

TRANE T.I - Park84 - Building 1 Suite 1

Nampa, ID

project data

PROJECT INFORMATION:																																																																																																																																		
PROJECT NAME:	Park84 - Building 1																																																																																																																																	
LOCATION:	8400 Birch Lane, Suite 1 Nampa, ID 83687																																																																																																																																	
APPLICABLE CODES & REQUIREMENTS:																																																																																																																																		
2018 INTERNATIONAL BUILDING CODE (IBC)																																																																																																																																		
2017 NATIONAL ELECTRIC CODE (NEC)																																																																																																																																		
2018 INTERNATIONAL PLUMBING CODE (IPC)																																																																																																																																		
2018 INTERNATIONAL MECHANICAL CODE (IMC)																																																																																																																																		
2018 INTERNATIONAL FUEL GAS CODE (IFGC)																																																																																																																																		
2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)																																																																																																																																		
2018 INTERNATIONAL FIRE CODE (IFC)																																																																																																																																		
2009 ANSI (AS REFERENCED IN THE 2015 INTERNATIONAL BUILDING CODE)																																																																																																																																		
BUILDING CODE SUMMARY:	TENANT IMPROVEMENT WITHIN PREVIOUSLY APPROVED CORE & SHELL BUILDING																																																																																																																																	
OCCUPANCY GROUP:	B (BUSINESS GROUP) S1 (STORAGE GROUP)																																																																																																																																	
BUILDING AREA:	TOTAL BUILDING AREA WAREHOUSE AREA OFFICE AREA	SECTION 304 SECTION 311 80,460 SF (PREVIOUSLY APPROVED COM-03326-2022) 25,963 SF 20,763 SF 5,200 SF SECTION 502																																																																																																																																
ALLOWABLE BUILDING HEIGHT W/ SPRINKLER:	IN FEET MAX 75' PROVIDED 37' (PREVIOUSLY APPROVED) IN STORIES MAX 3 PROVIDED 1 (PREVIOUSLY APPROVED)	TABLE 504.3 TABLE 504.4																																																																																																																																
ALLOWABLE FLOOR AREA W/ SPRINKLER AND OPEN SPACE INCREASE:	UNLIMITED (OPEN YARDS > 60' ALL SIDES) (PREVIOUSLY APPROVED)	SECTION 507.4																																																																																																																																
OCCUPANCY CLASSIFICATION:	NONSEPARATED OCCUPANCIES NO SEPARATION REQ'D	SECTION 508.3 SECTION 508.3.3																																																																																																																																
TYPE OF CONSTRUCTION:	II-B WITH AUTOMATIC ESFR SPRINKLER SYSTEM	SECTION 602 SECTION 903.3.1.1																																																																																																																																
OCCUPANT LOAD:	B BUSINESS AREA 150 GROSS 4,406 / 150 = 30 A-3 ACCESSORY (TRAINING) 794 / 15 = 53 S-1 WAREHOUSE AREA 500 GROSS 20,763 / 500 = 42 TOTAL 125 PEOPLE OCCUPANT LOAD	SECTION 1004																																																																																																																																
EGRESS WIDTH	DOOR 0.2 x 125 OCC LOAD = 25" PROVIDED 6 x 36" DOORS	SECTION 1005.3.2 SECTION 1005.1																																																																																																																																
TRAVEL DISTANCE:	WITH SPRINKLER SYSTEM PROVIDED 250' COMMON PATH OF EGRESS TRAVEL PROVIDED 177' 100' 71'	TABLE 1016.1 TABLE 1014.3																																																																																																																																
NUMBER OF EXITS:	REQUIRED 2 PROVIDED 7	SECTION 1021																																																																																																																																
PLUMBING SYSTEM	CHAPTER 29																																																																																																																																	
<table border="1"> <thead> <tr> <th rowspan="2">OCC:</th> <th colspan="2">WATER CLOSET</th> <th colspan="2">URINAL</th> <th colspan="2">LAVATORIES</th> <th colspan="2">TUB / SHOWER</th> <th colspan="2">DF</th> <th colspan="2">OTHER</th> </tr> <tr> <th>FEMALE</th> <th>MALE</th> <th>MALE</th> <th>FEMALE</th> <th>MALE</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>B: 30 15 WOMEN 15 MEN</td> <td>1 PER 25 FOR 1ST 50 THAN 1 PER 50</td> <td>1 PER 25 FOR 1ST 50 THAN 1 PER 50</td> <td>-</td> <td>1 PER 40 FOR 1ST 80 THAN 1 PER 80</td> <td>-</td> <td>1 PER 40 FOR 1ST 80 THAN 1 PER 80</td> <td>-</td> <td>-</td> <td>1 PER 100</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>REQ'D</td> <td>0.6</td> <td>0.6</td> <td>-</td> <td>0.375</td> <td>0.375</td> <td>-</td> <td>0.15</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>A-3: 53 27 WOMEN 26 MEN</td> <td>1 PER 125</td> <td>1 PER 65</td> <td>-</td> <td>1 PER 250</td> <td>1 PER 250</td> <td>-</td> <td>1 PER 1000</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>REQ'D</td> <td>0.22</td> <td>0.40</td> <td>-</td> <td>0.10</td> <td>0.10</td> <td>-</td> <td>0.053</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>S-1: 42 21 WOMEN 21 MEN</td> <td>1 PER 100</td> <td>1 PER 100</td> <td>-</td> <td>1 PER 100</td> <td>1 PER 100</td> <td>-</td> <td>1 PER 1,000</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>REQ'D</td> <td>0.21</td> <td>0.21</td> <td>-</td> <td>0.42</td> <td>0.42</td> <td>-</td> <td>0.042</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>TOTAL REQ'D</td> <td>1.03</td> <td>1.21</td> <td>-</td> <td>0.895</td> <td>0.895</td> <td>-</td> <td>1 HI-LOW</td> <td>1 JAN SINK</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>TOTAL PROVIDED</td> <td>4 UNISEX</td> <td>4 UNISEX</td> <td>1</td> <td>4 UNISEX</td> <td>4 UNISEX</td> <td>-</td> <td>1 HI-LOW W BOTTLE FILLER</td> <td>1 JAN SINK 1 KITCHEN SINK</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table>		OCC:	WATER CLOSET		URINAL		LAVATORIES		TUB / SHOWER		DF		OTHER		FEMALE	MALE	MALE	FEMALE	MALE								B: 30 15 WOMEN 15 MEN	1 PER 25 FOR 1ST 50 THAN 1 PER 50	1 PER 25 FOR 1ST 50 THAN 1 PER 50	-	1 PER 40 FOR 1ST 80 THAN 1 PER 80	-	1 PER 40 FOR 1ST 80 THAN 1 PER 80	-	-	1 PER 100	-	-	-	REQ'D	0.6	0.6	-	0.375	0.375	-	0.15	-	-	-	-	-	A-3: 53 27 WOMEN 26 MEN	1 PER 125	1 PER 65	-	1 PER 250	1 PER 250	-	1 PER 1000	-	-	-	-	-	REQ'D	0.22	0.40	-	0.10	0.10	-	0.053	-	-	-	-	-	S-1: 42 21 WOMEN 21 MEN	1 PER 100	1 PER 100	-	1 PER 100	1 PER 100	-	1 PER 1,000	-	-	-	-	-	REQ'D	0.21	0.21	-	0.42	0.42	-	0.042	-	-	-	-	-	TOTAL REQ'D	1.03	1.21	-	0.895	0.895	-	1 HI-LOW	1 JAN SINK	-	-	-	-	TOTAL PROVIDED	4 UNISEX	4 UNISEX	1	4 UNISEX	4 UNISEX	-	1 HI-LOW W BOTTLE FILLER	1 JAN SINK 1 KITCHEN SINK	-	-	-	-
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PRESCRIPTIVE METHOD BUILDING ENVELOPE: (PREVIOUSLY APPROVED)	IECC 2015, TABLE C402.1.3																																																																																																																																	
ROOF MASS WALLS UNHEATED SLAB OPAQUE DOOR NONSMINING OPAQUE DOOR SWINGING OPAQUE DOOR FENESTRATION FIXED FENESTRATION OPERABLE FENEST. ENTRANCE DOOR SKYLIGHT LOADING DOOR	MIN R-30 CI MIN R-11.4 CI MIN R-10 FOR 24" BELOW MIN R-4.75 MIN R-4.75 U 0.37 U 0.38 U 0.77 U 0.77 U 0.5 LOADING DOOR WEATHERSEAL																																																																																																																																	

NOTE:
1. FIRE SPRINKLER SYSTEM AND FIRE ALARM / SPRINKLER MONITORING SYSTEM PLANS ARE TO BE SUBMITTED SEPARATELY.

