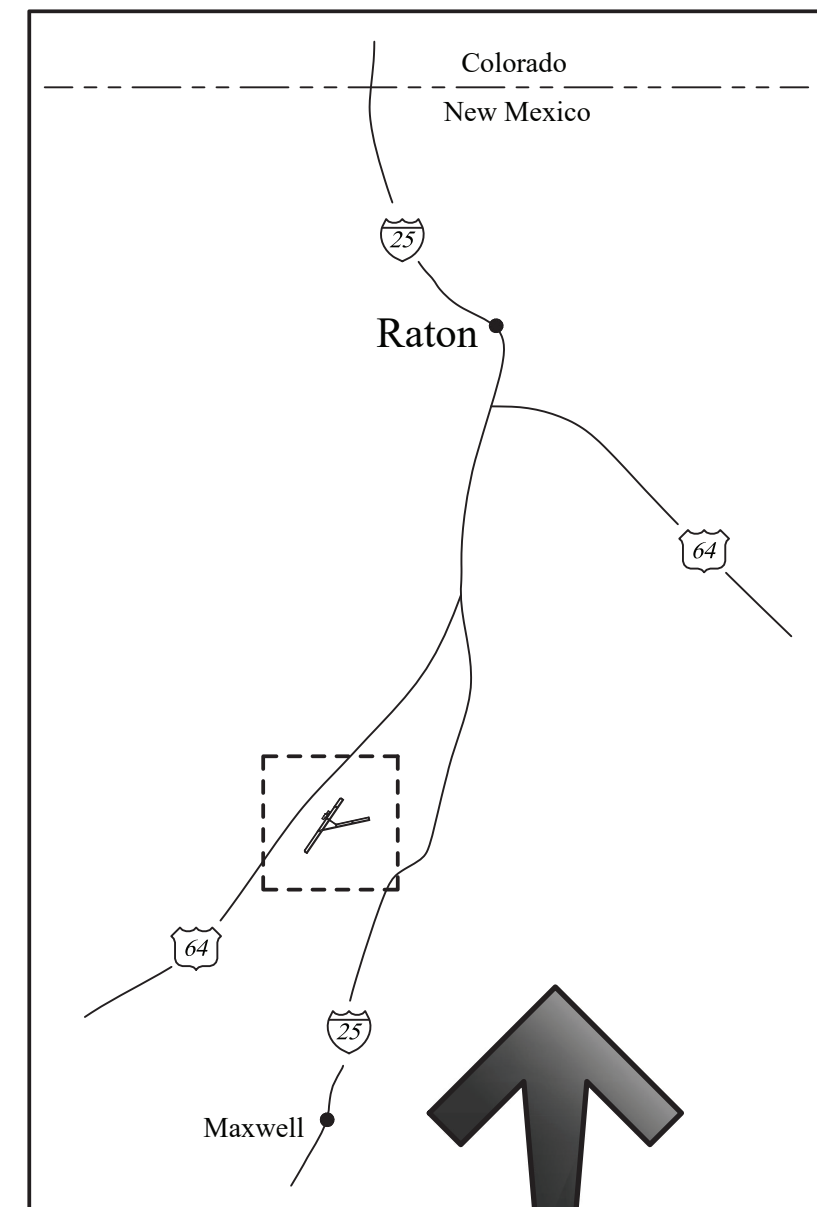
ADD ALT #1:
A. ENLARGE BUILDING GRIDLINE DIMENSIONS 1 TO 4 = 68'-0" AND A TO D = 58'-0".

CERTIFICATION:

I, JOHN QUINN PATE, REGISTERED PROFESSIONAL ARCHITECT NO. 1784 HEREBY CERTIFY THAT THE FOLLOWING PLANS AND DESIGNS WERE MADE UNDER MY SUPERVISION AND DIRECTION AND THAT SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF



[Signature]
JOHN QUINN PATE
9/10/21
NO. 1784



VICINITY MAP

DESCRIPTION	REV DATE	REV NO	
			NUMERIC SCALE CONFIRMATION
			DRAWINGS ARE DEPICTED AT INTENDED NUMERIC SCALES IF THIS BAR EQUALS ONE INCH

THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR THE CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.

ALL IDEAS, DESIGNS, ARRANGEMENTS, AND PLANS INDICATED OR REPRESENTED BY THIS INSTRUMENT ARE OWNED BY AND THE PROPERTY OF MOLZEN-CORBIN & ASSOCIATES, AND WERE CREATED AND DEVELOPED FOR USE ON AND IN CONNECTION WITH THE SPECIFIED PROJECT. THESE IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL NOT BE USED BY ANY PERSON, FIRM, OR CORPORATION FOR ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN CONSENT OF MOLZEN-CORBIN & ASSOCIATES.

THESE DRAWINGS REFLECT INFORMATION ON UTILITIES GATHERED BY SITE INSPECTION, DISCUSSIONS WITH MUNICIPAL OFFICIALS, AND PREVIOUS CONSTRUCTION DOCUMENTS. IT IS POSSIBLE THAT THE EXACT LOCATION OF LINES AND UTILITY CONNECTION POINTS IN THE VICINITY OF REQUIRED WORK MAY BE DIFFERENT FROM THE LOCATION SHOWN ON THESE DRAWINGS. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.



MOLZENCORBIN

ENGINEERS | ARCHITECTS | PLANNERS

2701 Miles Road SE, Albuquerque, New Mexico 87106 505 242 5700 office Molzencorbin.com

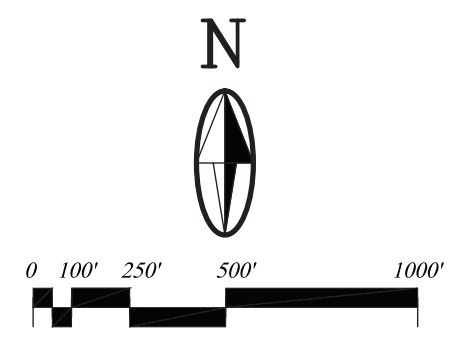
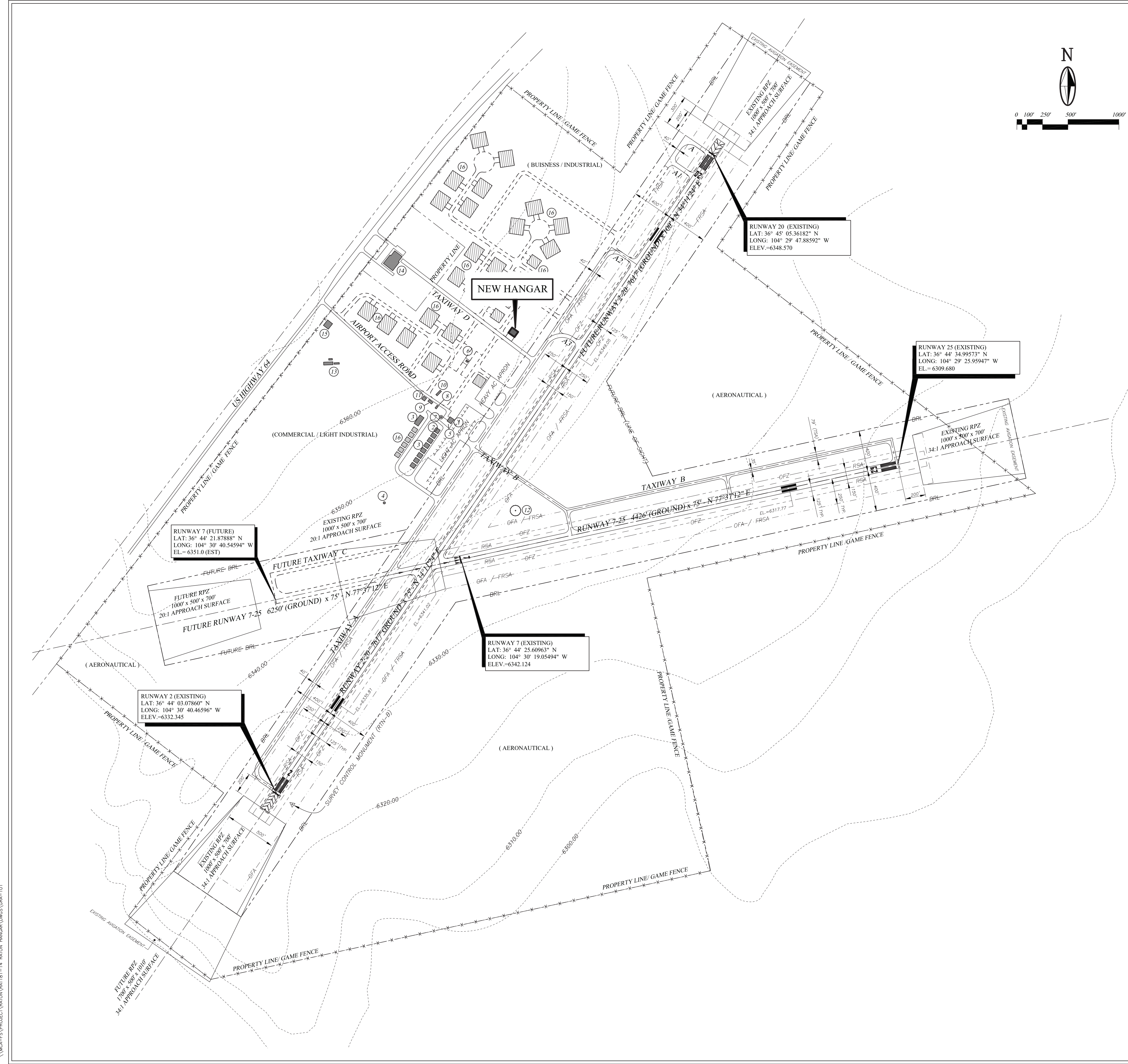


Molzen Corbin Project Number: RAT181-14

G-001

Sheet

DATE: 8/10/2021 1:05 PM
 DATE: 8/10/2021 1:05 PM
 \\INDA-FS\PROJECTS\RATON\B118-14-RATON-HANGAR\DWG\GHA-101



AIRPORT DATA			
RATON MUNICIPAL AIRPORT / CREWS FIELD AIRPORT (RTN)			
CITY: RATON (10 MILES SW)	COUNTY: COLFAX, NEW MEXICO		
RANGE: 23 E TOWNSHIP: 30 NORTH (PROJECTED)	FAA SITE NUMBER: 14709 * A		
BEAUBIEN AND MIRANDA GRANT (MAXWELL)	EXISTING	ULTIMATE	
AIRPORT REFERENCE CODE	B-II	C-II	
AIRPORT REFERENCE POINT (ARP) COORDINATES (NAD 83)	LAT 36° 44' 29.52260"	36° 44' 31.86681"	
	LONG 104° 30' 07.71016"	104° 30' 09.03138"	
AIRPORT ELEVATION (FEET M.S.L.)	6352	6354 (est)	
MEAN MAX. TEMPERATURE	84.0° F	SAME	
AIRPORT NAVIGATIONAL AIDS	NDB, VOR, GPS	SAME	
TAXIWAY LIGHTING	REFLECTIVE	REFLECTIVE	
MISCELLANEOUS	ASOS	SAME	

RUNWAY DATA	RUNWAY 2-20		RUNWAY 7-25	
	EXISTING	FUTURE	EXISTING	FUTURE
AIRCRAFT APPROACH CATEGORY	B-II	C-II	B-II	B-II
RUNWAY AZIMUTH	34.180	214.18	77.61	257.61
RUNWAY BEARING	N 34°11'24" E	N 34°11'24" E	N 77°37'12" E	N 77°37'12" E
RUNWAY DIMENSIONS	7,617 x 75'	7,617 x 100'	4,426 x 75'	6,250 x 75'
RUNWAY APPROACH SURFACES	34:1 / 34:1	34:1 / 34:1	20:1 / 34:1	20:1 / 34:1
PART 77 APPROACH CATEGORY	C / B	C / C	B / C	B / C
RUNWAY THRESHOLD DISPLACEMENT	0' / 0'	0' / 0'	0' / 0'	0' / 0'
RUNWAY STOPWAY	0'	0'	0'	0'
RUNWAY SAFETY AREA	6931' x 150'	6931' x 500'	5026' x 150'	6850' x 150'
RUNWAY OBSTACLE FREE ZONE	8031' x 250'	8031' x 250'	4826' x 250'	6650' x 250'
PAVEMENT MATERIAL	ASPHALT	ASPHALT	ASPHALT	ASPHALT
PAVEMENT STRENGTH	82000(D)63000(S)	82000(D)63000(S)	16500(S)	30000(D)20000(S)
PCN NUMBER	25/F/D/X/T	SAME	6/F/D/X/T	SAME
RUNWAY EFFECTIVE GRADIENT	0.32%	0.28%	0.75%	0.66%
TOUCHDOWN ZONE ELEVATION	6335.81 / 6349.05	6335.81 / 6349.05	6342.14 / 6317.77	6344.40 / 6317.77
MARKINGS	NP / VISUAL	NP / NP	VISUAL / NP	VISUAL / NP
LIGHTING	MIRL	MIRL	MIRL	MIRL
APPROACH LIGHTS	NONE	NONE	NONE	NONE
RUNWAY VISUAL AIDS	NONE	PLAS (2)	NONE	NONE

- NOTES**
- ALL COORDINATES, ELEVATIONS, INCLUDING LAT AND LONG ARE (NAD83/NAVD88) NM STATE PLANE, EAST ZONE AND DISTANCES ARE GROUND MEASURED
 - BUILDING / FACILITY ELEVATIONS FROM AIRPORT ALP - 01/2002 BY OTHERS

LEGEND		DESCRIPTION
---	---	AIRPORT FENCING
---	---	PROPERTY LINE
---	---	BUILDING FACILITIES
---	---	RUNWAY/TAXIWAY
---	---	BUILDING RESTRICTION LINE
---	---	OBJECT FREE ZONE
---	---	OBJECT FREE AREA
---	---	RUNWAY SAFETY AREA
---	---	TOPOGRAPHY CONTOUR
---	---	SEGMENTED CIRCLE
---	---	AIRPORT REFERENCE POINT
---	---	RUNWAY THRESHOLD LIGHTS

BUILDINGS/FACILITIES			
EXISTING	ULTIMATE	DESCRIPTION	ELEVATION
1		ADMINISTRATION BUILDING (TERMINAL)	6369.91
2		AIRFIELD MAINTENANCE BUILDING	6377.39
3		HANGARS	6378.04
4		AWOS	6387.19
5		RADIO ANTENNA	6385.01
6		FUEL FARM	6380.43
7		ROTATING BEACON	6419.88
8		ELECTRICAL VAULT BUILDING	6380.06
9		AIRFIELD MAINTENANCE BUILDING	6369.87
10		RESIDENCE	
11		FIRE SUB-STATION	6381.58
12		SEGMENTED CIRCLE / WINDCONE	
13		TRAP CLUB BUILDING	
14		NATIONAL GUARD BUILDING	
15		EQUIPMENT STORAGE BUILDING	
	16	HANGARS	

MOLZENCORBIN

2701 Miles Road SE
 Albuquerque, New Mexico 87106
 505 242 5700 office
 505 242 0673 fax
 MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
 THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
 DRAWINGS ARE DEPICTED AT INTENDED NUMERIC SCALES
 IF THIS BAR EQUALS ONE INCH



REV. NO.	REV. DATE	DESCRIPTION

PROJECT NUMBER: RAT181-14
 DESIGNED BY: KSF
 DRAWN BY: KSF
 CHECKED BY: KSF
 PRIME DESIGN PROFESSIONAL: JOHN QUINN PAPE
 PROJECT DATE: SEPTEMBER 2021

AIRPORT LAYOUT PLAN
HANGAR
RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)
CITY OF RATON, NEW MEXICO

G-101
 SHEET

PROJECT DESCRIPTION & SITE LOCATION:

THE RATON HANGAR PROJECT CONSISTS OF ONE HANGAR BUILDING AND AN ASPHALT PAVED PAD. THE SIZE OF THE PROJECT SITE IS APPROXIMATELY 0.19 ACRES. THE SITE IS LOCATED AT THE RATON MUNICIPAL AIRPORT. THE SITE PAVING IS AN ESTIMATED 50 FOOT PAD, AND A HANGAR SLAB OF 62.5 FEET BY 74 FEET. ALL CONSTRUCTION SHALL REMAIN WITHIN THE SITE. THE PROJECT AREA IS GENTLY SLOPING AND UNDISTURBED. OFFSITE FLOWS FROM THE WEST ARE CUT OFF FROM US HWY 64 AND FROM THE SOUTH BY TAXILANE D. THE FACILITY IS BEING BUILT ON LAND BELONGING TO THE RATON MUNICIPAL AIRPORT.

HYDROLOGIC CRITERIA:

HYDROLOGIC CRITERIA FOR THIS DRAINAGE REPORT WERE DETERMINED USING THE NRCS TR-55 RUNOFF METHOD AND THE METHODOLOGY DEVELOPED FOR USING HEC-HMS IN ALBUQUERQUE. HYDROLOGIC CALCULATIONS WERE BASED ON THE 100-YR, 24-HR STORM AND PRECIPITATION DATA COLLECTED FROM THE NOAA ATLAS 14 SPECIFIC TO THE PROJECT LOCATION. SOIL INFORMATION FOR THE SITE WAS OBTAINED USING THE NRCS WEB SOIL SURVEY.

EXISTING CONDITIONS:

THE EXISTING SITE IS UNDEVELOPED AND ADJACENT TO AN EXISTING TAXILANE, THE TERRAIN FALLS GENERALLY FROM WEST TO EAST AT A 1% SLOPE. THE EXISTING PROJECT SITE IS CLASSIFIED AS HERBACEOUS GRASSLAND IN A SEMIARID CLIMATE. THE NATURAL GRADE OF THE SITE IS FAIRLY FLAT. TAXILANE D BLOCKS OFFSITE RUNOFF FROM THE SOUTHWEST, AND OFFSITE RUNOFF TO THE SITE FLOWS FROM AN AREA ALONG TAXILANE D FROM THE OLD NATIONAL GUARD ARMORY TO THE PROPOSED HANGAR SITE. THE NRCS WEB SOIL SURVEY IDENTIFIES ONE SOIL FOR THE SITE, A SWASTIKA ASSOCIATION, GENTLY SLOPING. THIS SOIL HAS A HYDROLOGIC RATING OF C, WHICH CORRELATES TO A CURVE NUMBER OF 81. MANNINGS EQUATION FOR SHEET FLOW AND SHALLOW CONCENTRATED FLOW WERE USED FOR ESTIMATING LAG TIME OF THE ONSITE RUNOFF. THIS INFORMATION WAS INPUTTED INTO THE HEC-HMS HYDROLOGIC MODELING PROGRAM TO COMPUTE THE EXISTING RUNOFF CONDITIONS.

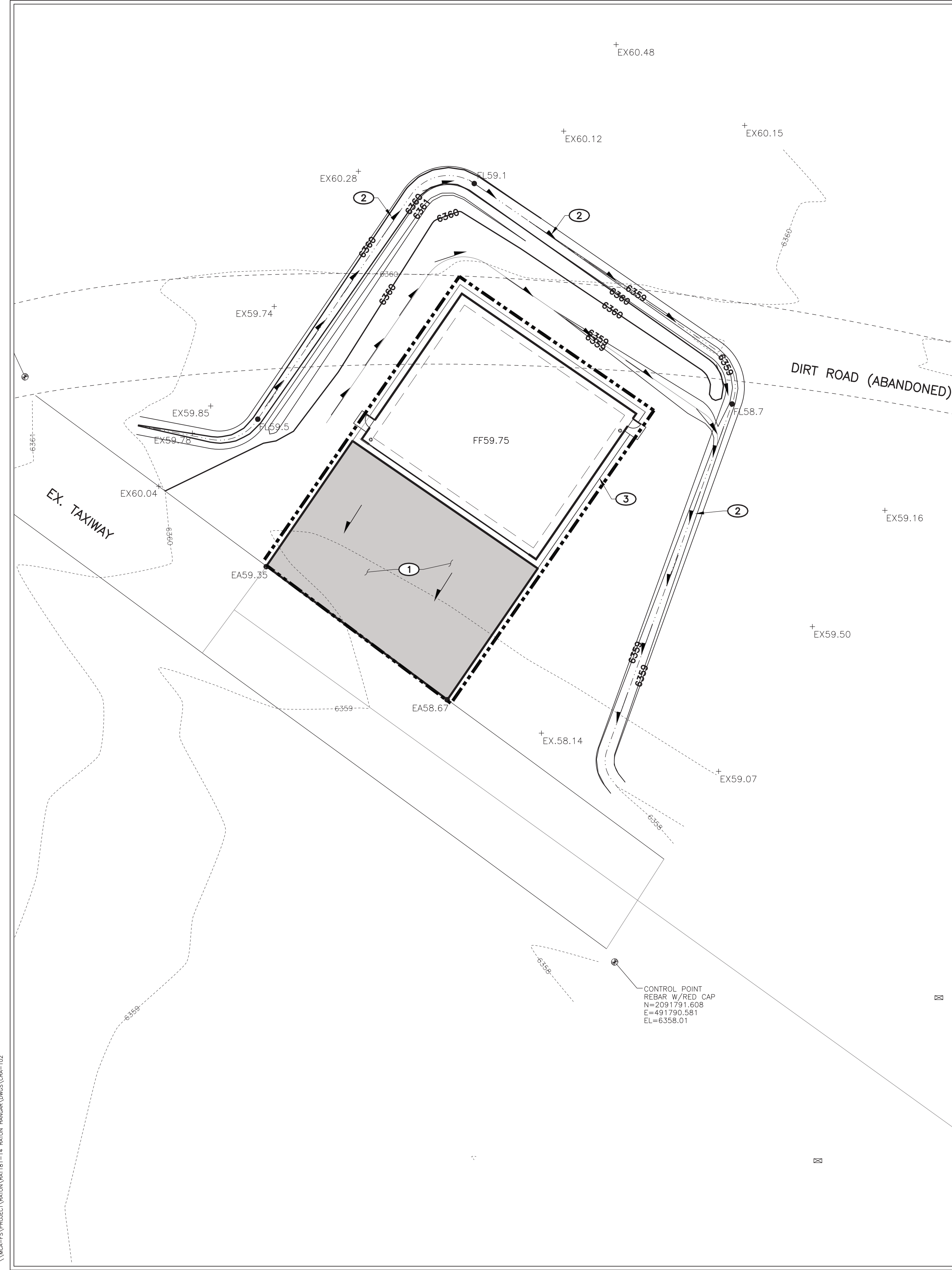
THE SITE GENERATES 0.85 CFS OF RUNOFF AND A VOLUME OF 0.0425 AC.-FT. (1850.4 CU.-FT.) IN THE 100-YR, 24-HR STORM. THE OFFSITE AREA OF 115,065 SQ. FT. PRODUCES 5.61 CFS OF RUNOFF AND A VOLUME OF 0.6567 AC. FT. (28,603.7 CU.-FT.) IN THE 100-YR, 24-HR STORM.

DEVELOPED CONDITIONS:

ALL ADDITIONAL RUNOFF GENERATED BY THIS PROJECT IN THE 100-YR, 24-HR STORM WILL BE DIRECTED TO A 6 FOOT SWALE AROUND THE HANGAR. THE NEW DEVELOPMENT WILL INCLUDE THE CONSTRUCTION OF AN ASPHALT PAD, AND A HANGAR BUILDING. A DRAINAGE SWALE WILL BE CONSTRUCTED ON NORTH, EAST, AND WEST SIDES OF THE BUILDING SITE TO CONTAIN OFFSITE FLOWS AND DRAIN BUILDING SITE, THE BUILDING SITE WILL DRAIN ALL ITS RUNOFF TO THE NEW SWALE OR AWAY FROM THE PROJECT BUILDING TO THE NORTHEAST.

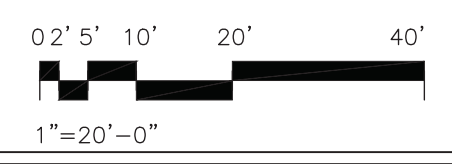
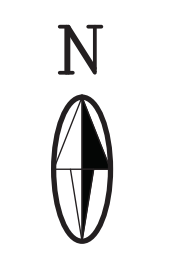
THE DEVELOPED SITE WILL GENERATE 1.29 CFS IN THE 100-YR, 24-HR STORM, MAKING THE ADDITIONAL RUNOFF GENERATED BY THIS PROJECT 0.44 CFS. THE DEVELOPED SITE WILL PRODUCE 0.0642 AC.-FT FROM THE 100-YR, 24-HR STORM, MAKING THE ADDITIONAL VOLUME PRODUCED BY THIS PROJECT 0.0217 AC.-FT OR 944 CU. FT. THIS DRAINAGE PLAN IS ONLY VALID IF CURRENT AND NEW DRAINAGE STRUCTURES ARE MAINTAINED.

