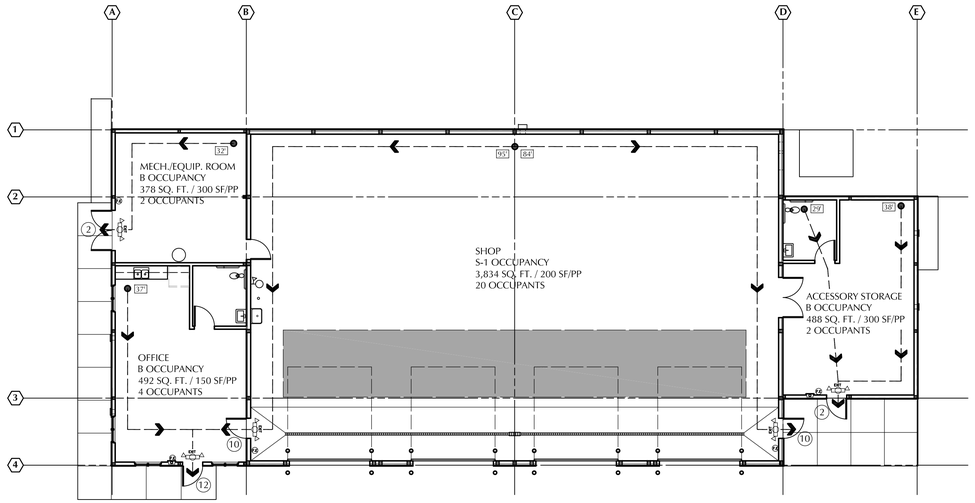


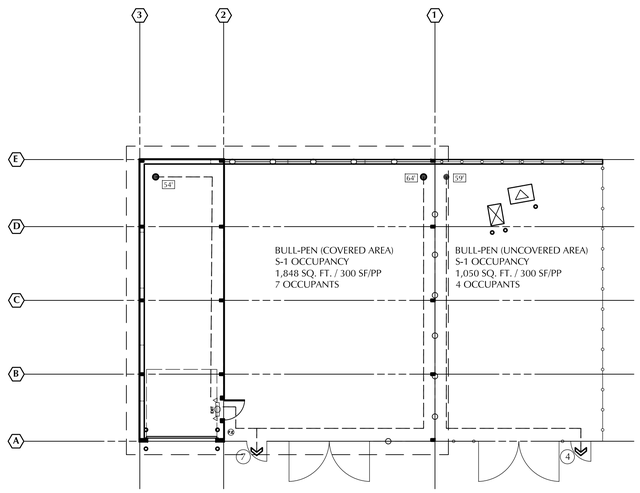
LIFE SAFETY/EXITING PLAN
FIRST FLOOR - BUILDING 1

3/32"=1'-0"

LIFE SAFETY AND EXITING NOTES

- EXIT TRAVEL PATH
- XXX' EXIT ACCESS TRAVEL DISTANCE (LEAST DISTANCE)
- (#) OCCUPANT LOAD FACTOR AT DOOR
- EXIT SIGN
- FIRE EXTINGUISHER PER IBC 906

1. MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE PER IBC TABLE 1006.2.1
   S OCCUPANCY = 100' (WITHOUT SPRINKLER SYSTEM, OCCUPANT LOAD UNDER 30)
   B OCCUPANCY = 100' (WITHOUT SPRINKLER SYSTEM, OCCUPANT LOAD UNDER 30)
2. MAXIMUM EXIT ACCESS TRAVEL DISTANCE PER IBC TABLE 1017.2
   S-1 OCCUPANCY = 200' (WITHOUT SPRINKLER SYSTEM)
   B OCCUPANCY = 200' (WITHOUT SPRINKLER SYSTEM)
3. EXIT SIGNS - IBC SECTION 1013
   EXIT SIGN PLACEMENT SHALL BE SUCH THAT NO POINT IN AN EXIT PASSAGEWAY IS MORE THAN 100' OR THE LISTED VIEWING DISTANCE FOR THE SIGN, WHICHEVER IS LESS, FROM THE NEAREST VISIBLE EXIT. PROVIDE ADDITIONAL EXIT SIGN AS MAY BE REQUIRED BY THE LOCAL JURISDICTION.
4. FIRE EXTINGUISHER - IBC SECTION 906
   FIRE EXTINGUISHER PLACEMENT MAXIMUM DISTANCE OF TRAVEL FOR CLASS A MODERATE FIRE HAZARD SHALL BE 75' AND SHALL BE RATED MIN 2-A. FIRE EXTINGUISHER PLACEMENT MAXIMUM DISTANCE OF TRAVEL FOR FLAMMABLE OR COMBUSTIBLE LIQUIDS MODERATE FIRE HAZARD SHALL BE 30' FOR TYPE 10-B OR 50' FOR TYPE 20-B. EXTINGUISHER SHALL BE PLACED IN CONSPICUOUS LOCATION FOR READY ACCESS AND INSTALLED ON HANGERS OR BRACKETS SUPPLIED IF NOT HOUSED IN CABINETS.



LIFE SAFETY/EXITING PLAN
BULL PEN - BUILDING 4

3/32"=1'-0"

DESIGN CRITERIA - BUILDING 1

JURISDICTION:	CITY OF WENATCHEE CODE
REFERENCES:	2018 INTERNATIONAL BUILDING CODE 2018 WA STATE BLDG CODE AMENDMENTS CHAP. 51-50 WAC ICC/ANSI A117.1-2009 2018 INTERNATIONAL MECHANICAL CODE 2018 UNIFORM PLUMBING CODE 2018 INTERNATIONAL FIRE CODE
ZONING:	INDUSTRIAL (I)
SITE AREA:	2.75 ACRES
BUILDING 1:	PERMITTED, REFERENCE BPC-21-055
CONSTRUCTION TYPE:	V-B NON-SPRINKLERED
OCCUPANCY GROUP:	B AND S-1
ACTUAL BUILDING AREA:	B OCCUPANCY = 1,600 SF S-1 OCCUPANCY = 4,000 SF (VEHICLE REPAIR GARAGE) TOTAL = 5,600 SF
TABLE 506.2 (ALLOWABLE):	9,000 SF (NON-SPRINKLERED)

CLIMATE DATA - BUILDING 1

2018 WASHINGTON STATE ENERGY CODE:	
CLIMATE ZONE:	5B
COMPLIANCE METHOD:	COMPONENT
ROOF INSULATION:	R-49 (ATTIC)
WALLS, ABOVE GRADE:	R-21
SLAB ON GRADE:	R-10 FOR 24" BELOW
DOORS, NON-SWINGING:	R-4.75
DOORS, SWINGING:	U-0.37
WINDOWS (FIXED):	MAX. NFRC U-VALUE =0.38 (FIXED) MAX. NFRC U-VALUE =0.40 (OPERABLE) SHGC = 0.38 (SOUTH/EAST/WEST) SHGC = 0.51 (NORTH)

DESIGN CRITERIA - BUILDING 2

JURISDICTION:	CITY OF WENATCHEE CODE
REFERENCES:	2018 INTERNATIONAL BUILDING CODE 2018 WA STATE BLDG CODE AMENDMENTS CHAP. 51-50 WAC ICC/ANSI A117.1-2009 2018 INTERNATIONAL MECHANICAL CODE 2018 UNIFORM PLUMBING CODE 2018 INTERNATIONAL FIRE CODE
ZONING:	INDUSTRIAL (I)
SITE AREA:	2.75 ACRES
BUILDING 2:	PERMITTED, REFERENCE BPC-21-056
CONSTRUCTION TYPE:	V-B NON-SPRINKLERED
OCCUPANCY GROUP:	B AND S-1
ACTUAL BUILDING AREA:	B OCCUPANCY = 2,800 SF (1ST FLOOR) B OCCUPANCY = 800 SF (2ND FLOOR) S-1 OCCUPANCY = 3,000 SF TOTAL = 6,600 SF
TABLE 506.2 (ALLOWABLE):	9,000 SF (NON-SPRINKLERED, 1 STORY)

CLIMATE DATA - BUILDING 2

2018 WASHINGTON STATE ENERGY CODE:	
CLIMATE ZONE:	5B
COMPLIANCE METHOD:	COMPONENT
ROOF INSULATION:	R-49 (ATTIC)
WALLS, ABOVE GRADE:	R-21
SLAB ON GRADE:	R-10 FOR 24" BELOW
DOORS, NON-SWINGING:	R-4.75
DOORS, SWINGING:	U-0.37
WINDOWS (FIXED):	MAX. NFRC U-VALUE =0.38 (FIXED) MAX. NFRC U-VALUE =0.40 (OPERABLE) SHGC = 0.38 (SOUTH/EAST/WEST) SHGC = 0.51 (NORTH)

DESIGN CRITERIA - BUILDING 3

JURISDICTION:	CITY OF WENATCHEE CODE
REFERENCES:	2021 INTERNATIONAL BUILDING CODE 2021 WA STATE BLDG CODE AMENDMENTS CHAP. 51-50 WAC 2017 ICC/ANSI HANDICAP ACCESSIBILITY 2021 INTERNATIONAL MECHANICAL CODE 2021 UNIFORM PLUMBING CODE 2021 INTERNATIONAL FIRE CODE
ZONING:	INDUSTRIAL (I)
SITE AREA:	2.75 ACRES
BUILDING 3:	RISK CATEGORY IV (IBC TABLE 1604.5)
CONSTRUCTION TYPE:	V-B NON-SPRINKLERED
OCCUPANCY GROUP:	B AND S-1
ACTUAL BUILDING AREA:	B OCCUPANCY = 1,992 SF (1ST FLOOR) B OCCUPANCY = 1,992 SF (2ND FLOOR) S-1 OCCUPANCY = 3,921 SF S-1 MEZZANINE = 780 SF (NOT INCLUDED IN TOTAL
BUILDING AREA	TOTAL = 7905 SF
TABLE 506.2 (ALLOWABLE):	9,000 SF (NON-SPRINKLERED, 1 STORY)

CLIMATE DATA - BUILDING 3

2021 WASHINGTON STATE ENERGY CODE:	
CLIMATE ZONE:	5B
COMPLIANCE METHOD:	COMPONENT
ROOF INSULATION:	R-49 (ATTIC)
WALLS, ABOVE GRADE:	R-20 + R-3.8c.i. (INTERMEDIATE FRAMING)
SLAB ON GRADE:	R-10 FOR 24" BELOW
DOORS, NON-SWINGING:	R-4.75
DOORS, SWINGING:	U-0.37
WINDOWS (FIXED):	MAX. NFRC U-VALUE =0.34 (FIXED) MAX. NFRC U-VALUE =0.36 (OPERABLE) SHGC = 0.38 (SOUTH/EAST/WEST)

DESIGN CRITERIA - BUILDING 4 (BULL-PEN)

JURISDICTION:	CITY OF WENATCHEE CODE
REFERENCES:	2021 INTERNATIONAL BUILDING CODE 2021 WA STATE BLDG CODE AMENDMENTS CHAP. 51-50 WAC 2021 INTERNATIONAL FIRE CODE
ZONING:	INDUSTRIAL (I)
SITE AREA:	2.75 ACRES
BUILDING 3:	RISK CATEGORY IV (IBC TABLE 1604.5)
CONSTRUCTION TYPE:	V-B NON-SPRINKLERED
OCCUPANCY GROUP:	S-1
ACTUAL BUILDING AREA:	S-1 OCCUPANCY = 1,848 SF COVERED S-1 OCCUPANCY = 1,050 SF UNCOVERED TOTAL = 2,898 SF
TABLE 506.2 (ALLOWABLE):	9,000 SF (NON-SPRINKLERED, 1 STORY)

CLIMATE DATA - BUILDING 4 (BULL-PEN)

2021 WASHINGTON STATE ENERGY CODE:	
CLIMATE ZONE:	5B
COMPLIANCE METHOD:	COMPONENT
ROOF INSULATION:	N/A
WALLS, ABOVE GRADE:	N/A
SLAB ON GRADE:	N/A
DOORS, NON-SWINGING:	N/A
DOORS, SWINGING:	N/A
WINDOWS (FIXED):	N/A

Drwn: Chkd:

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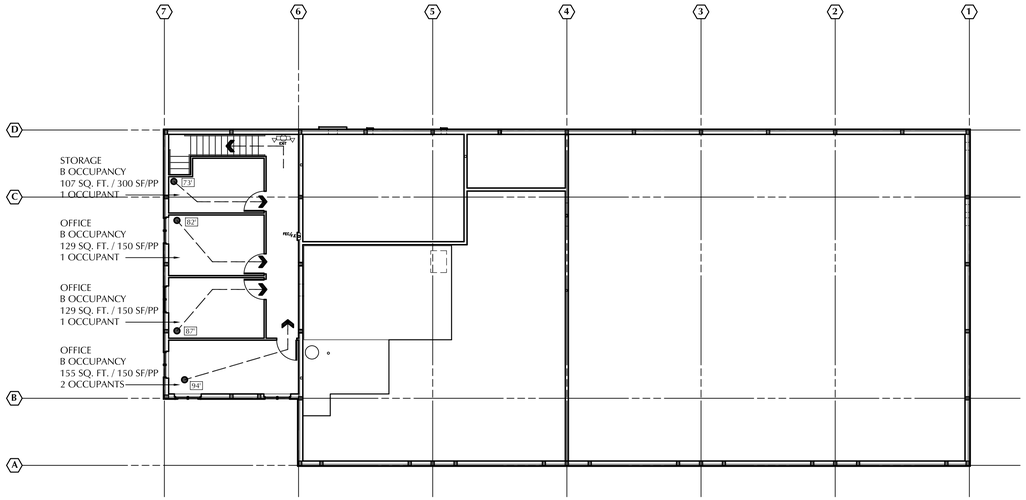
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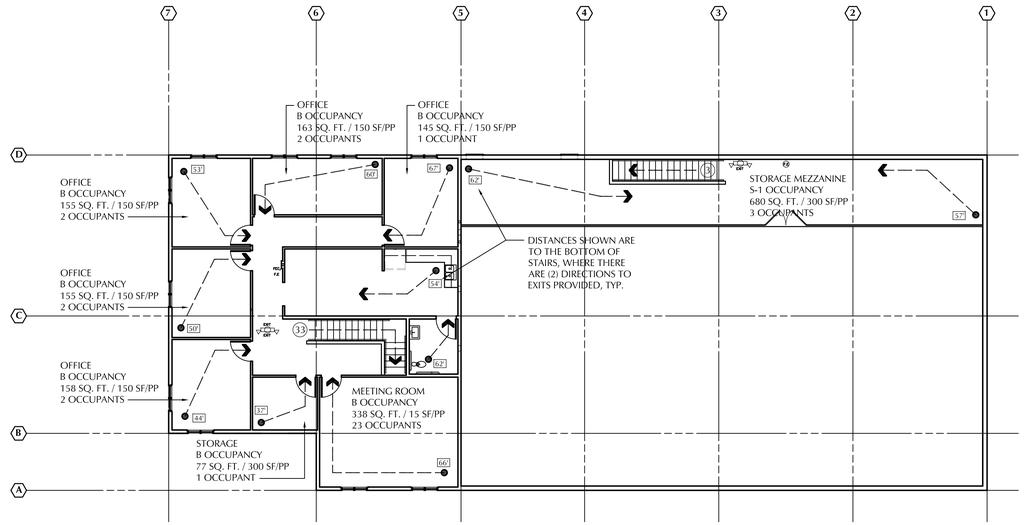
BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025