project directory

owner

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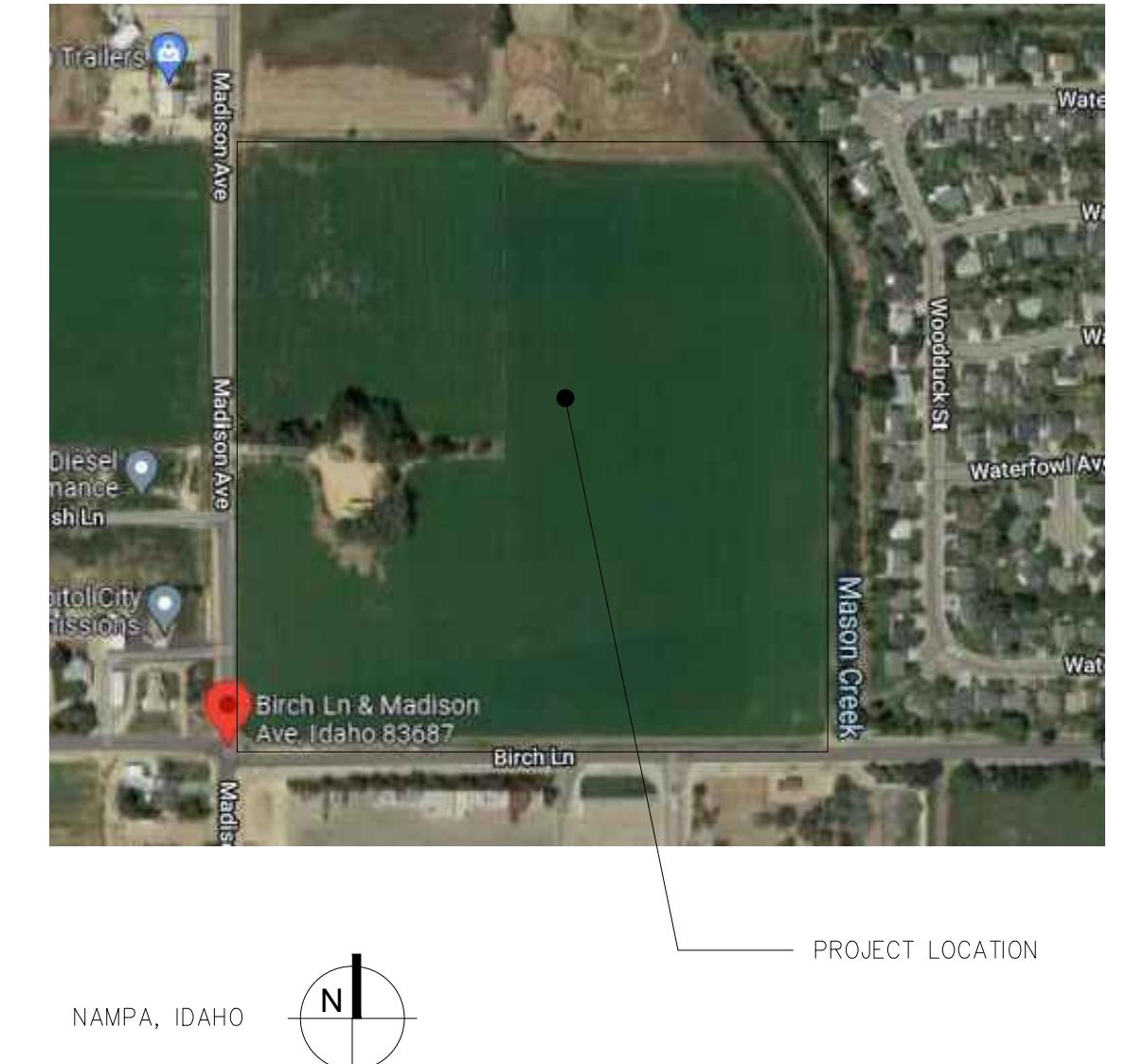
Electrical:

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LITTLETON, CO 80202
303.991.0991

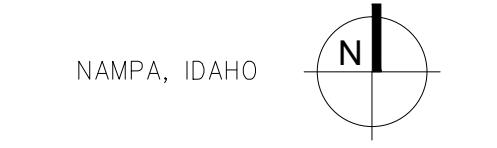
RICK SABAB
rsabab@thompson-eng.com

Vince Rossi
vrossi@rossengineering.net

vicinity map



NAMPA, IDAHO



sheet index

CS COVER SHEET

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- A2.2 ENLARGED FLOOR PLAN
- A2.3 ENLARGED REFLECTIVE CEILING PLAN
- A2.4 ENLARGED FINISH FLOOR PLAN
- A3.1 INTERIOR ELEVATIONS
- A4.1 DOOR & WINDOW SCHEDULES & DETAILS

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- Q-101 OWNER PROVIDED RACKING PLAN

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- M0.2 MECHANICAL DETAILS AND SCHEDULES
- M0.3 MECHANICAL CHECK
- M1.0 OVERALL MECHANICAL PLAN
- M1.1 ENLARGED MECHANICAL PLAN

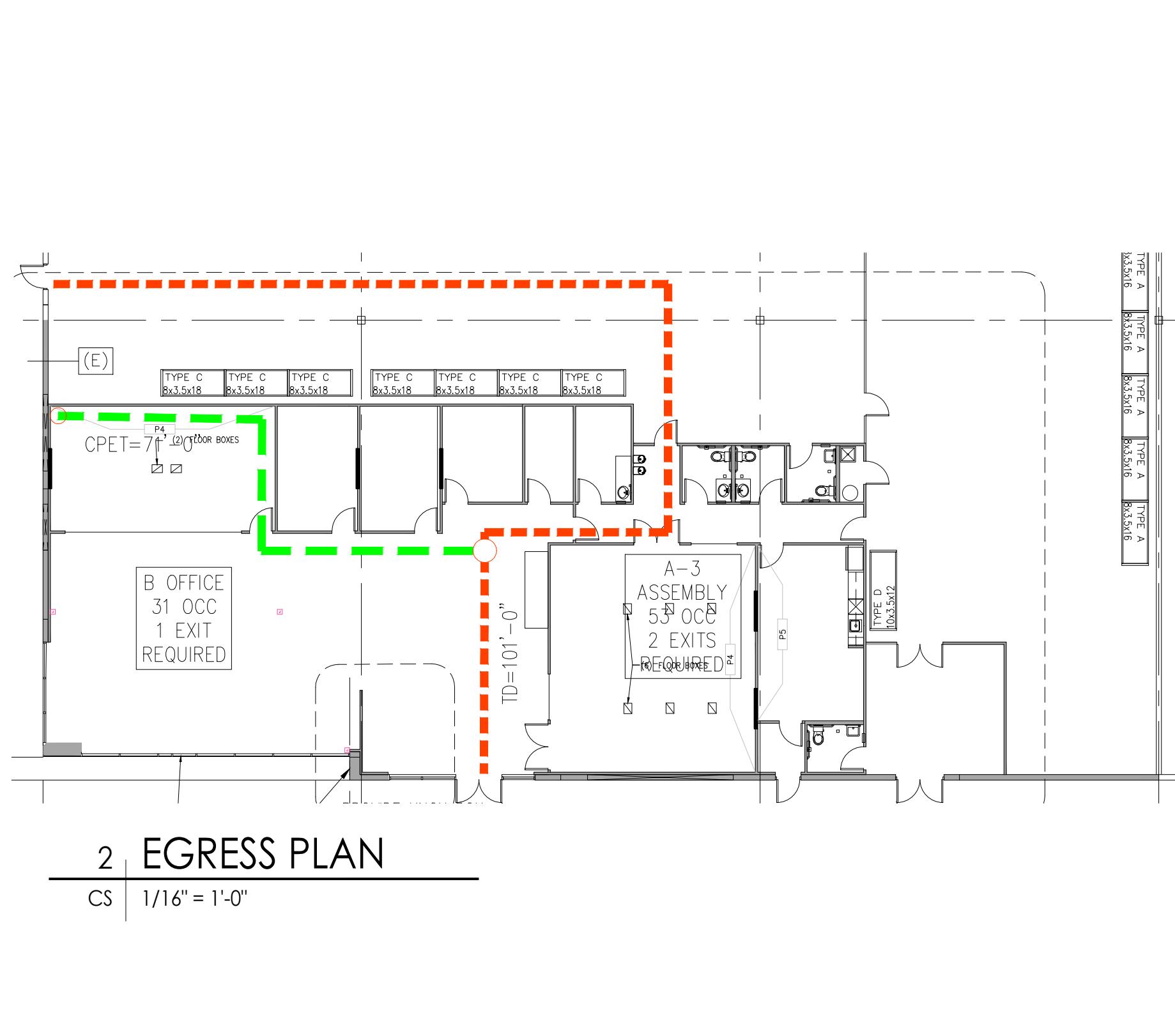
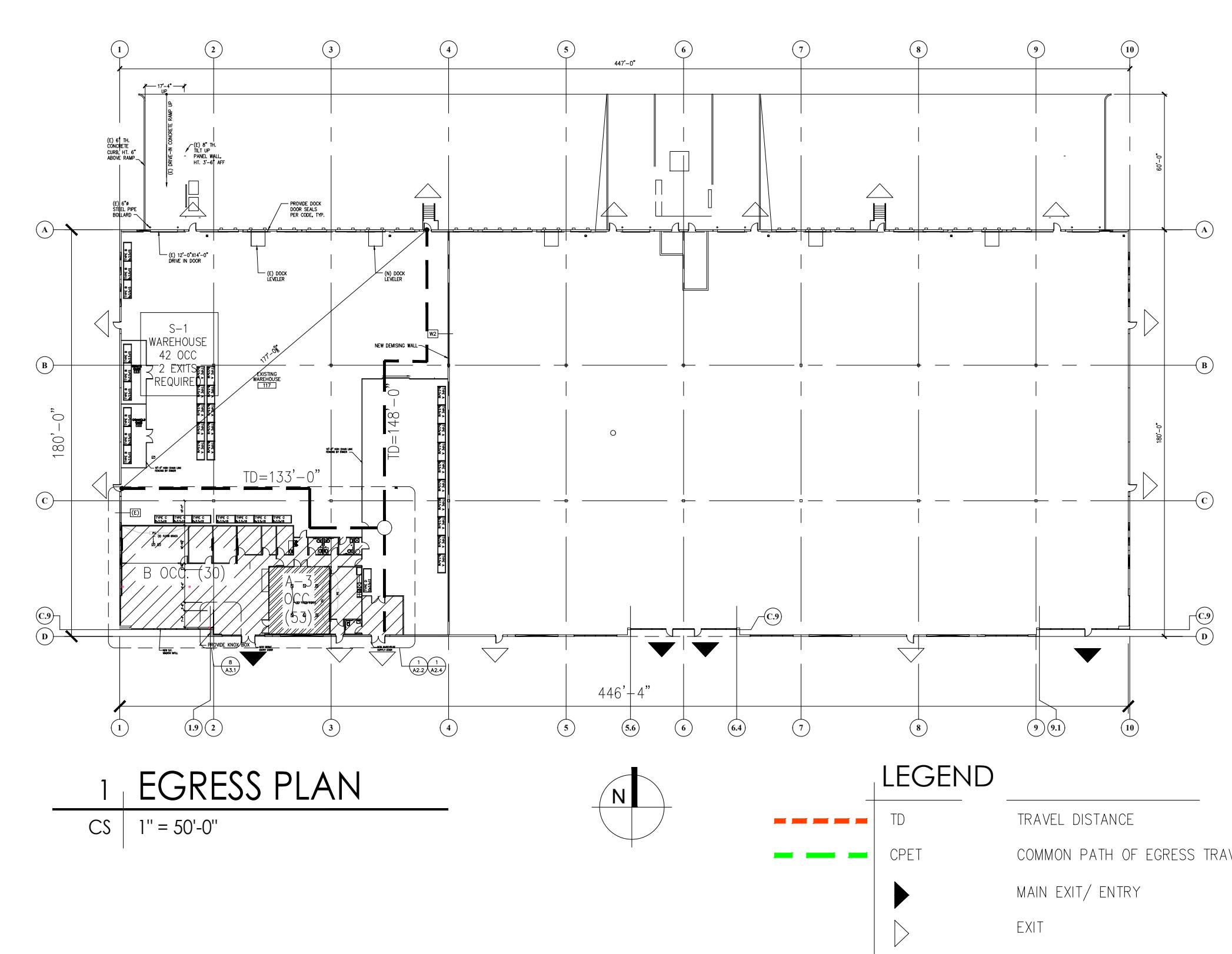
PLUMBING:

- P0.1 PLUMBING DETAILS AND SCHEDULES
- P0.2 WASTE & VENT PIPING DIAGRAM
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- E1.0 WAREHOUSE ELECTRICAL PLANS
- E2.0 ENLARGED ELECTRICAL PLANS
- E3.0 ELECTRICAL ONE-LINE DIAGRAM
- E4.0 ELECTRICAL SCHEDULES
- E5.0 ENERGY CODE COMPLIANCE

building plan



LICENSED ARCHITECT
AR-807015
KENNETH W.
HARSHMAN
STATE OF IDAHO
09.17.2024

ALL DRAWN AND WRITTEN INFORMATION
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OF GREY WOLF ARCHITECTURE

PROJECT NUMBER 24-625.1.1
DRAWN HMG
CHECKED KWH
ISSUE 09.17.24 PERMIT

REVISIONS

COVER SHEET

CS

GENERAL NOTES

- CONTRACTOR TO IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES, ERRORS, OR CONFLICTS DISCOVERED IN THE DRAWINGS
- USE $\frac{1}{8}$ " WR G.B. (FIBEROCK) @ WET SIDE OF PARTITION
- ALL STUDS ARE 16" O.C. U.N.O.
- ALL DIMENSIONS ARE TO FACE OF METAL STUD OR CONCRETE PANEL U.N.O.
- ALL INTERIOR DOORS ARE LOCATED 4" FROM ADJACENT WALL ON HINGE SIDE U.N.O.
- PROVIDE DOUBLE 20 GA. STUDS (MIN.) AT ALL DOOR JAMBS.
- PORTABLE FIRE EXTINGUISHERS SHALL BE FURNISHED BY G.C. AS REQUIRED BY THE INTERNATIONAL FIRE CODE, RE: 1/A2.1 FOR LOCATION MARKED AS FE. VERIFY W/ FIRE DEPARTMENT
- ALL FULL HEIGHT WALLS SHALL HAVE SLIP TRACK AT STRUCTURE ABOVE
- PROVIDE SOLID BACKING SUPPORT BEHIND ALL WALL MOUNTED EQUIPMENT AND CABINETS
- PROVIDE SOLID BACKING SUPPORT BEHIND ALL WALL MOUNTED EQUIPMENT AND CABINETS

CEILING GENERAL NOTES

- CONTRACTOR TO IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES, ERRORS, OR CONFLICTS DISCOVERED IN THE DRAWINGS
- RE: ELECT. FOR WAREHOUSE LIGHT FIXTURE TYPE AND LOCATION.

CEILING TYPES

C1	$\frac{1}{8}$ " GYPSUM BOARD CEILING, PAINT P1 NOTE: USE MOISTURE RESISTANT GYP. BD IN ALL BATHROOMS
C2	2'x4' ACOUSTICAL CEILING ASSEMBLY - SECOND LOOK, WHITE
C3	NO CEILING - OPEN TO STRUCTURE ABOVE.
C4	DROPPED CIRRUS SECOND LOOK, 24X48X34" ACOUSTICAL CEILING WITH 8" "COMPASSO" CEILING EDGE TRIM, WHITE

LEGEND

2'x4' ACOUSTICAL CEILING ASSEMBLY - SECOND LOOK STANDARD WHITE COLOR
$\frac{1}{8}$ " GYPSUM BOARD CEILING, PAINT P1
RECESSED LED CAN LIGHT, RE: ELECT.
LED VANTAGE LIGHT CENTER WITH LAVATORY, RE: ELECT.
2'x4' LAY-IN RECESSED LED, RE: ELECT.
2'x4' LED HIGH BAY FIXTURES, RE: ELECT. PROVIDE 5' WHIP SO FIXTURES CAN BE RELOCATED ABOVE RACKING IN FUTURE

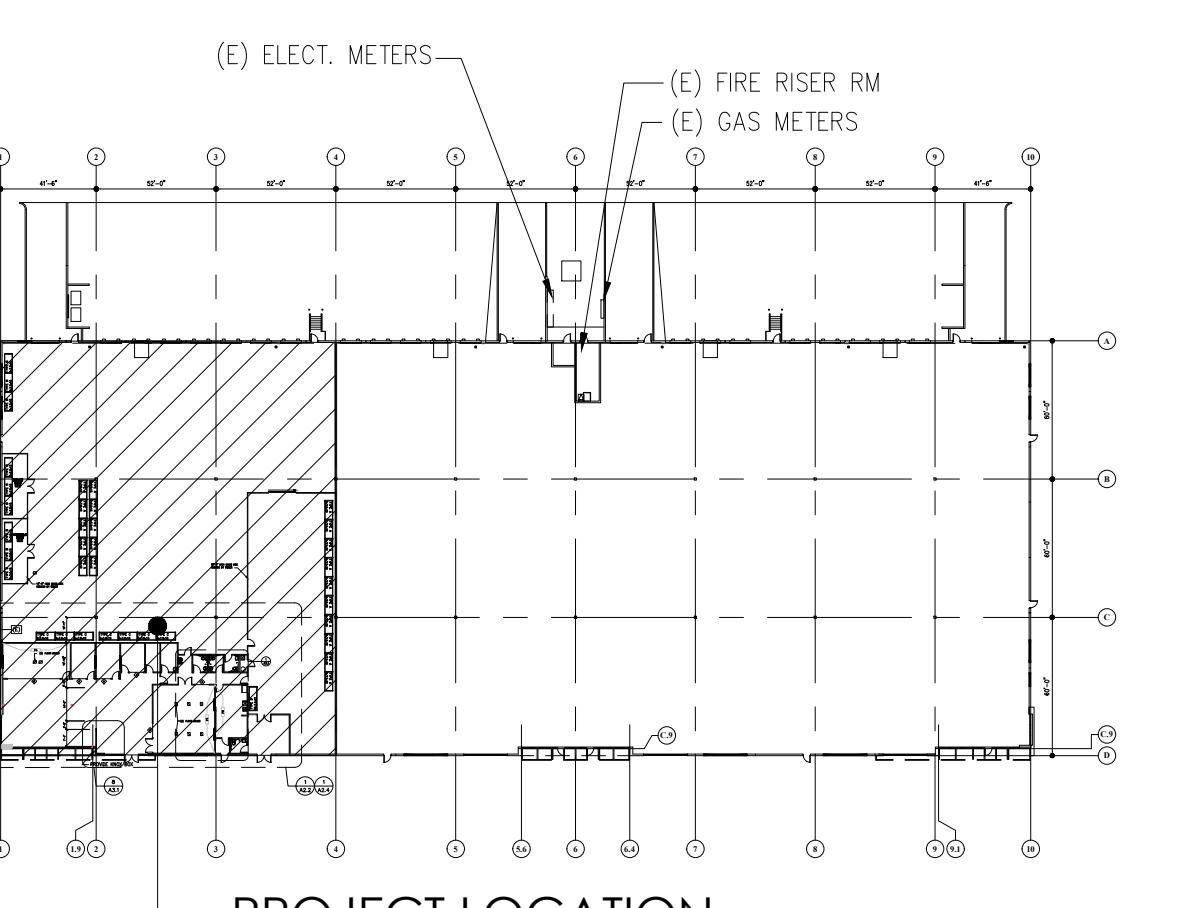
PARK 84 - BLDG 1 - TRANE TECH T.I.
8400 BIRCH LANE SUITE 1
Nampa, Idaho

LICENSED ARCHITECT
AR-387015
KENNETH W.
HARSHAW
STATE OF IDAHO
09.17.2024

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PROJECT NUMBER 24-625.1.1
DRAWN HMG
CHECKED KWH
ISSUE 09.17.24 PERMIT