SITE HYDROLOGY					
AREA	AREA (ACRES)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (ACRE-FT)	100YR,24HR VOL. (CU. FT.)	RETAINED RUNOFF (ACRE-FT)
EXISTING CONDITIONS	0.19	0.85	0.0425	1850.4	0.000
DEVELOPED CONDITIONS	0.19	1.29	0.0642	2795.2	0.022
OFFSITE AREA	2.64	5.61	0.6567	28603.7	0.000



LEGEND

- 6320--- EX. INDEX CONTOUR
- 6321--- EX. INTERMEDIATE CONTOUR
- FL58.7 FLOWLINE ELEVATION
- EA59.35 EDGE OF ASPHALT ELEVATION
- + EX59.50 EXISTING GRADE ELEVATION
- 4" ASPHALT
- DIRECTION OF FLOW
- - - - - DRAINAGE BASIN BOUNDARY



KEYED NOTES

- ① 4" ASPHALT SEE DETAIL SHEET C-501
- ② GRADED SWALE SEE DETAIL SHEET C-501
- ③ HANGAR SEE ARCHITECTURAL SHEETS

CAUTION:
NOTE THAT ALL EXISTING UTILITIES MAY NOT BE SHOWN. EXISTING SERVICE CONNECTIONS ARE NOT SHOWN. ANY EXISTING UTILITIES THAT ARE SHOWN ARE SHOWN IN APPROXIMATE LOCATION ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL THE UTILITY OWNERS AND TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS.

MOLZENCORBIN

2701 Miles Road SE
Albuquerque, New Mexico 87106
505 242 5700 office
505 242 0673 fax
MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION

DRAWINGS ARE DEPICTED AT INTENDED NUMERIC SCALES
IF THIS BAR EQUALS ONE INCH



REV. NO.	REV. DATE	DESCRIPTION	PROJECT NUMBER:	RAT181-14	RD	SKM	PRIME DESIGN PROFESSIONAL:	PROJECT DATE:
							JOHN QUINN PAPE	SEPTEMBER 2021

DRAINAGE SYNOPSIS

HANGAR
RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)
CITY OF RATON, NEW MEXICO

C-102

SHEET

PLANT DATE: 8/9/2021 4:58 PM
SAVE DATE: 8/9/2021 4:58 PM
\\VIA-FS\PROJECT\RATON\B181-14_RATON_HANGAR\DWG\DRW-102

GENERAL CRITERIA

- DESIGN LOADS SHALL BE CONFIGURED USING INTERNATIONAL BUILDING CODE (IBC) 2015 EDITION, AND ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES.
 - SNOW LOAD DESIGN DATA**

GROUND SNOW LOAD	30 psf
SNOW EXPOSURE FACTOR (Ce)	1.0
SNOW IMPORTANCE FACTOR (Is)	1.1
THERMAL FACTOR (Ct)	1.0
 - WIND LOAD DATA**

BASIC WIND SPEED, V_{ult}	115 MPH 3sec-gust
WIND IMPORTANCE FACTOR	1.15
WIND EXPOSURE	C
BUILDING CLASSIFICATION	II
TOPOGRAPHIC FACTOR, K_{zt}	1.0
WIND DESIGN PRESSURE, p	21.77 psf Pressure, -29.03 psf Suction
 - EARTHQUAKE DESIGN DATA**

RISK CATEGORY	II
IMPORTANCE FACTOR (Ie)	1.0
S_s	0.198g
S_1	0.065g
SITE CLASS	D
SD_s	0.172g
SD_1	0.065g
SEISMIC DESIGN CATEGORY	B
SEISMIC FORCE-RESISTING SYSTEM	C4
SEISMIC COEFFICIENT, C_S	0.0986
SEISMIC COEFFICIENT, R	3.25
- CAST-IN-PLACE CONCRETE:
 - $F'_c = 4000\text{psi @ 28 DAYS (AIR ENTRAINED)}$ - ALL EXTERIOR BUILDING
 - $F'_c = 3000\text{psi @ 28 DAYS (NONE AIR ENTRAINED)}$ - ALL BUILDING
- REINFORCING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615 OR A706, GRADE 60.
- UNLESS NOTED OTHERWISE, LAP SPLICED OR EMBEDMENT LENGTHS SHALL CONFORM TO TABLE A, CLASS B SPLICE. SEE THIS SHEET, TABLE A.
- UNLESS NOTED OTHERWISE, CONCRETE COVER OVER STEEL REINFORCEMENT SHALL CONFORM TO THE MINIMUMS REQUIRED BY CURRENT ADDITION OF ACI 318.
- REINFORCEMENT DETAILING AND PLACEMENT SHALL CONFORM TO ACI 318 AND ACI 315, EXCEPT WHERE OTHERWISE INDICATED.
- COVER: UNLESS OTHERWISE NOTED OR DETAILED, THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT

EXPOSURE		MINIMUM COVER (IN.)
A.	CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3
B.	CONCRETE EXPOSED TO EARTH OR WEATHER:	
	#6 - #18 BARS	2
	#5 - AND SMALLER	1 1/2
C.	CONCRETE NOT EXPOSED TO WEATHER OR NOT IN CONTACT WITH GROUND:	
	SLABS, WALLS, JOISTS:	
	#11 AND SMALLER	3/4
	BEAMS, COLUMNS:	
	TIES, STIRRUPS, PRIMARY REINFORCEMENT	1 1/2

FOUNDATION NOTES

- FOR COMPACTED FILL SOIL AND EXCAVATION REQUIREMENTS, SEE GEO-TECHNICAL REPORT BY GEO-TEST JOB# 1-10512 DATED 6/29/21 AND ALSO SEE 2015 IBC. AN ALLOWABLE BEARING PRESSURE OF 3,000 PSF HAS BEEN USED FOR FOOTING DESIGN. THIS BEARING PRESSURE APPLIES TO FULL DEAD LOAD PLUS LIVE LOADS AND INCREASED BY ONE-THIRD FOR WIND AND SEISMIC FORCES. CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW THE GEO-TECHNICAL REPORT AND SHALL FOLLOW THE RECOMMENDATIONS SPECIFIED THEREIN.
- REINFORCEMENT SHALL BE PLACED MID-DEPTH OF SLAB, U.N.O. CHAMFER EXPOSED EDGES OF CONCRETE 3/4", AT EXPOSED EDGES UNLESS OTHERWISE NOTED.
- REINFORCEMENT SHALL BE PLACED MID-DEPTH OF SLAB, U.N.O.
- CHAMFER EXPOSED EDGES OF CONCRETE 3/4", AT EXPOSED EDGES UNLESS OTHERWISE NOTED.
- SUB-GRADE PREPARATION:
 - EXISTING FOUNDATIONS AND UTILITIES AT ANY POINT BENEATH OR WITHIN 3'-0" OF THE NEW STRUCTURES SHALL BE REMOVED ENTIRELY. ANY FILL MATERIAL FROM PREVIOUS CONSTRUCTION ACTIVITIES WHICH IS ENCOUNTERED WITHIN THE BUILDING FOOTPRINT SHOULD ALSO BE REMOVED ENTIRELY. EXPOSED SUB-GRADE AT THE BASE OF REQUIRED EXCAVATION WHICH IS TO RECEIVE FILL SHALL BE COMPACTED TO NOT LESS THAN 90% MAXIMUM LAB DENSITY FOR COHESIVE MATERIAL, AND 95% MAXIMUM LAB DENSITY FOR COHESION-LESS MATERIAL, TO A MINIMUM DEPTH OF 8".
 - ALL FILL PLACED UNDER BUILDING SLABS SHALL BE NON-EXPANSIVE AND SHALL BE COMPACTED TO NOT LESS THAN 95% MAXIMUM DENSITY ACCORDING TO ASTM D-1557. SEE GEO-TECHNICAL REPORT FOR COMPLETE INFORMATION.

STRUCTURAL STEEL

- ALL STRUCTURAL STEEL MEMBERS SUCH AS COLUMNS, BEAMS, GIRTS AND BRACES SHALL BE PER SCHEDULE OF CONSTRUCTION MATERIALS THIS SHEET. MISCELLANEOUS STEEL ITEMS SHALL BE ASTM A36. MISCELLANEOUS STEEL TUBES SHALL BE ASTM A500, GRADE B.
- ALL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS CODE.
- ALL BOLTS FOR BEAM CONNECTIONS SHALL BE ASTM A325 WITH A MINIMUM DIAMETER OF 3/4", UNLESS NOTED OTHERWISE. ALL BOLTED CONNECTIONS SHALL BE BEARING TYPE CONNECTIONS. WASHERS SHALL BE INSTALLED UNDER NUTS OF FASTENERS WHEN REQUIRED BY THE SPECIFICATION FOR JOINTS.
- ALL FIELD WELDS SHALL BE INSPECTED PER SHEET S-002.
- STEEL BEAMS SHALL BE CONCENTRIC WITH COLUMNS, UNLESS OTHERWISE NOTED.
- ALL ANCHOR BOLTS SHALL BE ASTM F1554 GRADE 36, UNLESS NOTED OTHERWISE.
- NO OPENINGS SHALL BE CUT IN STRUCTURAL MEMBERS UNLESS SHOWN ON THE DRAWINGS.
- BUILDING STEEL ROOF BEAMS AND SUPPORT POST ARE NON-SELF-SUPPORTING. THE ROOF METAL DECK, VERTICAL STEEL BRACING AND MASONRY WALLS ARE REQUIRED TO PROVIDE LATERAL STABILITY FOR THE STEEL BEAMS AND COLUMNS. CONTRACTOR SHALL PROVIDE ALL TEMPORARY BRACING REQUIRED TO MAINTAIN STABILITY OF THE POST AND BEAM SYSTEM UNTIL THESE BRACING ELEMENTS ARE IN PLACE.

SCHEDULE OF CONSTRUCTION MATERIALS		
	LOCATION	28-DAY COMPRESSIVE STRENGTH
CONCRETE	EXTERIOR CONCRETE (EXPOSED TO FREEZING AND/OR DE-ICERS)	4,000 P.S.I. MIX TYPE D
	EXTERIOR CONCRETE (NOT EXPOSED TO FREEZING)	3,000 P.S.I. MIX TYPE A
	FOOTINGS	3,000 P.S.I. MIX TYPE A
	FOUNDATION WALLS	3,000 P.S.I. MIX TYPE D
	INTERIOR SLABS ON GRADE	3,000 P.S.I. MIX TYPE E
NOTE: CONCRETE STRENGTH USED IN DESIGN IS 3,000 P.S.I.		
STRUCTURAL STEEL	APPLICATION	MATERIAL
	SQUARE OR RECTANGULAR HSS	ASTM A500 (46ksi) GRADE B
	WIDE FLANGES SECTIONS	ASTM A992 (50ksi)
REINFORCING STEEL	OTHER SHAPES AND PLATES	ASTM A36 (36ksi)
REINFORCING STEEL	BARS SHOWN ON DRAWING TO BE FIELD BENT	ALL OTHER BARS
	ASTM A615, GRADE 40 OR GRADE 60 (SEE LAP SPLICE SCHEDULE D/S003 FOR LAP LENGTHS)	ASTM A615, GRADE 60 (SEE LAP SPLICE SCHEDULE D/S003 FOR LAP LENGTHS)

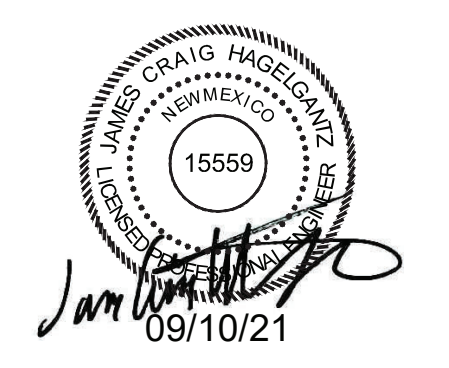
Type A - Water reducing admixture. This is used to reduce the quantity of mixing water at a given workability or increase workability at a given water content.
Type B - Retarding admixture used for increasing setting time of concrete.
Type C - Accelerating admixture used for decreasing setting time and to develop early strength gain.
Type D - Water reducing and retarding admixture has the effects of both A and B.
Type E - Water reducing and accelerating admixtures has the effects of both A and C.
Type F - Water reducing, high range admixture used to reduce the quantity of mixing water required to produce concrete of a given consistency by 12% or more, and can be used to produce high slump or flowing concrete.
Type G - Water reducing, high range, and retarding admixtures are used to reduce the quantity of mixing water required to produce concrete of given consistency by 12% or more and retard setting times of concrete.
Type S - Specific performance admixtures used for shrinkage reduction, ASR mitigation, viscosity modification or any other specific requirement.

MOLZENCORBIN

2701 Miles Road SE
 Albuquerque, New Mexico 87106
 505 242 5700 office
 505 242 0673 fax
 MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
 THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
 DRAWINGS ARE DEPICTED AT INTENDED NUMERIC SCALES
 IF THIS BAR EQUALS ONE INCH



REV. NO.	REV. DATE	DESCRIPTION	RAT181-14
			JCH
PROJECT NUMBER:			DM
DESIGNED BY:			JCH
DRAWN BY:			JCH
CHECKED BY:			JCH
PRIME DESIGN PROFESSIONAL:			QUINN PATRICK
PROJECT DATE:			SEPTEMBER 2021

GENERAL NOTES

HANGAR
 RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)
 CITY OF RATON, NEW MEXICO

ABQ Engineering
 Civil • Structural • Mechanical • Plumbing • Electrical
 8102 Menaul Blvd. NE, Suite D, Albuquerque, NM 87110
 tele: 505.255.7802 Proj. No.: 20-017 www.abqeng.com

S-001

SHEET 1 OF 5

PLG DATE: 9/10/2021 9:15 AM
 K:\PROJECTS\2020\20-017\STRUCTURAL\STRUCTURAL SET RATON HANGAR.MXD

DEFINITIONS

THE FOLLOWING DEFINITIONS COVER THE MEANINGS OF CERTAIN TERMS USED IN THESE NOTES:

'ARCHITECT/ENGINEER' - THE ARCHITECT OF RECORD AND THE STRUCTURAL ENGINEER OF RECORD.

- 'STRUCTURAL ENGINEER OF RECORD' (SER) - THE STRUCTURAL ENGINEER WHO IS LICENSED TO STAMP AND SIGN THE STRUCTURAL DOCUMENTS FOR THE PROJECT. THE SER IS RESPONSIBLE FOR THE DESIGN OF THE PRIMARY STRUCTURAL SYSTEM.
- 'SUBMIT FOR REVIEW' - SUBMIT TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO FABRICATION OR CONSTRUCTION.
- 'PER PLAN' - INDICATES REFERENCES TO THE STRUCTURAL PLANS, ELEVATIONS AND STRUCTURAL GENERAL NOTES.
- 'SPECIALTY STRUCTURAL ENGINEER' (SSE) - A PROFESSIONAL ENGINEER (PE OR SE), LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED, (TYPICALLY NOT THE SER), WHO PERFORMS SPECIALTY STRUCTURAL ENGINEERING SERVICES FOR SELECTED SPECIALTY-ENGINEERED ELEMENTS IDENTIFIED IN THE CONTRACT DOCUMENTS, AND WHO HAS EXPERIENCE AND TRAINING IN THE SPECIALTY. DOCUMENTS STAMPED AND SIGNED BY THE SSE SHALL BE COMPLETED BY OR UNDER THE DIRECT SUPERVISION OF THE SSE.
- 'BIDDER-DESIGNED' - COMPONENTS OF THE STRUCTURE THAT REQUIRE THE GENERAL CONTRACTOR, SUBCONTRACTOR, OR SUPPLIER WHO IS RESPONSIBLE FOR THE DESIGN, FABRICATION AND INSTALLATION OF SPECIALTY-ENGINEERED ELEMENTS IDENTIFIED IN THE CONTRACT DOCUMENTS TO RE-RETAIN THE SERVICES OF AN SSE. SUBMITTALS OF 'BIDDER-DESIGNED' ELEMENTS SHALL BE STAMPED AND SIGNED BY THE SSE.

OTHER DRAWINGS: REFER TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, CIVIL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION INCLUDING BUT NOT LIMITED TO: DIMENSIONS, ELEVATIONS, SLOPES, DOOR AND WINDOW OPENINGS, NON-BEARING WALLS, STAIRS, FINISHES, DRAINS, WATERPROOFING, RAILINGS, MECHANICAL UNIT LOCATIONS, AND OTHER NON-STRUCTURAL ITEMS.

STRUCTURAL DETAILS: THE STRUCTURAL DRAWINGS ARE INTENDED TO SHOW THE GENERAL CHARACTER AND EXTENT OF THE PROJECT AND ARE NOT INTENDED TO SHOW ALL DETAILS OF THE WORK.

STRUCTURAL RESPONSIBILITIES: THE STRUCTURAL ENGINEER (SER) IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE PRIMARY STRUCTURE IN ITS COMPLETED FORM.

COORDINATION: THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING DETAILS AND ACCURACY OF THE WORK; FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; FOR SELECTING FABRICATION PROCESSES; FOR TECHNIQUES OF ASSEMBLY; AND FOR PERFORMING WORK IN A SAFE AND SECURE MANNER.

MEANS, METHODS AND SAFETY REQUIREMENTS: THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND ALL JOB RELATED SAFETY STANDARDS SUCH AS OSHA AND DOSH (DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH).

BRACING/SHORING DESIGN ENGINEER: THE CONTRACTOR SHALL, AT HIS DISCRETION EMPLOY AN SSE, A REGISTERED PROFESSIONAL ENGINEER FOR THE DESIGN OF ANY TEMPORARY BRACING AND SHORING.

TEMPORARY SHORING, BRACING: THE CONTRACTOR IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING, BRACING AND OTHER ELEMENTS REQUIRED TO MAINTAIN STABILITY UNTIL THE STRUCTURE IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE WORK REQUIRED IN THE CONSTRUCTION DOCUMENTS AND THE REQUIREMENTS FOR EXECUTING IT PROPERLY.

CONSTRUCTION LOADS: LOADS ON THE STRUCTURE DURING CONSTRUCTION SHALL NOT EXCEED THE DESIGN LOADS AS NOTED IN DESIGN CRITERIA & LOADS BELOW OR THE CAPACITY OF PARTIALLY COMPLETED CONSTRUCTION AS DETERMINED BY THE CONTRACTOR'S SSE FOR BRACING/SHORING.

CHANGES IN LOADING: THE CONTRACTOR HAS THE RESPONSIBILITY TO NOTIFY THE SER OF ANY ARCHITECTURAL, MECHANICAL, ELECTRICAL, OR PLUMBING LOAD IMPOSED ONTO THE STRUCTURE THAT DIFFERS FROM, OR THAT IS NOT DOCUMENTED ON THE ORIGINAL CONTRACT DOCUMENTS (ARCHITECTURAL / STRUCTURAL / MECHANICAL / ELECTRICAL OR PLUMBING DRAWINGS). PROVIDE DOCUMENTATION OF LOCATION, LOAD, SIZE AND ANCHORAGE OF ALL UNDOCUMENTED LOADS IN EXCESS OF 400 POUNDS. PROVIDE MARKED-UP STRUCTURAL PLAN INDICATING LOCATIONS OF ANY NEW EQUIPMENT OR LOADS. SUBMIT PLANS TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO INSTALLATION.

NOTE PRIORITIES: PLAN AND DETAIL NOTES AND SPECIFIC LOADING DATA PROVIDED ON INDIVIDUAL PLANS AND DETAIL DRAWINGS SUPPLEMENTS INFORMATION IN THE STRUCTURAL GENERAL NOTES.

DISCREPANCIES: IN CASE OF DISCREPANCIES BETWEEN THE GENERAL NOTES, SPECIFICATIONS, PLAN/DETAILS OR REFERENCE STANDARDS, THE ARCHITECT/ENGINEER SHALL DETERMINE WHICH SHALL GOVERN. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK. SHOULD ANY DISCREPANCY BE FOUND IN THE CONTRACT DOCUMENTS, THE CONTRACTOR WILL BE DEEMED TO HAVE INCLUDED IN THE PRICE THE MOST EXPENSIVE WAY OF COMPLETING THE WORK, UNLESS PRIOR TO THE SUBMISSION OF THE PRICE, THE CONTRACTOR ASKS FOR A DECISION FROM THE ARCHITECT AS TO WHICH SHALL GOVERN. ACCORDINGLY, ANY CONFLICT IN OR BETWEEN THE CONTRACT DOCUMENTS SHALL NOT BE A BASIS FOR ADJUSTMENT IN THE CONTRACT PRICE.

SITE VERIFICATION: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE. CONFLICTS BETWEEN THE DRAWINGS AND ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.

ADJACENT UTILITIES: THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO EARTHWORK, FOUNDATIONS, SHORING, AND EXCAVATION. ANY UTILITY INFORMATION SHOWN ON THE DRAWINGS AND DETAILS IS APPROXIMATE AND NOT NECESSARILY COMPLETE.

ALTERNATES: ALTERNATE PRODUCTS OF SIMILAR STRENGTH, NATURE, AND FORM FOR SPECIFIED ITEMS MAY BE SUBMITTED WITH ADEQUATE TECHNICAL DOCUMENTATION TO THE ARCHITECT/ENGINEER FOR REVIEW. ALTERNATE MATERIALS THAT ARE SUBMITTED WITHOUT ADEQUATE TECHNICAL DOCUMENTATION OR THAT SIGNIFICANTLY DEVIATE FROM THE DESIGN INTENT OF MATERIALS SPECIFIED MAY BE RETURNED WITHOUT REVIEW. ALTERNATES THAT REQUIRE SUBSTANTIAL EFFORT TO REVIEW WILL NOT BE REVIEWED UNLESS AUTHORIZED BY THE OWNER.

SUBMITTALS

SUBMIT FOR REVIEW: SUBMITTALS OF SHOP DRAWINGS, AND PRODUCT DATA ARE REQUIRED FOR ITEMS NOTED IN THE INDIVIDUAL MATERIALS SECTIONS AND FOR BIDDER DESIGNED ELEMENTS.

SUBMITTAL REVIEW PERIOD: SUBMITTALS SHALL BE MADE IN TIME TO PROVIDE A MINIMUM OF TWO WEEKS FOR REVIEW BY THE ARCHITECT/ENGINEER PRIOR TO THE ONSET OF FABRICATION.

GENERAL CONTRACTOR'S PRIOR REVIEW: PRIOR TO SUBMISSION TO THE ARCHITECT/ENGINEER, THE CONTRACTOR SHALL REVIEW THE SUBMITTAL FOR COMPLETENESS. DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE 'SER', AND THEREFOR, MUST BE VERIFIED BY THE GENERAL CONTRACTOR. CONTRACTOR SHALL PROVIDE ANY NECESSARY DIMENSIONAL DETAILS REQUESTED BY THE DETAILER AND PROVIDE THE CONTRACTOR'S REVIEW STAMP AND SIGNATURE BEFORE FORWARDING TO THE ARCHITECT/ENGINEER.

SHOP DRAWING REVIEW: ONCE THE CONTRACTOR HAS COMPLETED THE REQUIRED PRIOR REVIEW, THE 'SER' WILL REVIEW THE SUBMITTAL FOR GENERAL CONFORMANCE WITH THE DESIGN INTENT AND THE CONTRACT DOCUMENTS OF THE BUILDING AND WILL STAMP THE SUBMITTAL ACCORDINGLY. MARKINGS OR COMMENTS SHALL NOT BE CONSTRUED AS RELIEVING THE CONTRACTOR FROM COMPLIANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, NOR THE DEPARTURES THERE FROM.

SHOP DRAWING DEVIATIONS: WHEN SHOP DRAWINGS (COMPONENT DESIGN DRAWINGS) DIFFER FROM OR ADD TO THE REQUIREMENTS OF THE STRUCTURAL DRAWINGS THEY SHALL BE DESIGNED AND STAMPED BY THE RESPONSIBLE 'SSE'.

DEFERRED SUBMITTALS

BIDDER-DESIGNED ELEMENTS
SUBMIT "BIDDER-DESIGNED" DEFERRED SUBMITTALS TO THE ARCHITECT AND 'SER' FOR REVIEW PRIOR TO SUBMISSION TO THE APPROVING AGENCY.

DESIGN OF PREFABRICATED, "BIDDER-DESIGNED", MANUFACTURED, PRE-ENGINEERED, OR OTHER FABRICATED PRODUCTS SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:

- DESIGN CONSIDERS TRIBUTARY DEAD, LIVE, WIND AND EARTHQUAKE LOADS IN COMBINATIONS REQUIRED BY IBC.
- DESIGN WITHIN THE DEFLECTION LIMITS NOTED HEREIN AND AS SPECIFIED OR REFERENCED IN 2006 IBC.
- DESIGN SHALL CONFORM TO THE SPECIFICATIONS AND REFERENCE STANDARDS OF THE GOVERNING CODE.
- SUBMITTAL SHALL INCLUDE:
 - CALCULATIONS PREPARED, STAMPED AND SIGNED BY THE 'SSE' DEMONSTRATING CODE CONFORMANCE.
 - ENGINEERED COMPONENT DESIGN DRAWINGS ARE PREPARED, STAMPED AND SIGNED BY THE 'SSE'.
 - PRODUCT DATA, TECHNICAL INFORMATION AND MANUFACTURER'S WRITTEN REQUIREMENTS AND AGENCY APPROVALS AS APPLICABLE.
 - 'SSE' MAY SUBMIT TO THE ARCHITECT/ENGINEER, A REQUEST TO UTILIZE RELEVANT ALTERNATE DESIGN CRITERIA OF SIMILAR NATURE AND GENERALLY EQUIVALENCY WHICH IS RECOGNIZED BY THE CODE AND ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION. SUBMIT ADEQUATE DOCUMENTATION OF DESIGN.