.DWG ID = 2344 a002+.dwg
2344 a002a428+.dwg

A0.2



LIFE SAFETY/EXITING PLAN
SECOND FLOOR - BUILDING 2
3/32"=1'-0"

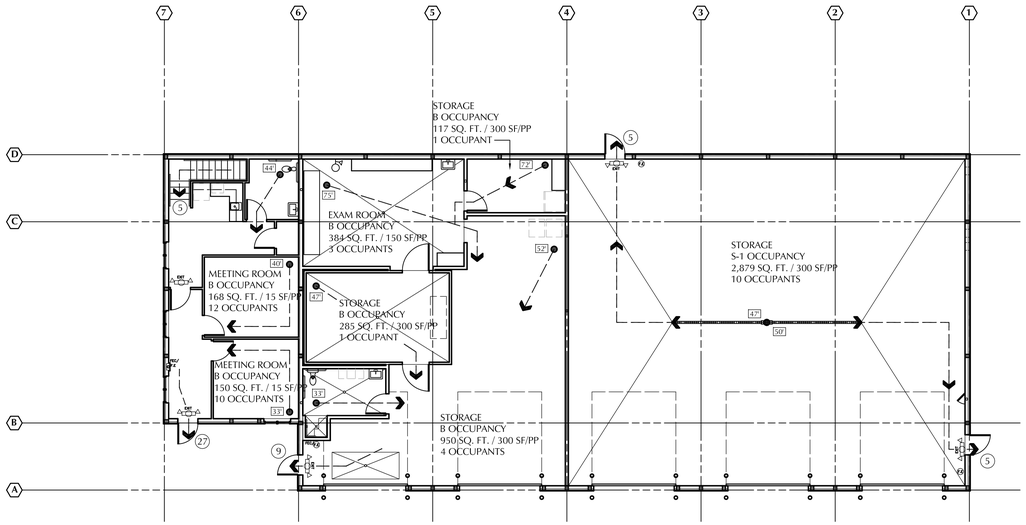


LIFE SAFETY/EXITING PLAN
SECOND FLOOR - BUILDING 3
3/32"=1'-0"

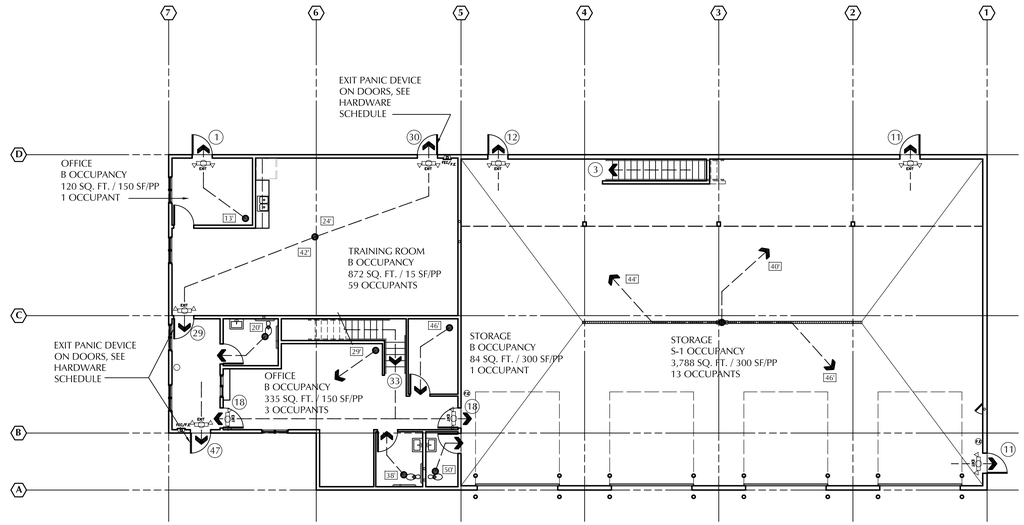
LIFE SAFETY AND EXITING NOTES

- EXIT TRAVEL PATH
- XXX' EXIT ACCESS TRAVEL DISTANCE (LEAST DISTANCE)
- (#) OCCUPANT LOAD FACTOR AT DOOR
- EXIT SIGN
- FIRE EXTINGUISHER PER IBC 906

1. MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE PER IBC TABLE 1006.2.1
   S OCCUPANCY = 100' (WITHOUT SPRINKLER SYSTEM, OCCUPANT LOAD UNDER 30)
   B OCCUPANCY = 100' (WITHOUT SPRINKLER SYSTEM, OCCUPANT LOAD UNDER 30)
2. MAXIMUM EXIT ACCESS TRAVEL DISTANCE PER IBC TABLE 1017.2
   S-1 OCCUPANCY = 200' (WITHOUT SPRINKLER SYSTEM)
   B OCCUPANCY = 200' (WITHOUT SPRINKLER SYSTEM)
3. EXIT SIGNS - IBC SECTION 1013
   EXIT SIGN PLACEMENT SHALL BE SUCH THAT NO POINT IN AN EXIT PASSAGEWAY IS MORE THAN 100' OR THE LISTED VIEWING DISTANCE FOR THE SIGN, WHICHEVER IS LESS, FROM THE NEAREST VISIBLE EXIT. PROVIDE ADDITIONAL EXIT SIGN AS MAY BE REQUIRED BY THE LOCAL JURISDICTION.
4. FIRE EXTINGUISHER - IBC SECTION 906
   FIRE EXTINGUISHER PLACEMENT MAXIMUM DISTANCE OF TRAVEL FOR CLASS A MODERATE FIRE HAZARD SHALL BE 75' AND SHALL BE RATED MIN 2-A. FIRE EXTINGUISHER PLACEMENT MAXIMUM DISTANCE OF TRAVEL FOR FLAMMABLE OR COMBUSTIBLE LIQUIDS MODERATE FIRE HAZARD SHALL BE 30' FOR TYPE 10-B OR 50' FOR TYPE 20-B. EXTINGUISHER SHALL BE PLACED IN CONSPICUOUS LOCATION FOR READY ACCESS AND INSTALLED ON HANGERS OR BRACKETS SUPPLIED IF NOT HOUSED IN CABINETS.



LIFE SAFETY/EXITING PLAN
FIRST FLOOR - BUILDING 2
3/32"=1'-0"



LIFE SAFETY/EXITING PLAN
FIRST FLOOR - BUILDING 3
3/32"=1'-0"

Drwn: Chkd:

REGISTERED ARCHITECT
7083
LARRY A. DANGLE
STATE OF WASHINGTON

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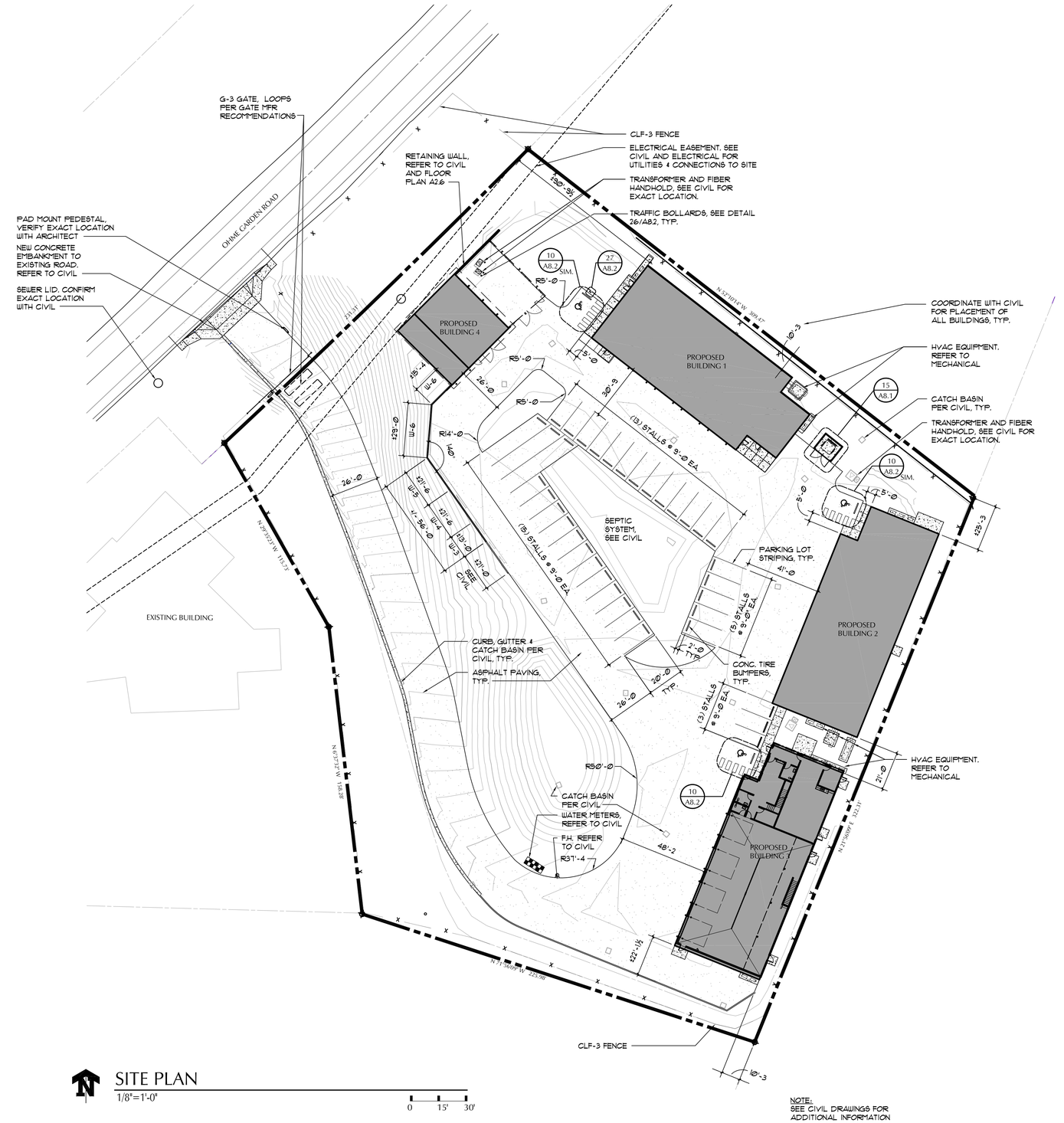
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Job: 2344 Date: 1/6/2025
DWG ID = 2344 a003-.dwg

A0.3



SITE PLAN

1/8"=1'-0"

0 15' 30'

NOTE:
SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION

Drwn: Chkd:

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BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
DWG ID = 2344 0101
2344 0101.vw60=

A1.1

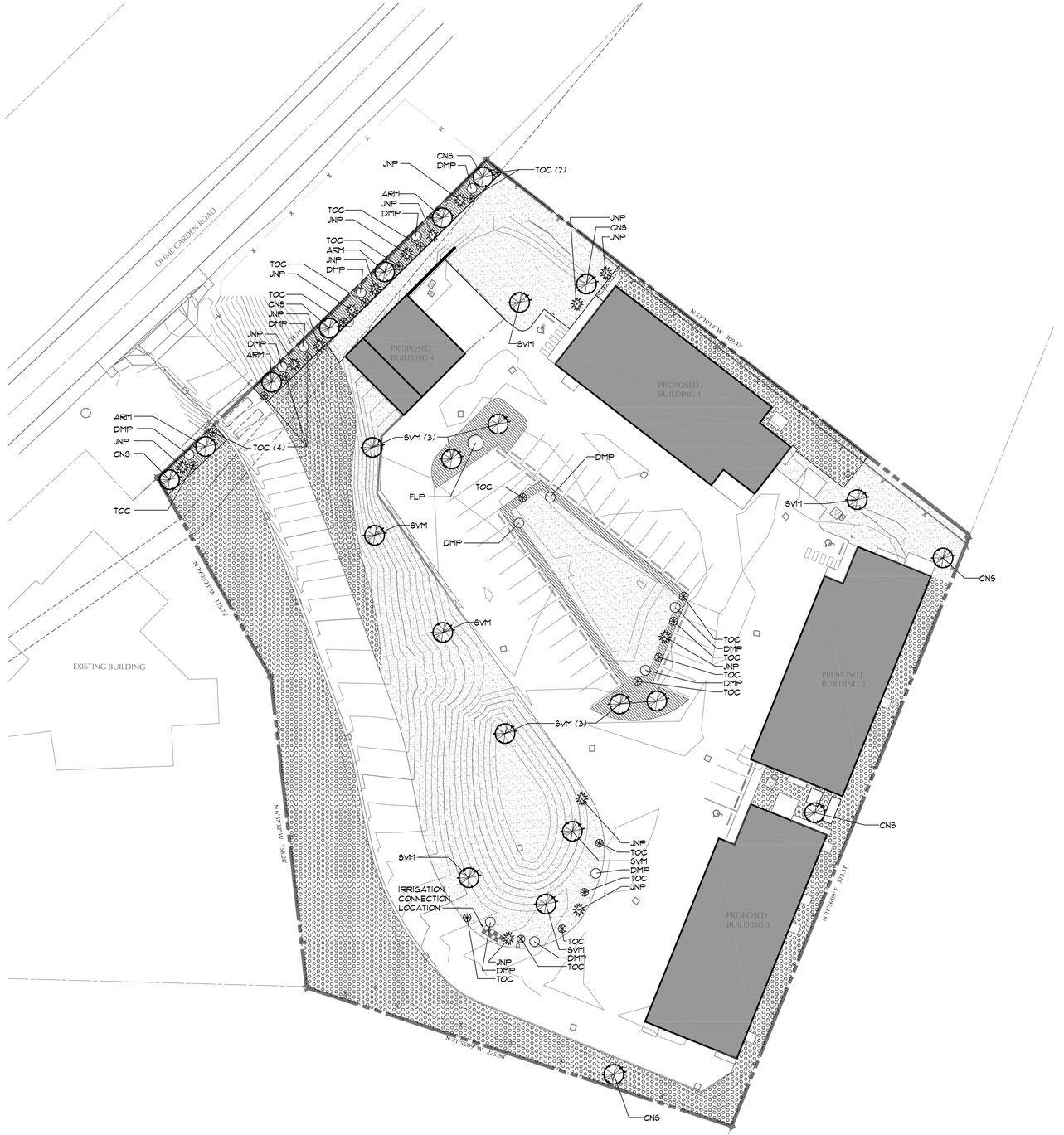
ABBREVIATION	NAME	SIZE AND SPACING
LAWN	GRASS (HYDROSEEDING)	
KIN	KINNIKINNICK GROUNDCOVER	1 GALLON, 24" O.C.TRIANGULAR SPACING
CM	CRUSHED ROCK	
ARM	ACER RUBRUM (ARMSTRONG MAPLE)	1¾" CALIPER
SVM	ACER RUBRUM (SUN VALLEY MAPLE)	1¾" CALIPER
CNS	CUPRESSINA (COLUMNAR NORWAY SPRUCE)	6'-Ø MINIMUM
FLP	PYRUS CALLERYANA 'CHANTICLEER' (CLEVELAND FLOWERING PEAR)	1¾" CALIPER
DMP	PINUS MUGO CULTIVARS (DWARF MUGO PINE)	2 GALLON
JNP	JUNIPERUA SCOPULORUM (SKYROCKET JUNIPER)	2 GALLON
TOC	THUJA OCCIDENTALIS (FIRE CHIEF ARBORVITAE)	2 GALLON

PLANTINGS
1. INSTALL WEED BARRIER UNDER 2" DEEP MEDIUM TEXTURED BARK MULCH IN ALL NEW PLANTING BEDS. EXCEPT, USE FINE BARK MULCH W/ NO FABRIC AT ANNUAL PLANTING BED.
2. EXCAVATE AND REMOVE EXISTING SOIL FOR NEW TREES AND SHRUBS 3 TIMES THE SIZE OF THE ROOT BALL/CONTAINER. PLANT USING 50% ON SITE SOIL AND 50% COMPOST.
3. FERTILIZE TREES AND PLANTINGS WITH 20-20-10 CONTROLLED RELEASE FERITILIZER
4. ROTOTILL SUBGRADE AT LANDSCAPE BEDS AND LAWN AND ADD 4" DEPTH ORGANIC AMENDMENT AND GENERAL AMENDMENT AND STABILIZATION FERTILIZERS. RAKE SMOOTH AND LEVEL W/ ADDITIONAL COMPOST.
5. FILL ALL PLANTING BEDS TO WITHIN 1" OF TOP OF DRIVES, CURBS/SIDEWALKS OR ADJACENT SURFACING.
6. APPLY 'SNAP-SHOT' PRE-EMERGENT TO ALL BEDS PRIOR TO PLACING WEED BARRIER AND BARK MULCH.
7. APPLY 'MY CORRHIZA ROOTS' ROOT LIQUID SOLUTION TO ALL PLANTING HOLES PER MANUFACTURER'S RECOMMENDATIONS.