REVISIONS



KEY PLAN

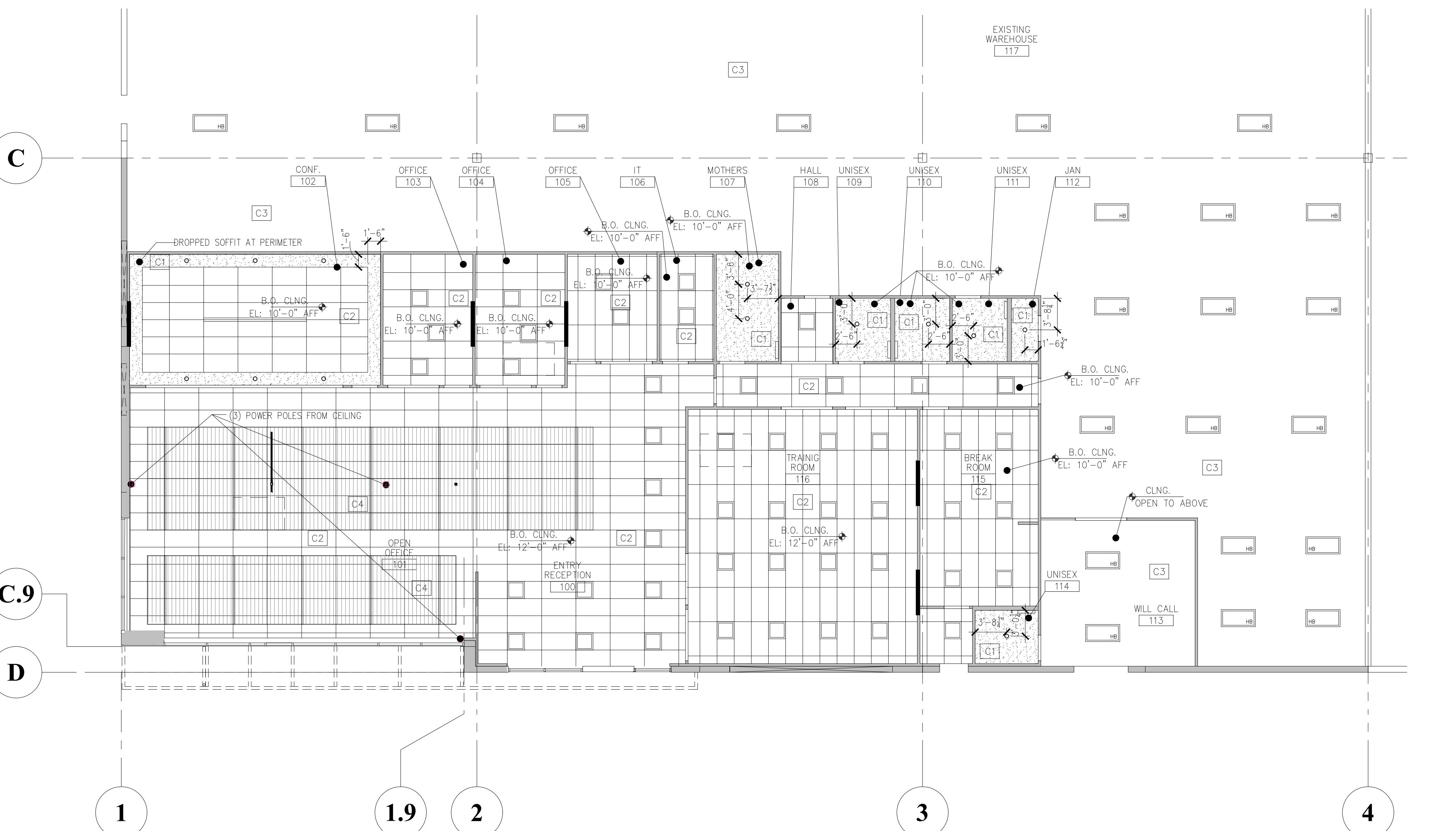
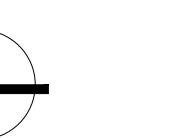
A2.3 NTS

ENL. OFFICE
REF CEILING PLAN

A2.3

ENL. REFLECTIVE CEILING PLAN

A2.3 1/8" = 1'-0"



PARK 84 - BLDG 1 - TRANETECH T.I.
8400 BIRCH LANE SUITE 1
NAMPA, ID

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PROJECT NUMBER 2024-149 KN
DRAWN BY CHECKED JB/RS
ISSUE PERMIT 08/21/2024

REVISIONS

MECHANICAL DETAILS
AND SCHEDULES

MO.1

OUTSIDE AIR CALCULATIONS: IMC Code (table 403.3)											
HVAC SYSTEM: RTU-1			7.5 Ton Cooling			Total SA = 3,000 CFM			Set OSA min set = 10.0%		
Room Type:	Room Name and Room #	Az	Rp	Ra	Default Dcc	Pz	If all Return Air is at Ceiling Level	Effectiveness Factor > 0.8	Total Room Supply Air (SA) CFM	Total OSA CFM req'd	Result:
Toilet Rooms (EXHAUST)	114 - Unisex	46					0	0	50	5	Complies.
Break Rooms (ASHRAE62.1)	115 - Break Room	317	5.0	0.12	50	16	117	147	1,500	150	Complies.
Conference	119 - Training Room	835	5.0	0.06	50	42	259	324	1,450	145	*
* CO2 DEMAND CONTROL VENTILATION											
Total Floor Area = 1,198 sqft			Totals = 376			Total min OSA req'd RA			Total min OSA CFM required		
Total min OSA req'd RA			470			3,000			Total OSA Provided		

OUTSIDE AIR CALCULATIONS: IMC Code (table 403.3)											
HVAC SYSTEM: RTU-2			6.0 Ton Cooling			Total SA = 2,400 CFM			Set OSA min set = 15.0%		
Room Type:	Room Name and Room #	Az	Rp	Ra	Default Dcc	Pz	If all Return Air is at Ceiling Level	Effectiveness Factor > 0.8	Total Room Supply Air (SA) CFM	Total OSA CFM req'd	Result:
Main Entry Lobby	100 - Entry Reception	259	5.0	0.06	10	3	28	36	500	75	Complies.
Office	101 - Open Office	1,705	5.0	0.06	5	9	145	181	1,900	285	Complies.
Total Floor Area = 1,964 sqft			Totals = 173			Total min OSA req'd floor RA			Total min OSA CFM required		
Total min OSA req'd RA			217			2,400			Total OSA Provided		

OUTSIDE AIR CALCULATIONS: IMC Code (table 403.3)											
HVAC SYSTEM: RTU-3			4.0 Ton Cooling			Total SA = 1,600 CFM			Set OSA min set = 20.0%		
Room Type:	Room Name and Room #	Az	Rp	Ra	Default Dcc	Pz	If all Return Air is at Ceiling Level	Effectiveness Factor > 0.8	Total Room Supply Air (SA) CFM	Total OSA CFM req'd	Result:
Conference	102 - Conf.	477	5.0	0.06	50	24	148	185	950	190	Complies.
Office	103 - Office	170	5.0	0.06	5	1	14	18	100	20	Complies.
Office	104 - Office	170	5.0	0.06	5	1	14	18	100	20	Complies.
Office	105 - Office	131	5.0	0.06	5	1	11	14	100	20	Complies.
Office	107 - Mothers	91	5.0	0.06	5	0	8	10	100	20	Complies.
Corridors	108 - Hall	244	0.0	0.06	0.0	0.0	15	18	100	20	Complies.
Toilet Rooms (EXHAUST)	109 - Unisex	47					0	0	50	10	Complies.
Toilet Rooms (EXHAUST)	110 - Unisex	47					0	0	50	10	Complies.
Toilet Rooms (EXHAUST)	111 - Unisex	47					0	0	50	10	Complies.
Total Floor Area = 1,424 sqft			Totals = 210			Total min OSA req'd RA			Total min OSA CFM required		
Total min OSA req'd RA			263			1,600			Total OSA Provided		

OUTSIDE AIR CALCULATIONS: IMC Code (table 403.3)											
HVAC SYSTEM: SF-1			Ton Cooling			Total SA = 1,600 CFM			Set OSA min set = 100.0%		
Room Type:	Room Name and Room #	Az	Rp	Ra	Default Dcc	Pz	If all Return Air is at Ceiling Level	Effectiveness Factor > 0.8	Total Room Supply Air (SA) CFM	Total OSA CFM req'd	Result:
Warehouses	117 - Warehouse	20,487	10.0	0.06	0.0	0.0	1,229	1,537	1,600	1,600	Complies.
Total Floor Area = 20,487 sqft			Totals = 1,229			Total min OSA req'd floor RA			Total min OSA CFM required		
Total min OSA req'd RA			1,537			1,600			Total OSA Provided		

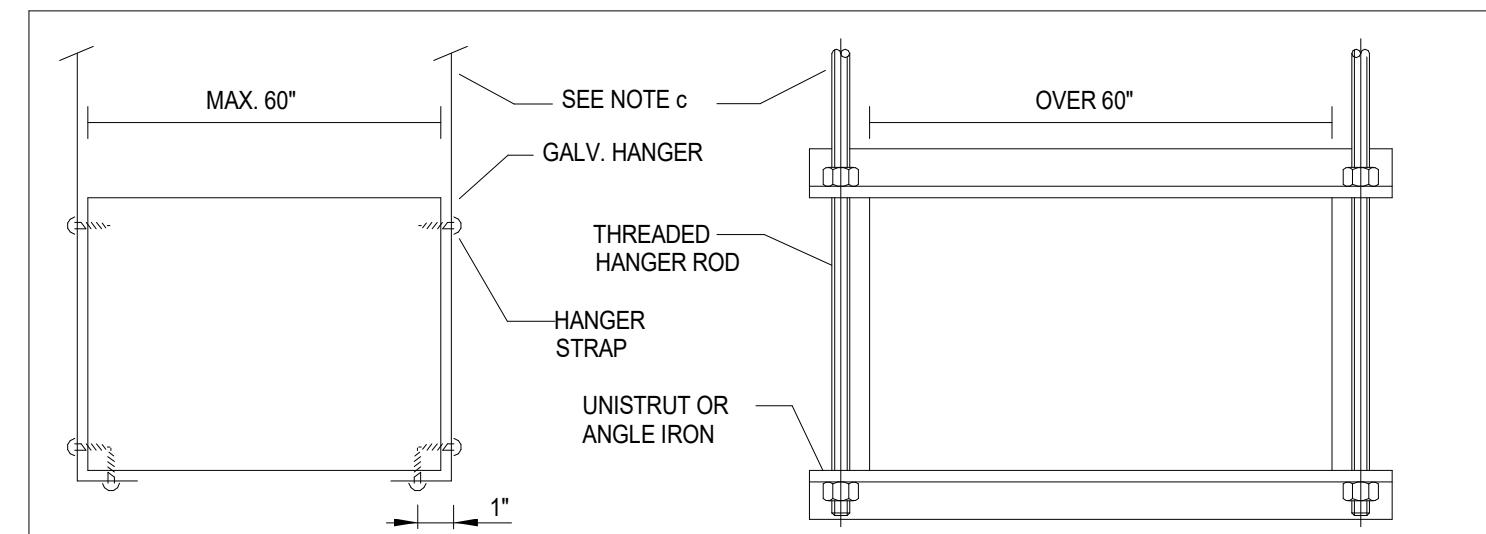
MECHANICAL SPECIFICATIONS												GAS FIRED ROOFTOP HVAC UNIT SCHEDULE											
PLAN CODE	MANUFACTURER	MODEL #	COOLING DATA						HEATING DATA			FAN DATA			ELECTRICAL DATA				WT. (LBS)	AREA SERVED	DIMENSIONS INC. CURB (LxWxH)		NOTES
RTU #			NOMINAL ARI TONS	MBH TOTAL	MBH SENSIBLE	EER (SEER2)	IEER	MBH INPUT	AFCU %	CFM AT ALT</td													