DEFLECTION LIMITS:	VERTICAL	LIMIT
	ROOF MEMBERS, DEAD + LIVE OR SNOW OR WIND, TOTAL LOAD (TL) DEFLECTION	L / 240, WHERE (L IS SPAN LENGTH, INCHES)
	ROOF, LIVE OR SNOW OR WIND LOAD (RLL)	L / 360
	FLOOR MEMBERS, TOTAL LOAD (TL) uno	L / 240
	FLOOR LIVE LOAD (LL) uno	L / 360
	HORIZONTAL	LIMIT AND FOOTNOTE
	MEMBERS SUPPORTING BRITTLE FINISHES	L / 240 (1)
	MEMBERS SUPPORTING FLEXIBLE FINISHES	L / 180 (1)

(1) WIND LOAD IS REDUCIBLE TO 0.7 TIMES THE COMPONENT AND CLADDING LOADS PER TABLE 1604.3 FOOTNOTE f.

GENERAL CONTRACTOR'S PRIOR REVIEW: ONCE THE CONTRACTOR HAS COMPLETED THE REVIEW OF THE 'SSE' COMPONENT DRAWINGS, THE 'SER' WILL REVIEW THE SUBMITTAL FOR GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING AND WILL STAMP THE SUBMITTAL ACCORDINGLY. REVIEW OF THE SPECIALTY STRUCTURAL ENGINEER'S 'SSE' SHOP DRAWINGS (COMPONENT DESIGN DRAWINGS) IS FOR COMPLIANCE WITH DESIGN CRITERIA AND COMPATIBILITY WITH THE DESIGN OF THE PRIMARY STRUCTURE AND DOES NOT RELIEVE THE 'SSE' OF RESPONSIBILITY FOR THAT DESIGN. ALL NECESSARY BRACING, TIES, ANCHORAGE, PROPRIETARY PRODUCTS SHALL BE FURNISHED AND INSTALLED PER MANUFACTURER'S INSTRUCTIONS OR THE 'SSE'S' DESIGN DRAWINGS AND CALCULATIONS. THESE ELEMENTS INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:

- "BIDDER-DESIGNED" DEFERRED SUBMITTALS
- TEMPORARY SHORING SYSTEMS
- PRE-MANUFACTURED METAL BUILDING AND ASSOCIATED SYSTEMS
- OVERHEAD BI-FOLD DOOR COMPONENTS

QUALITY ASSURANCE (TESTING AND INSPECTION)

QUALITY ASSURANCE (TESTING AND INSPECTION) AS REQUIRED BY THE OWNER AND SECTIONS 1704 THRU 1709 OF THE IBC, SHALL BE PROVIDED BY A QUALIFIED AGENCY SELECTED BY THE OWNER. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE REQUIRED INSPECTIONS. ALL TESTING AND INSPECTION REPORTS SHALL BE SENT WITHIN 24 HOURS OF THE TEST OR INSPECTION TO THE OWNER, ARCHITECT, APPLICABLE ENGINEER, BUILDING OFFICIAL AND GENERAL CONTRACTOR. ITEMS REQUIRING QUALITY ASSURANCE (TESTING AND INSPECTION) ARE:

- SOILS/ENGINEERED FILL (IBC SECTION 1705.6 AND TABLE 1705.6):
 - REFER TO SPECIFICATION SECTION 01 4523 FOR ADDITIONAL AND SPECIFIC TESTING AND INSPECTION REQUIREMENTS.
 - PRIOR TO PLACEMENT OF THE PREPARED FILL, THE INSPECTOR SHALL DETERMINE THAT THE SITE HAS BEEN PREPARED IN ACCORDANCE WITH THE SOILS REPORT.
 - DURING PLACEMENT AND COMPACTION OF THE FILL MATERIAL, THE INSPECTOR SHALL DETERMINE THAT THE MATERIAL BEING USED AND THE MAXIMUM LIFT THICKNESS COMPLIES WITH THE GEO-TECHNICAL'S REPORT.
 - THE INSPECTOR SHALL DETERMINE THAT THE IN-PLACE DRY DENSITY OF THE ENGINEERED FILL MATERIAL COMPLIES WITH THE GEO-TECHNICAL REPORT.
 - CONTINUOUS FOOTING ENGINEERED FILL: SEE SPECIFICATIONS.
 - SPOT FOOTING ENGINEERED FILL: SEE SPECIFICATIONS.
 - SITE WORK ENGINEERED FILL (PAVED AREAS, SIDEWALKS, TRENCHES, ETC.): SEE SPECIFICATIONS.
 - BUILDING PAD ENGINEERED FILL: SEE SPECIFICATIONS.
- CONCRETE (IBC SECTION 1705.3 AND TABLE 1705.3):
 - REFER TO SPECIFICATION SECTION 01 4523 FOR ADDITIONAL AND SPECIFIC TESTING AND INSPECTION REQUIREMENTS.
 - CYLINDERS, SLUMP, TEMPERATURE AND AIR-ENTRAINMENT SHALL BE DONE. PROVIDE SIX SAMPLES EACH FOR EXTERIOR SITE WORK CONCRETE, FOOTINGS, FOUNDATION WALLS AND INTERIOR SLABS ON GRADE.
 - PROTECTION OF CONCRETE DURING COLD AND HOT WEATHER.
- PREFABRICATED METAL PLATE WOOD TRUSSES (IBC SECTIONS 1705.5)
 - REFER TO SPECIFICATION SECTION 06 1753 SHOP-FABRICATED WOOD TRUSSES: TRUSSED RAFTERS FOR CERTIFICATION REQUIREMENTS.
 - THE INSPECTOR SHALL VERIFY THAT THE FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS OF INSPECTION CONTROL OF THE WORKMANSHIP AND THE FABRICATORS ABILITY TO CONFORM TO APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS.
- WOOD DIAPHRAGMS AND SHEAR WALLS (IBC SECTION 1705.5)
 - FOR WALLS AND ROOF AREAS WHERE THE NAIL SPACING IS 4 INCHES AND LESS ON CENTER, THE INSPECTOR SHALL VERIFY WOOD PANEL SHEATHING GRADE, THICKNESS AND NOMINAL SIZE OF FRAMING MEMBERS, ADJOINING PANEL EDGES, NAIL SIZE AND SPACING, BOLTING AND OTHER FASTENING OF COMPONENTS.
- EPOXY ANCHORS (IBC SECTION 1706.1):
 - REFER TO SPECIFICATION SECTION 01 4523 FOR ADDITIONAL AND SPECIFIC TESTING AND INSPECTION REQUIREMENTS.
 - INSPECTION SHALL VERIFY ALL DRILLED HOLES SIZE AND DEPTH PRIOR TO INSTALLATION OF EPOXY AND ANCHOR ROD. SEE SPECIFICATIONS FOR QUANTITY OF TESTING.
- STEEL (IBC SECTION 1705.2):
 - INSPECTION DURING FABRICATION IS NOT REQUIRED IF THE FABRICATOR IS REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT INSPECTION. SPECIAL INSPECTION OF FIELD WELDS AS REQUIRED BY IBC SECTION 1704.
- MASONRY (IBC SECTION 1705.4):
 - REFER TO SPECIFICATION SECTION 04 0000 FOR ADDITIONAL AND SPECIFIC TESTING AND INSPECTION REQUIREMENTS.
 - SPECIAL INSPECTION OF MASONRY IS NOT REQUIRED.

MOLZENCORBIN

2701 Miles Road SE
Albuquerque, New Mexico 87106
505 242 5700 office
505 242 0673 fax
MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
THIS CONTRACT ALLOWS THE OWNER TO MAKE
PAYMENT WITHIN 45 DAYS AFTER SUBMISSION
OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
DRAWINGS ARE DEPICTED AT INTENDED
NUMERIC SCALES
IF THIS BAR EQUALS ONE INCH



REV. NO.	REV. DATE	DESCRIPTION	RAT181-114
PROJECT NUMBER:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
PRIME DESIGN PROFESSIONAL:JOHN QUINN PAPE	PROJECT DATE:	SEPTEMBER 2021	

GENERAL NOTES

HANGAR
RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)
CITY OF RATON, NEW MEXICO

S-002

SHEET 2 OF 5



MOLZENCORBIN

2701 Miles Road SE
Albuquerque, New Mexico 87106
505 242 5700 office
505 242 0673 fax
MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
THIS CONTRACT ALLOWS THE OWNER TO MAKE
PAYMENT WITHIN 45 DAYS AFTER SUBMISSION
OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
DRAWINGS ARE DEPICTED AT INTENDED
NUMERIC SCALES
IF THIS BAR EQUALS ONE INCH



REV. NO.	REV. DATE	DESCRIPTION	RAT181-14
			JCH
PROJECT NUMBER:			DM
DESIGNED BY:			JCH
DRAWN BY:			JCH
CHECKED BY:			PRIME DESIGN PROFESSIONAL/JOHN QUINN PATE
PROJECT DATE:			SEPTEMBER 2021

GENERAL NOTES

HANGAR

RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)

CITY OF RATON, NEW MEXICO

S-003

3 OF 5

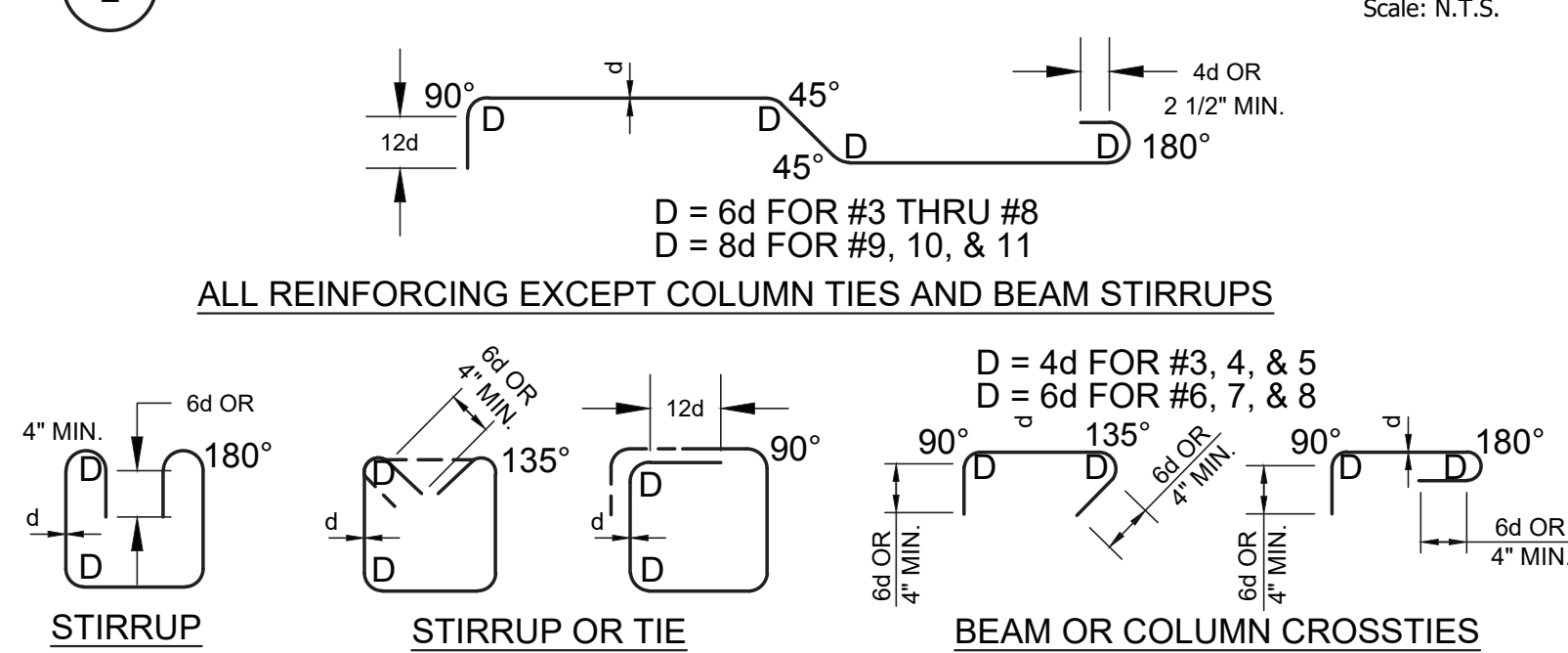
TABLE A - REINFORCEMENT TENSION LAPS, EMBEDMENT AND HOOK LENGTHS
 $f_y = 60000 \text{ psi}$ $f_c = 3000 \text{ psi}$

BAR SIZE (d)	CLEAR SPACING (IN) (4)			EMBEDMENT AND CLASS A LAP (IN) (5, 6, 7)						CLASS B LAP (IN) (6, 8)						HOOK (IN) (9)
	2d	3d	5d	TOP BAR (10)			OTHER BARS			TOP BAR (10)			OTHER BARS			
				(11)	(12)	(12)	(11)	(12)	(11)	(12)	(11)	(12)				
3	3/4	1 1/8	1 7/8	16	16	16	13	13	13	21	21	21	16	16	16	9
4	1	1 1/2	2 1/2	22	22	22	17	17	17	28	28	28	22	22	22	11
5	1 1/4	1 7/8	3 1/8	27	27	27	21	21	21	35	35	35	27	27	27	14
6	1 1/2	2 1/4	3 3/4	35	32	32	27	25	25	46	42	42	35	32	32	17
7	1 3/4	2 5/8	4 3/8	48	38	38	37	29	29	63	49	49	48	38	38	20
8	2	3	5	63	45	43	49	35	33	82	59	56	63	45	43	22
9	2.256	3 3/8	5 5/8	80	57	48	62	44	37	104	74	63	80	57	48	25
10	2.54	3.81	6.35	102	73	58	78	56	45	132	94	76	102	73	58	28
11	2.82	4.23	7.05	125	89	71	96	69	55	162	116	93	125	89	71	31

NOTES FOR TABLE A

- LENGTHS SHOWN CONFORM WITH NON SEISMIC PROVISIONS OF ACI 318-95 FOR UNCOATED BARS NOT ENCLOSED BY CLOSELY SPACED SPIRALS OR TIES. DEVELOPMENT OF REINFORCEMENT NOT COVERED BY THE TABLE SHALL CONFORM WITH ACI 318-95.
- MULTIPLY LENGTHS SHOWN BY 0.87 FOR 4000 PSI. CONCRETE, BUT LENGTH OF LAP SHALL NOT BE LESS THAN 12 INCH.
- MULTIPLY LENGTHS SHOWN BY 1.3 FOR LIGHTWEIGHT AGGREGATE CONCRETE.
- BAR CLEAR SPACING IS THE CENTER TO CENTER BAR SPACING MINUS TWO BAR DIAMETERS WHEN ALL BARS ARE LAPPED AT THE SAME LOCATION. WHEN BAR LAPS ARE STAGGERED, AND LAP HALF THE BARS ARE LAPPED AT THE SAME LOCATION, THE BAR CLEAR SPACING IS TWICE THE CENTER TO CENTER BAR SPACING MINUS TWO BAR DIAMETERS. WHEN ALL BARS ARE EMBEDDED AT THE SAME LOCATION, THE BAR CLEAR SPACING IS THE CENTER TO CENTER BAR SPACING MINUS ONE BAR DIAMETER.
- CLASS A LAP LENGTHS APPLY ONLY WHERE NOTED ON THE DRAWINGS.
- LAP AND EMBEDMENT LENGTHS SHOWN APPLY WHEN MINIMUM CONCRETE COVER OVER BARS CONFORMS WITH VALUES GIVEN IN THE TABLE FOR "CONCRETE COVER". THESE COVER VALUES CONFIRM WITH ACI 318-95.
- CLASS A LAP AND EMBEDMENT LENGTH HAVE SAME VALUE.
- CLASS B LAP LENGTHS APPLY FOR ALL SPLICES UNLESS NOTED OTHERWISE.
- HOOK LENGTH GIVEN IS THE STRAIGHT LINE DISTANCE FROM THE LOCATION OF MAXIMUM STRESS IN THE BAR TO THE OUTSIDE END OF THE HOOK. MULTIPLY LENGTHS GIVEN BY 0.7 FOR HOOKS WITH SIDE COVER NORMAL TO THE HOOK NOT LESS THAN 2-1/2 INCH AND FOR 90 DEGREE HOOKS COVER ON BAR EXTENSION BEYOND HOOK NOT LESS THAN 2 INCH.
- TOP BARS ARE HORIZONTAL REINFORCEMENT PLACED SO THAT MORE THAN 12 INCHES OF CONCRETE IS CAST BELOW THE REINFORCEMENT.
- MULTIPLY LAP AND EMBEDMENT LENGTHS GIVEN BY 2.0 FOR BARS WITH CLEAR SPACING OF TWO BAR DIAMETERS OR LESS OR CONCRETE COVER OF ONE BAR DIAMETER OR LESS.
- MINIMUM CONCRETE COVER FROM FACE OF MEMBER TO EDGE BAR SHALL NOT BE LESS THAN TWO AND ONE HALF BAR DIAMETERS.

REBAR TYPICAL LAPS & NOTES



REBAR TYPICAL BEND DETAILS



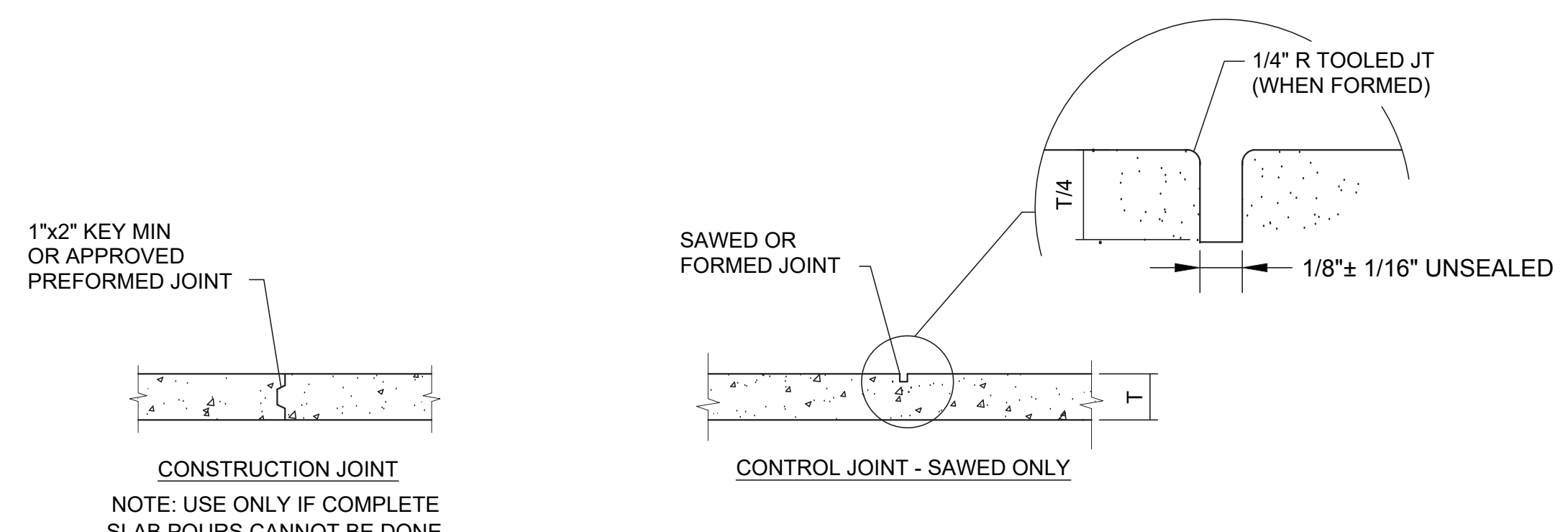
TYPICAL ANCHOR BOLT SCHEDULE

INSTALLATION TYPE	CAST-IN-PLACE (PRE AUTHORIZED) [2]			DRILL-IN-OPTIONS (SUBMITTAL REQUIRED) [3]	
	BOLT TYPE	STANDARD J-BOLT	HEADED ANCHOR	THREADED ROD ANCHOR	SIMPSON "SSTB" ANCHOR BOLT
EMBEDMENT REQUIREMENTS	7 1/2"	12x DIA. 1/4" MIN.	TACK	PER MFR	NOT ALLOWED AT P-T SLAB
LIMITS	5/8"Ø MAX	5/8"Ø THRU 2 1/2"Ø		FOR WOOD FRAME ONLY	5/8"Ø THRU 1"Ø
ANCHOR BOLT MATERIAL - A325 OR F1554 GRADE 36 MIN. DIA = ANCHOR BOLT DIAMETER (NOMINAL)					

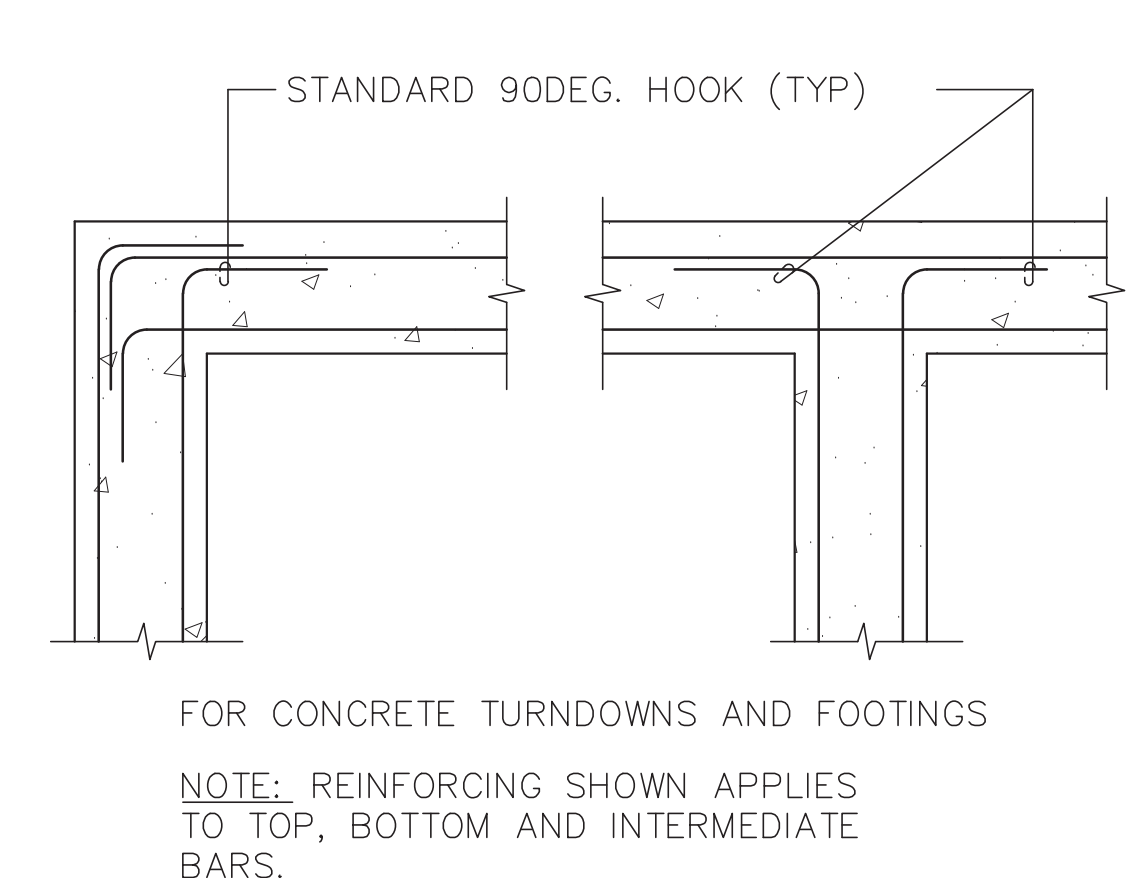
NOTES:

- CONTRACTOR SHALL DETERMINE THE REQUIRED THREAD PROJECTION SUITABLE FOR THE THICKNESS OF MATERIAL BEING FASTENED PLUS GROUT ALLOWANCE, IF ANY, AND CONSTRUCTION TOLERANCES, UNO.
- CONTRACTOR MAY SELECT APPROPRIATE CAST-IN-PLACE ANCHOR BOLT OPTION WITHOUT SUBMITTAL.
- DRILL-IN OPTIONS ARE NOT APPROPRIATE AT ALL CONDITIONS. IF DRILL-IN METHOD IS PREFERRED, SUBMIT MANUFACTURER'S INFORMATION, ALLOWABLE LOAD VS. EMBEDMENT DATA AND LOCATIONS OF WHERE SUBSTITUTIONS ARE REQUESTED. ENGINEER WILL DETERMINE IF SUBSTITUTION IS APPROPRIATE FOR LOCATION AND LOADING.
- EMBEDMENT OF DRILL-IN ANCHORS SHALL BE PER ENGINEER'S SUBMITTAL REVIEW COMMENTS. EMBEDMENT SHALL BE (9) NINE TIMES THE NOMINAL ANCHOR DIAMETER, UNO.
- AT PRESSURE TREATED SILLS, PROVIDE HOT DIPPED GALVANIZED OR STAINLESS STEEL ANCHORS
- ANCHOR BOLTS SHOWN MAY NOT BE SUBSTITUTED FOR ANCHOR BOLTS REQUIRED FOR PRE-MANUFACTURED METAL BUILDING FRAMES. SEE PLANS AND MANUFACTURE REQUIREMENTS FOR ASSOCIATED ANCHOR BOLTS.