IRRIGATION
1. REFERENCE SPECIFICATION SECTION 32 80 00 FOR ADDITIONAL INFORMATION.
2. IRRIGATION SYSTEM SHALL COVER ALL LANDSCAPING AREA AND PLANTINGS.
3. IRRIGATION SYSTEM SHALL BE CONTRACTOR DESIGN. INSPECT SITE AND VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO BIDDING AND CONSTRUCTION.
4. IRRIGATION SHALL BE CONTROLLED FROM KEYED LOCATIONS SHOWN ON THE PLANS.
5. PROVIDE NEW PIPES, VALVES AND IRRIGATION HEADS ACCORDING TO FIELD CONDITIONS AND PLANT LOCATIONS.
6. ALL VALVES WILL BE PLACED IN VALVE BOXES, LOCATED IN SHRUB BEDS, IN A MANNER WHICH FACILITATES ACCESS FOR MAINTENANCE.
7. ALL COMPONENTS OF IRRIGATION SYSTEM SHALL BE INSTALLED AND ADJUSTED TO PROVIDE ADEQUATE COVERAGE AND NO OVERSPRAY ONTO BUILDINGS, WINDOWS OR PAVED AREAS.
8. ALL IRRIGATION WIRE TO BE IN CONDUIT, ALL IRRIGATION WATER LINES UNDER PAVED SURFACES TO BE IN CONDUIT.
9. INSTALL ALL SPRINKLER HEADS W/ HEAD TO HEAD COVERAGE
10. DRIP IRRIGATION HEADS TO BE PLACED AT EACH PLANT ACCORDING TO VOLUME NEEDED.
11. IRRIGATION SHALL BE ZONED AS REQUIRED FOR FULL COVERAGE AT AVAILABLE WATER PRESSURE.

STATMENT OF RESPONSIBILITIES
AS THE OWNER OF THE SUBJECT PROPERTY, I HAVE REVIEWED THIS LANDSCAPE PLAN AND UNDERSTAND OUR RESPONSIBILITIES FOR THE LANDSCAPING INSTALLATION AND MAINTENANCE.

RON CRIDLEBAUGH
OWNER



SITE-LANDSCAPING/IRRIGATION PLAN
1"=30'-0"
0 15' 30'

Drwn: Chkd:

REGISTERED ARCHITECT LARRY A. DANGLE STATE OF WASHINGTON 7083

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BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
DWG ID - 2344 a1028
2344 A1011360-

A1.2

TYPICAL HVAC CONCRETE EQUIPMENT PAD, 6" THICK W/ #4 REBAR AT 18" Ø.C. (E.A. WAY) OVER 4" COMPACTED CRUSHED SURFACING BASE COURSE. REFERENCE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION AND STRUCTURAL (BUILDING 3) FOR CONCRETE MIX REQUIREMENTS.

HVAC CONCRETE EQUIPMENT PAD, ±3'-Ø" x ±15'-6"

DRYWALL CONTROL JOINT, PROVIDE BLOCKING TYP.

PROVIDE FRAMED OPENINGS IN WALL AS REQUIRED FOR DUCTWORK, EXHAUST, ETC. COORD. EXACT LOCATIONS AND SIZES WITH MECH. TYP.

HVAC CONCRETE EQUIPMENT PAD, ±8'-6" x ±7'-Ø"

HVAC CONCRETE EQUIPMENT PAD, ±3'-Ø" x ±11'-Ø"

REFER O.F.O.I., SEE MECH. AND ELEC. DRAWINGS FOR INFORMATION ON ALL O.F.O.I. APPLIANCES

EMERGENCY SHOWER/EYE WASH STATION

69'-Ø" (VERIFY EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION OF THICKENED SLAB)

±9'-6" (VERIFY EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION OF THICKENED SLAB)

SUMP, SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION

TRENCH DRAIN @ -1" BELOW FINISH FLOOR

CONCRETE SIDEWALK

TYPICAL CONCRETE SIDEWALK AND DOOR STOOPS, 4" THICK W/ #4 REBAR AT 18" Ø.C. (E.A. WAY) OVER 4" COMPACTED CRUSHED SURFACING BASE COURSE. REFERENCE STRUCTURAL (BUILDING 3) FOR CONCRETE MIX REQUIREMENTS. SEE DETAIL 7/A8.2 FOR CONTROL JOINTS

ROOM SCHEDULE

101	COMPRESSOR ROOM/STORAGE
102	UNISEX ADA RESTROOM
103	OFFICE
104	VEHICLE REPAIR GARAGE
105	STORAGE
106	UNISEX ADA RESTROOM

FLOOR PLAN - BUILDING 1

3/16"=1'-0"

0 2' 6'

Drwn: | Chkd: |

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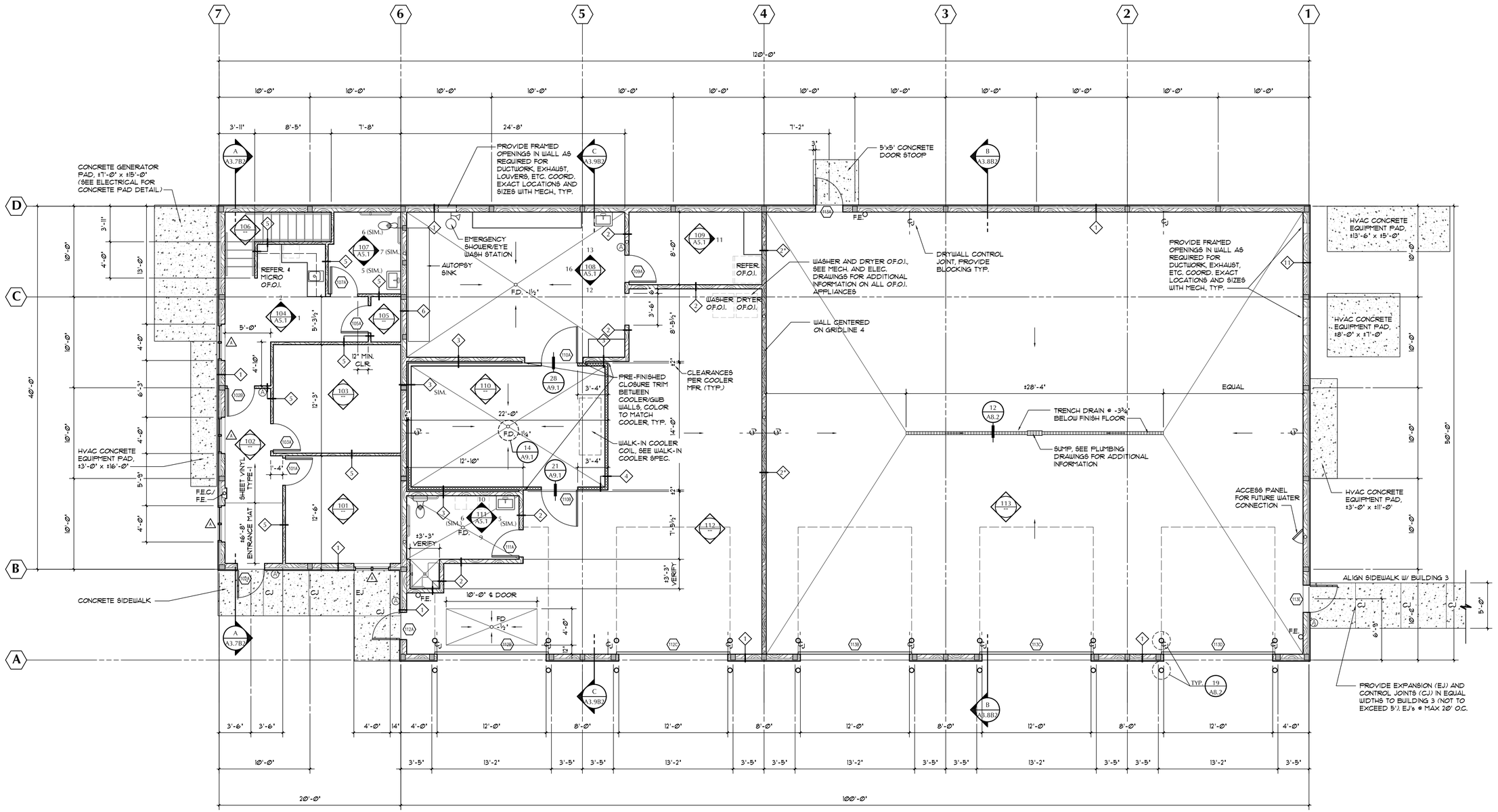
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BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

DWG ID - 2344 a201b1
2344 a201b1x64

A2.1B1



FIRST FLOOR PLAN - BUILDING 2

3/16"=1'-0"

0 2' 6'

ROOM SCHEDULE

101	FAMILY MEETING ROOM
102	HALL
103	CONFERENCE ROOM/STAFF
104	HALL/KITECHENETTE
105	STORAGE
106	STAIR
107	UNISEX ADA RESTROOM
108	EXAM ROOM
109	PROPERTY EVIDENCE TOXICOLOGY
110	WALK-IN COOLER
111	UNISEX ADA RESTROOM/SHOWER ROOM
112	STORAGE
113	STORAGE

Drwn: | Chkd: |

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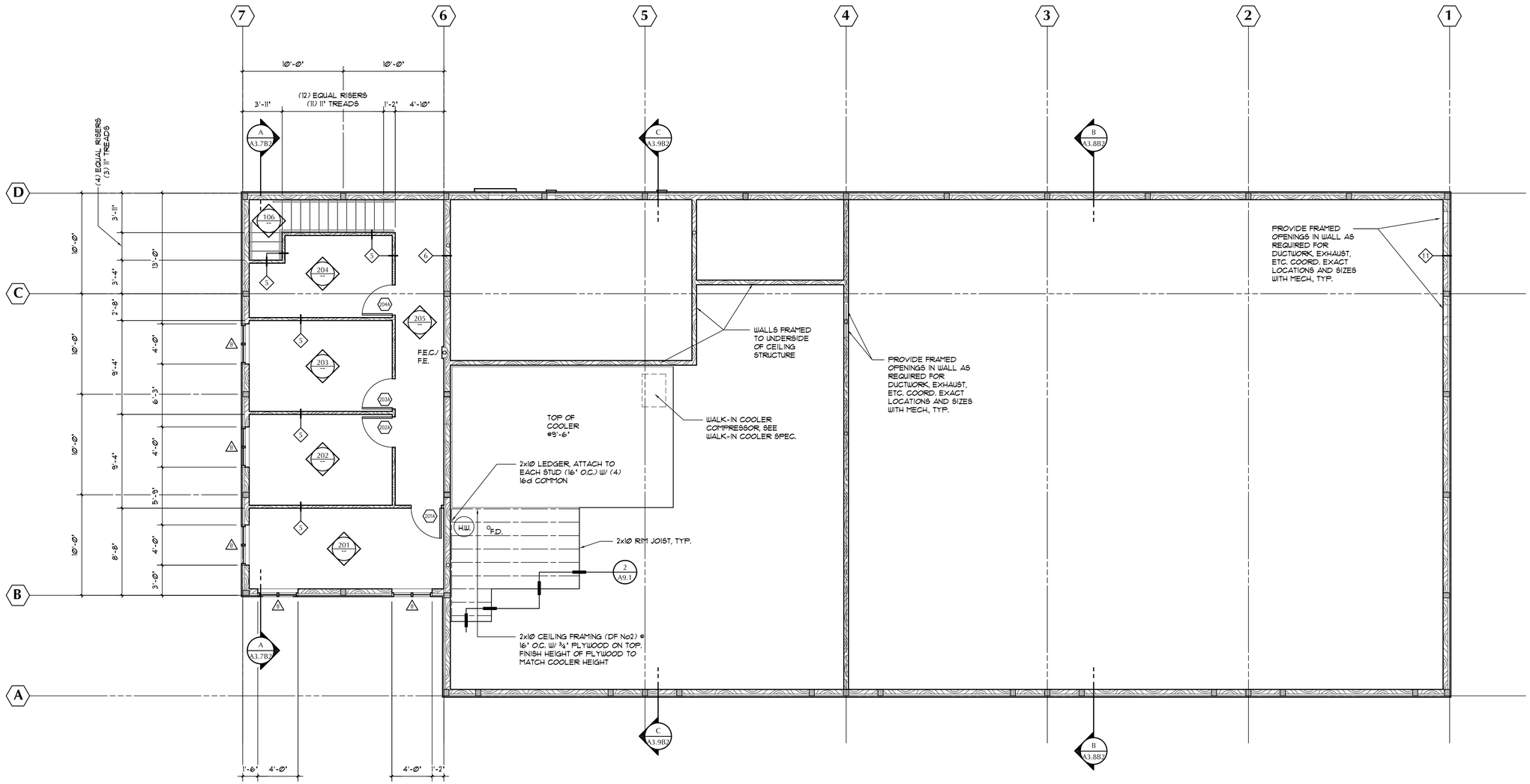
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BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