PARK 84 - BLDG 1 - TRANE TECH T.I. 8400 BIRCH LANE SUITE 1 NAMPA, ID

PROFESSIONAL ENGINEER
LICENSSED
20065
09/13/2024
STATE OF IDAHO
RICHARD A SABA

GREY WOLF ARCHITECTURE
■ ARCHITECTURE PLANNING
INTERIOR DESIGN
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golden, co 80401
phone: 303.292.9107
fax: 303.292.4297

THOMPSON
ENGINEERING
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SUITE 100
LITTLETON, COLORADO 80127
TELE: 303.991.0991

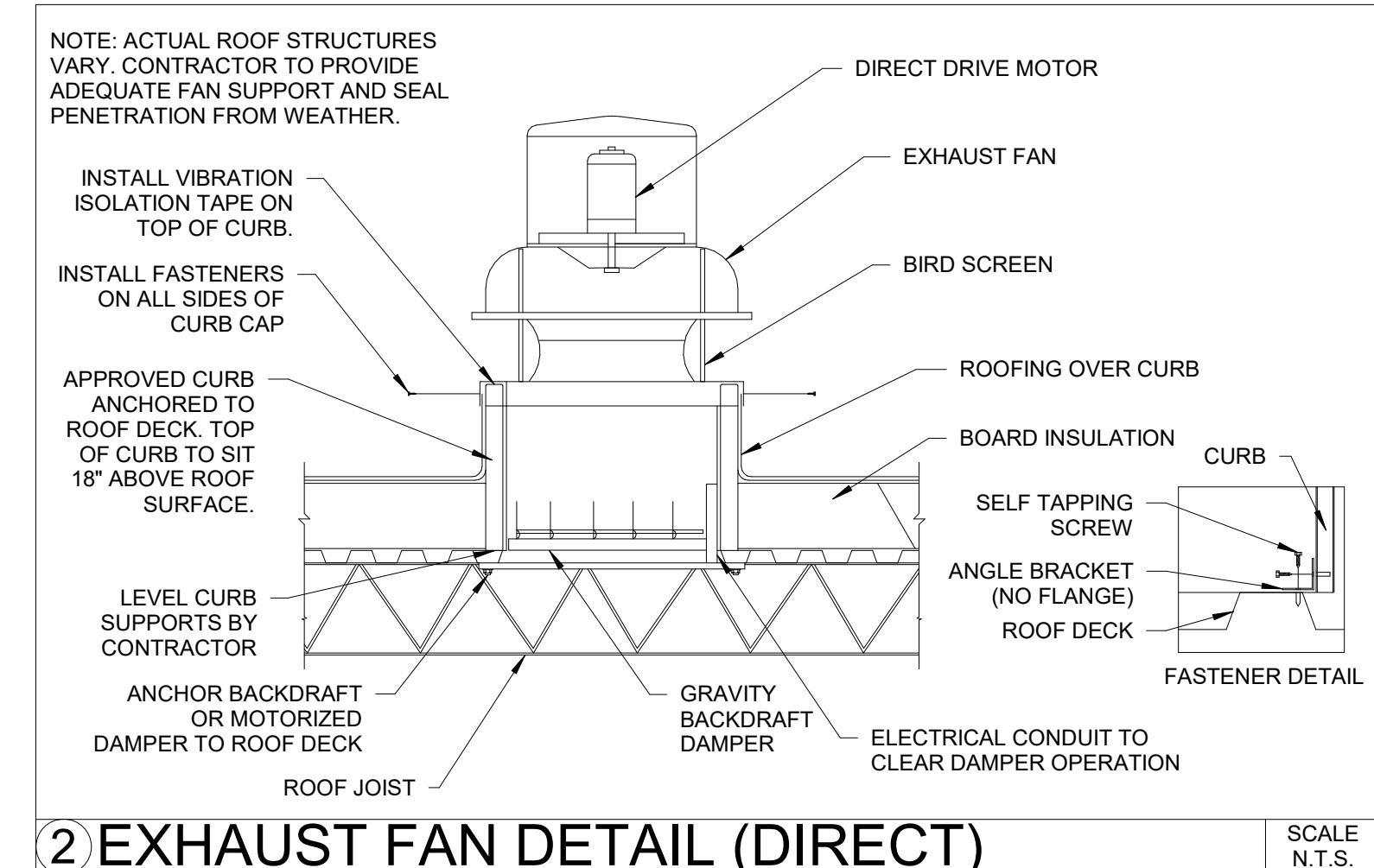


NOTES:
1. ON DUCTS OVER 48" WIDE, BOTTOM SHALL BE BRACED BY ANGLE. FOR CROSS SECTION AREA MORE THAN 8 SQ FT, DUCT SHALL BE BRACED BY ANGLES ON ALL FOUR SIDES.
2. CUTTING AND PATCHING SHALL BE LIMITED TO A MINIMUM AS REQUIRED FOR PROPER INSTALLATION.
3. SUPPORTS SHALL BE SPACED AND SIZED AS PER SMACNA.

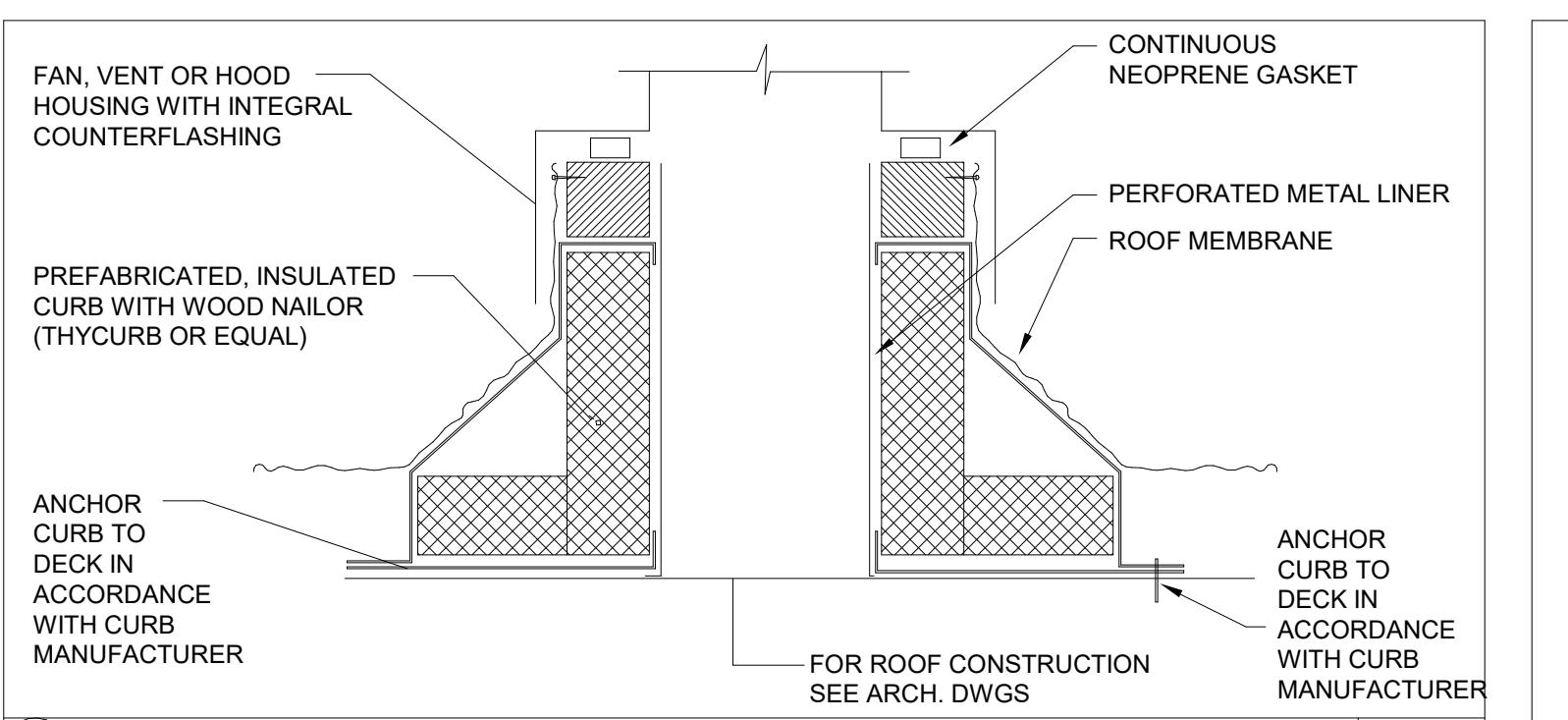
① DUCT HANGER SUPPORT DETAIL

DUCTLESS FAN COIL UNIT SCHEDULE																
PLAN CODE #	MANUFACTURER	MODEL	TYPE	COOLING DATA SEE CU SCHEDULE		HEATING DATA		FAN DATA				ELECTRICAL		OUTDOOR AIR CFM	AREA SERVED	Notes
				NOMINAL ARI TONS	CU#	MBH TOTAL	CFM @ ALT.	E.S.P. "W.C."	HP	MCA	WATTS	VOLTS	PHASE			
DFC 1	TRANE	NTYWST18A	WALL MOUNTED	1.5	CU-1	-	615	-	-	1	27	208/230	1	-	SEE PLANS	1, 2, 3, 6, 7, 8, 9, 10, 11, 12