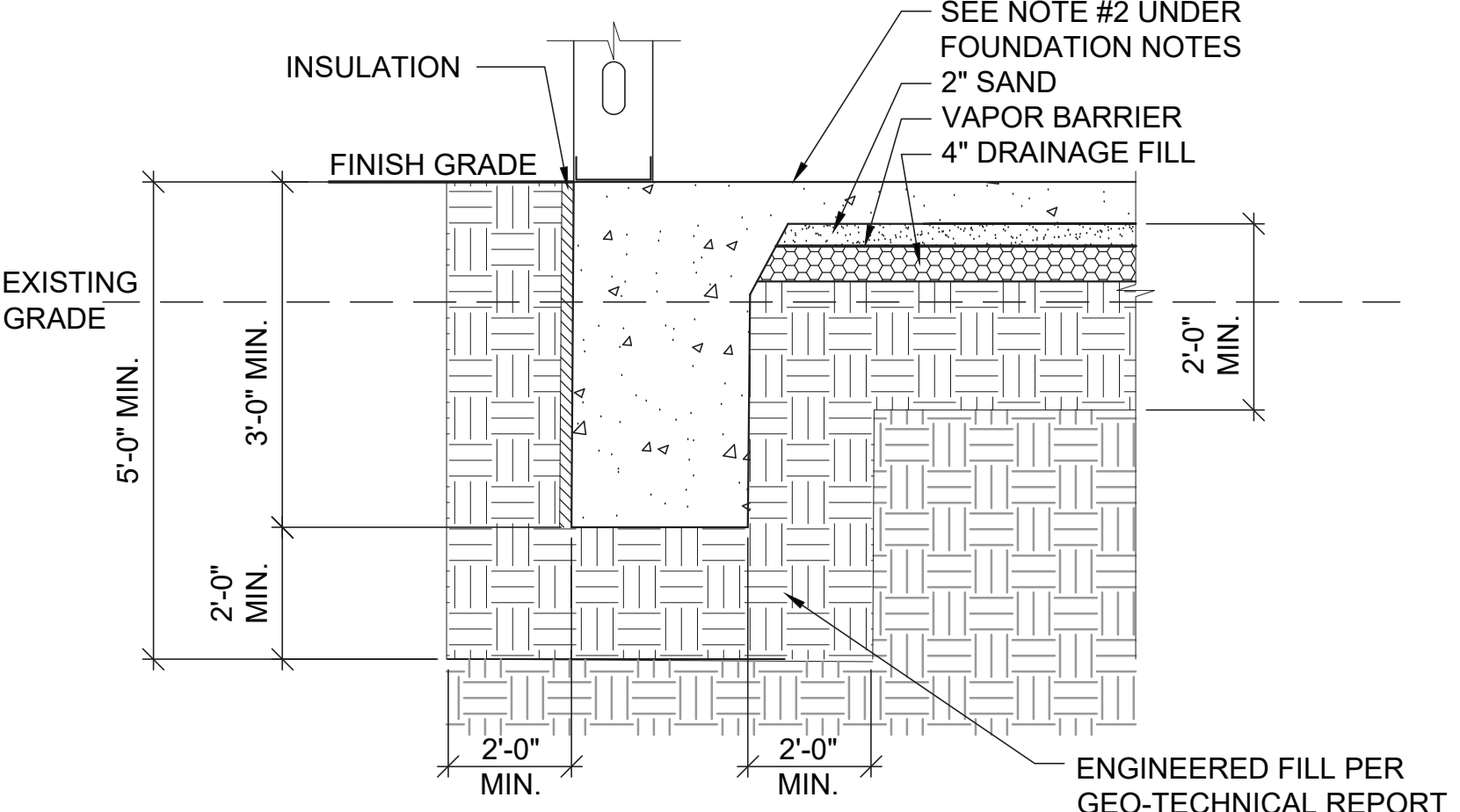
ANCHOR DETAILS



CONCRETE SLAB JOINTS



TURNDOWN REBARS AT CORNERS

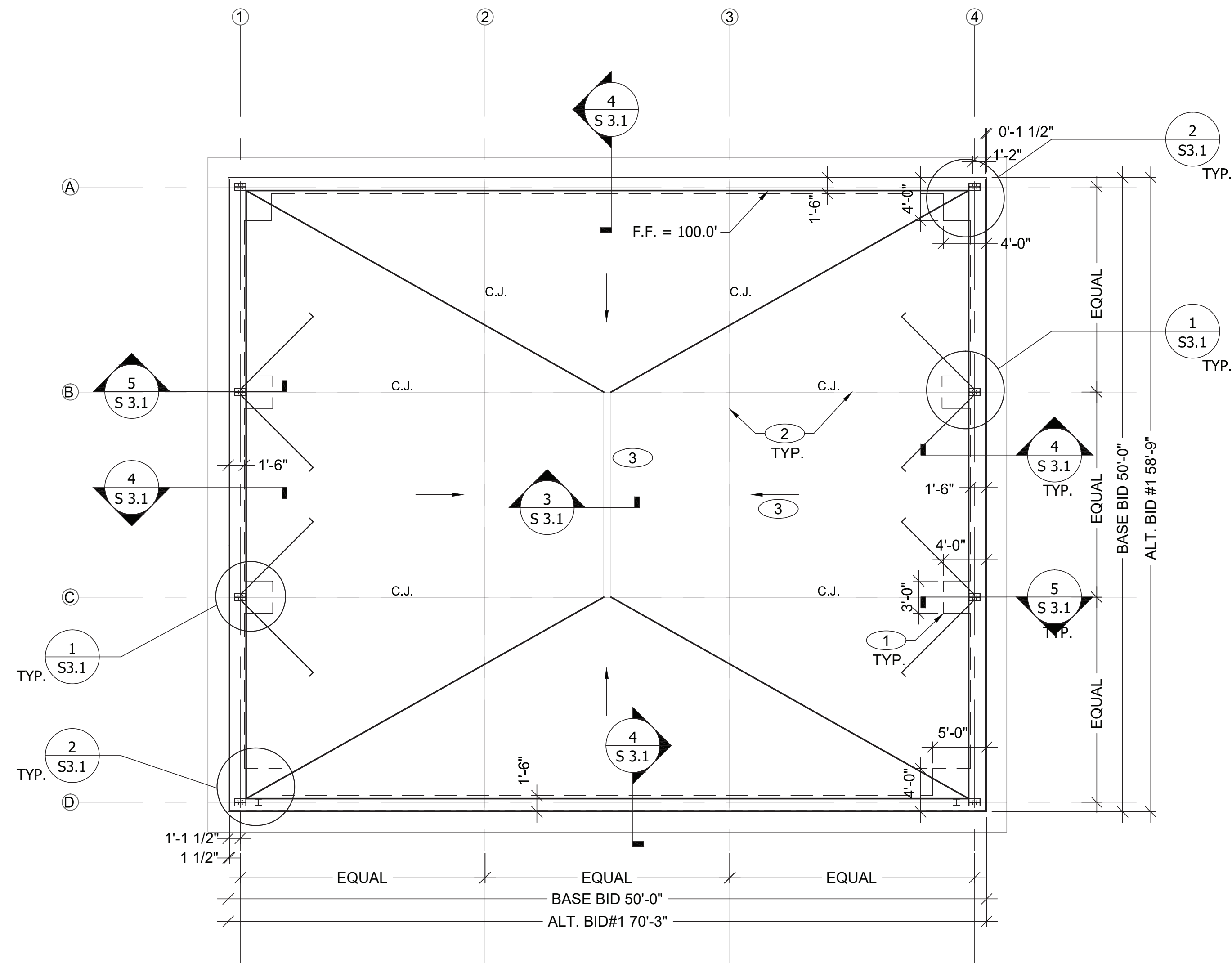


EXCAVATION/FILL DETAIL

ABQ Engineering
Civil • Structural • Mechanical • Plumbing • Electrical
8102 Menaul Blvd. NE, Suite D, Albuquerque, NM 87110
tele: 505.255.7802 Proj. No.: 20-017 www.abqeng.com

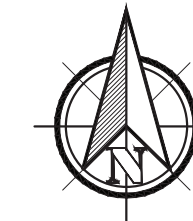
PLOT DATE: 9/10/2021 9:15 AM
 K:\PROJECTS\2020\20-017\STRUCTURAL\STRUCTURAL SET - RATON HANGAR.MAC

PLG DATE: 9/10/2021 9:15 AM
 K:\PROJECTS\2020\20-017\STRUCTURAL\STRUCTURAL SET - RATON HANGER.MAC



1 FOUNDATION PLAN

Scale: 1/8" = 1'-0"



General Notes

- F1. SEE METAL BUILDING MANUFACTURERS DRAWING FOR ANCHOR BOLT DIAMETER AND LOCATIONS. ANCHOR BOLTS SHALL BE 20" IN LENGTH MINIMUM WITH A MINIMUM EMBEDMENT OF 12".
- F2. OVER-EXCAVATION OF SOIL REMOVED BELOW FOOTINGS SHALL BE REPLACED AND COMPACTED IN LAYERS TO 95% OF MODIFIED PROCTOR DENSITY.
- F3. INTERIOR CONCRETE SLABS ON GRADE, UNLESS OTHERWISE NOTED, SHALL BE REINFORCED WITH WELDED WIRE FABRIC MATS AS FOLLOWS:
 - 4" SLAB - #4 REBAR @ 16" O.C. EACH WAY
 - 6" SLAB - #4 REBAR @ 12" O.C. EACH WAY
- F4. ELECTRIC CONDUIT AND OTHER PIPES EMBEDDED IN THE CONCRETE FLOOR SHALL BE PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318, PARAGRAPH 6.3.
- F5. LOCATE ALL SLEEVES, DRAINS, OPENINGS, EMBEDDED ITEMS, ETC. THAT ARE INDICATED ON THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL SUCH ITEMS ARE CORRECTLY POSITIONED & INSTALLED PRIOR TO PLACEMENT OF CONCRETE.
- F6. SEE SHEET S-001 FOR ADDITIONAL NOTES AND LEGEND.

Keyed Notes

- 1. OUTLINE OF CONCRETE FOUNDATION & FOOTING BELOW GRADE. SEE FOUNDATION PLAN & DETAILS FOR INFORMATION.
- 2. SAWN CONTROL JOINT - MAXIMUM 12'-0" O.C. EACH WAY. SEE SHEET 4/S0.3
- 3. DEPRESSED SLAB AT TRENCH DRAIN AND SLOPED FLOORS.

Legend

— CONTROL JOINT @ 12'-0" O.C.E.W.
 — GRID LINE

AB ANCHOR BOLT	GB GRADE BEAM
BC BLOCK CORE DOWELS	HT HORIZONTAL TIES
CD CORNER DOWELS	LW LONG WAY
CF COLUMN FOOTING	NS NEAR SIDE
CP COLUMN PIER	PD PIER DOWELS
DD DRILL & DOWEL	RF RECTANGULAR FOOTING
FD FOOTING DOWEL/FLOOR	SD SLAB DOWEL
DRAIN	SW SHORT WAY
FH FOOTING HORIZONTAL	ST SPIRAL TIE
FS FAR SIDE	WF WALL FOOTING
FT FOOTING TRANSVERSE	WH WALL HORIZONTAL
	WV WALL VERTICAL

MOLZENCORBIN

2701 Miles Road SE
 Albuquerque, New Mexico 87106
 505 242 5700 office
 505 242 0673 fax
 MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
 THIS CONTRACT ALLOWS THE OWNER TO MAKE
 PAYMENT WITHIN 45 DAYS AFTER SUBMISSION
 OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
 DRAWINGS ARE DEPICTED AT INTENDED
 NUMERIC SCALES
 IF THIS BAR EQUALS ONE INCH



REV. NO.	REV. DATE	DESCRIPTION	RAT181-14	JCH	DM	JCH	PRIME DESIGN PROFESSIONAL/JOHN QUINN	DATE	PROJECT DATE
									SEPTEMBER 2021

FOUNDATION PLAN

HANGAR
 RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)
 CITY OF RATON, NEW MEXICO

ABQ Engineering
 Civil • Structural • Mechanical • Plumbing • Electrical
 8102 Menaul Blvd. NE, Suite D, Albuquerque, NM 87110
 tele: 505.255.7802 Proj. No.: 20-017 www.abqeng.com

S-101

SHEET 4 OF 5

MOLZENCORBIN

2701 Miles Road SE
 Albuquerque, New Mexico 87106
 505 242 5700 office
 505 242 0673 fax
 MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
 THIS CONTRACT ALLOWS THE OWNER TO MAKE
 PAYMENT WITHIN 45 DAYS AFTER SUBMISSION
 OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
 DRAWINGS ARE DEPICTED AT INTENDED
 NUMERIC SCALES
 IF THIS BAR EQUALS ONE INCH



REV. NO.	REV. DATE	DESCRIPTION	PROJECT NUMBER:	DESIGNED BY:	DRAWN BY:	CHECKED BY:	PRIME DESIGN PROFESSIONAL:	DATE:
			RAT181-14	JCH	DM	JCH	QUINN PATRICK	SEPTEMBER 2021

FOUNDATION DETAILS

HANGAR

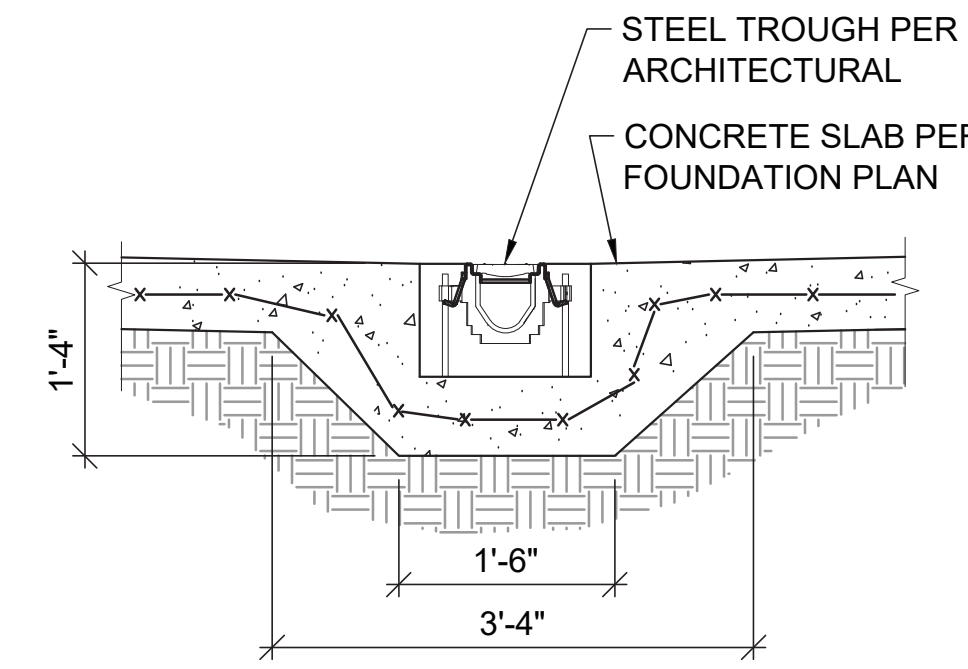
RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)

CITY OF RATON, NEW MEXICO

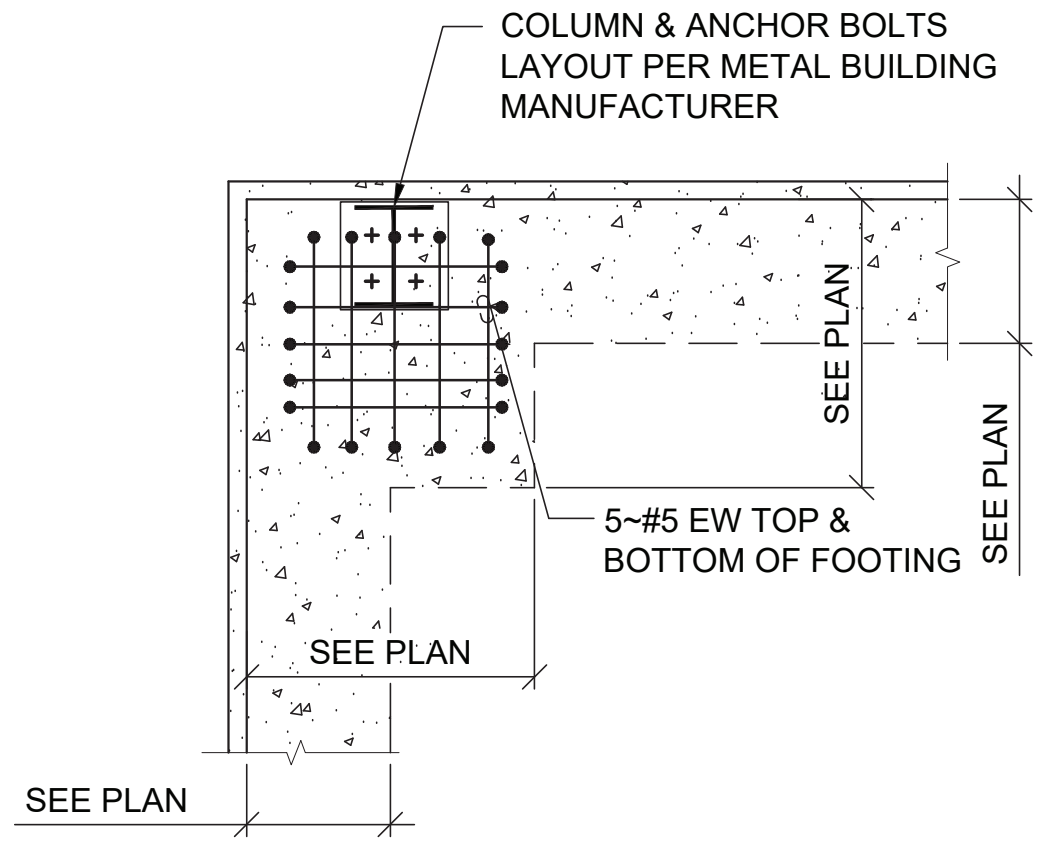
S-301

SHEET 5 OF 5

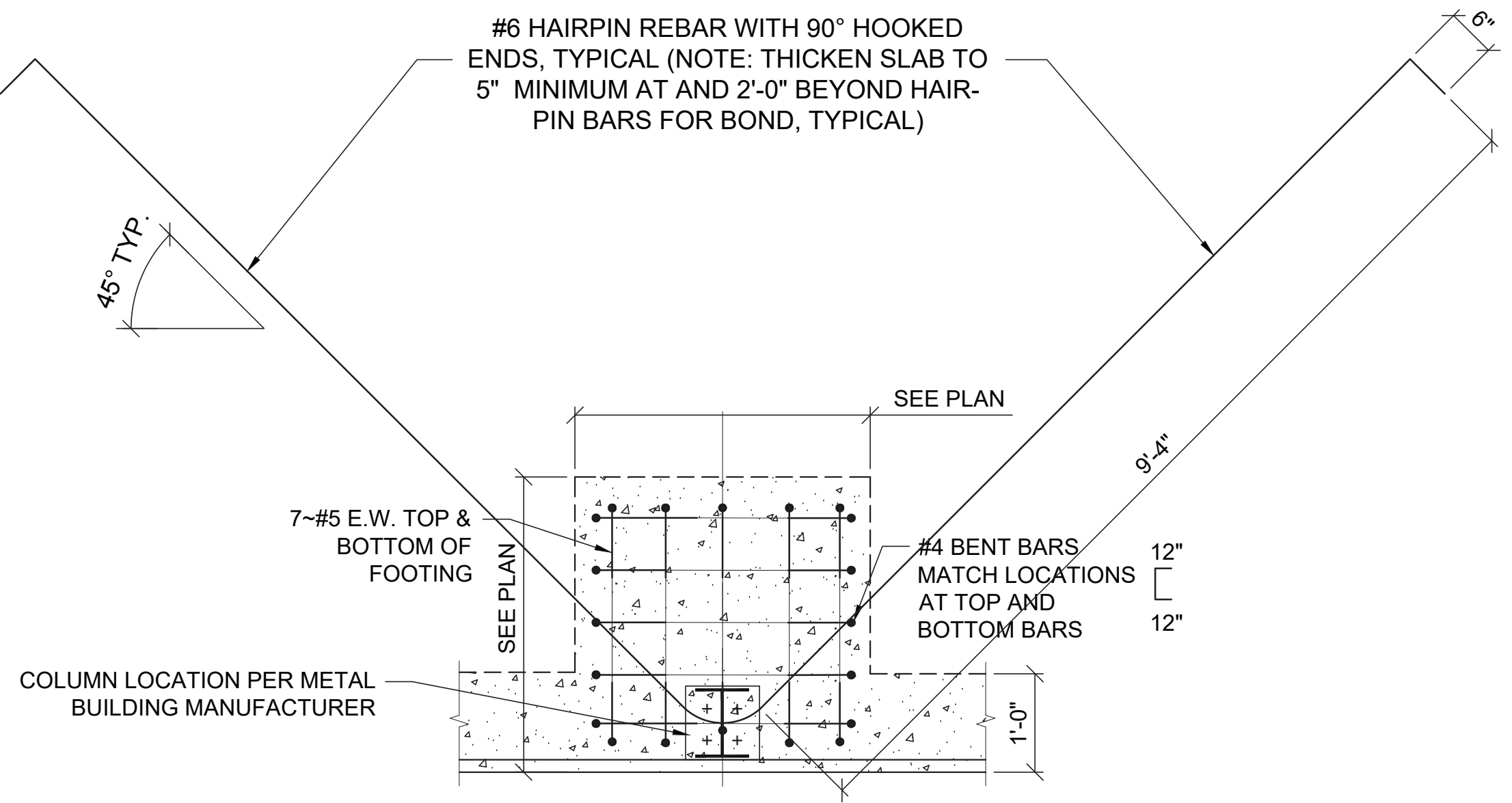
ABQ Engineering
 Civil • Structural • Mechanical • Plumbing • Electrical
 8102 Menaul Blvd. NE, Suite D, Albuquerque, NM 87110
 tele: 505.255.7802 Proj. No.: 20-017 www.abqeng.com



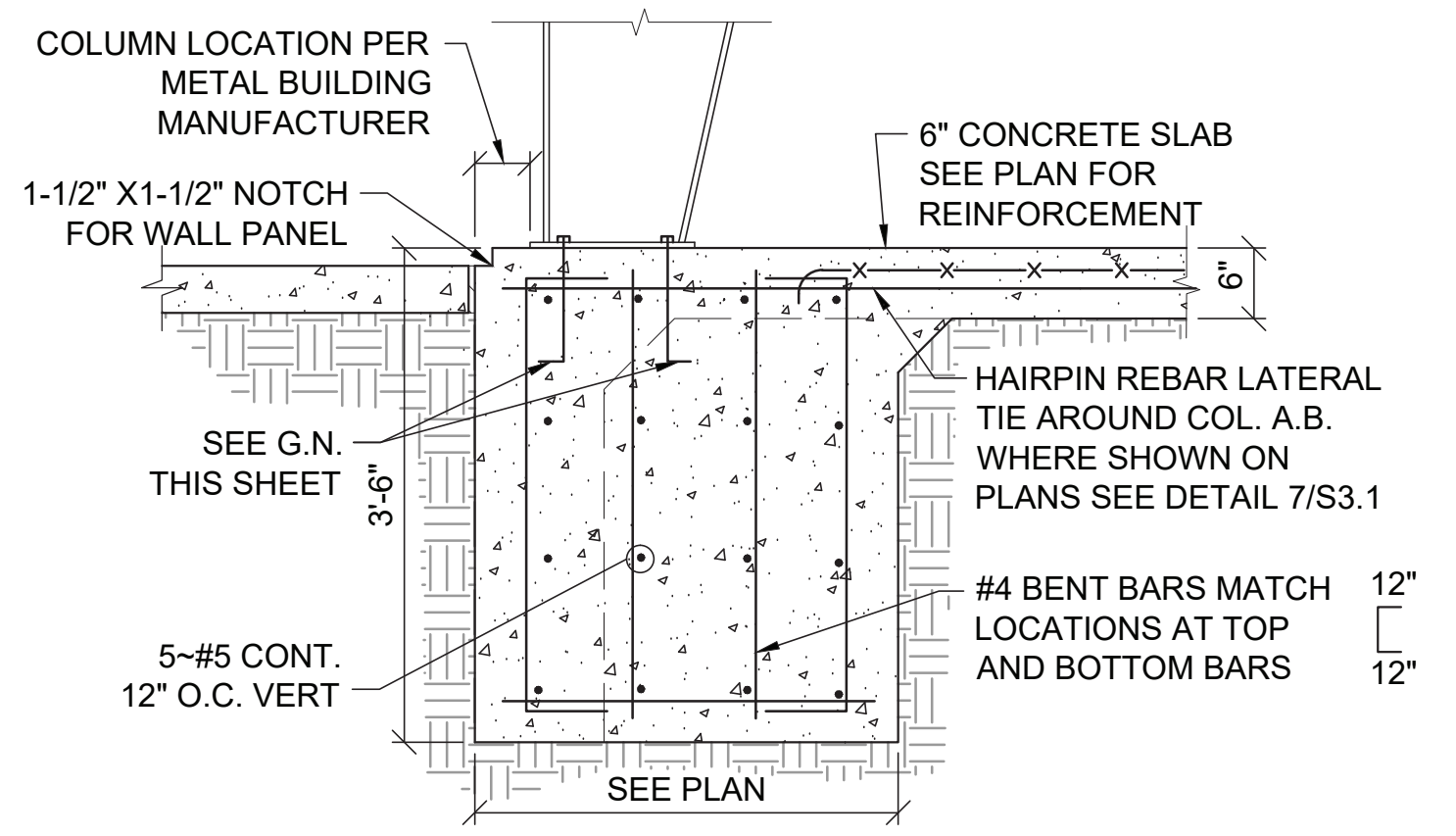
3 TRENCH DRAIN DETAIL Scale: 3/4"=1'-0"