DWG ID - 2344 a202b2
2344 a202b2x64

A2.2B2



SECOND FLOOR PLAN - BUILDING 2

3/16"=1'-0"

0 2' 6'

ROOM SCHEDULE

106	STAIR
201	OFFICE
202	OFFICE
203	OFFICE
204	STORAGE
205	HALL

Drwn: | Chkd: |

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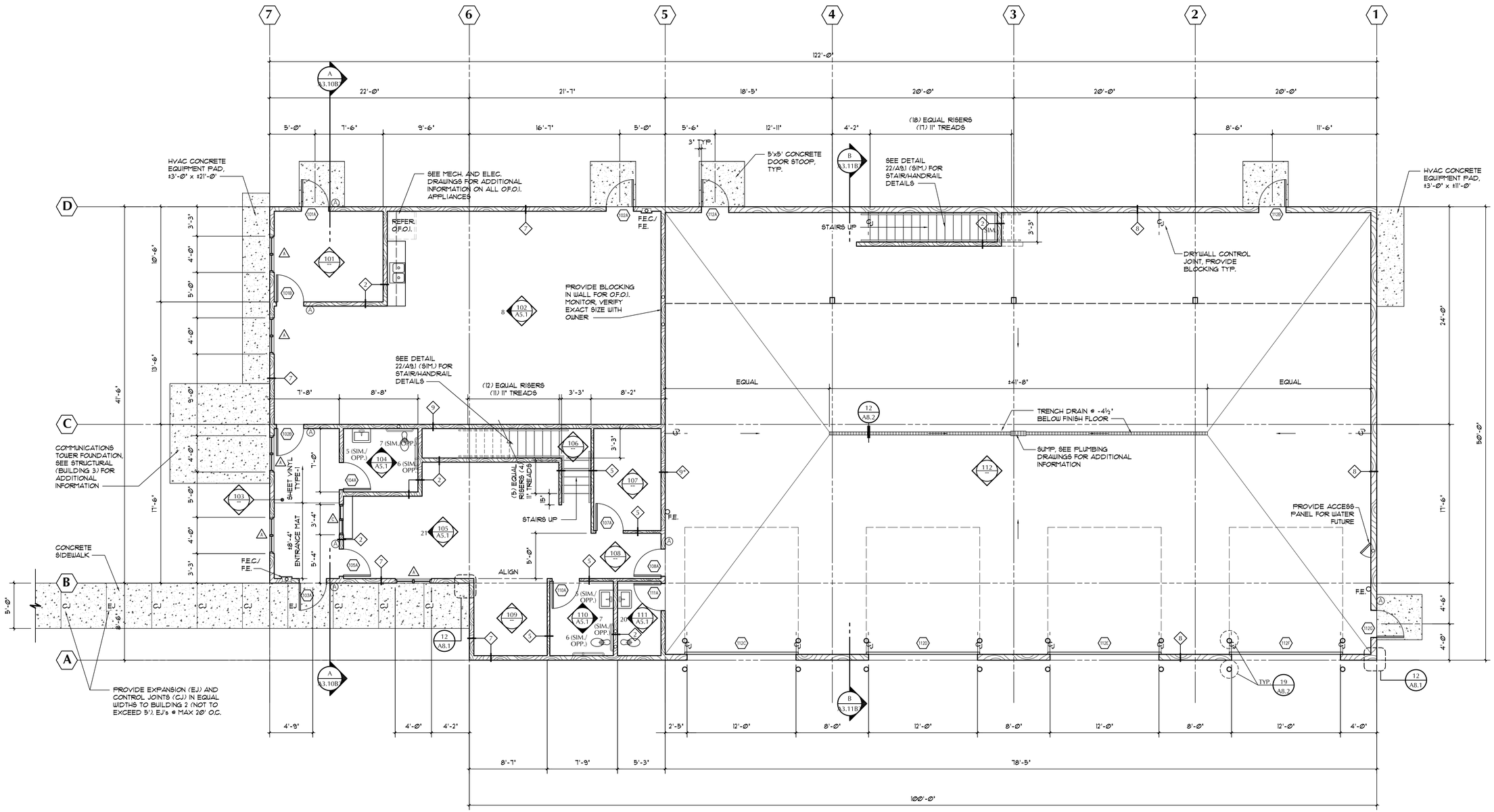
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BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

DWG ID - 2344 a203b2
2344 a203b2x64

A2.3B2



FIRST FLOOR PLAN - BUILDING 3

3/16"=1'-0"

0 2' 6'

ROOM SCHEDULE

101	OFFICE
102	TRAINING
103	HALL
104	UNISEX ADA RESTROOM
105	RECEPTION OFFICE
106	STAIR
107	STORAGE
108	HALL
109	WORK AREA
110	UNISEX ADA RESTROOM
111	UNISEX RESTROOM
112	STORAGE

Drwn: | Chkd: |

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CHELAN COUNTY OLDS STATION CAMPUS

425 OHME GARDEN ROAD WENATCHEE, WASHINGTON 98801

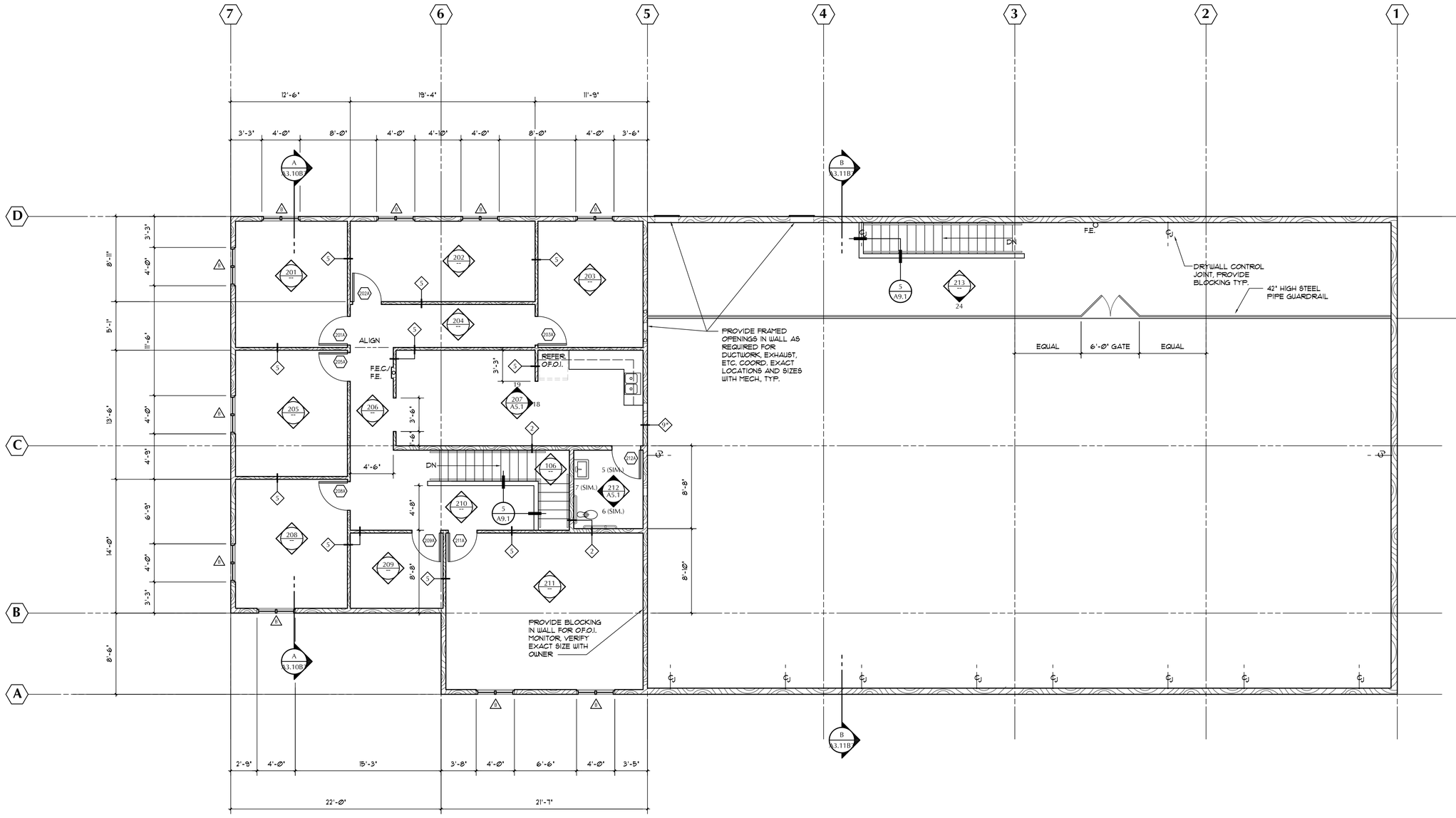
The DOH Associates, PS
ARCHITECTS and PLANNERS
7 N Wenatchee Ave Suite 500, Wenatchee, Washington 98801
Telephone (509) 662-4781 Facsimilie (509) 663-3253

BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

DWG ID → a2344 a204b3–
a2344 a204b3x64–

A2.4B3



SECOND FLOOR PLAN - BUILDING 3

3/16"=1'-0"

0 2' 6'

ROOM SCHEDULE

201	OFFICE
202	OFFICE
203	OFFICE
204	HALL
205	OFFICE
206	HALL
207	BREAK ROOM
208	OFFICE
209	STORAGE
210	HALL
211	CONFERENCE ROOM
212	UNISEX ADA RESTROOM
213	MEZZANINE

Drwn: | Chkd: |

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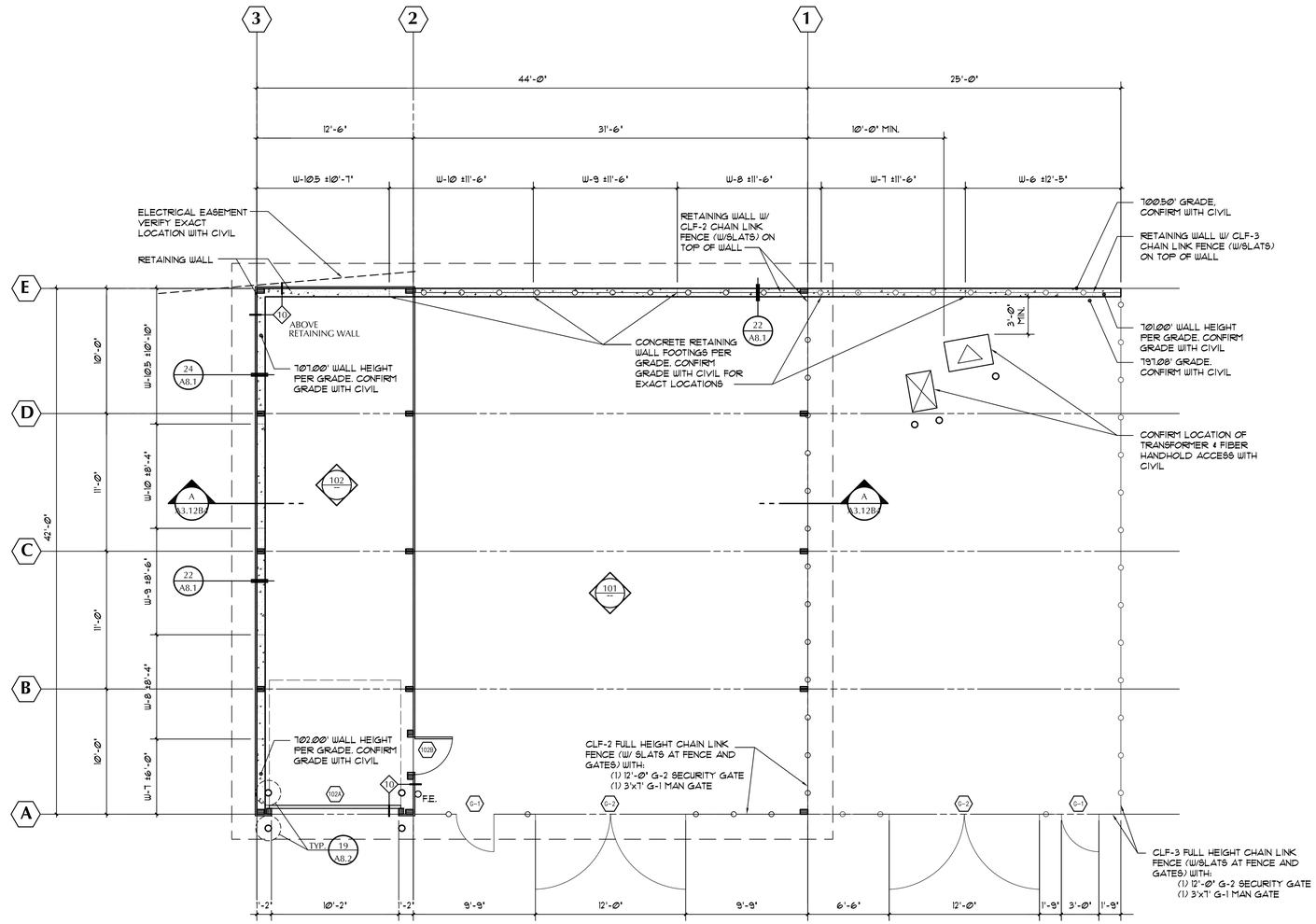
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BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

DWG ID = a2344 a205b3~
a2344 a205b3x64~

A2.5B3



FLOOR PLAN - BUILDING 4

3/16"=1'-0"

0 2' 6'