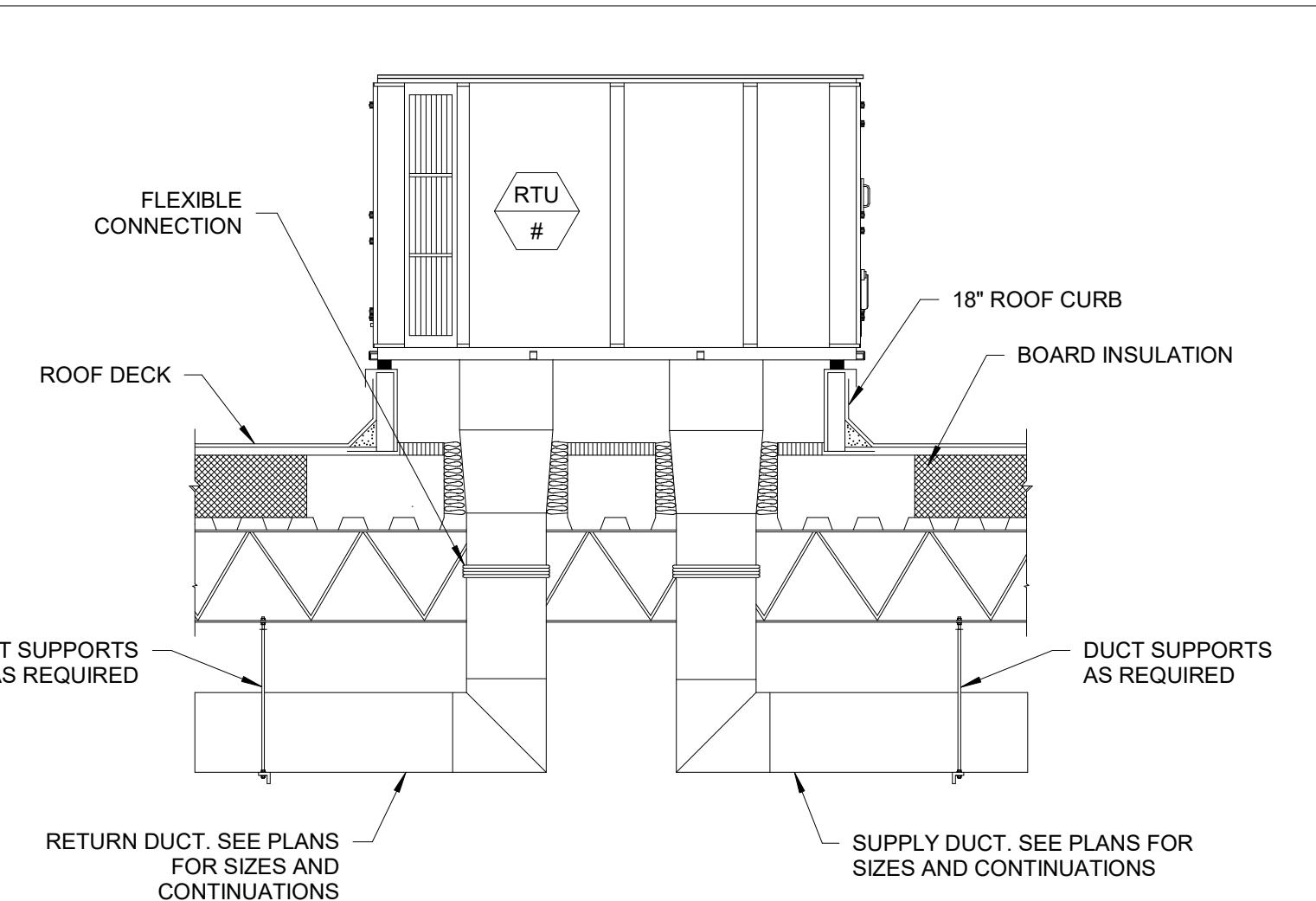
AIR COOLED CONDENSING UNIT SCHEDULE																		
PLAN CODE #	MANUFACTURER	MODEL	COOLING DATA 95F AMBIENT, 80F DB RET, 62F WB RET				HEATING DATA		COMPRESSOR/FAN DATA			ELECTRICAL DATA			WT. (LBS) INC. CURB	EQUIPMENT SERVED	NOTES	
			NOMINAL ARI TONS	MBH TOTAL	MBH SENSIBLE	EER (SEER)	REFRIGERANT	MBH TOTAL	CONDENSER FAN CFM (@ 0.0° SP)	COMPRESSOR STAGES	SOUND RATING (DB)	VOLTS	PHASE	MCA	MOCP			
CU 1	TRANE	NTYSST18SB	1.5	18	18	(20.0)	R-410A	-	-	1	48	208/230	1	13.5	15	115	DFC-1	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11



② EXHAUST FAN DETAIL (DIRECT)

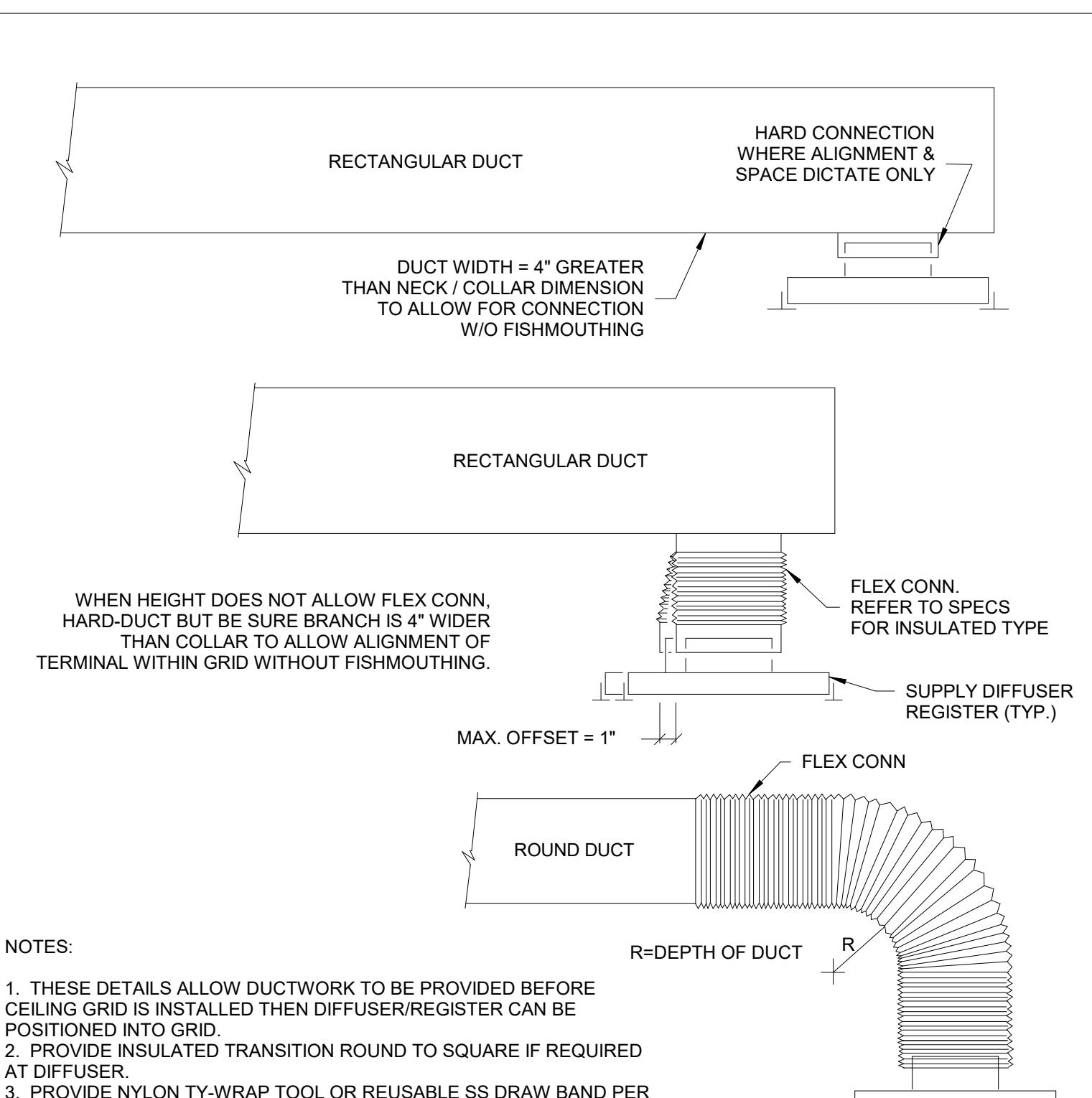


③ ROOF CURB DETAIL



NOTES:
1) MOUNT THERMOSTAT ON WALL OR COLUMN 48" AFF.
2) INTERNALLY LINED DUCT WITH 1" THICK ACOUSTIC INSULATION
3) REFER TO ARCHITECTURAL AND STRUCTURAL FOR ADDITIONAL DETAILS.

④ ROOF TOP UNIT DETAIL



NOTES:
1. THESE DETAILS ALLOW DUCTWORK TO BE PROVIDED BEFORE CEILING GRID IS INSTALLED THEN DIFFUSER/REGISTER CAN BE POSITIONED INTO GRID.
2. PROVIDE INSULATED TRANSITION ROUND TO SQUARE IF REQUIRED AT DIFFUSER.
3. PROVIDE NYLON TY-WRAP TOOL OR REUSABLE SS DRAW BAND PER SPECS.
4. FLEX DUCT SHALL NOT HAVE MORE THAN 1/2" SAG PER FOOT.
5. LENGTH OF FLEX DUCT SHALL NOT EXCEED 6'-0" WITH UP TO ONE BEND.
6. PROVIDE DUCT MOUNTED VOLUME DAMPER WHENEVER POSSIBLE. TRY TO AVOID NECK DAMPERS.