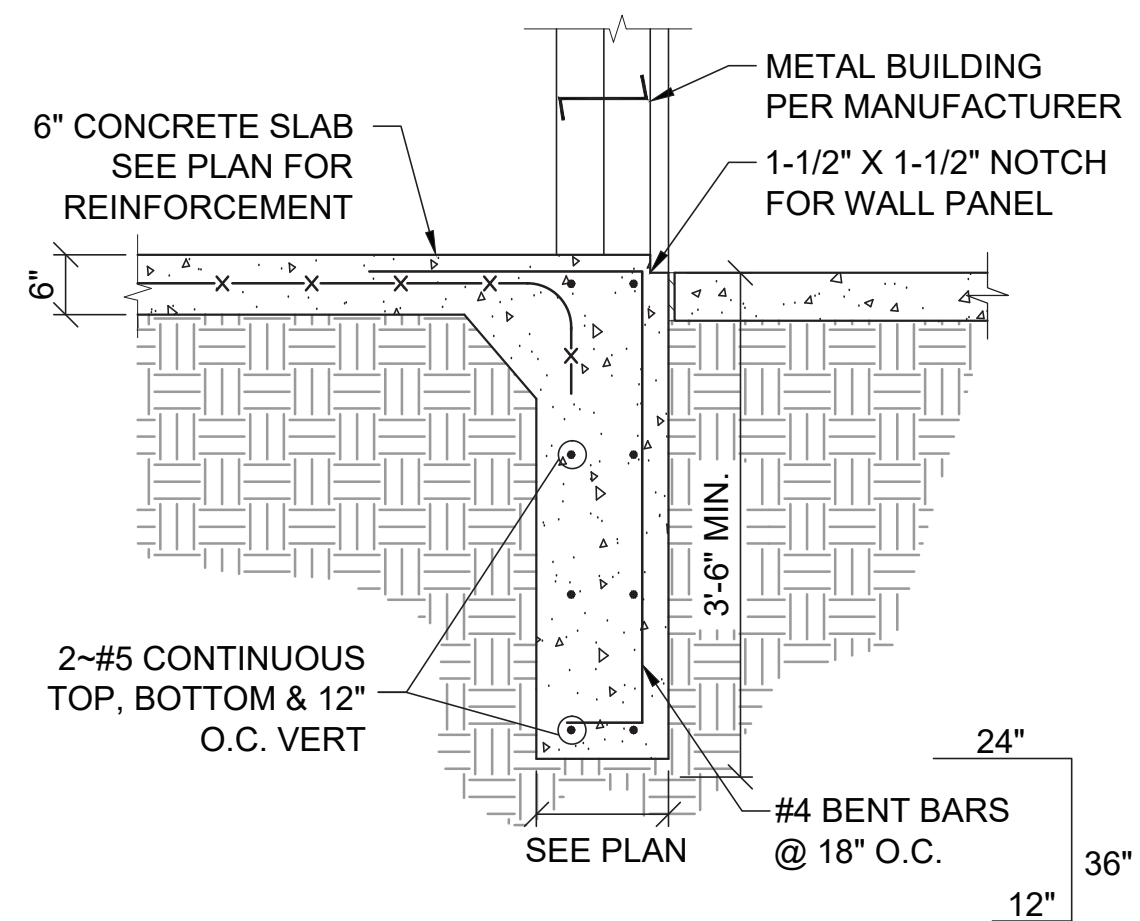
2 CORNER FOOTING DETAIL Scale: 3/4"=1'-0"



1 SIDE FOOTING DETAIL Scale: 3/4"=1'-0"

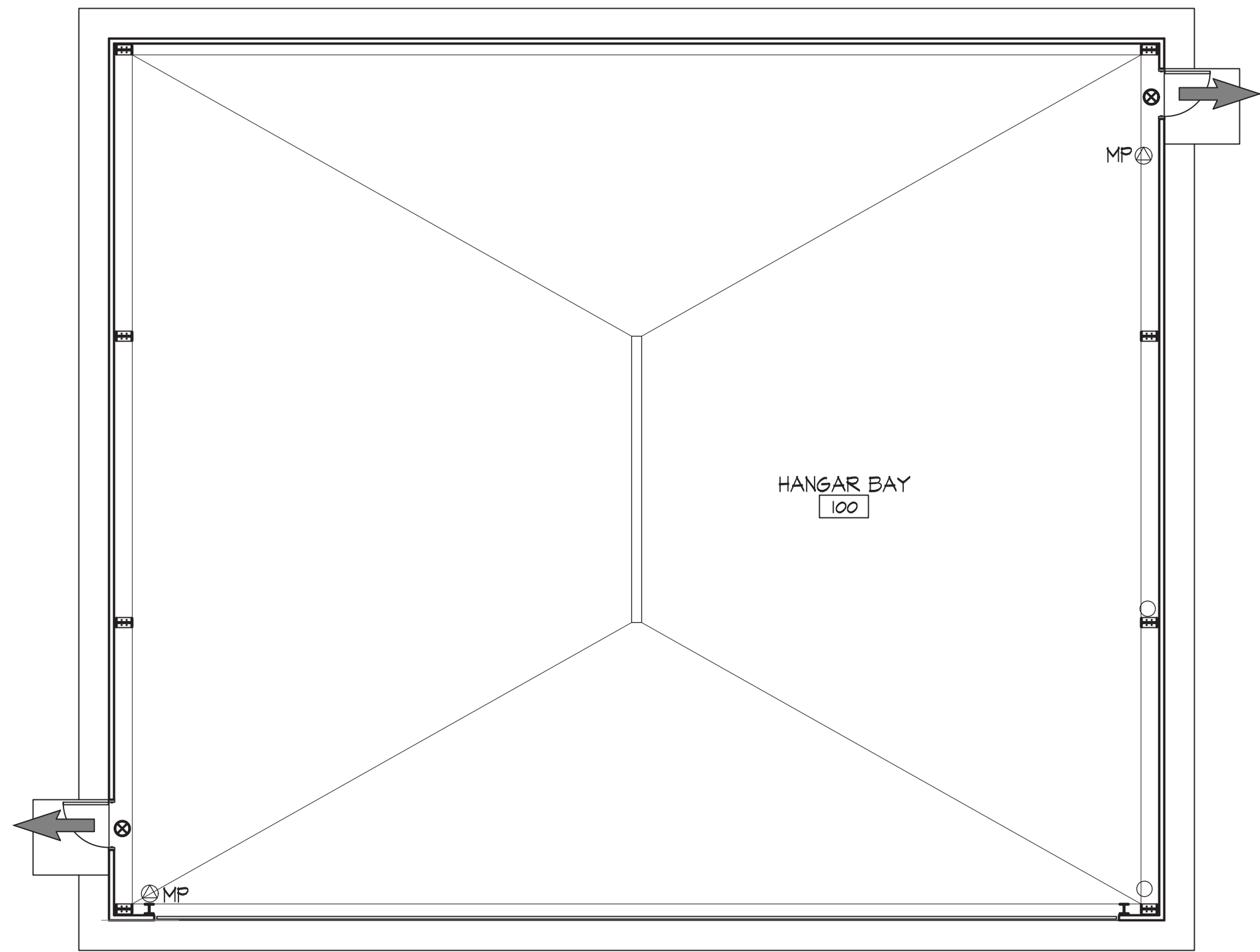


5 FOOTING SECTION @ COLUMN Scale: 3/4"=1'-0"



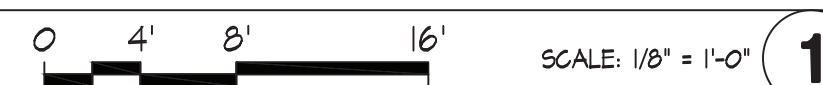
4 TYPICAL TURNDOWN EDGE FOOTING Scale: 3/4"=1'-0"

PLOT DATE: 9/10/2021 9:15 AM
 K:\PROJECTS\2020\20-017\STRUCTURAL\STRUCTURAL SET RATON HANGAR.MAC



SYMBOLS LEGEND

- ⊙MP MULTI PURPOSE FIRE EXTINGUISHER
- ← EXIT
- ⊗ EXIT LIGHTING



LIFE SAFETY PLAN

BUILDING CRITERIA

RATON AIRPORT HANGAR

DESIGNED TO MEET 2015 NMCBC/IBC, 2015 NMPC/UPC, 2015 NMMC/UMC, AND 2015 IFC; 2017 NMEC/NEC AND ANSI A117.1 CURRENT EDITION	
TYPE	BUILDING USE OCCUPANCY CLASSIFICATION: AIRCRAFT HANGAR STORAGE: S-1 TYPE OF CONSTRUCTION: NON-COMBUSTIBLE IIB
BUILDING ATTRIBUTES TABLE 503	BUILDING FLOOR AREA - NON SEPARATED MIXED OCCUPANCY: 2936 SF S-1 W/ ALTERNATE #1: 4095 SF NO OF STORIES: 1 BUILDING HEIGHT: 34 FT ALLOWABLE AREA PER FLOOR FOR S-1 CLASSIFICATION: 17500 SF ALLOWABLE BUILDING HEIGHT: 55 FT
EXTERIOR PROTECTION	FIRE SEPARATION DISTANCES >30 FT ON ALL SIDES TO NEAREST BUILDING OR PROPERTY LINE FIRE RESISTANCE RATING FOR EXTERIOR WALLS BASED ON DISTANCE: NOT REQUIRED
INTERIOR PROTECTION	PORTABLE FIRE EXTINGUISHERS PER IFC SECTION 906: REQUIRED: 2A UNITS EA 1500 SF FLOOR AREA 6A UNITS AT 75FT MAX SPACING REQUIRED 2 - 4A:80B:C EXTINGUISHERS PROVIDED AUTOMATIC FIRE SUPPRESSION: NOT REQUIRED FOR GROUP III HANGAR (903.2.9) UNDER 5000 SF AND LESS THAN 1600 GALLONS OF AGGREGATE FUEL TANKS FIRE DETECTION AND FIRE ALARM SYSTEMS: SMOKE DETECTORS PROVIDED
DESIGN OCCUPANT LOAD MEANS OF EGRESS	FUNCTION OF SPACE/SF PER OCCUPANT: AIRCRAFT HANGAR OCCUPANT LOAD OCCUPANT LOAD: 4095 SF/500 SF PER OCCUPANT = 9 MEANS OF EGRESS REQUIRED AT 36" WIDE EACH: 2 EXITS TO PUBLIC WAY PROVIDED: 2
PLUMBING FIXTURES TABLES 2902.1	PLUMBING FACILITIES NOT REQUIRED AT STORAGE FACILITY PER 412-4-3 INTERIOR FLOOR DRAINS REQUIRED TO DISCHARGE THROUGH OIL SEPARATOR, PROVIDED
INSULATION VALUES NMECC	CLIMATE ZONE: RATON, COLFAX COUNTY, ZONE 5B INSULATION PROVIDED: ROOF: R19+11 LINER SYSTEM (LS) WALLS: R13+13 CONTINUOUS INSULATION (CI) PERIMETER: R10 TO 24" BELOW GRADE

MOLZENCORBIN

2701 Miles Road SE
Albuquerque, New Mexico 87106
505 242 5700 office
505 242 0673 fax
MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
DRAWINGS ARE DEPICTED AT INTENDED NUMERIC SCALES
IF THIS BAR EQUALS ONE INCH



REV. NO.	DESCRIPTION	DATE	BY
PROJECT NUMBER:	RAT181-24	JSA	JOP
DESIGNED BY:	JSA	JSA	JOP
CHECKED BY:	JSA	JSA	JOP
PRIME DESIGN PROFESSIONAL:	JOHN QUINN PATE	SEPTEMBER 2021	

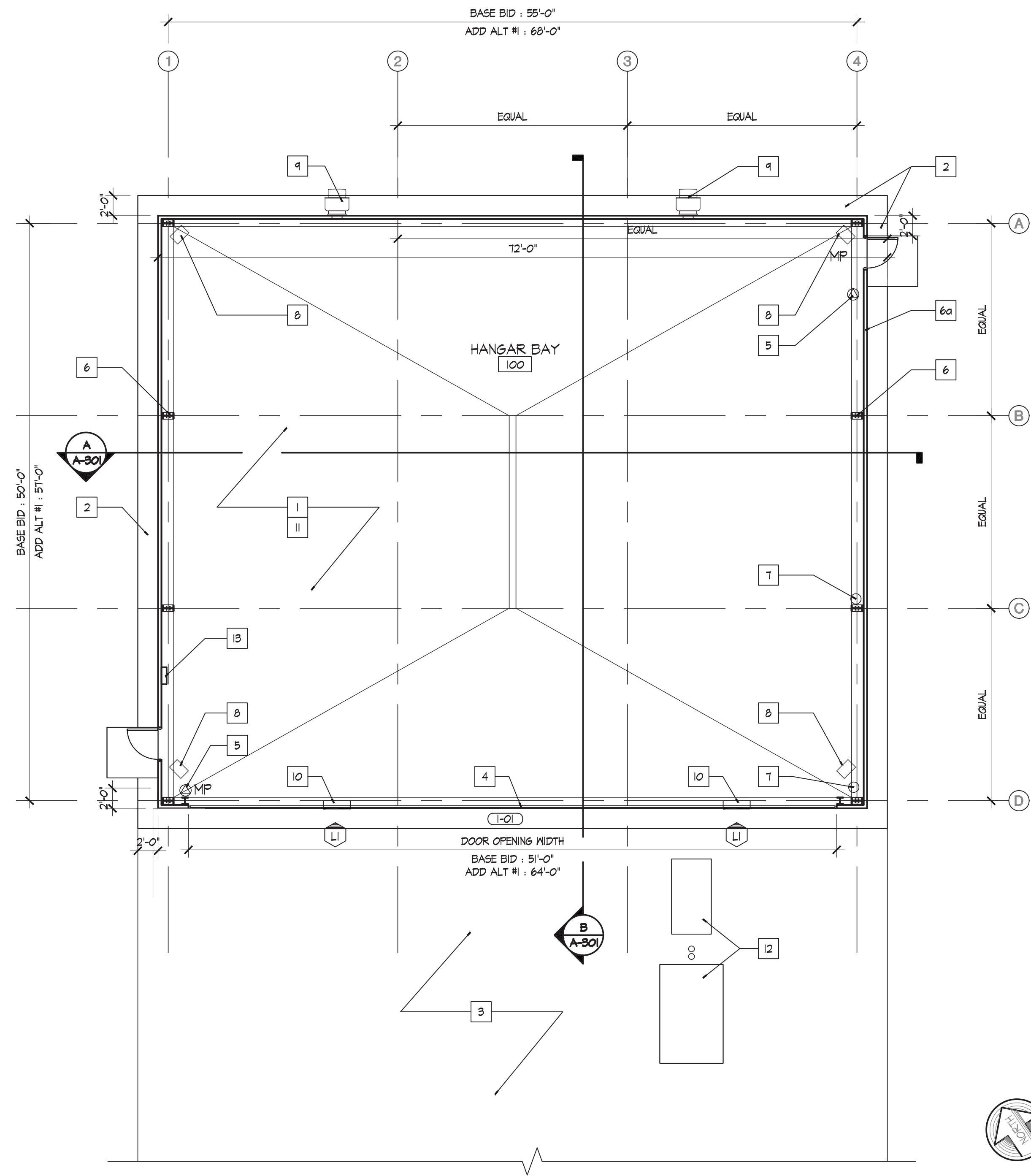
CODE EVALUATION, EGRESS, & LIFE SAFETY

HANGAR
RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)
CITY OF RATON, NEW MEXICO

A-100

SHEET

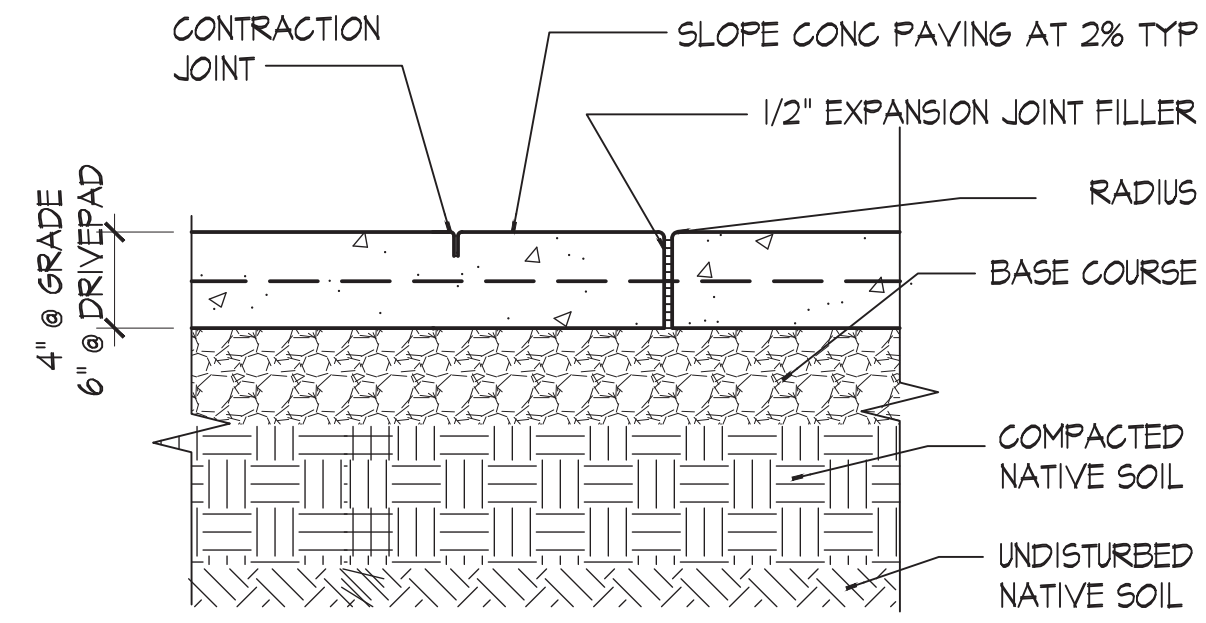
DATE: 09/10/2021 11:51 AM
DRAWN: JSA
PROJECT: RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT) CITY OF RATON, NEW MEXICO
SHEET: A-100



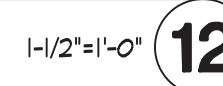
FLOOR PLAN



- NOTES:
1. LOCATE EXP JOINTS WHERE SIDEWALK ABUTS DRIVEWAYS, CURB OR OTHER ADJACENT STRUCTURES.
 2. INSTALL 1/2" BITUMINOUS JOINT FILLER AT EXP JOINT LOCATIONS THE FULL DEPTH OF THE CONCRETE.
 3. PLACE 1" DEEP CONTRACTION JOINTS AT INTERVALS OF APPROX 15'.
 4. FINISH FORMED CONTRACTION JOINTS WITH A TOOL HAVING A 1/4" RADIUS.
 5. PLACE 1/4" DEEP SCORED JOINTS AT SPACING INDICATED FOR THE WIDTH OF SIDEWALK.
 6. FINISH CONCRETE BY MEANS OF A FLOAT, STEEL TROWEL AND BROOMED WITH A FINE BRUSH IN A TRANSVERSE DIRECTION.
 7. WHERE WALK DOES NOT ABUT CURB, REINFORCE WITH 6X6 W1.4 X W1.4 WWF



APRON DETAIL



KEYED NOTES

1. CONCRETE SLAB ON GRADE FLOOR PER STRUCTURAL DRAWINGS, FINISHED AS SCHEDULED ON A-101 AND PER SPECIFICATION SECTION 09 90 00
2. CONCRETE APRON SLOPED AWAY AT 2% FROM FINISHED FLOOR LEVEL SEE CIVIL DWGS
3. ASPHALT DRIVE PAD; SEE CIVIL DETAILS
4. HANGER BI-FOLD DOOR
5. PORTABLE FIRE EXTINGUISHER
6. PRE-ENGINEERED STRUCTURE (REFER TO SPECIFICATION SECTION 13 34 19) INCLUDES
7. PLUMBING VENTS; REFER TO SHEET M-101
8. ELECTRIC UNIT HEATER ABOVE; REFER TO SHEET M-101
9. EXHAUST FAN; REFER TO SHEET M-101
10. INTAKE LOUVER; REFER TO SHEET M-101
11. FLOOR SLOPES DOWN TO FLOOR DRAIN LOCATION; REFER TO M-102 FOR DRAINS
12. OIL SAND INTERCEPTOR; REFER TO M-101
13. ELECTRICAL EQUIPMENT; REFER TO SHEET E-101

GENERAL NOTES

- A. SEE SHEET A-501 FOR OPENING TYPES AND DOOR SCHEDULE
- B. EXPOSED METAL PAINT PER SPECIFICATION 09 90 00
- C. SEE STRUCTURAL FOR CONCRETE SLABS

FINISH SCHEDULE

- FLOOR - EXPOSED CONCRETE, SEALED
 WALLS - EXPOSED PEMB STRUCTURE
 CEILING - EXPOSED PEMB STRUCTURE AND INSULATION

SYMBOL LEGEND

- SECTION INDICATOR
- DOOR TAG
- MECHANICAL LOUVER
- MULTI PURPOSE FIRE EXTINGUISHER

MOLZENCORBIN

2701 Miles Road SE
 Albuquerque, New Mexico 87106
 505 242 5700 office
 505 242 0673 fax
 MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
 THIS CONTRACT ALLOWS THE OWNER TO MAKE
 PAYMENT WITHIN 45 DAYS AFTER SUBMISSION
 OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
 DRAWINGS ARE DEPICTED AT INTENDED
 NUMERIC SCALES
 IF THIS BAR EQUALS ONE INCH

REV. NO.	REV. DATE	DESCRIPTION

PROJECT NUMBER:	RAT181-14
DESIGNED BY:	JSA
DRAWN BY:	JSA
CHECKED BY:	JOP
PRIME DESIGN PROFESSIONAL:	JOHN QUINN PAE
PROJECT DATE:	SEPTEMBER 2021

FLOOR PLAN

HANGAR
 RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)
 CITY OF RATON, NEW MEXICO

A-101

SHEET

MOLZENCORBIN

2701 Miles Road SE
 Albuquerque, New Mexico 87106
 505 242 5700 office
 505 242 0673 fax
 MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
 THIS CONTRACT ALLOWS THE OWNER TO MAKE
 PAYMENT WITHIN 45 DAYS AFTER SUBMISSION
 OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
 DRAWINGS ARE DEPICTED AT INTENDED
 NUMERIC SCALES
 IF THIS BAR EQUALS ONE INCH



REV. NO.	REV. DATE	DESCRIPTION
PROJECT NUMBER:	RAT181-44	JSA
DESIGNED BY:	JSA	JOP
CHECKED BY:	JOHN QUINN PATE	SEPTEMBER 2021
PRIME DESIGN PROFESSIONAL:	JOHN QUINN PATE	
PROJECT DATE:		