ROOM SCHEDULE

101	OPEN AREA - BULL PEN
102	SECURE AREA - BULL PEN

Drwn: | Chkd: |

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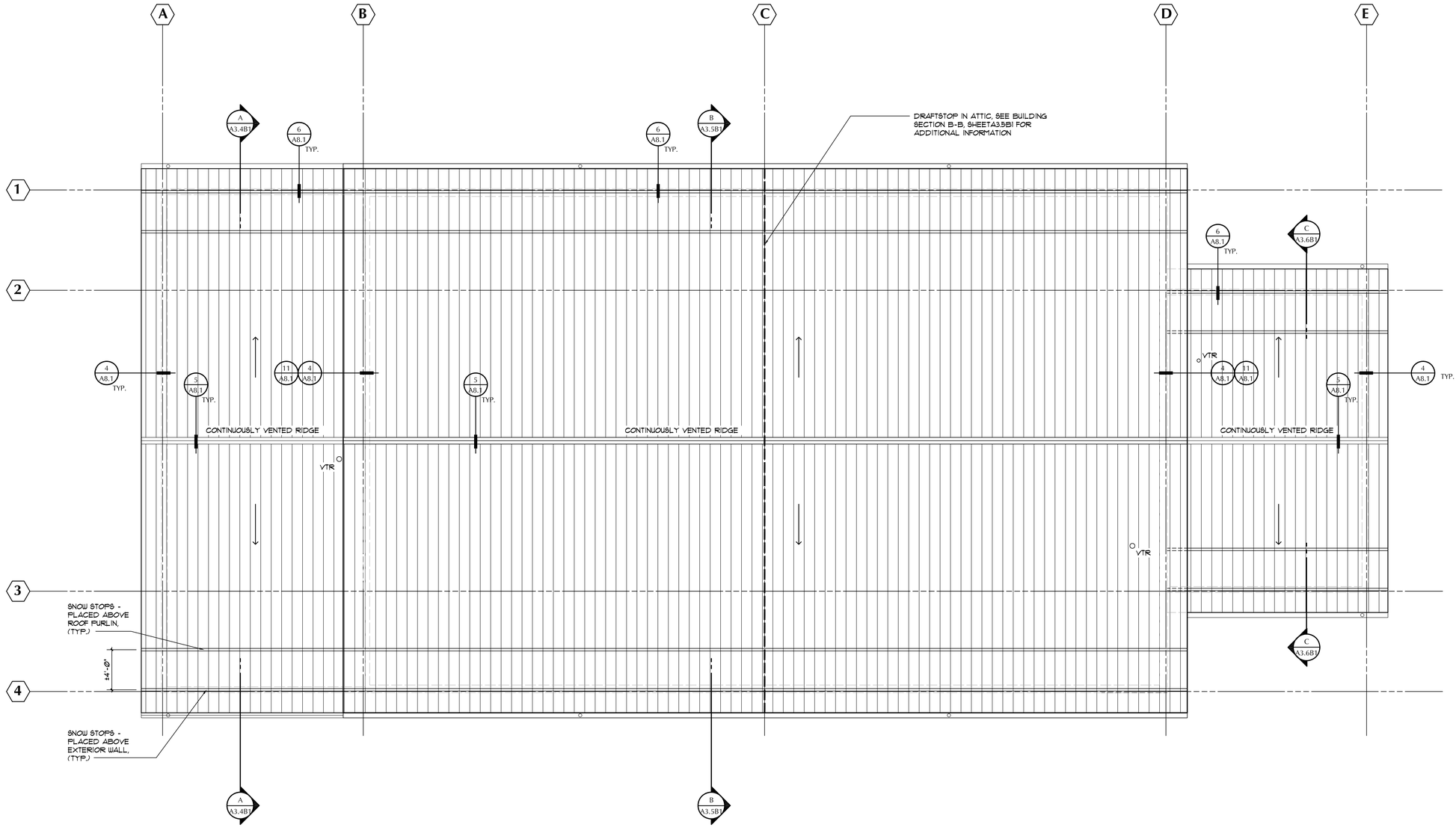
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BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
DWG ID - 2344 a2064
2344 a2064x64

PRELIMINARY NOT FOR CONSTRUCTION

A2.6B4



ROOF VENTILATION REQUIREMENTS

1. INSTALL A CLASS 1 OR 2 VAPOR RETARDER ON UNDERSIDE OF TRUSSES
2. RIDGE VENT SHALL ACCOUNT FOR AT LEAST 40% BUT NOT MORE THAN 50% OF REQUIRED VENTILATION AREA
3. PROVIDE VENTED SOFFITS AT EAVES OF ALL PORTIONS OF ROOF.
4. PROVIDE BAFFLES TO MAINTAIN A MINIMUM OF 2" CLEAR AIR SPACE BETWEEN ROOF SHEATHING AND ATTIC INSULATION
5. ROOF VENTILATION CALCULATIONS: ENCLOSED ATTIC AREA = 9,600 SF
   MINIMUM NET CLEAR AREA = 1/300 OF THE ENCLOSED ATTIC AREA
   REQUIRED NET FREE VENTILATION AREA = 5,642 SF/300 = 18.80 SF = 2,708.43 SQ. IN TOTAL:
   1,355 SQ. IN. MAX REQUIRED AT RIDGE
   1,355 SQ IN. MIN. REQUIRED AT SOFFIT/EAVES.

ROOF PLAN NOTES

1. ALL ROOF PENETRATIONS TO BE FLASHED PER ROOFING MANUFACTURER'S APPROVED DETAILS. COORDINATE WITH MECHANICAL AND ELECTRICAL CONTRACTORS FOR ANY REQUIRED PENETRATIONS.
2. PROVIDE ROOFING EXPANSION JOINTS AS RECOMMENDED/REQUIRED BY THE ROOFING MANUFACTURER.
3. SEE DETAILS 1 AND 2/A8.1 FOR PIPE/VENT THRU ROOF, TYP.
4. DETAILS NOT SPECIFICALLY SHOWN SHALL CONFORM TOT HE MANUFACTURER'S STANDARD DETAILS, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND OWNER'S REPRESENTATIVE.

ROOF PLAN - BUILDING 1

3/16"=1'-0"

0 2' 6'

Drwn: Chkd:

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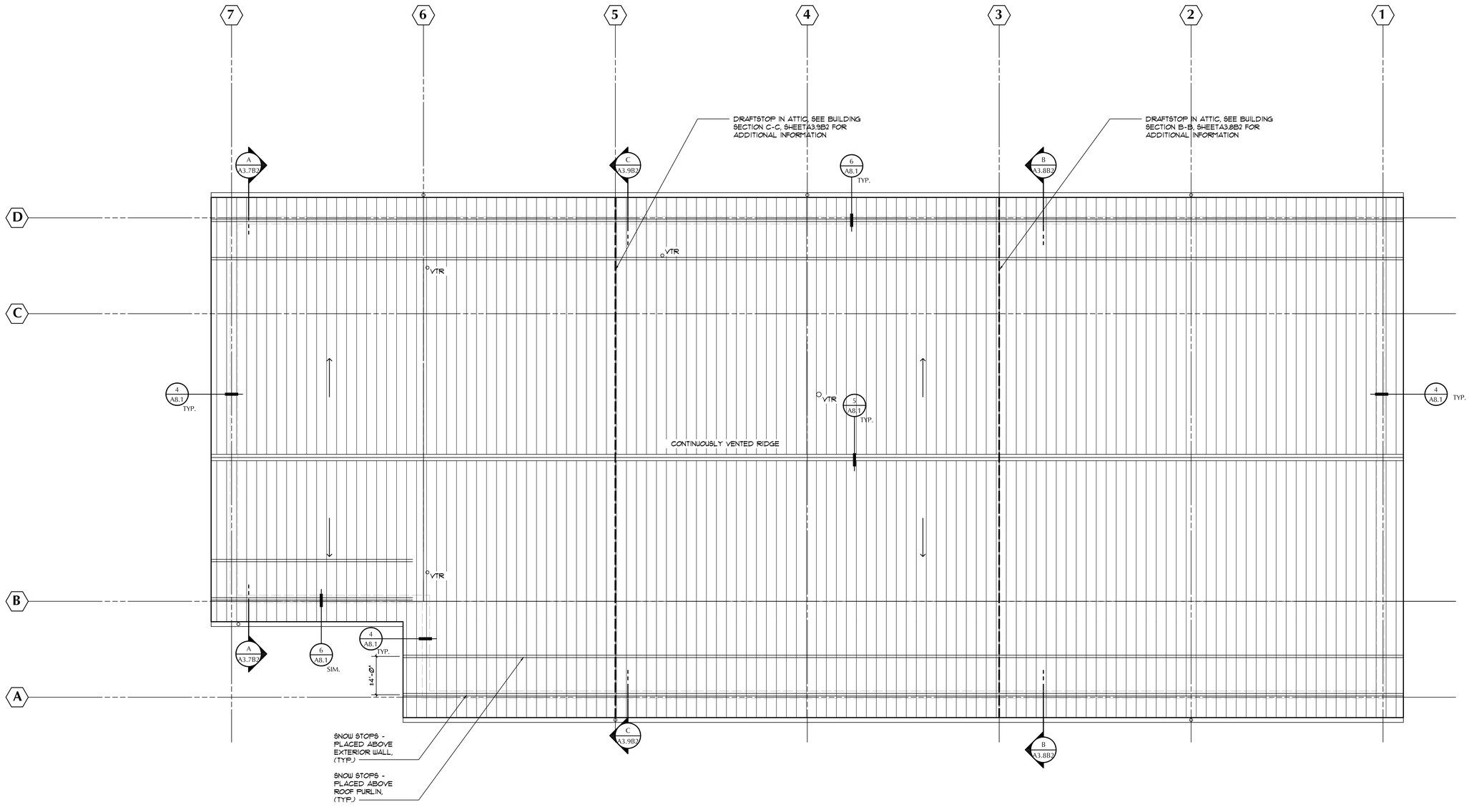
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Telephone (509) 662-4781 Facsimilie (509) 663-3253

BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
.DWG ID ~ 2344 a207b1

A2.7B1



ROOF VENTILATION REQUIREMENTS

1. INSTALL A CLASS 1 OR 2 VAPOR RETARDER ON UNDERSIDE OF TRUSSES
2. RIDGE VENT SHALL ACCOUNT FOR AT LEAST 40% BUT NOT MORE THAN 50% OF REQUIRED VENTILATION AREA
3. PROVIDE VENTED SOFFITS AT EAVES OF ALL PORTIONS OF ROOF.
4. PROVIDE BAFFLES TO MAINTAIN A MINIMUM OF 2" CLEAR AIR SPACE BETWEEN ROOF SHEATHING AND ATTIC INSULATION
5. ROOF VENTILATION CALCULATIONS: ENCLOSED ATTIC AREA = 9,600 SF
   MINIMUM NET CLEAR AREA = 1/300 OF THE ENCLOSED ATTIC AREA
   REQUIRED NET FREE VENTILATION AREA = 5,843 SF/300 = 19.47 SF = 2804.43 SQ. IN TOTAL:
   1,403 SQ. IN. MAX REQUIRED AT RIDGE
   1,403 SQ IN. MIN. REQUIRED AT SOFFIT/EAVES.

ROOF PLAN NOTES

1. ALL ROOF PENETRATIONS TO BE FLASHED PER ROOFING MANUFACTURER'S APPROVED DETAILS. COORDINATE WITH MECHANICAL AND ELECTRICAL CONTRACTORS FOR ANY REQUIRED PENETRATIONS.
2. PROVIDE ROOFING EXPANSION JOINTS AS RECOMMENDED/REQUIRED BY THE ROOFING MANUFACTURER.
3. SEE DETAILS 1 AND 2/A8.1 FOR PIPE/VENT THRU ROOF, TYP.
4. DETAILS NOT SPECIFICALLY SHOWN SHALL CONFORM TOT HE MANUFACTURER'S STANDARD DETAILS, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND OWNER'S REPRESENTATIVE.

ROOF PLAN - BUILDING 2

3/16"=1'-0"

0 2' 6'

Drwn: | Chkd: |

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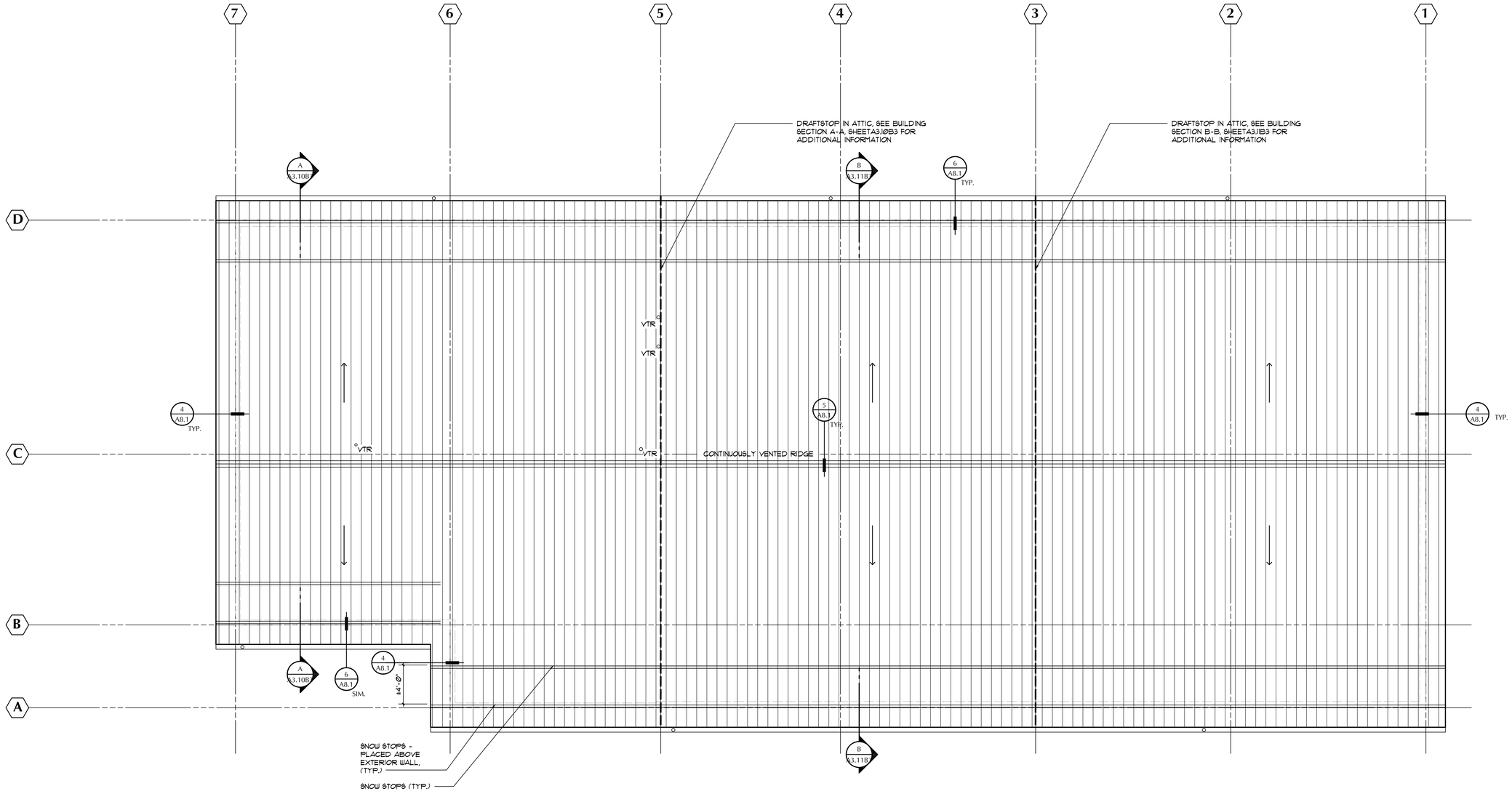
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BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
.DWG ID - 2344 a208b2

A2.8B2



ROOF VENTILATION REQUIREMENTS

1. INSTALL A CLASS 1 OR 2 VAPOR RETARDER ON UNDERSIDE OF TRUSSES
2. RIDGE VENT SHALL ACCOUNT FOR AT LEAST 40% BUT NOT MORE THAN 50% OF REQUIRED VENTILATION AREA
3. PROVIDE VENTED SOFFITS AT EAVES OF ALL PORTIONS OF ROOF.
4. PROVIDE BAFFLES TO MAINTAIN A MINIMUM OF 2" CLEAR AIR SPACE BETWEEN ROOF SHEATHING AND ATTIC INSULATION
5. ROOF VENTILATION CALCULATIONS: ENCLOSED ATTIC AREA = 9,600 SF
   MINIMUM NET CLEAR AREA = 1/300 OF THE ENCLOSED ATTIC AREA
   REQUIRED NET FREE VENTILATION AREA = 5,913 SF/300 = 19.71 SF = 2,838.24 SQ. IN TOTAL:
   1,420 SQ. IN. MAX REQUIRED AT RIDGE
   1,420 SQ IN. MIN. REQUIRED AT SOFFIT/EAVES.