⑤ DIFFUSER CONNECTION DETAIL

MECHANICAL DETAILS
AND SCHEDULES Copy 1

M0.2

PARK 84 - BLDG 1 - TRANTECH T.I. 8400 BIRCH LANE SUITE 1 NAMPA, ID

PROFESSIONAL ENGINEER
LICENSED
STATE OF IDAHO
RICHARD A. SABA
20065
09/13/2024

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PROJECT
NUMBER
DRAWN
CHECKED
ISSUE
PERMIT

2024-149
KN
JB/RS
08/21/2024

REVISIONS

MECHANICAL
COMCHECK

M0.3

**COMcheck Software Version COMcheckWeb
Mechanical Compliance Certificate**

Project Information

Energy Code: 2021 IECC
Project Title: Tran Tech
Location: Nampa, Idaho
Climate Zone: 5b
Project Type: Addition

Construction Site: Owner/Agent: Designer/Contractor:
8400 Birch Lane Suite 1

Mechanical Systems List

Quantity/Type & Description

1 RTU 1 (Single Zone)
Heating: 1 heat - Duct Furnace, Max. Capacity = 200000 Btu/h
Proposed EER = 10.00 % EER Required EER = 12.00 % EER
Cooling: 1 heat - Single stage DX Unit, Capacity = 100000 Btu/h, Evaporatively Cooled Condenser, Air Economizer
Proposed EER = 15.00 EER Required EER = 11.50 EER
Proposed Part Load Efficiency = 11.50 EER Required Part Load Efficiency = 11.70 EER

1 RTU 2-3 (Single Zone)
Heating: 1 heat - Duct Furnace, Max. Capacity = 150000 Btu/h
Proposed EER = 10.00 % EER Required EER = 12.00 % EER
Cooling: 1 heat - Single stage DX Unit, Air-Cooled Condenser, Air Economizer
Proposed EER = 15.00 EER Required EER = 11.50 EER
Proposed Part Load Efficiency = 12.00 EER Required Part Load Efficiency = 12.30 EER

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and conditions of record for this project application. The proposed mechanical systems have been designed to meet the 2021 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory energy codes and standards.

Richard A. Saba
Name - Title
Signature
Date: 08/09/2024

**COMcheck Software Version COMcheckWeb
Inspection Checklist**

Energy Code: 2021 IECC

Requirements: 0.0% were addressed directly in the COMcheck software.

Text in the "Comments/Assumptions" is provided by the user. The user can edit this text in the COMcheck Requirements screen. For each requirement, the user can indicate if the code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req ID	Footing / Foundation Inspection	Completes?	Comments/Assumptions
C403.1.2	Snowload melting system and freeze control configured to limit service for outdoor temperature above 40F.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.1.3	Thermally ineffective panel surfaces of exterior walls have insulation $\geq R-15$.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
Additional Comments/Assumptions:			

Section # & Req ID	Plumbing Rough-In Inspection	Completes?	Comments/Assumptions
C402.2.6	Heated water supply piping conforms to section 1000.10. Refer to section details.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.2.7	HVAC fan systems at design conditions do not exceed allowable system ship.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Mechanical Systems list for values.
C402.8.3	Fans have a fan energy index (FEI) ≥ 0.95 . Note: Variable volume fans will have an FEI > 0.95 .	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.4	Fans have a fan energy index (FEI) ≥ 1.00 . Note: Variable volume fans will have an FEI > 1.00 .	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.5	Large diameter fans where installed shall be tested and labeled according to AMCA 230.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.6	HVAC equipment efficiency verified.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Mechanical Systems list for values.
C402.8.7	Fan detection and diagnostics installed with air-cooled unitary DX systems having variable frequency drives.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.8	Natural or mechanical ventilation is provided for each zone. Each zone has the capability to reduce outdoor air supply.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.9	Demand control ventilation provided for each zone. Each zone has people/1000 ft ² occupied density and provides for a minimum of 100% economizer, auto-modulating outside air intake valve, and $>3,000$ cfm.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.10	Emergency cooling garage ventilation has automatic command detection and controls to reduce fan to 50% or less of design capacity.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.11	HVAC systems serving garages in accordance with C402.8.10 have questions: Each question is provided with a response that automatically manages temperature setpoints and fan speeds based on C403.7.4.1 and C403.7.4.2.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.12	Systems meeting C402.8.10 and C402.7.4.2.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
Additional Comments/Assumptions:			

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Data filename: Page: 2 of 3

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Project Title: Tran Tech Report date: 08/01/24
Data filename: Page: 4 of 4

Project Title: Tran Tech Report date: 08/01/24
Data filename: Page: 5 of 5

Section # & Req ID	Mechanical Rough-In Inspection	Completes?	Comments/Assumptions
C402.7.5	Kitchen exhaust systems comply with minimum requirements for supply air limitations, and steady hood exhaust rate criteria.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.1	Air economizers automatically reduce minimum outdoor air quantity when cooling energy usage. See Table C402.8.1 for details.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.2	Air economizers automatically reduce outdoor air during air economizer operation. The relief air outlet must be avoided from entering the building.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.3	At least 50% of dwelling unit permanently installed lighting shall have means for air balancing.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.4	At least 50% of dwelling unit permanently installed lighting shall have means for air balancing.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.5	At least 50% of dwelling unit permanently installed lighting shall have means for air balancing.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.6	At least 50% of dwelling unit permanently installed lighting shall have means for air balancing.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.7	At least 50% of dwelling unit permanently installed lighting shall have means for air balancing.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.8	At least 50% of dwelling unit permanently installed lighting shall have means for air balancing.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.9	At least 50% of dwelling unit permanently installed lighting shall have means for air balancing.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.10	Total voltage drop across the branch circuit $\leq 5\%$.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.11	Each zone equipped with setpoint overlap restrictions.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.12	Each zone equipped with setpoint overlap restrictions.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.13	Automatic Controls Setback to 55°F (heat and 85°F cool), 7-day clock, 24-hour program override, 24-hour backup.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.14	Building operations and maintenance documents will be provided to the owner. Documents will cover all aspects of the HVAC system including procedures and means of illustrating how the system is intended to operate.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.15	HVAC equipment, systems and system-to-system relationships have been tested to ensure proper operation.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.8.16	HVAC and service water heating systems have been tested to ensure proper operation, calibration and adjustment of controls.	<input type="checkbox"/> Completes <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
Additional Comments/Accommodations:			

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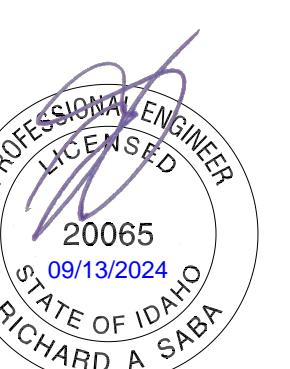
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Project Title: Tran Tech Report date: 08/01/24
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**PARK 84 - BLDG 1 - TRANE TECH T.I.
8400 BIRCH LANE SUITE 1
NAMPA, ID**



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PROJECT NUMBER DRAWN 2024-149 KN
CHECKED JB/RS
ISSUE PERMIT 08/21/2024

REVISIONS

SHEET NOTES	
①	PROVIDE FULL SIZE EXHAUST FAN AND SUPPLY FAN CONNECTION DOWN THROUGH ROOF TO 12" BELOW STRUCTURE. LEAVE END OPEN AND COVER WITH 1/4" MESH.
②	HYDROGEN SENSOR AND CONTROLLER LOCATION. MOUNT HYDROGEN SENSOR ABOVE ELECTRIC FORKLIFT CHARGER AT 12" BELOW ROOF DECK. INTERLOCK CONTROLLER WITH EXHAUST FAN EF-1. UPON DETECTION OF 10% LEI HYDROGEN, THE SYSTEM WILL ENTER LOW ALARM AND ACTIVATE FAN. UPON DETECTION OF 20% LEI HYDROGEN, THE SYSTEM WILL ENTER HIGH ALARM AND ACTIVATE HORN/STROBE TO NOTIFY OCCUPANTS. FAN SHALL REMAIN ON UNTIL SENSOR READS 0%.
③	INSTALL CEILING FAN PER MANUFACTURERS SPECIFICATIONS. INTERLOCK FAN WITH FIRE ALARM SYSTEM TO SHUT DOWN IMMEDIATELY UPON RECEIPT OF A RATE-OF-FLOW SIGNAL. VERIFY ACTUAL LOCATION WITH ARCHITECT, OWNER, AND FIELD CONDITIONS. ENSURE UNIT IS MOUNTED APPROXIMATELY CENTERED BETWEEN THE NEAREST FOUR FIRE SPRINKLER HEADS.
④	FANS MUST BE MINIMUM 1X THE DIAMETER AWAY FROM HVAC SUPPLY IF FAN IS LOCATED ABOVE DISCHARGE OF HVAC SUPPLY. FANS MUST BE MINIMUM 2X DIAMETER AWAY FROM HVAC SUPPLY IF FAN IS LOCATED BELOW DISCHARGE OF HVAC SUPPLY.
⑤	VERIFY FINAL FORKLIFT CHARGING STATION LOCATION WITH HYDROGEN SENSOR PRIOR TO CONSTRUCTION WITH OWNER.

GENERAL NOTES	
1.	ALL ROOFTOP EQUIPMENT TO BE INSTALLED A MINIMUM OF 10 FEET FROM BUILDING EDGE UNLESS 42" PARAPET IS PROVIDED.
2.	ALL EXHAUST, FLUES, AND VENT OUTLETS TO DISCHARGE A MINIMUM OF 10 FEET FROM ANY OUTSIDE AIR INTAKE.
3.	ALL EQUIPMENT TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS. MAINTAIN ALL REQUIRED CLEARANCES.