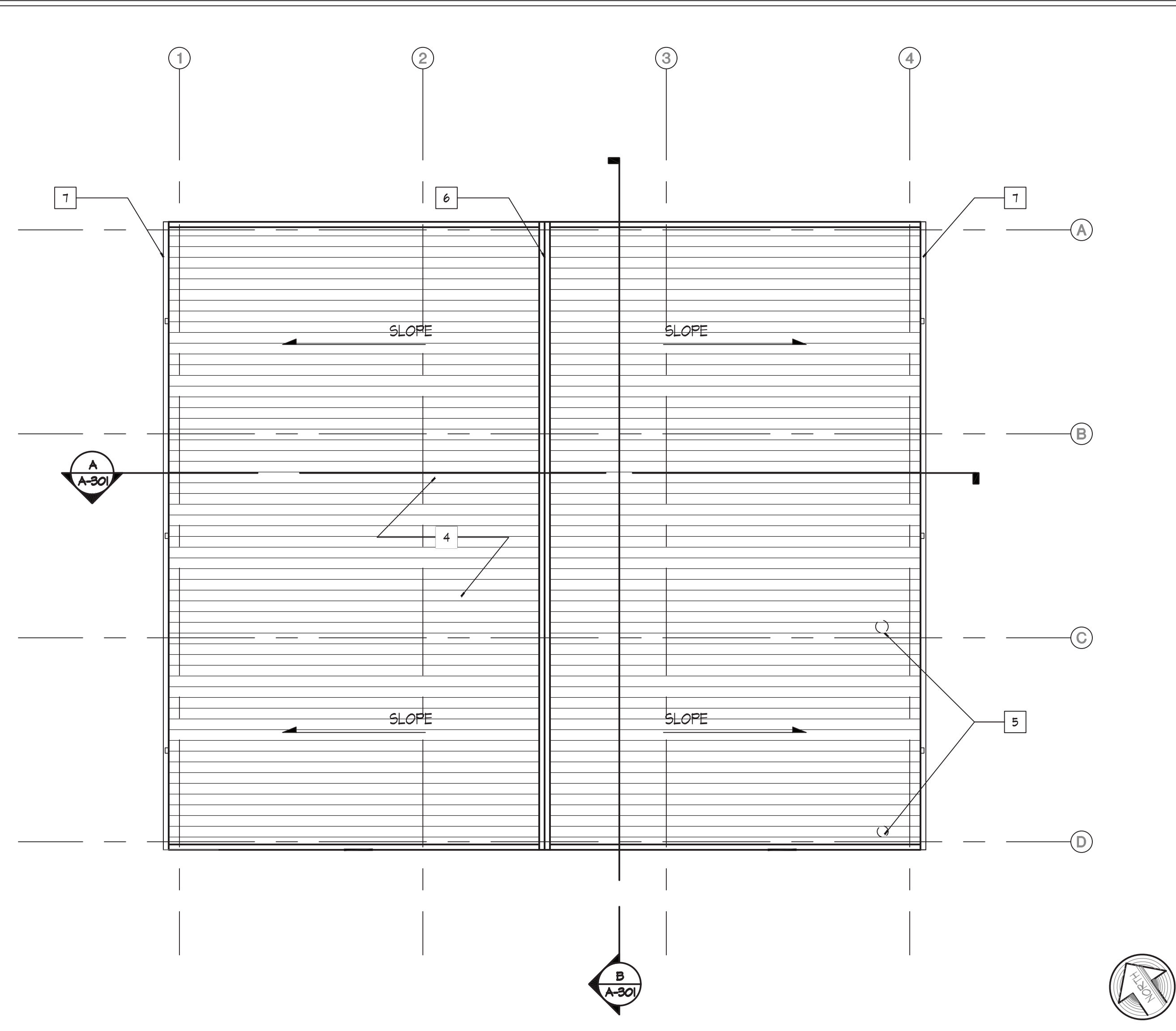
REFLECTED CEILING AND ROOF PLANS

HANGAR
 RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)
 CITY OF RATON, NEW MEXICO

A-102

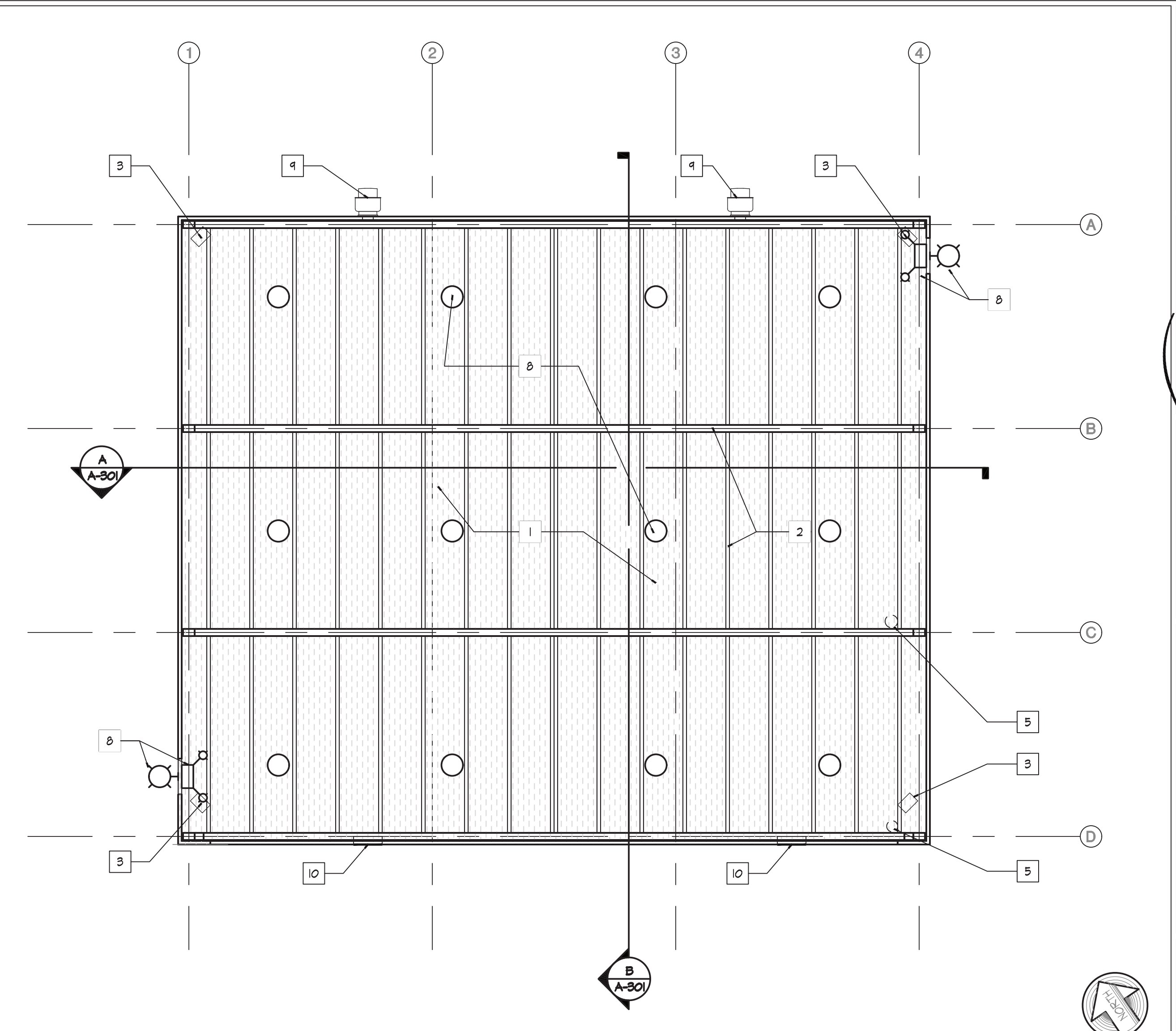
SHEET

© COPYRIGHT



ROOF PLAN

0 4' 8' 16' 1/8"=1'-0" **2**



REFLECTED CEILING PLAN

0 4' 8' 16' 1/8"=1'-0" **1**

KEYED NOTES

1. METAL BUILDING ROOF LINER SYSTEM INSULATION
2. EXPOSED METAL BUILDING STRUCTURE; PAINT, TYP
3. UNIT HEATER, SEE M-101
4. STANDING SEAM (SS) METAL ROOFING OVER INSULATION
5. VENT THROUGH ROOF, SEE P-101
6. ROOF RIDGE
7. CONTINUOUS GUTTER TO DOWNSPOUTS
8. LIGHTING, REFER TO SHEET E-101
9. EXHAUST UNIT, SEE M-101
10. MECHANICAL LOUVER ABOVE DOOR

DATE: 9/10/21 11:45 AM
 SAVE DATE: 9/10/21 9:31 AM
 I:\RATON\PAT181-44 RATON HANGAR\UNISS\ARA-102

MOLZENCORBIN

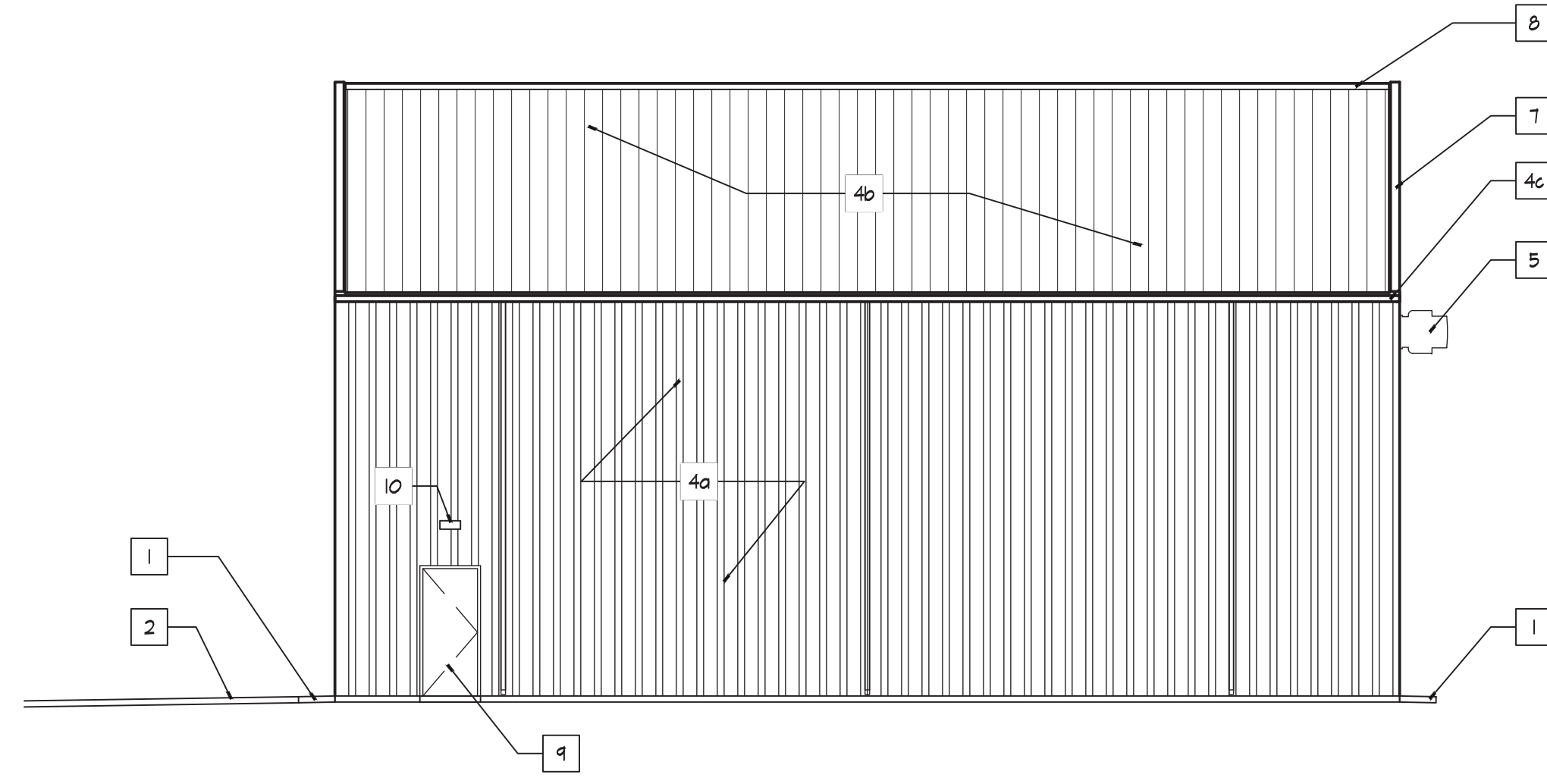
2701 Miles Road SE
 Albuquerque, New Mexico 87106
 505 242 5700 office
 505 242 0673 fax
 MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
 THIS CONTRACT ALLOWS THE OWNER TO MAKE
 PAYMENT WITHIN 45 DAYS AFTER SUBMISSION
 OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
 DRAWINGS ARE DEPICTED AT INTENDED
 NUMERIC SCALES
 IF THIS BAR EQUALS ONE INCH

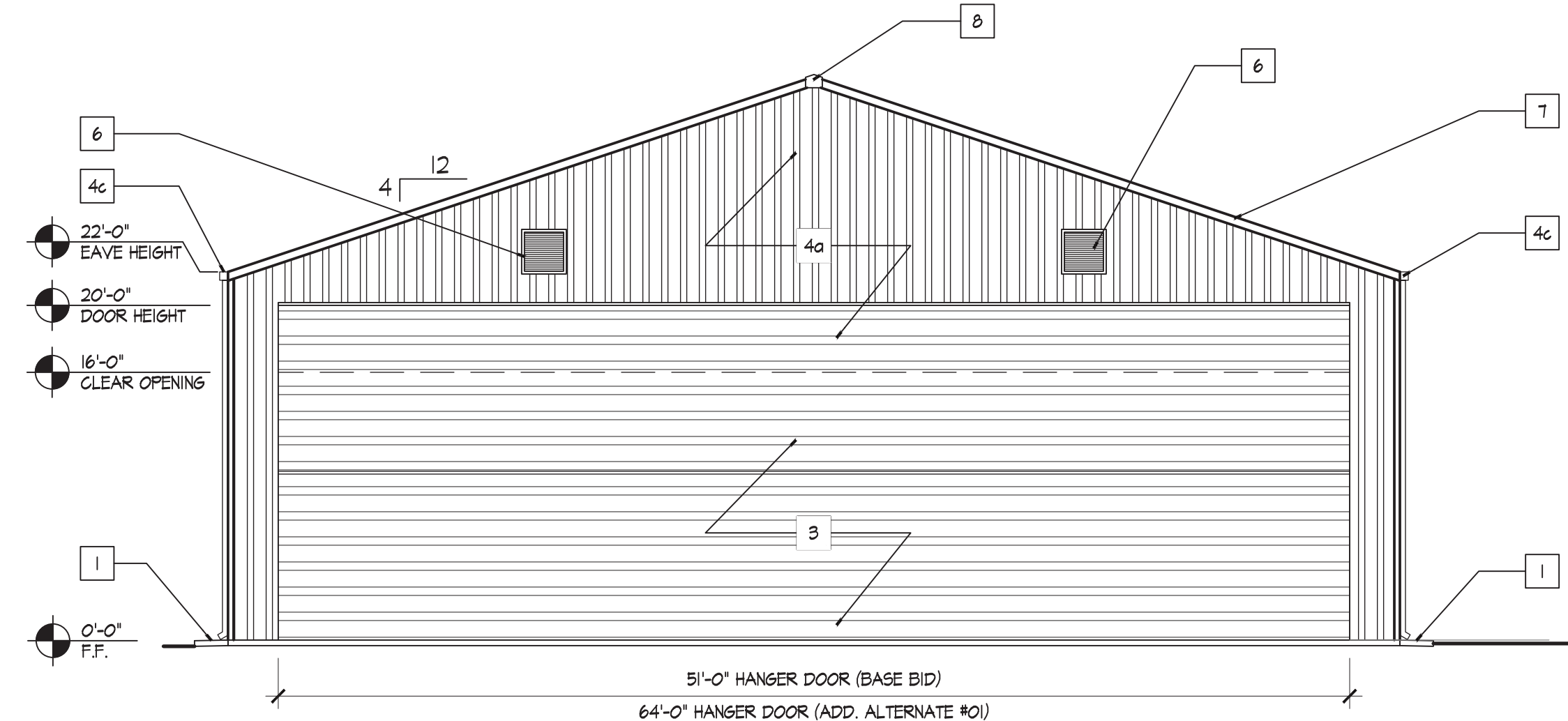


REV. NO.	REV. DATE	DESCRIPTION	RAT181-44	USA
PROJECT NUMBER:	DESIGNED BY:	DRAWN BY:	CHECKED BY:	PRIME DESIGN PROFESSIONAL: JOHN QUINN PATE
				PROJECT DATE: SEPTEMBER 2021



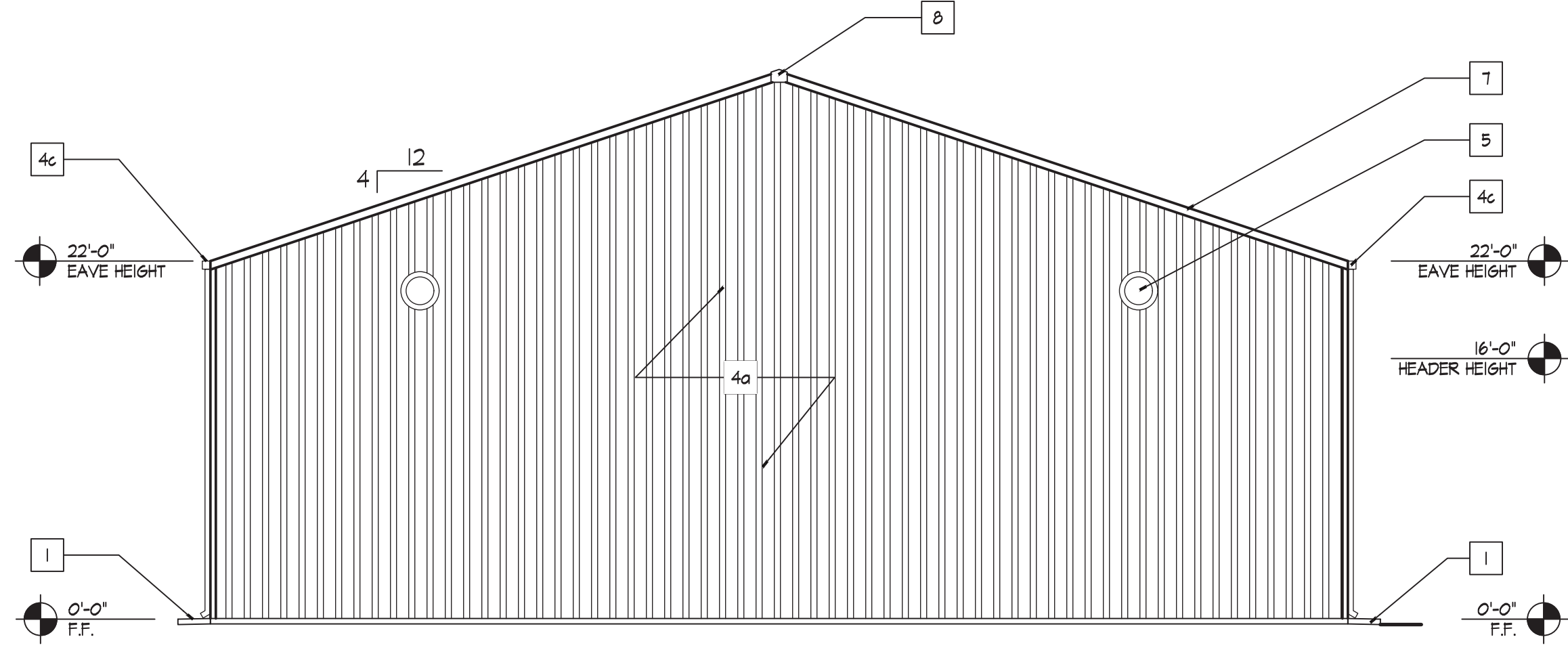
EAST ELEVATION

1/8"=1'-0" **2**



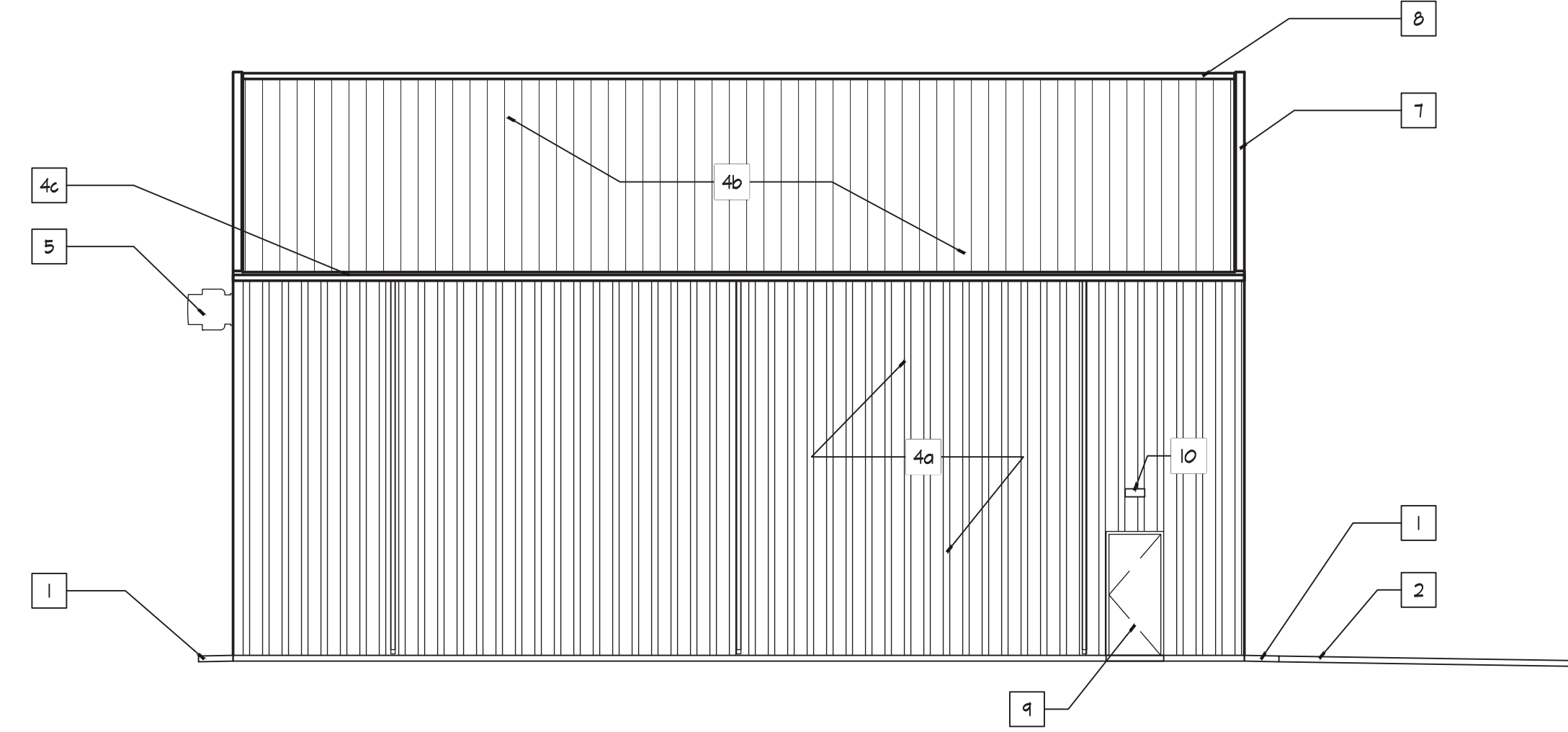
SOUTH ELEVATION

1/8"=1'-0" **1**



NORTH ELEVATION

1/8"=1'-0" **4**



WEST ELEVATION

1/8"=1'-0" **3**

KEYED NOTES

1. CONCRETE APRON SLOPED AWAY AT 2%
2. ASPHALT DRIVE PAD, SEE CIVIL DETAILS
3. HANGER DOOR
4. PRE-ENGINEERED METAL BUILDING (REFER TO SPECIFICATION SECTION 13 34 19) INCLUDES
 - 4a. INSULATED METAL WALL PANELING AT EXTERIOR OVER VINYL FACED INSULATION
 - 4b. STANDING SEAM METAL ROOFING OVER LINER SYSTEM INSULATION OVER STEEL STRUCTURE
 - 4c. DOWNSPOUTS FROM CONTINUOUS EAVE GUTTER ABOVE,
5. EXHAUST FAN, REFER TO SHEET M-101
6. INTAKE LOUVER, REFER TO SHEET M-101
7. GABLE TRIM BY PEMB
8. ROOF RIDGE BY PEMB
9. MAN DOOR WITH CONCRETE STOOP
10. LIGHT FIXTURE, REFER TO SHEET E-101

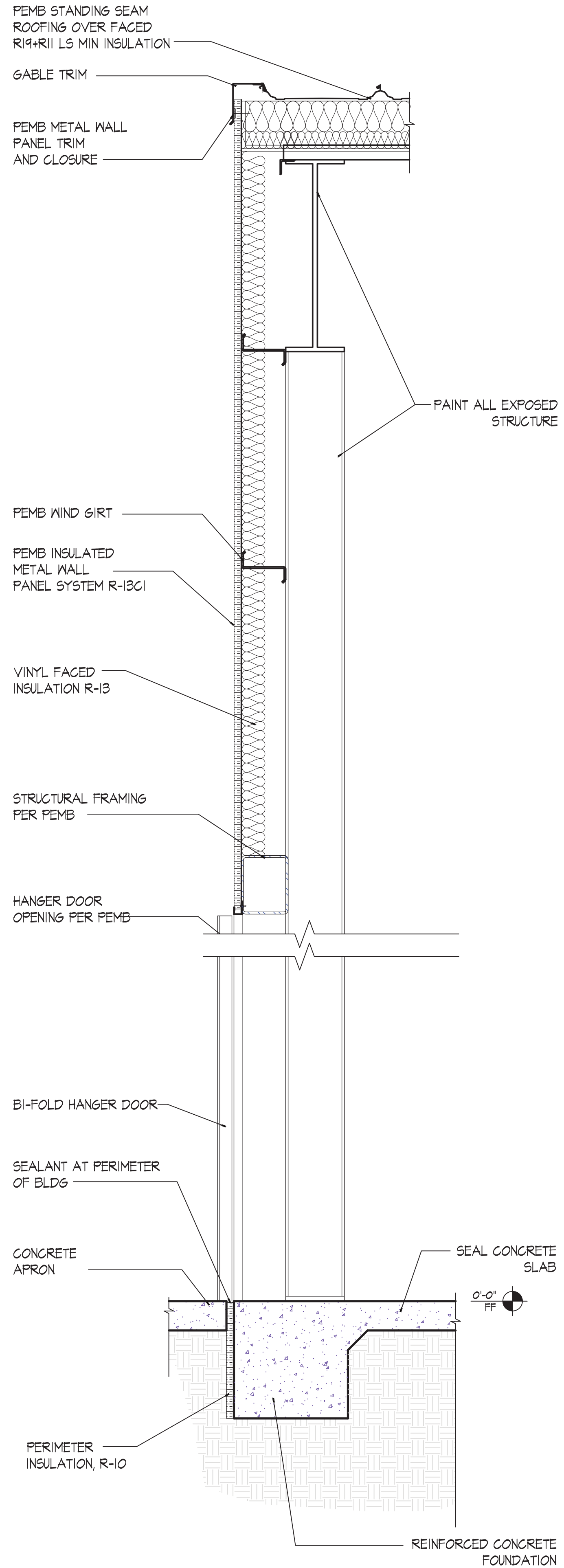
BUILDING ELEVATIONS

HANGAR
 RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)
 CITY OF RATON, NEW MEXICO