ROOF PLAN NOTES

1. ALL ROOF PENETRATIONS TO BE FLASHED PER ROOFING MANUFACTURER'S APPROVED DETAILS. COORDINATE WITH MECHANICAL AND ELECTRICAL CONTRACTORS FOR ANY REQUIRED PENETRATIONS.
2. PROVIDE ROOFING EXPANSION JOINTS AS RECOMMENDED/REQUIRED BY THE ROOFING MANUFACTURER.
3. SEE DETAILS 1 AND 2/A8.1 FOR PIPE/VENT THRU ROOF, TYP.
4. DETAILS NOT SPECIFICALLY SHOWN SHALL CONFORM TOT HE MANUFACTURER'S STANDARD DETAILS, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND OWNER'S REPRESENTATIVE.

ROOF PLAN - BUILDING 3

3/16"=1'-0"

0 2' 6'

Drwn: | Chkd: |

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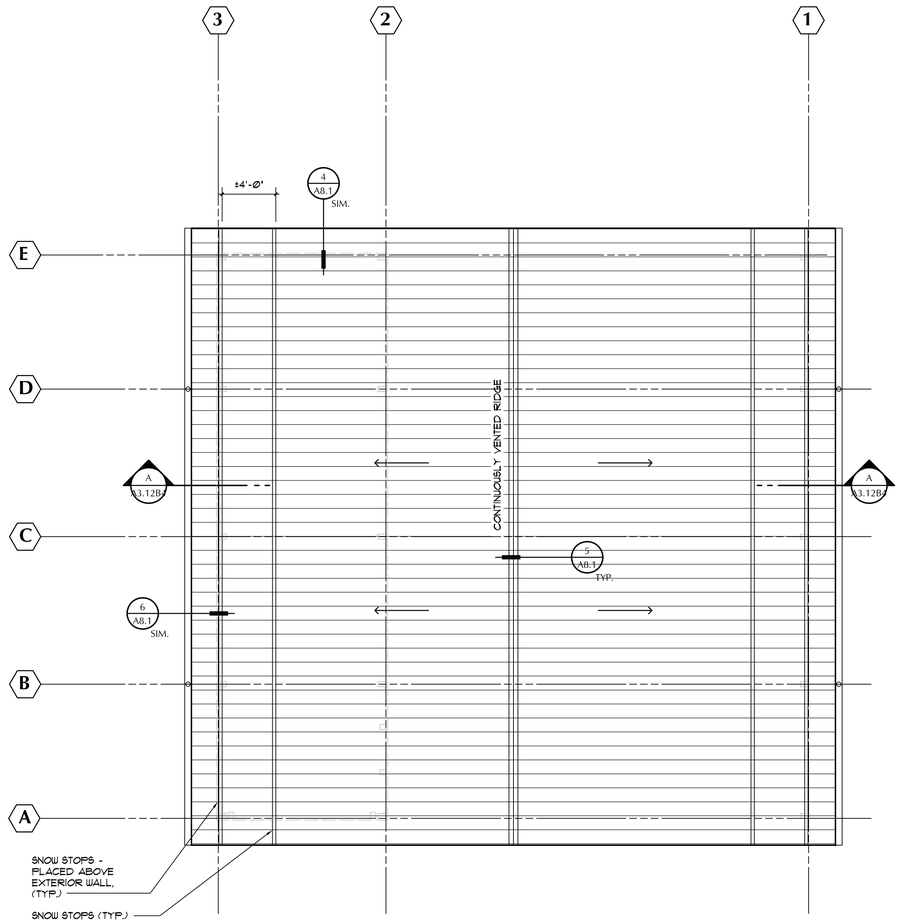
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BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

DWG ID = a2344 a209b3=

A2.9B3



ROOF PLAN NOTES:

1. ALL ROOF PENETRATIONS TO BE FLASHED PER ROOFING MANUFACTURER'S APPROVED DETAILS. COORDINATE WITH MECHANICAL AND ELECTRICAL CONTRACTORS FOR ANY REQUIRED PENETRATIONS.
2. PROVIDE ROOFING EXPANSION JOINTS AS RECOMMENDED/REQUIRED BY THE ROOFING MANUFACTURER.
3. DETAILS NOT SPECIFICALLY SHOWN SHALL CONFORM TOT HE MANUFACTURER'S STANDARD DETAILS, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND OWNER'S REPRESENTATIVE.

ROOF PLAN - BUILDING 4

3/16"=1'-0"

0 2' 6'

Drwn: J Chkd: J

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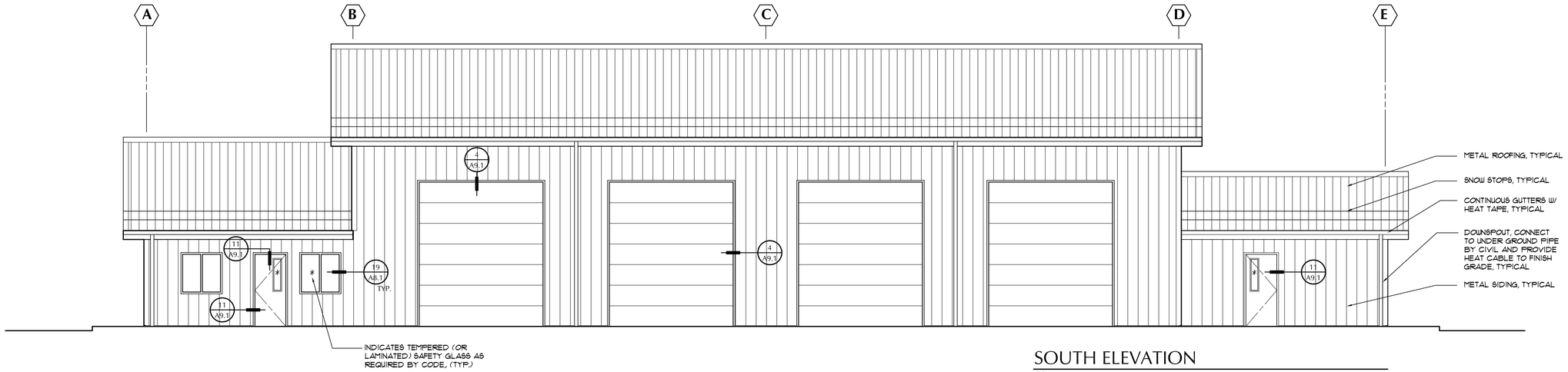
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Telephone (509) 662-4781 Facsimilie (509) 663-3253

BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
.DWG ID = a2344 a210b4=

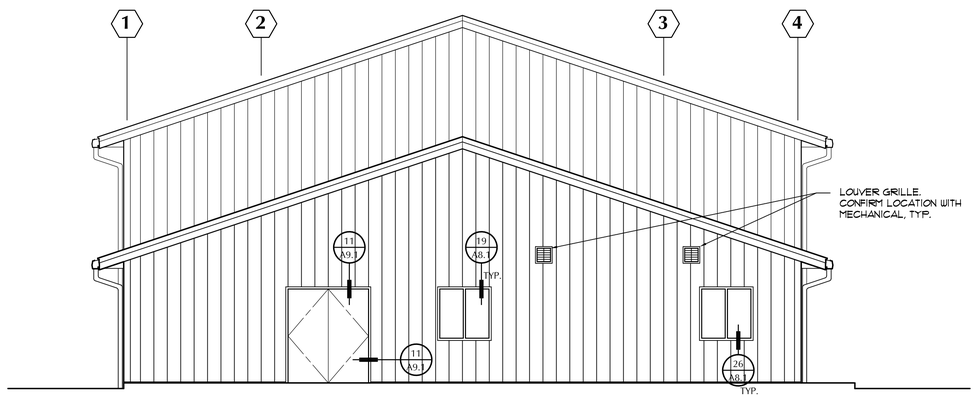
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SOUTH ELEVATION

3/16"=1'-0"

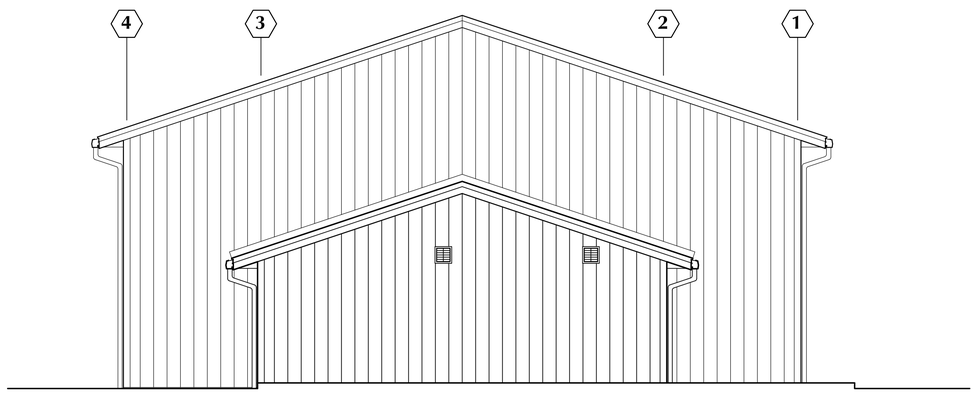
0 2' 6'



WEST ELEVATION

3/16"=1'-0"

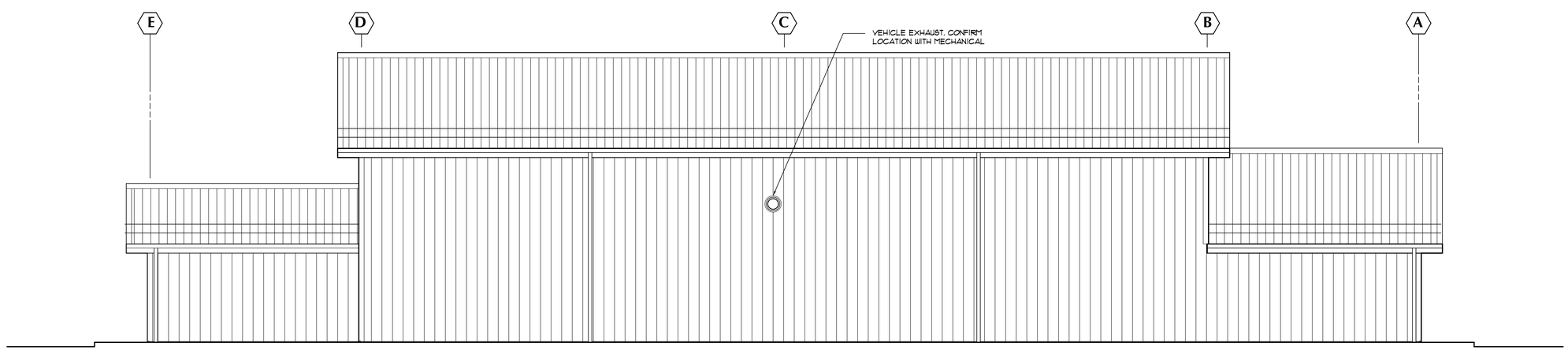
0 2' 6'



EAST ELEVATION

3/16"=1'-0"

0 2' 6'



NORTH ELEVATION

3/16"=1'-0"

0 2' 6'

Drwn: J Chkd: J

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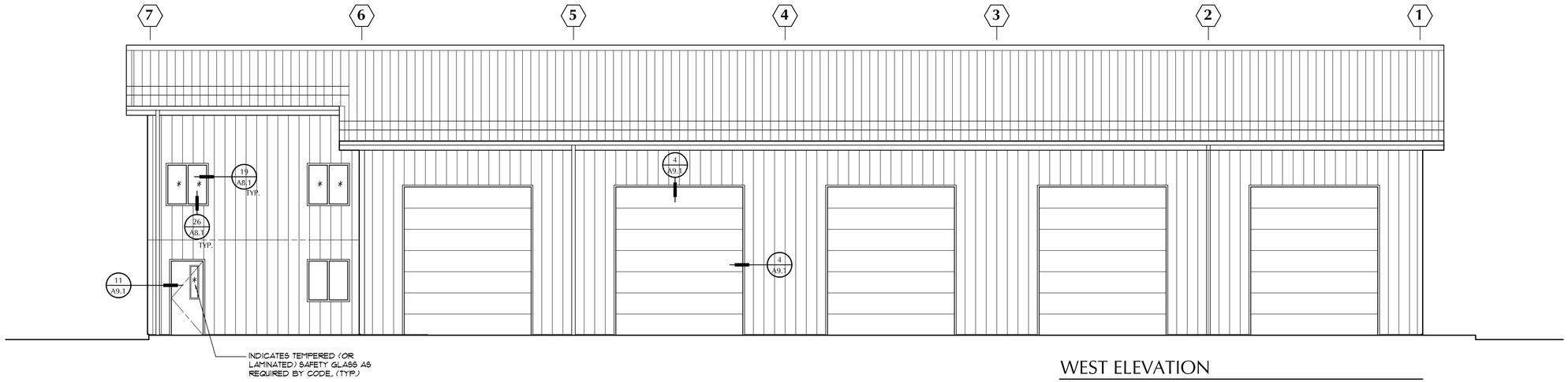
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Telephone (509) 662-4781 Facsimilie (509) 663-3253

BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
.DWG ID - 2344 a301b1-

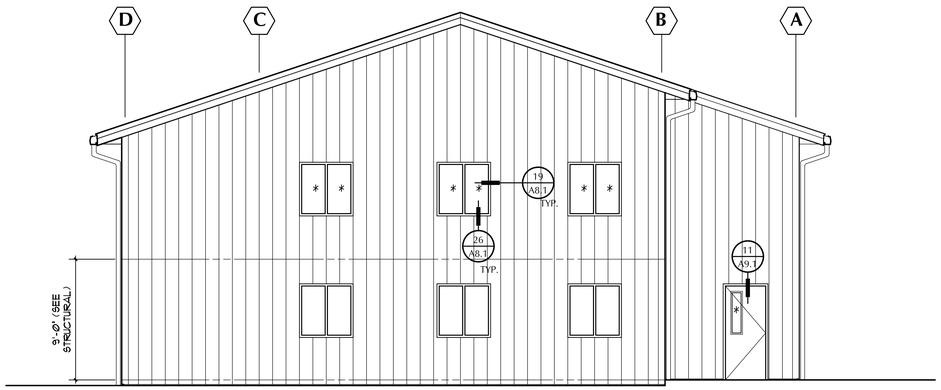
A3.1B1



WEST ELEVATION

3/16"=1'-0"