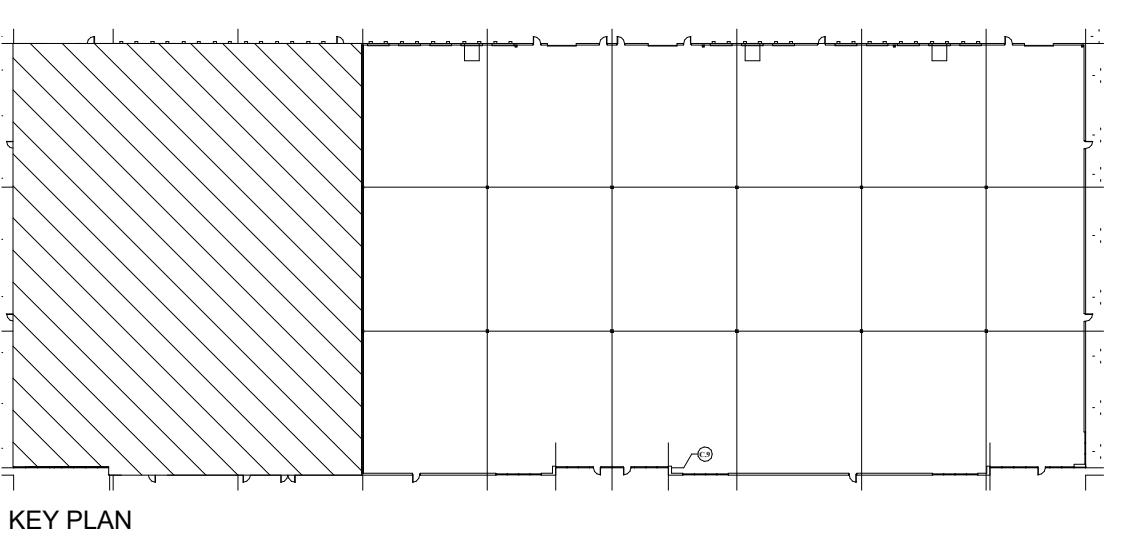
CONNECT NEW TO EXISTING

HYDROGEN SENSOR EQUIPMENT SPECIFICATIONS	
SENSOR:	Critical Environment Technologies Model ESH-A-CH2-100 (INTEGRAL POWER)
CONTROLLER:	Critical Environment Technologies Model DCC (90-240 VAC LINE VOLTAGE)
HORN/STROBE:	Critical Environment Technologies Model RSH-24V-R (INTEGRAL POWER)

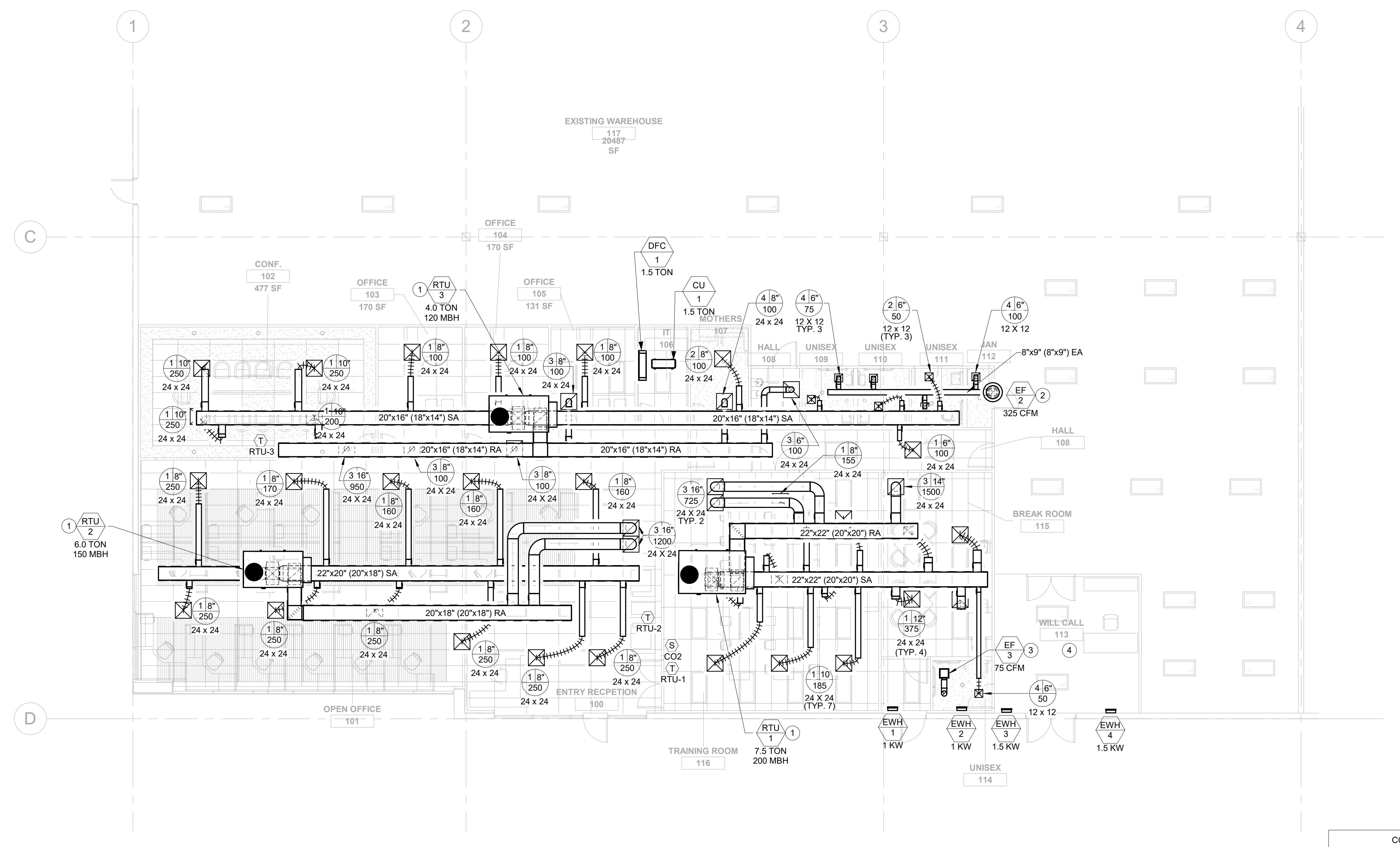
OVERALL MECHANICAL PLAN

M1.0

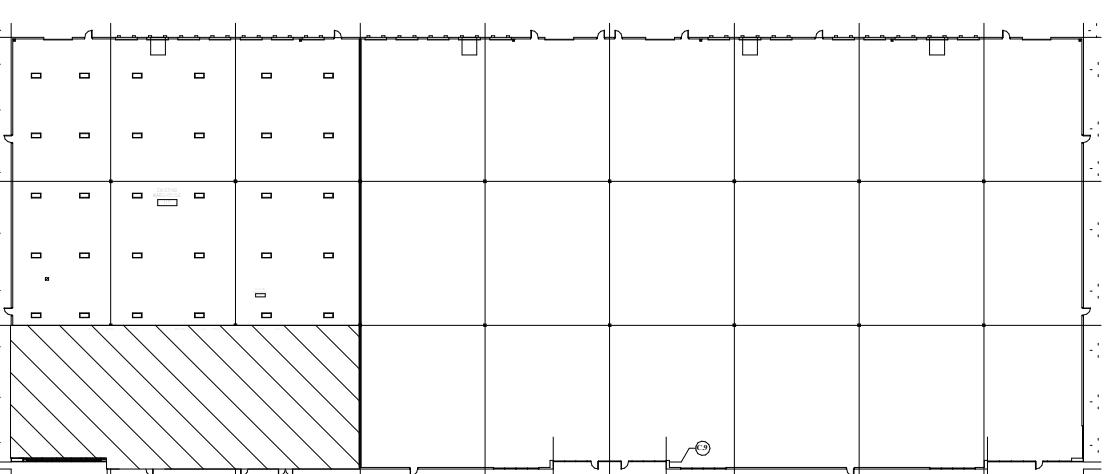
1
M1.0
OVERALL MECHANICAL PLAN
3/32" = 1'-0"



PARK 84 - BLDG 1 - TRANE TECH T.I. 8400 BIRCH LANE SUITE 1 NAMPA, ID



1
M1.1
ENLARGED OFFICE MECHANICAL PLAN
1/8" = 1'-0"



CO2 PURGE SYSTEM SEQUENCE OF OPERATIONS
WHEN CO2 SENSOR DETECTS LEVELS OF ROOM CO2 ABOVE 900 PPM, THE ASSOCIATED UNIT SHALL OPEN THE OSA DAMPER TO THE HIGH VALUE. THE OSA DAMPER SHALL STAY AT THE HIGH VALUE UNTIL THERE IS A CALL FOR ECONOMIZING OR THE CO2 LEVEL HAS DROPPED BELOW THE CO2 SENSOR SETPOINT (500 PPM).
RTU-1: (NORMAL) 10% - 300 CFM; (HIGH) 23% - 690 CFM
09/13/2024

CO2 SENSOR SPECIFICATIONS
ARMSTRONG MODEL AMC-310
MOUNT SENSORS AT 48" ABOVE FINISHED FLOOR

SHEET NOTES
① PROVIDE FULL SIZE ROOFTOP UNIT CONNECTIONS DOWN THROUGH ROOF AND TRANSITION TO DUCTWORK AS SHOWN.
② PROVIDE FULL SIZE EXHAUST FAN CONNECTION DOWN THROUGH ROOF AND TRANSITION TO DUCTWORK AS SHOWN.
③ ROUTE 6" DIA EXHAUST DUCT UP THROUGH ROOF TO MANUFACTURER APPROVED WEATHER CAP.
④ WILL CALL OPEN TO WAREHOUSE.

GENERAL NOTES
1. ALL ROOFTOP EQUIPMENT TO BE INSTALLED A MINIMUM OF 10 FEET FROM BUILDING EDGE UNLESS 42" PARAPET IS PROVIDED.
2. ALL EXHAUST, FLUES, AND VENT OUTLETS TO DISCHARGE A MINIMUM OF 10 FEET FROM ANY OUTSIDE AIR INTAKE.
3. ALL EQUIPMENT TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS. MAINTAIN ALL REQUIRED CLEARANCES.

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PROJECT NUMBER DRAWN
2024-149 KN
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ISSUE PERMIT
08/21/2024

REVISIONS

ENLARGED
MECHANICAL PLAN

M1.1