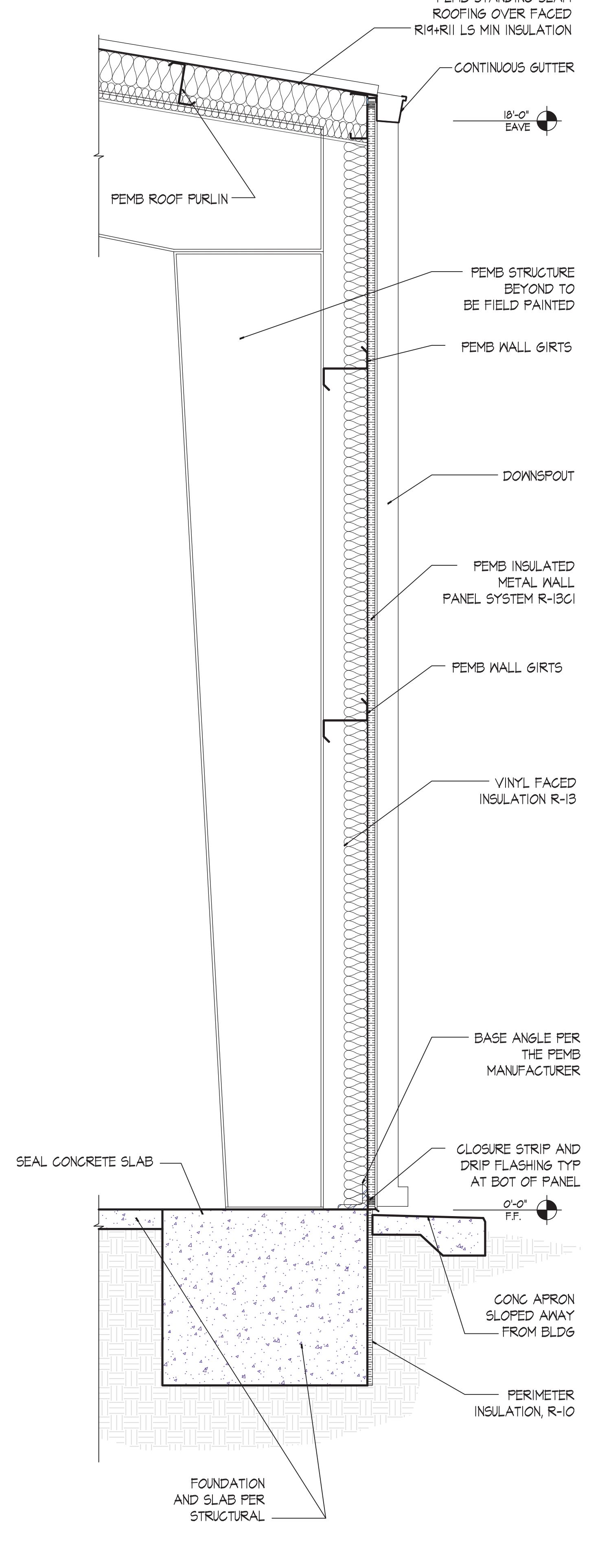
A-201

SHEET

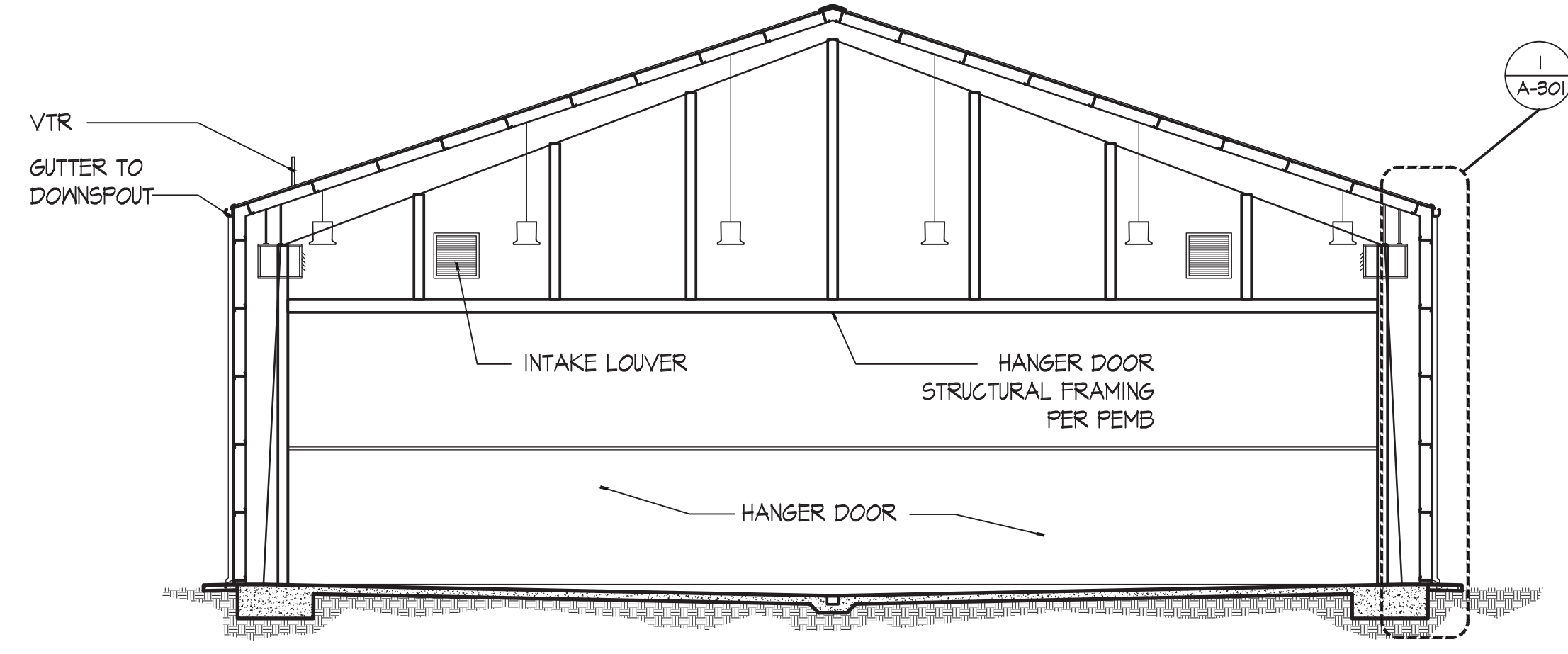
PLANT DATE: 9/10/2021 11:57 AM
 SAVE DATE: 9/10/2021 9:38 AM
 I:\PROJECTS\RATON-18-RATON HANGAR\UNITS\MBA-201



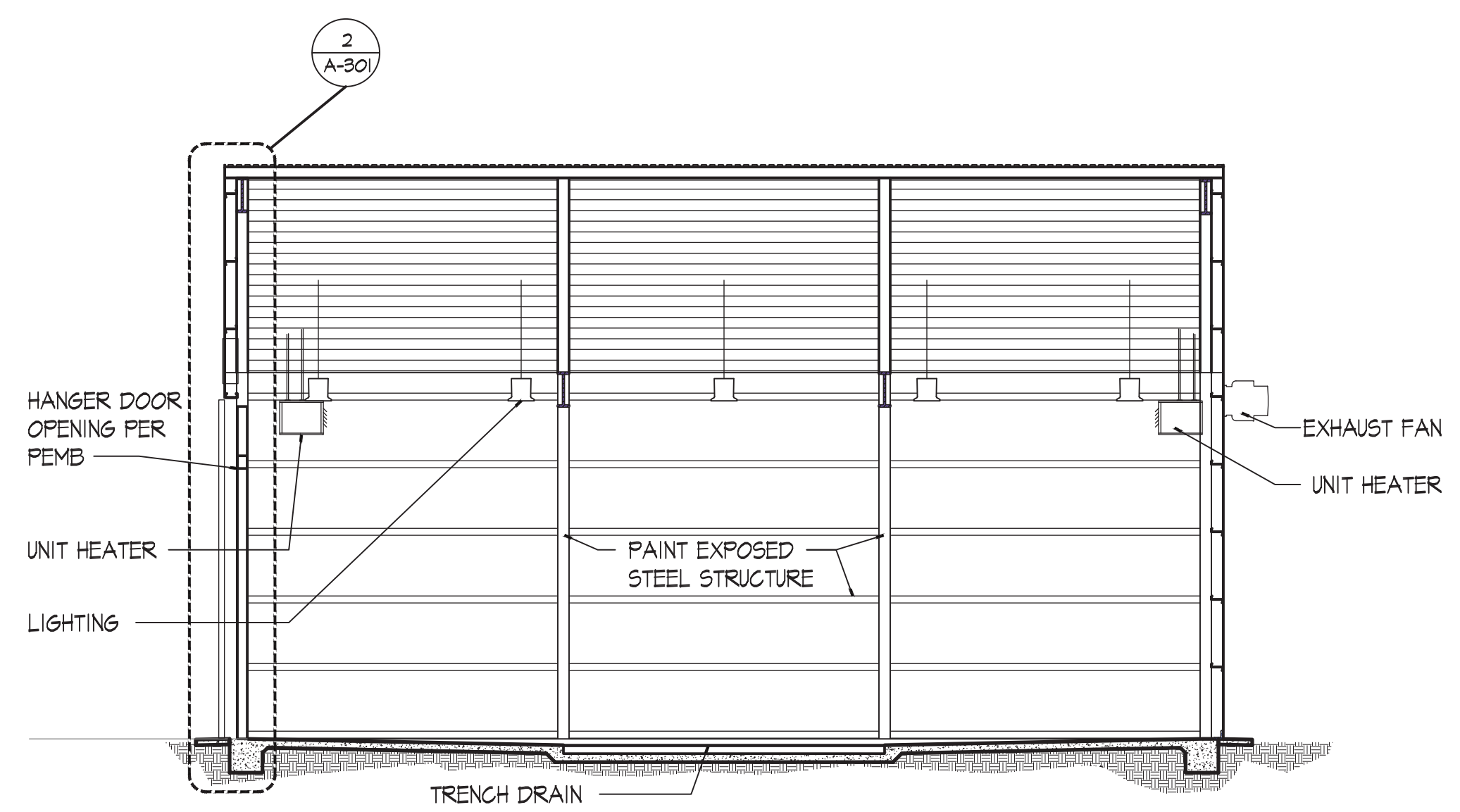
WALL SECTION 3/4" = 1'-0" **2**



WALL SECTION 3/4" = 1'-0" **1**



BUILDING SECTION 1/8" = 1'-0" **A**



BUILDING SECTION 1/8" = 1'-0" **B**

MOLZENCORBIN
 2701 Miles Road SE
 Albuquerque, New Mexico 87106
 505 242 5700 office
 505 242 0673 fax
 MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
 THIS CONTRACT ALLOWS THE OWNER TO MAKE
 PAYMENT WITHIN 45 DAYS AFTER SUBMISSION
 OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
 DRAWINGS ARE DEPICTED AT INTENDED
 NUMERIC SCALES
 IF THIS BAR EQUALS ONE INCH



REV. NO.	REV. DATE	DESCRIPTION
PROJECT NUMBER:	RAT181-1	JSA
DESIGNED BY:	JSA	JOP
DRAWN BY:	JOP	JOP
CHECKED BY:	JOHN QUINN PATE	SEPTEMBER 2021
PRIME DESIGN PROFESSIONAL:	JOHN QUINN PATE	
PROJECT DATE:	SEPTEMBER 2021	

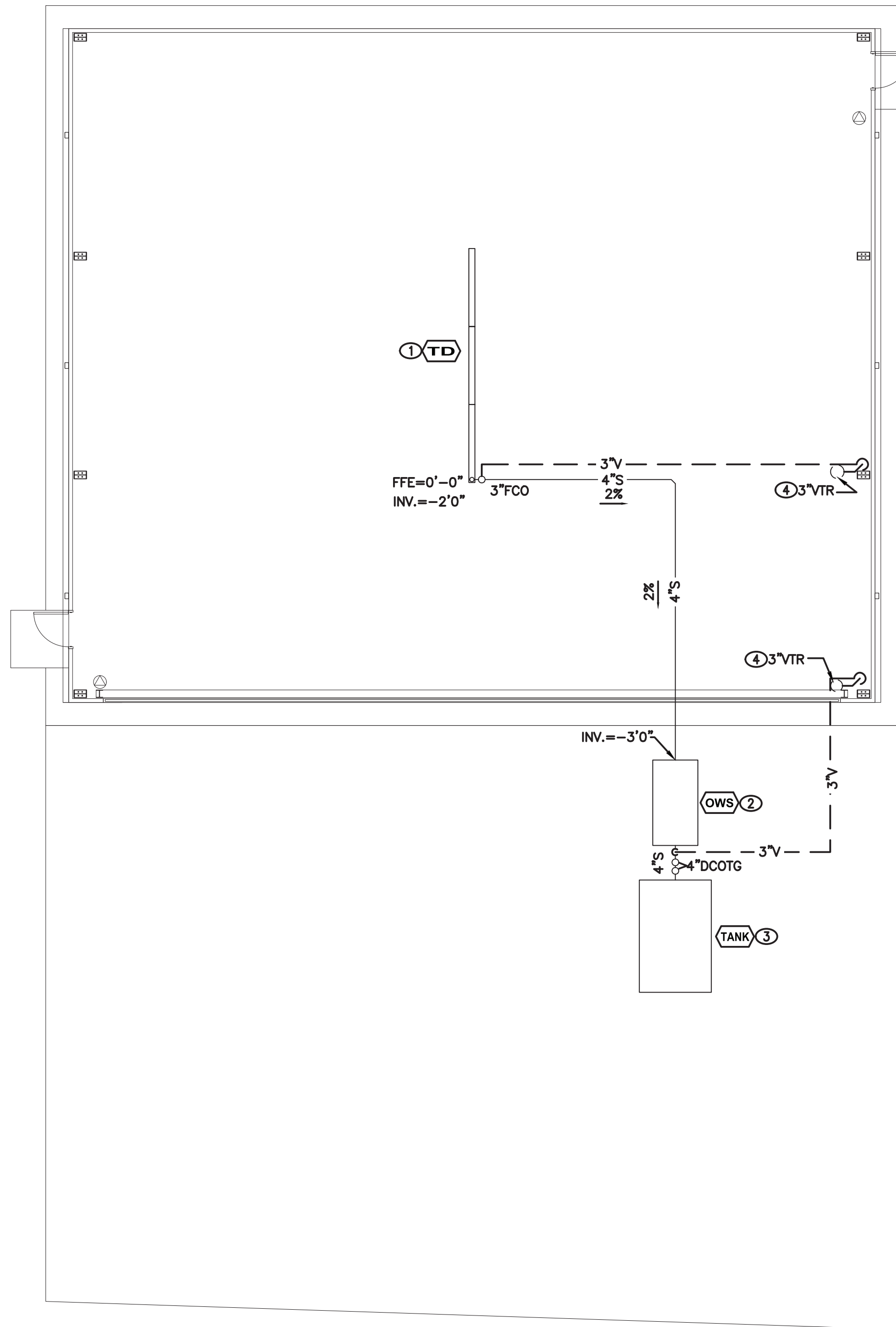
BUILDING SECTIONS AND WALL SECTIONS

HANGAR
RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)
CITY OF RATON, NEW MEXICO

A-301
 SHEET

DATE: 9/10/21 11:53 AM
 DATE: 9/10/21 8:42 AM
 15/000/PAT181-1E RATON HANGAR/CREWS-301

PLUMBING PLAN
 SCALE: 1/8"=1'-0"

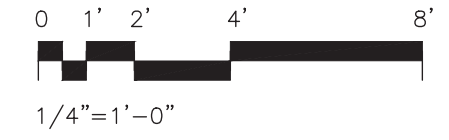
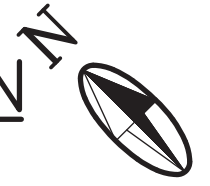


KEYED NOTES ○

1. TRENCH DRAIN.
2. OIL SAND INTERCEPTOR.
3. STORAGE TANK.
4. VENT THRU ROOF.

PLUMBING PLAN

SCALE: 1/8"=1'-0"



MOLZENCORBIN

2701 Miles Road SE
 Albuquerque, New Mexico 87106
 505 242 5700 office
 505 242 0673 fax
 MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
 THIS CONTRACT ALLOWS THE OWNER TO MAKE
 PAYMENT WITHIN 45 DAYS AFTER SUBMISSION
 OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION

DRAWINGS ARE DEPICTED AT INTENDED
 NUMERIC SCALES
 IF THIS BAR EQUALS ONE INCH



REV. NO.	REV. DATE	DESCRIPTION

PROJECT NUMBER:	RAT181-14
DESIGNED BY:	PMR
DRAWN BY:	PMR
CHECKED BY:	PMR
PRIME DESIGN PROFESSIONAL:	JOHN QUINN PATE
PROJECT DATE:	SEPTEMBER 2021

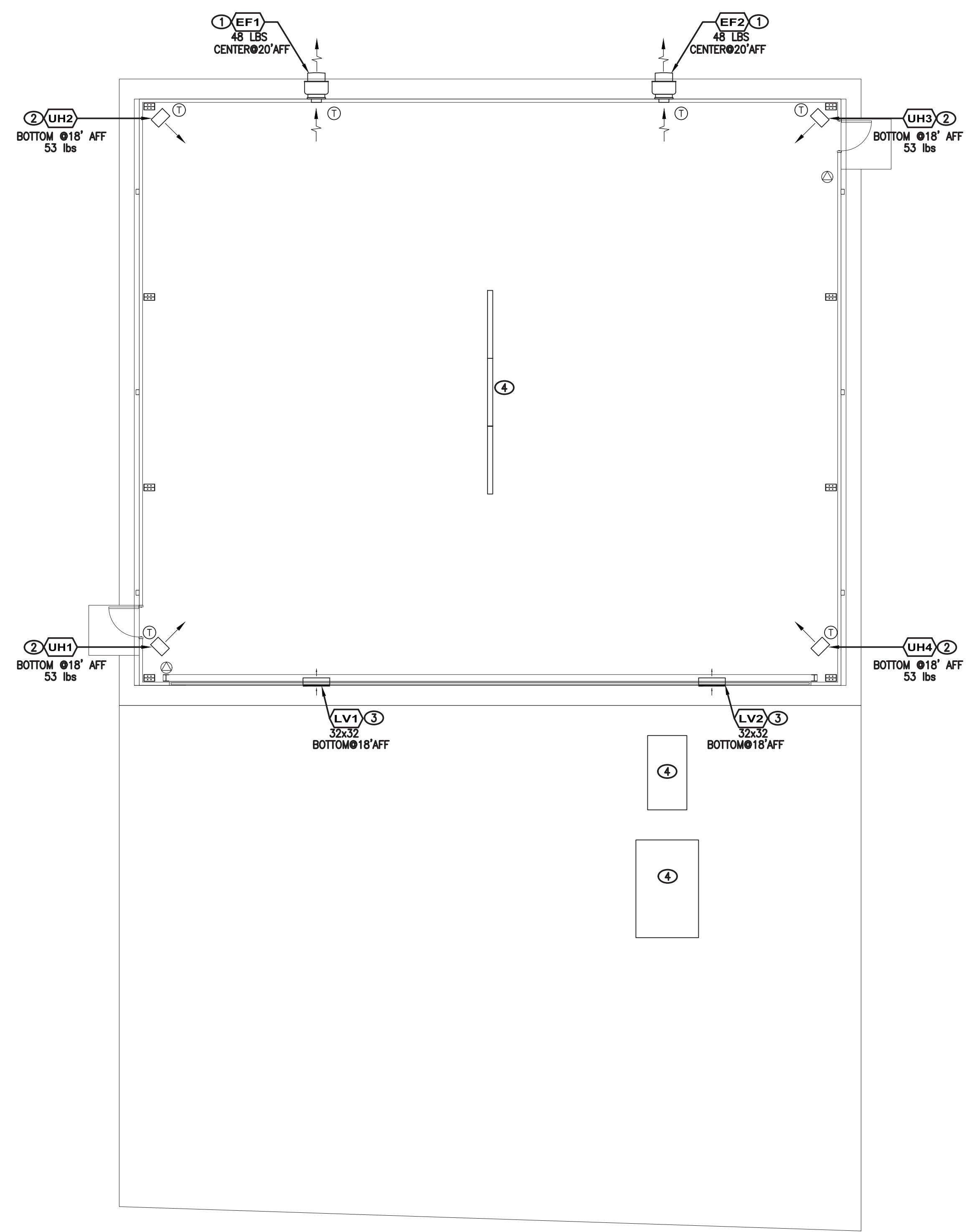
PLUMBING PLAN

HANGAR
RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)
CITY OF RATON, NEW MEXICO

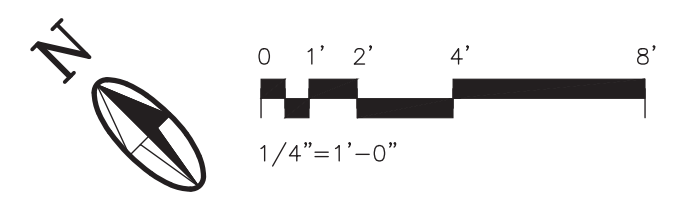
P-101

SHEET

PLN DATE: 9/10/2021 10:57 PM
 SAVG DATE: 9/10/2021 12:46 PM
 P:\PORTFOLIO\HANGAR-14.RVDW - HANGAR\DWGS\HANGAR-101



HVAC PLAN
 SCALE: 1/8"=1'-0"



KEYED NOTES ○

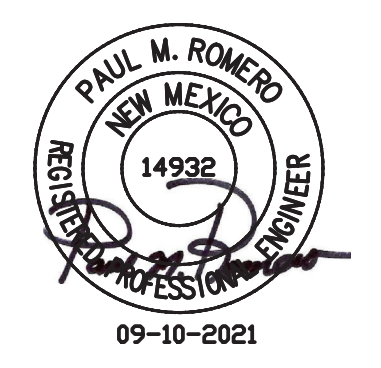
1. WALL MOUNT EXHAUST FAN. SET TO CFM INDICATED ON SCHEDULE.
2. ELECTRIC HEATER MOUNTED ON WALL.
3. INTAKE LOUVER WITH BAROMETRIC DAMPER.
4. PLUMBING EQUIPMENT. SEE PLUMBING PLANS.