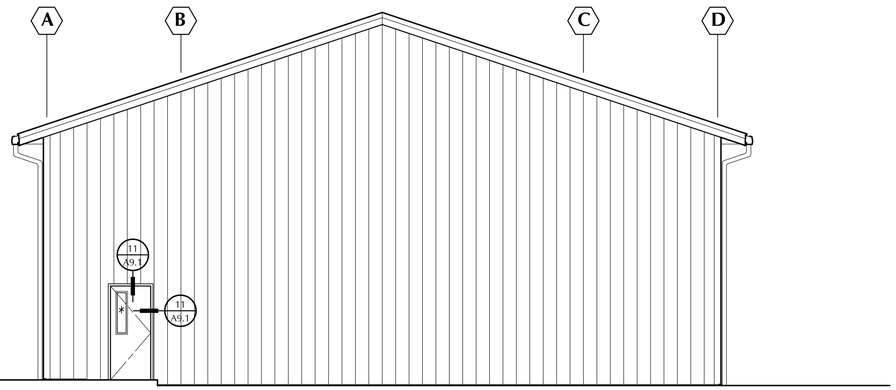
0 2' 6'



NORTH ELEVATION

3/16"=1'-0"

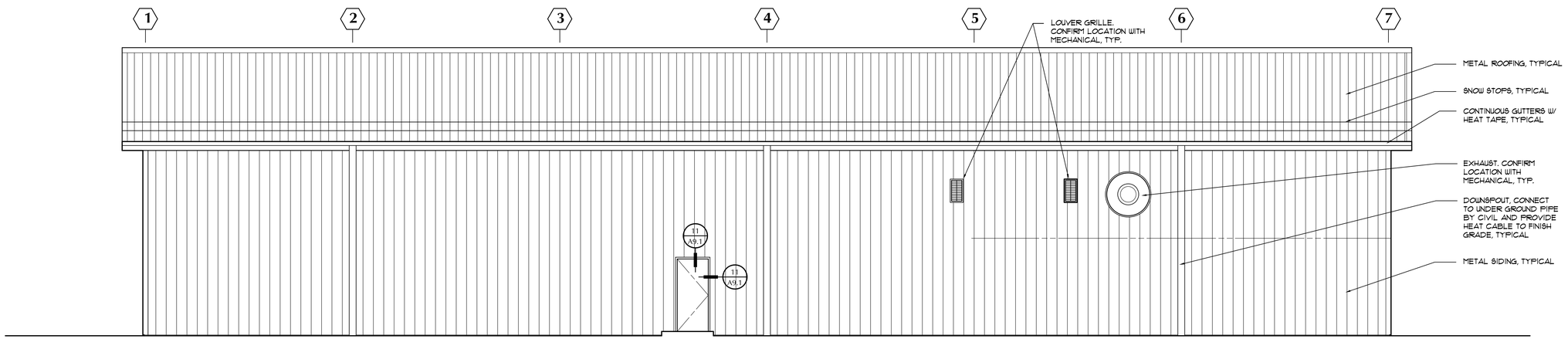
0 2' 6'



SOUTH ELEVATION

3/16"=1'-0"

0 2' 6'



EAST ELEVATION

3/16"=1'-0"

0 2' 6'

Drwn: | Chkd: |

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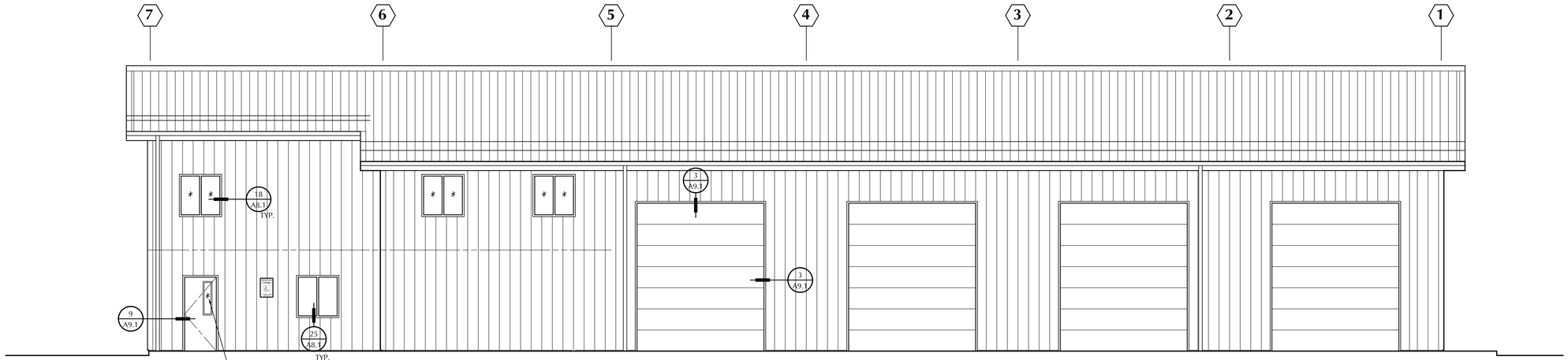
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BID SET: 1/8/2025

Job: 2344 Date: 1/8/2025

.DWG ID - 2344 a302b2-

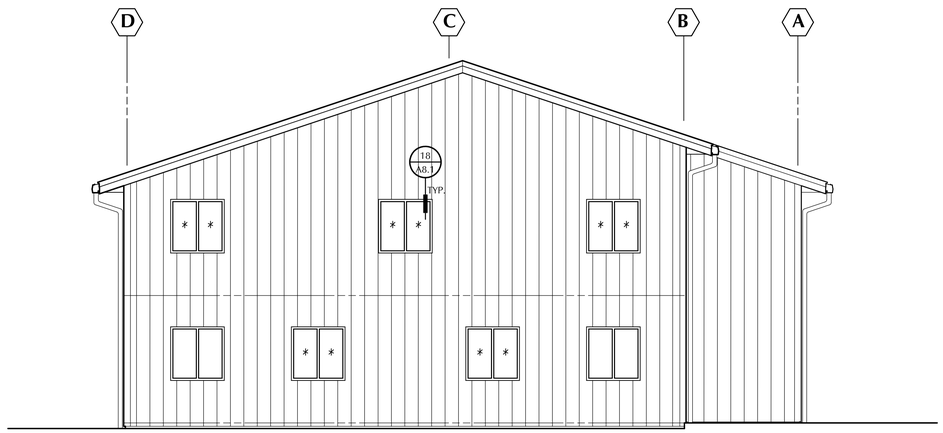
A3.2B2



WEST ELEVATION

3/16"=1'-0"

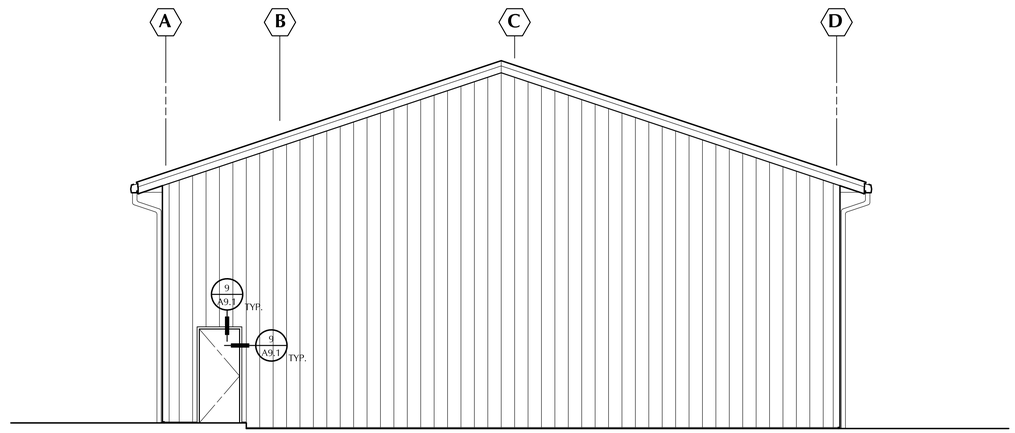
0 2' 6'



NORTH ELEVATION

3/16"=1'-0"

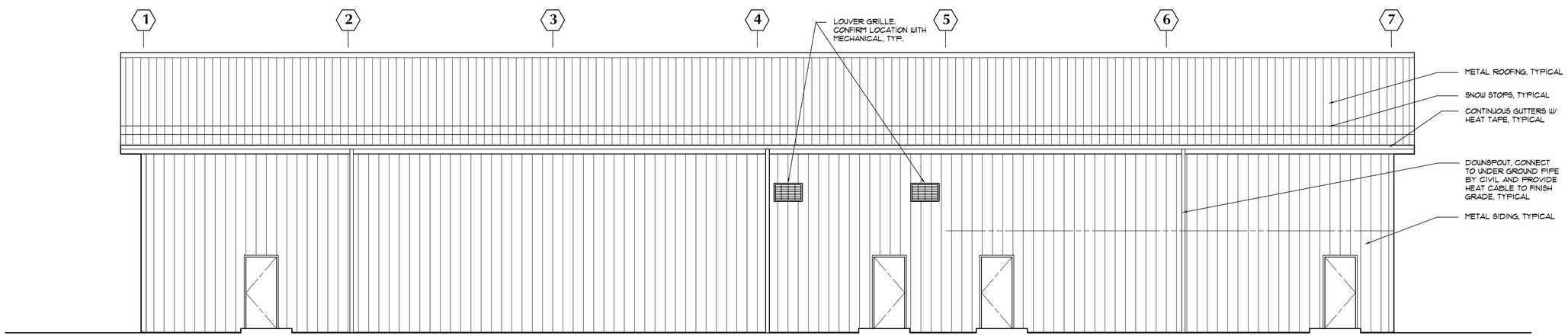
0 2' 6'



SOUTH ELEVATION

3/16"=1'-0"

0 2' 6'



EAST ELEVATION

3/16"=1'-0"

0 2' 6'

Drwn: I Chkd: I

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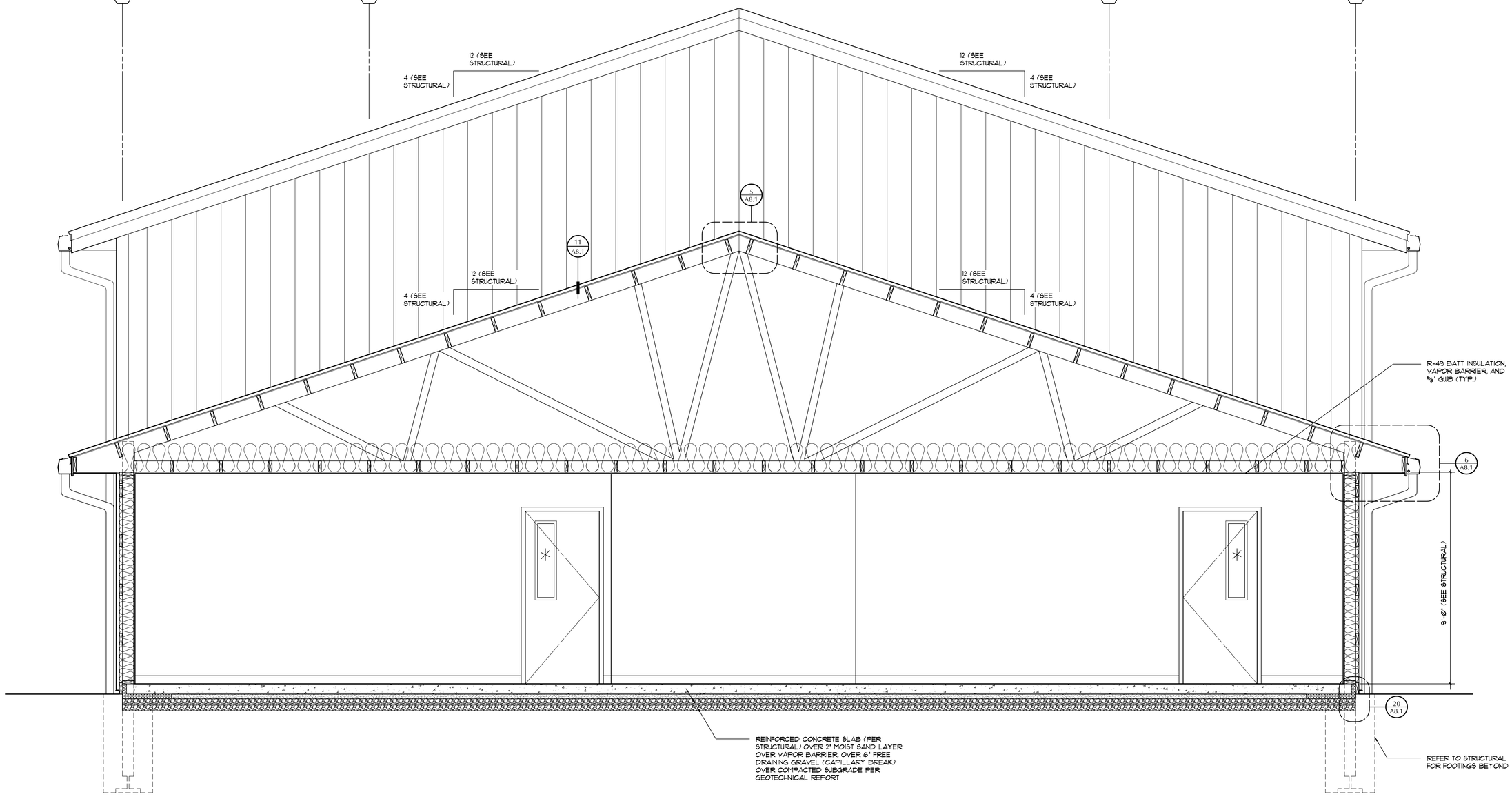
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BID SET: 1/8/2025

Job: 2344 Date: 1/8/2025

.DWG ID ~ 2344 a303b3~

A3.3B3



SECTION A-A BUILDING 1

1/2"=1'-0"

0 1' 2'