MOLZENCORBIN

2701 Miles Road SE
 Albuquerque, New Mexico 87106
 505 242 5700 office
 505 242 0673 fax
 MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
 THIS CONTRACT ALLOWS THE OWNER TO MAKE
 PAYMENT WITHIN 45 DAYS AFTER SUBMISSION
 OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
 DRAWINGS ARE DEPICTED AT INTENDED
 NUMERIC SCALES
 IF THIS BAR EQUALS ONE INCH



REV. NO.	REV. DATE	DESCRIPTION

PROJECT NUMBER:	RAT181-14
DESIGNED BY:	PMR
DRAWN BY:	PMR
CHECKED BY:	PMR
PRIME DESIGN PROFESSIONAL:	JOHN QUINN PATE
PROJECT DATE:	SEPTEMBER 2021

HVAC PLAN

HANGAR
 RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)
 CITY OF RATON, NEW MEXICO

M-101

SHEET

HVAC GENERAL NOTES

- A. CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET. FURNISH SUBMITTAL DATA ON EQUIPMENT LISTED ON SCHEDULE AND DUCTWORK.
- B. COORDINATE WITH THE WORK OF OTHER TRADES, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS AT THE PROJECT SITE.
- C. DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. PROVIDE, DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, CONTROLS AND MATERIALS NECESSARY FOR A COMPLETE FUNCTIONAL SYSTEM INSTALLATION.
- D. ALL NEW DUCT DIMENSIONS SHOWN ON DRAWINGS ARE NET INSIDE DIMENSIONS.
- E. ALL JOINTS AND SEAMS EXHAUST DUCTS, ROUND OR RECTANGULAR, MUST BE SEALED AIR TIGHT PER SMACNA STANDARDS. CONSTRUCT ALL DUCTS, CASINGS, PLENUMS, ETC., FROM GALVANIZED STEEL SHEETS. SHEETS SHALL BE FREE OF BLISTERS, SLIVERS, PITS, AND IMPERFECTLY GALVANIZED SPOTS. REINFORCING ANGLES AND BARS, AND DUCT SUPPORT MATERIALS SHALL BE GALVANIZED STEEL. DUCT CONSTRUCTION AND GAUGES SHALL BE PER SMACNA STANDARDS. DUCT JOINTS FOR LOW PRESSURE DUCTWORK SHALL BE SEALED TO MEET 1" WC PRESSURE CLASSIFICATION. SEAL ALL TRANSVERSE JOINTS WITH IRON GRIP 601 AS MANUFACTURED BY HARDCAST PER MANUFACTURER'S INSTRUCTIONS. DUCT TAPE IS NOT AN ACCEPTABLE MEANS OF SEALING DUCTS.
- F. DUCTWORK OR PIPE PENETRATIONS THRU ASSEMBLIES SHALL BE CAULKED AIRTIGHT BY MEANS OF AN APPROVED CAULKING MATERIAL.
- G. SUPPORTS FROM ROOF DECK ARE NOT PERMITTED. ALL PIPING SHALL BE RIGIDLY SUPPORTED FROM THE BUILDING STRUCTURE BY MEANS OF HANGER ASSEMBLIES PROPERLY SELECTED AND SIZED FOR THE APPLICATION IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
- H. TEST AND BALANCE EXHAUST FANS TO AIR FLOWS INDICATED ON PLANS. TAB AGENCY SHALL PERFORM THE WORK IN ACCORDANCE WITH THE LATEST EDITION OF AABC OR NEBB PROCEDURAL STANDARDS FOR TAB OF ENVIRONMENTAL SYSTEMS.
- I. IDENTIFY EXHAUST FAN AND HVAC EQUIPMENT DEVICES WITH NAMEPLATES.
- J. FASTENERS: USE GALVANIZED RIVETS, BOLTS, AND SHEET METAL SCREWS THROUGHOUT, EXCEPT ON STAINLESS DUCTWORK, USE SS FASTENERS.
- K. HANGER ROD: ASTM A36/A36M; STEEL, GALVANIZED; THREADED BOTH ENDS, THREADED ONE END, OR CONTINUOUSLY THREADED. USE GALVANIZED STEEL, 1/4 INCH MINIMUM DIAMETER FASTENERS FOR DUCTWORK 36 INCH OR LESS IN LENGTH; USE 3/8 INCH MINIMUM DIAMETER FOR LENGTHS LONGER THAN 36 IN.
- L. HANGER STRAPS: ASTM A653 GALVANIZED STEEL HAVING G90 ZINC COATING IN CONFORMANCE WITH ASTM A90.
- M. SUPPORTS: ANGLE IRON, CHANNELS, RODS AND RELATED SUPPORTING MATERIALS SHALL BE GALVANIZED OR RED OXIDE COATED.
- N. FURNISH SHOP DRAWING SUBMITTALS ON ITEMS LISTED ON EQUIPMENT SCHEDULES.

UNIT HEATER SCHEDULE

UNIT HEATER: HORIZONTAL AIR DELIVERY ELECTRIC UNIT HEATER, STEEL CASING AND THE CAPACITY AND VOLTAGE LISTED BELOW. UNITS SHALL BE UL AND C-UL LISTED FOR SAFE OPERATION CONSTRUCTION AND PERFORMANCE. CONTROL COMPARTMENT SHALL SAFELY ENCLOSE POWER AND TERMINAL BLOCKS, INCLUDE SAFETY FAN GUARD OF HEAVY GAUGE STEEL. MOTOR AND FAN SHALL BE TOTALLY ENCLOSED WITH AUTOMATIC RESETTING AND THERMAL OVERLOAD PROTECTION. FURNISH UNIT WITH FACTORY MOUNTED TRANSFORMER. MANUFACTURE: QMARK OR EQUIVALENT.

SYMBOL	QMARK	WEIGHT (LBS)	SUPPLY FAN DATA		ELECTRICAL DATA				HEATING PERFORMANCE		REMARKS
			CFM	VOLT	PHASE	HERTZ	AMPS	KW	EAT °F	LAT°F	
UH1 THRU UH4	MUH-15-2	53	910	208	3	60	31.3	11.2	55	107	HEAT THROW: 35 FEET. MAX MOUNTING HEIGHT: 18 FEET AFF. FURNISH WITH WALL MOUNTING KIT, AND THERMOSTAT

EXHAUST FAN SCHEDULE

EXHAUST FAN: CENTRIFUGAL WALL MOUNT, DIRECT DRIVE, ALUMINUM HOUSING, BACKWARD INCLINED ALUMINUM WHEEL, ELECTRONIC VARIABLE SPEED MOTOR WITH SPEED CONTROLLER, BIRD SCREEN, UNIT SHALL BE CAPABLE OF EXHAUSTING THE CAPACITIES SCHEDULED BELOW. SIZED FOR 7,000 FEET ELEVATION. MANUFACTURED BY GREENHECK OR EQUIVALENT.

SYMBOL	LOREN COOK MODEL #	CFM	ESP IN W.C.	DAMPER SIZE		ELECTRICAL			SONES	WEIGHT (LBS)	REMARKS
				WIDTH (IN)	HEIGHT (IN)	V/PH/Hz	WATTS	HP			
EF1 THRU EF2	135W17DEC	2,000	0.5	12	12	115/1/60	394.0	3/4	19.1	48	EXTERNAL SIGNAL SPEED CONTROL BALANCE KIT (120V), NEMA 3 DISCONNECT PRE WIRED, BACK DRAFT DAMPER

LOUVER SCHEDULE

LOUVER: 4" DEEP FRAME, 35° BLADE DESIGN, EXTRUDED ALUMINUM, DRAIN GUTTERS IN THE HEAD MEMBER, HORIZONTAL BLADES, INTERNAL BIRDSCREEN TO MATCH LOUVER. ACCESSORY DAMPERS AS LISTED IN REMARKS. UNIT SHALL BE CAPABLE OF CAPACITIES LISTED BELOW. SITE ELEVATION 7,000 FEET. MFG: GREENHECK ESD-435 OR EQUIVALENT.

SYMBOL	GREENHECK MODEL #	WIDTH (IN)	HEIGHT (IN)	FREE AREA (FT²)	VELOCITY (FPM)	DESIGN FLOW (CFM)	REMARKS
LV1	ESD-435	32	32	3.55	564	2000	INTAKE. PRIMED COATED THEN PAINTED PER ARCHITECTURAL SPECIFICATIONS. FURNISH WITH BACKDRAFT DAMPER AND BIRD SCREEN
LV2	ESD-435	32	32	3.55	564	2000	INTAKE. PRIME COATED THEN PAINTED PER ARCHITECTURAL SPECIFICATIONS. FURNISH WITH BACK DRAFT DAMPER AND BIRD SCREEN

SEQUENCE OF OPERATIONS

EXHAUST FAN (EF1, EF2)
MECHANICAL CONTRACTOR TO FURNISH SPEED CONTROLLER WITH EXHAUST FAN. ELECTRICAL CONTRACTOR TO FURNISH LINE VOLTAGE THERMOSTAT AND INSTALL TO SPEED CONTROLLER AND EXHAUST FAN. EXHAUST FAN TO RUN CONTINUOUSLY WHEN TEMPERATURE IN THE SPACE EXCEEDS 75°F.

UNIT HEATERS (UH-1 THRU UH-4)
MECHANICAL CONTRACTOR TO FURNISH UNIT HEATER WITH T-STAT AND ELECTRICAL CONTRACTOR TO INSTALL T-STAT. UNIT HEATER SHALL RUN WHEN SPACE TEMPERATURE FALLS BELOW 55°F.
REFER TO ELECTRICAL DRAWINGS FOR FURTHER DETAIL.

MOLZENCORBIN

2701 Miles Road SE
Albuquerque, New Mexico 87106
505 242 5700 office
505 242 0673 fax
MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION

DRAWINGS ARE DEPICTED AT INTENDED NUMERIC SCALES
IF THIS BAR EQUALS ONE INCH



REV. NO.	REV. DATE	DESCRIPTION

PROJECT NUMBER: RAT181-14	DESIGNED BY: PNR	PROJECT DATE: SEPTEMBER 2021
DRAWN BY: PNR	CHECKED BY: PNR	PRIME DESIGN PROFESSIONAL: JOHN QUINN PATE

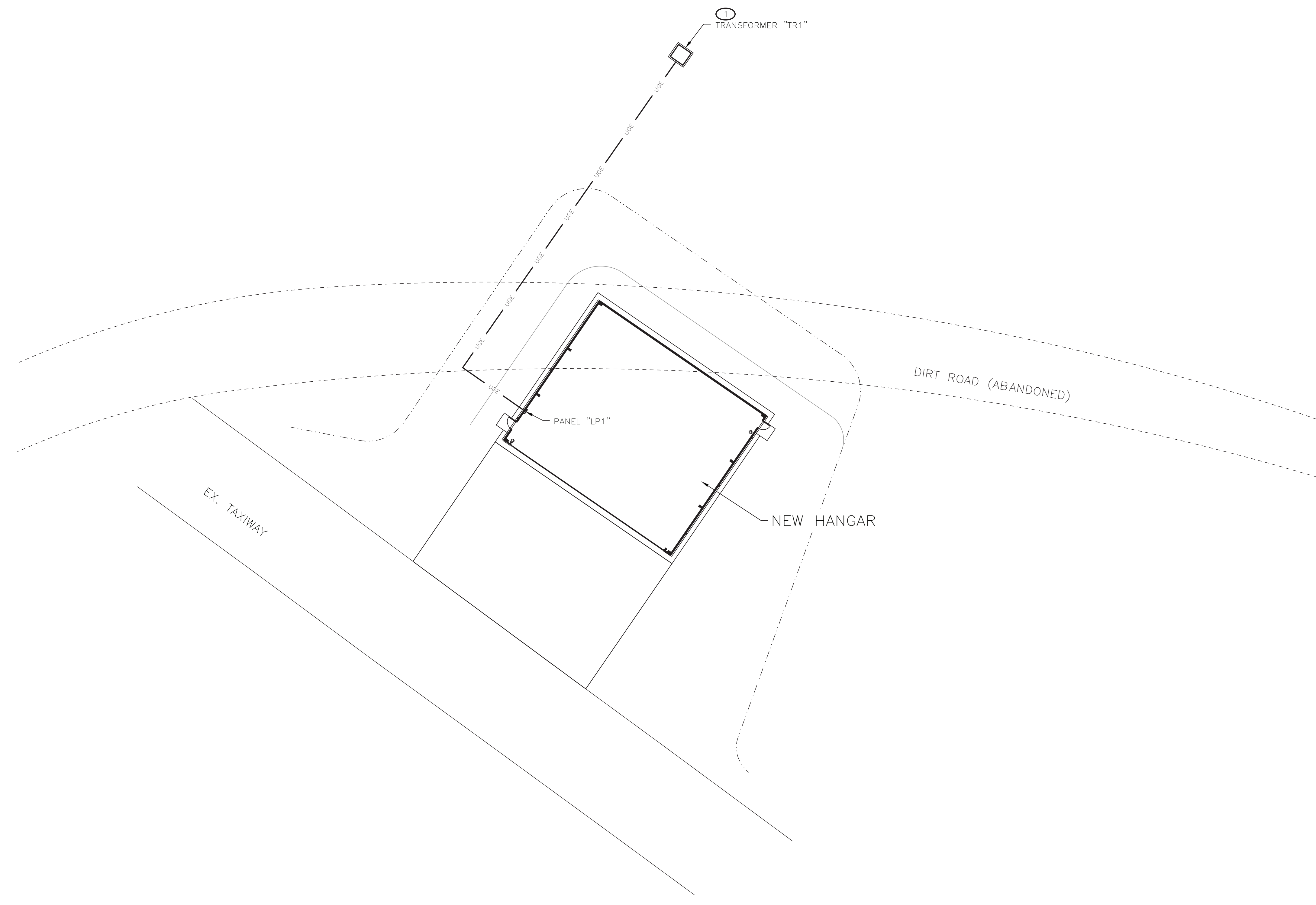
HVAC SCHEDULES

HANGAR
RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)
CITY OF RATON, NEW MEXICO

M-601

SHEET

DATE: 9/10/2021 11:25 AM
 SAVE DATE: 9/10/2021 11:25 AM
 I:\RATON\PAT181-14_RATON_HANGAR\DWGS\ERA-100



- GENERAL NOTES**
1. SEE ONE-LINE, SHEET E-601 FOR ADDITIONAL POWER WIRE & CONDUIT DETAILS.
 2. INSTALL WARNING TAPE 6" BFG IN TRENCHES. SEE TRENCH DETAIL, SHEET E-601.
 3. MINIMUM CONDUIT COVER 24".

- KEYED NOTES** #
1. RATON PUBLIC SERVICES TO PROVIDE TRANSFORMER "TR1" AND TRANSFORMER PAD. LOCATION SHOWN FOR DRAFTING PURPOSES. COORDINATE WITH RATON PUBLIC SERVICES FOR LOCATION AND CONNECTION TO SECONDARY OF TRANSFORMER.

MOLZENCORBIN

2701 Miles Road SE
 Albuquerque, New Mexico 87106
 505 242 5700 office
 505 242 0673 fax
 MolzenCorbin.com

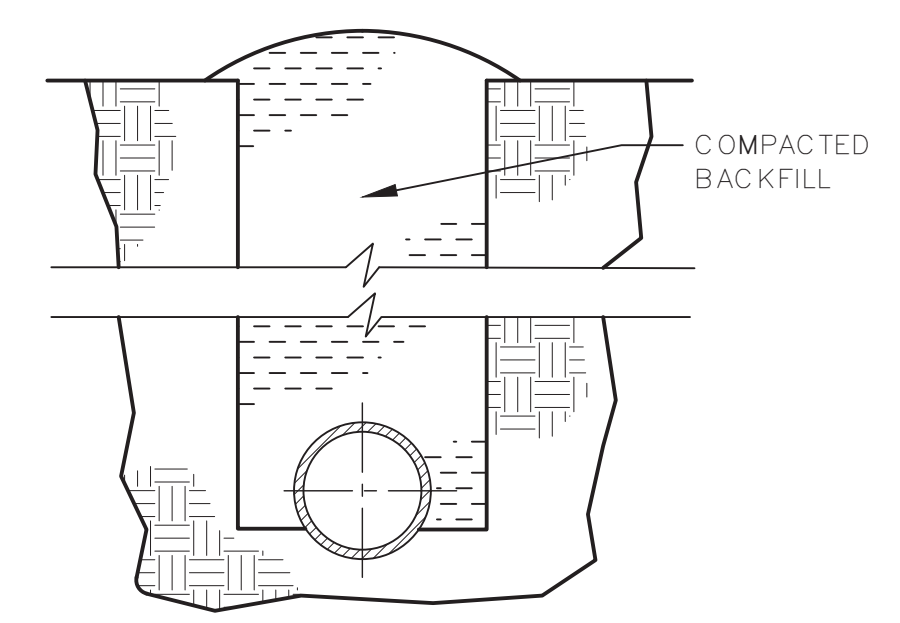
NOTICE OF EXTENDED PAYMENT PROVISION:
 THIS CONTRACT ALLOWS THE OWNER TO MAKE
 PAYMENT WITHIN 45 DAYS AFTER SUBMISSION
 OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION
 DRAWINGS ARE DEPICTED AT INTENDED
 NUMERIC SCALES
 IF THIS BAR EQUALS ONE INCH



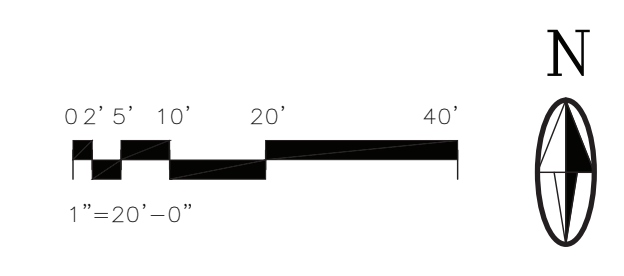
REV. NO.	REV. DATE	DESCRIPTION

PROJECT NUMBER:	RAT181-14
DESIGNED BY:	JM
DRAWN BY:	JM
CHECKED BY:	DG
PRIME DESIGN PROFESSIONAL:	JOHN QUINN PATE
PROJECT DATE:	SEPTEMBER 2021



ORDINARY TRENCH

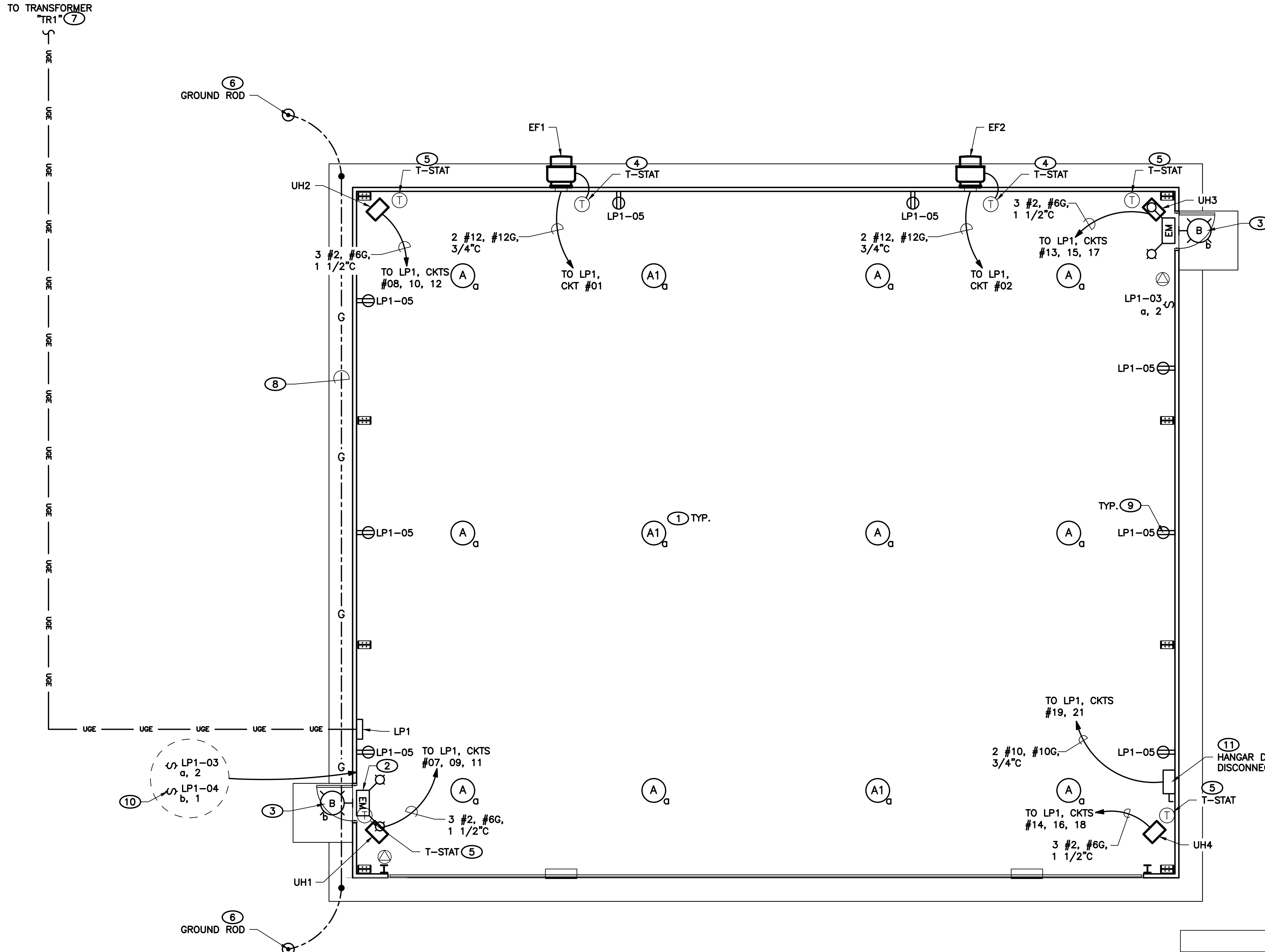
NOTES:
 BACKFILL IN AREAS OTHER THAN
 STREETS, ALLEYS AND DRIVEWAYS
 SHALL BE COMPACTED TO AT LEAST
 THE NATURAL DENSITY OF THE
 UNDISTURBED MATERIAL



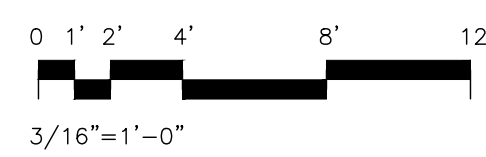
ELECTRICAL SITE PLAN

HANGAR
RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)
CITY OF RATON, NEW MEXICO

E-100
 SHEET



HANGAR ELECTRICAL PLAN
SCALE: 3/16" = 1'-0"



GENERAL NOTES

- SEE ONE-LINE AND PANEL SCHEDULES, SHEET E-601 FOR ADDITIONAL POWER WIRE, GROUNDING AND CONDUIT DETAILS.
- INSTALL RECEPTACLES AT 24" AFG. ALL RECEPTACLES SHALL HAVE WEATHER PROOF WHILE IN USE COVERS.
- SWITCHES MOUNTED AT 42" AFF.

KEYED NOTES

- MOUNT FIXTURES 20' AFF. TYPICAL FOR ALL "A" AND "A1" FIXTURES.
- MOUNT EXIT/EMERGENCY FIXTURE LIGHT COMBO ON WALL 18" ABOVE DOOR AND POWER FROM LP1 CKT #06.
- EXTERIOR WALL PACK LIGHT MOUNTED AT 9' AFF.
- FURNISH AND INSTALL LINE VOLTAGE THERMOSTAT FOR EXHAUST FANS EF1 & EF2. ROUTE 4 #12 IN 3/4" C TO SPEED CONTROLLER AND EXHAUST FAN.
- INSTALL THERMOSTAT FOR UNIT HEATERS UH1 THRU UH4. ROUTE 4 #14 IN 3/4" C TO UNIT HEATERS.
- GROUND ROD INSPECTION WELL. SEE ONE-LINE, SHEET E-601 FOR ADDITIONAL GROUNDING DETAILS.
- CONNECT TO TRANSFORMER AS SHOWN ONSITE PLAN, SHEET E-100.
- EMBEDDED BC IN FOOTING. BOND TO STRUCTURAL REBAR IN A MINIMUM OF TWO LOCATIONS.
- INSTALL GFCI RECEPTACLES IN LOCATIONS SHOWN. ROUTE 2 #12, #12G IN 3/4" C TO EACH RECEPTACLE.
- OVERRIDE SWITCH FOR EXTERIOR LIGHTS PHOTOELECTRIC CELL. ON = AUTO, OFF = OFF.
- INSTALL 30A, 208V 2P DISCONNECT FOR HANGAR DOOR CONTROL PANEL. MOUNT DISCONNECT 5' AFF. COORDINATE WITH DOOR MANUFACTURER FOR LOCATION OF DOOR DISCONNECT.

LUMINAIRE & EQUIPMENT SCHEDULE						
TYPE	DESCRIPTION	VOLTS	MOUNTING	LUMENS	WATTAGE	Q-TY
A	UTILIBAY UTB2 HIGH BAY LED	UNV	PENDANT	21172	168	9
A1	UTILIBAY UTB2 HIGH BAY EMERGENCY BACKUP LED	UNV	PENDANT	21172	168	3
B	MAKO ARCHITECTURAL LED LUMINAIRE	UNV	EXTERIOR WALL	1080	11	2
EM	WHITE THERMOPLASTIC LED EXIT/EMERGENCY LIGHT COMBO	UNV	WALL	~	0.6	2

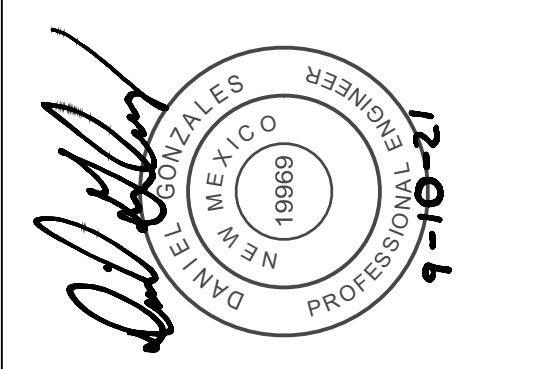
MOLZENCORBIN

2701 Miles Road SE
Albuquerque, New Mexico 87106
505 242 5700 office
505 242 0673 fax
MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:
THIS CONTRACT ALLOWS THE OWNER TO MAKE
PAYMENT WITHIN 45 DAYS AFTER SUBMISSION
OF AN UNDISPUTED REQUEST FOR PAYMENT

NUMERIC SCALE CONFIRMATION

DRAWINGS ARE DEPICTED AT INTENDED
NUMERIC SCALES
IF THIS BAR EQUALS ONE INCH



REV. NO.	REV. DATE	DESCRIPTION

PROJECT NUMBER:	RAT181-14
DESIGNED BY:	JM
DRAWN BY:	JM
CHECKED BY:	DG
PRIME DESIGN PROFESSIONAL:	JOHN QUINN PATE
PROJECT DATE:	SEPTEMBER 2021

ELECTRICAL BUILDING PLAN

HANGAR
RATON MUNICIPAL AIRPORT/CREWS FIELD (RAT)
CITY OF RATON, NEW MEXICO

E-101

SHEET

PLANT DATE: 9/10/2021 11:45 AM
SAVE DATE: 9/10/2021 11:45 AM
\\MCA-FS\PROJECT\RATON\B181-14-RATON HANGAR.DWG\$VER=101