Drwn: | Chkd: |

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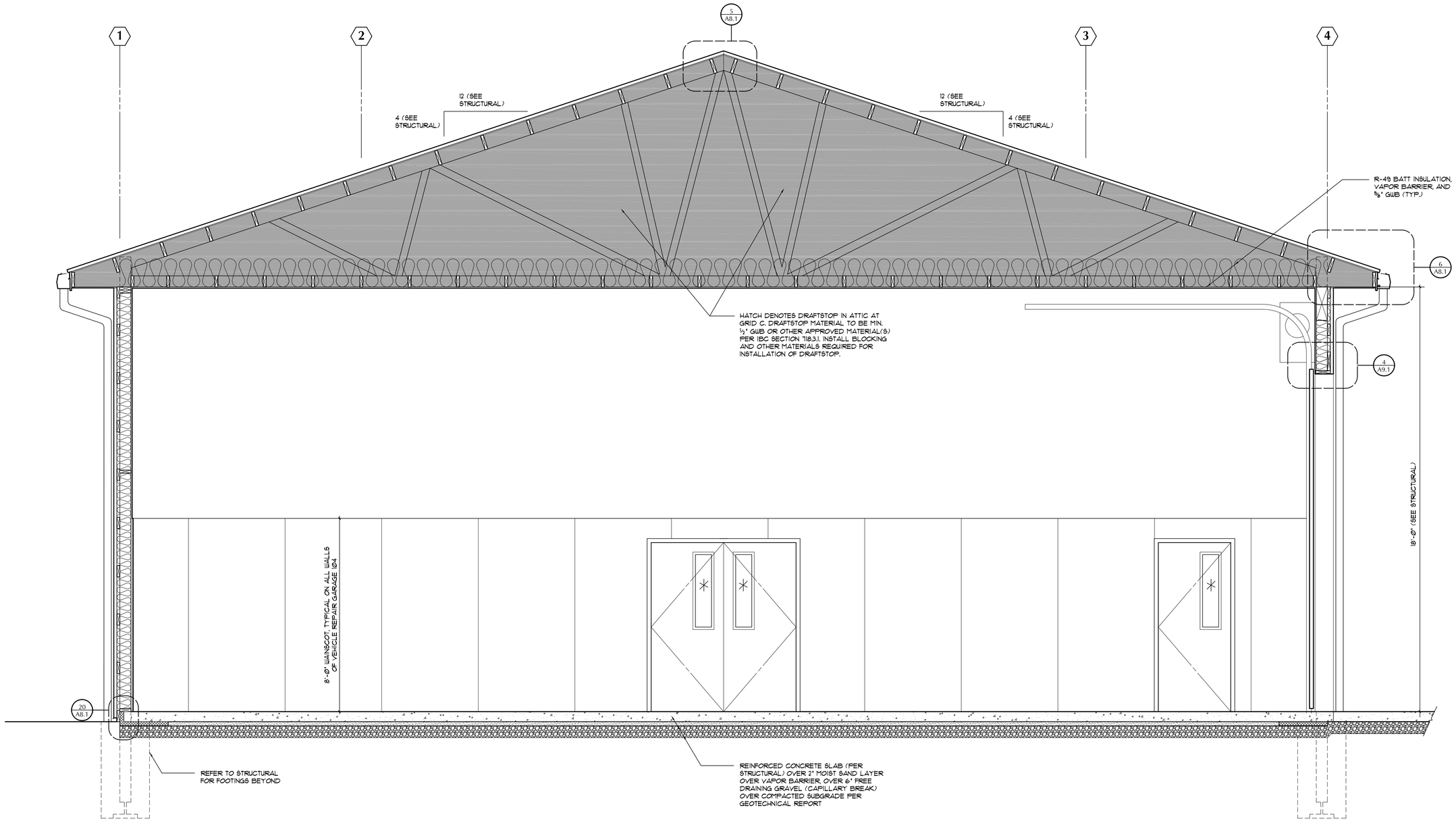
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BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

.DWG ID - 2344 630461

A3.4B1



SECTION B-B BUILDING 1

1/2"=1'-0"

0 1' 2'

Drwn: | Chkd: |

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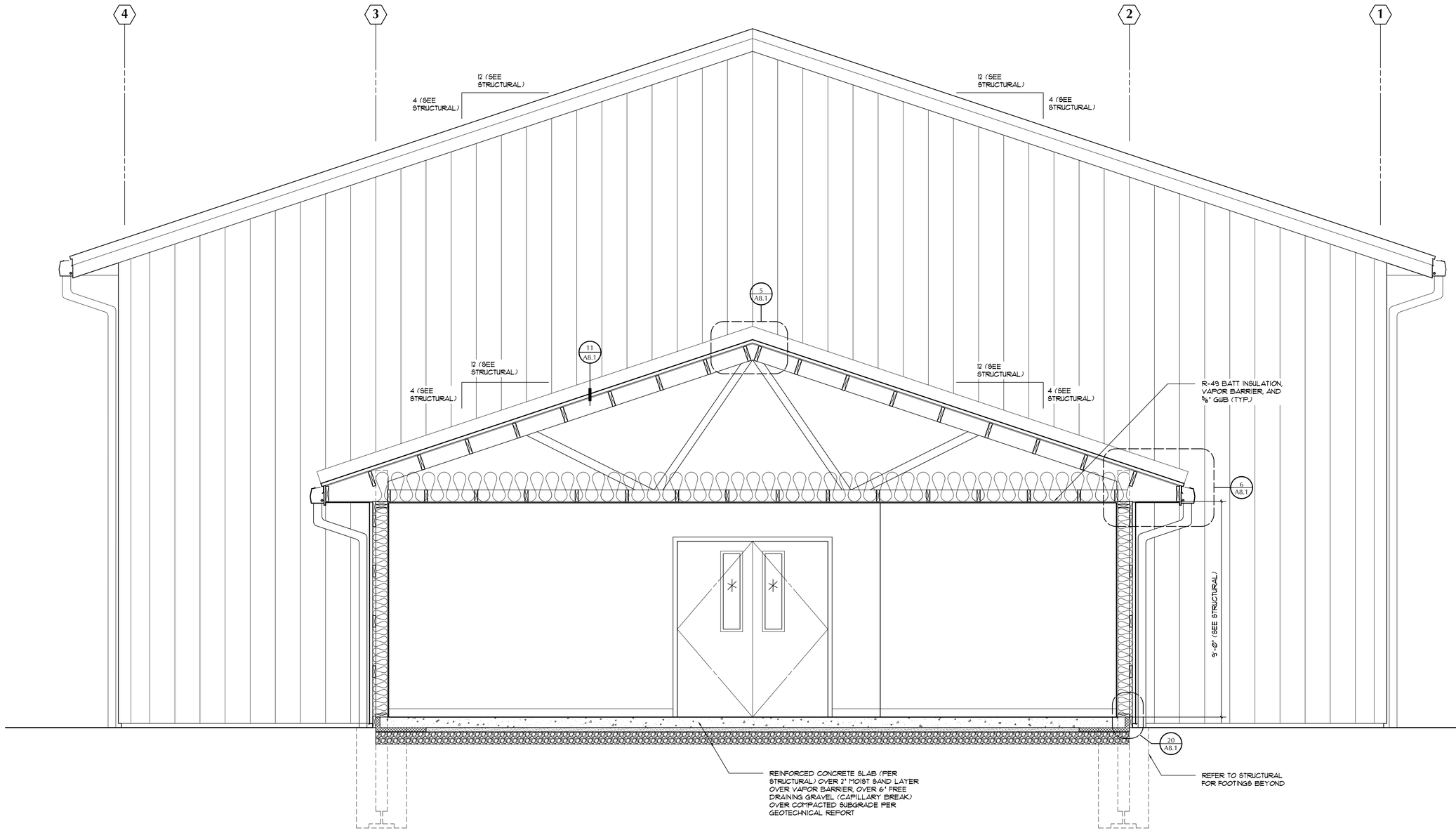
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Telephone (509) 662-4781 Facsimilie (509) 663-3253

BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

.DWG ID - 2344 a3051

A3.5B1



SECTION C-C BUILDING 1

1/2"=1'-0"

0 1' 2'

Drwn: | Chkd: |

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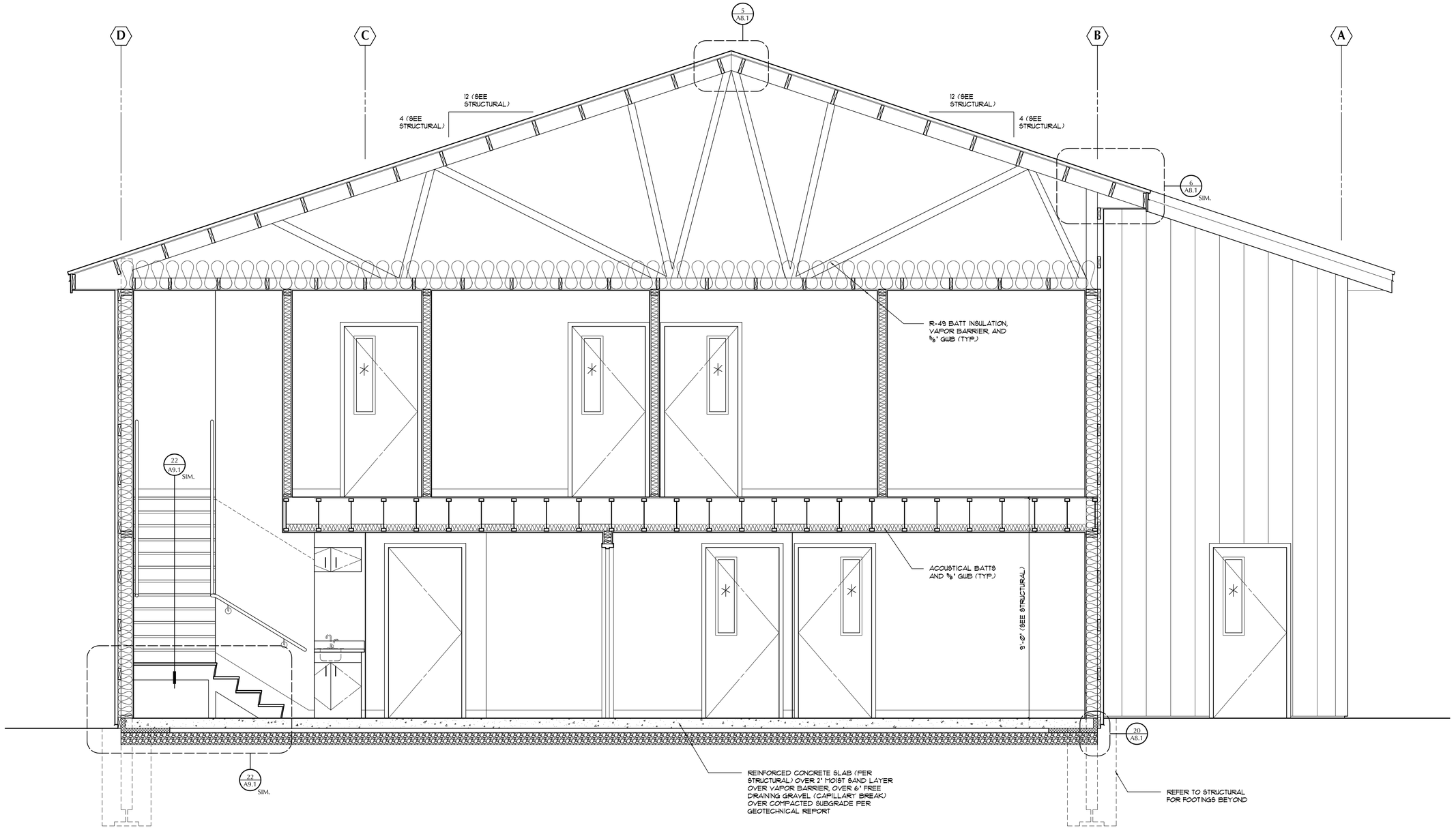
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Telephone (509) 662-4781 Facsimilie (509) 663-3253

BID SET: 1/8/2025

Job: 2344 Date: 1/8/2025

.DWG ID - 2344 a306b1

A3.6B1



SECTION A-A BUILDING 2

1/2"=1'-0"

0 1' 2'

Drwn: | Chkd: |

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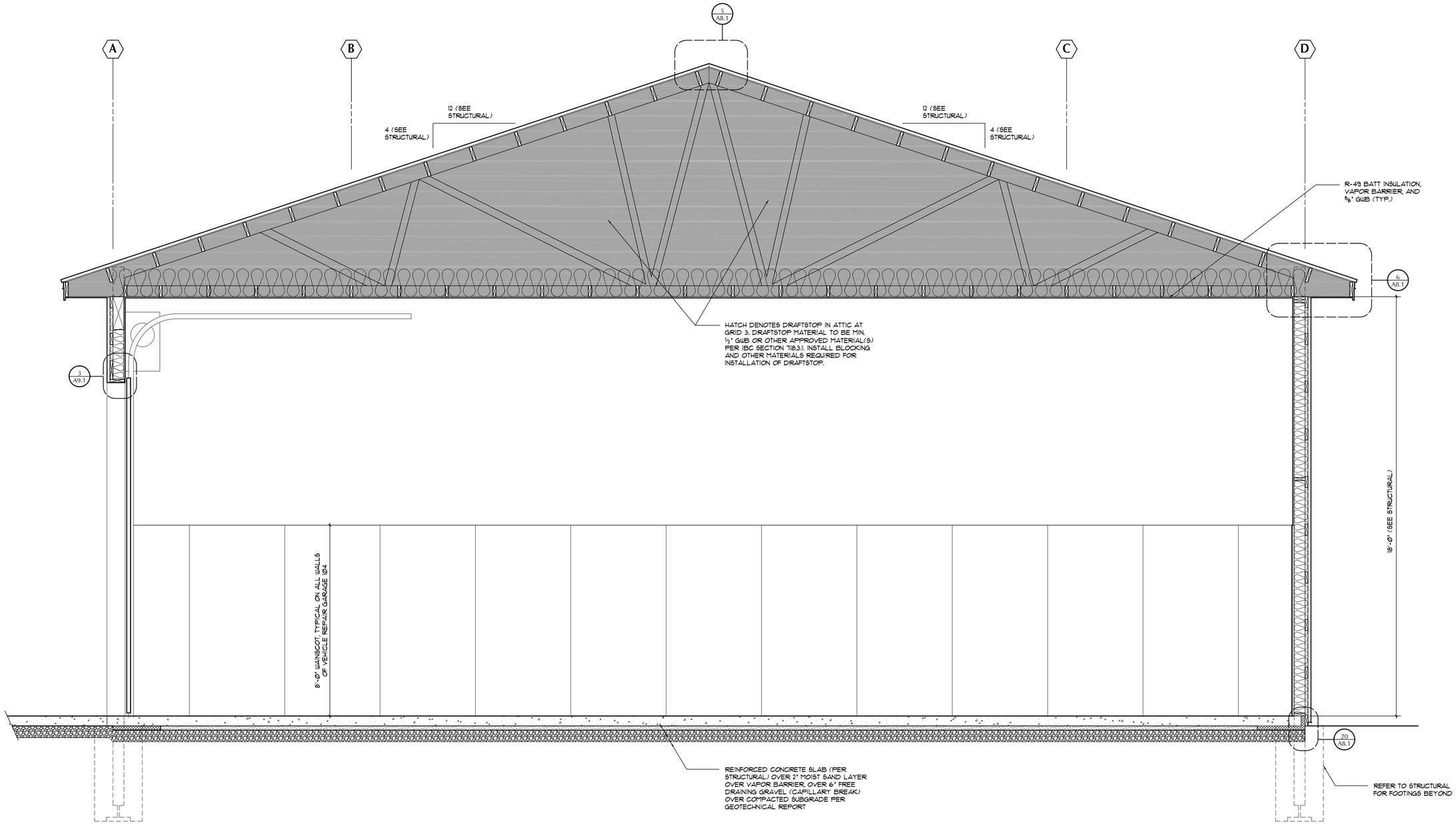
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Telephone (509) 662-4781 Facsimilie (509) 663-3253

BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

DWG ID = 2344 a307b2

A3.7B2



SECTION B-B BUILDING 2

1/2"=1'-0"

0 1' 2'

Drwn: | Chkd: |

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425 OHME GARDEN ROAD WENATCHEE, WASHINGTON 98801

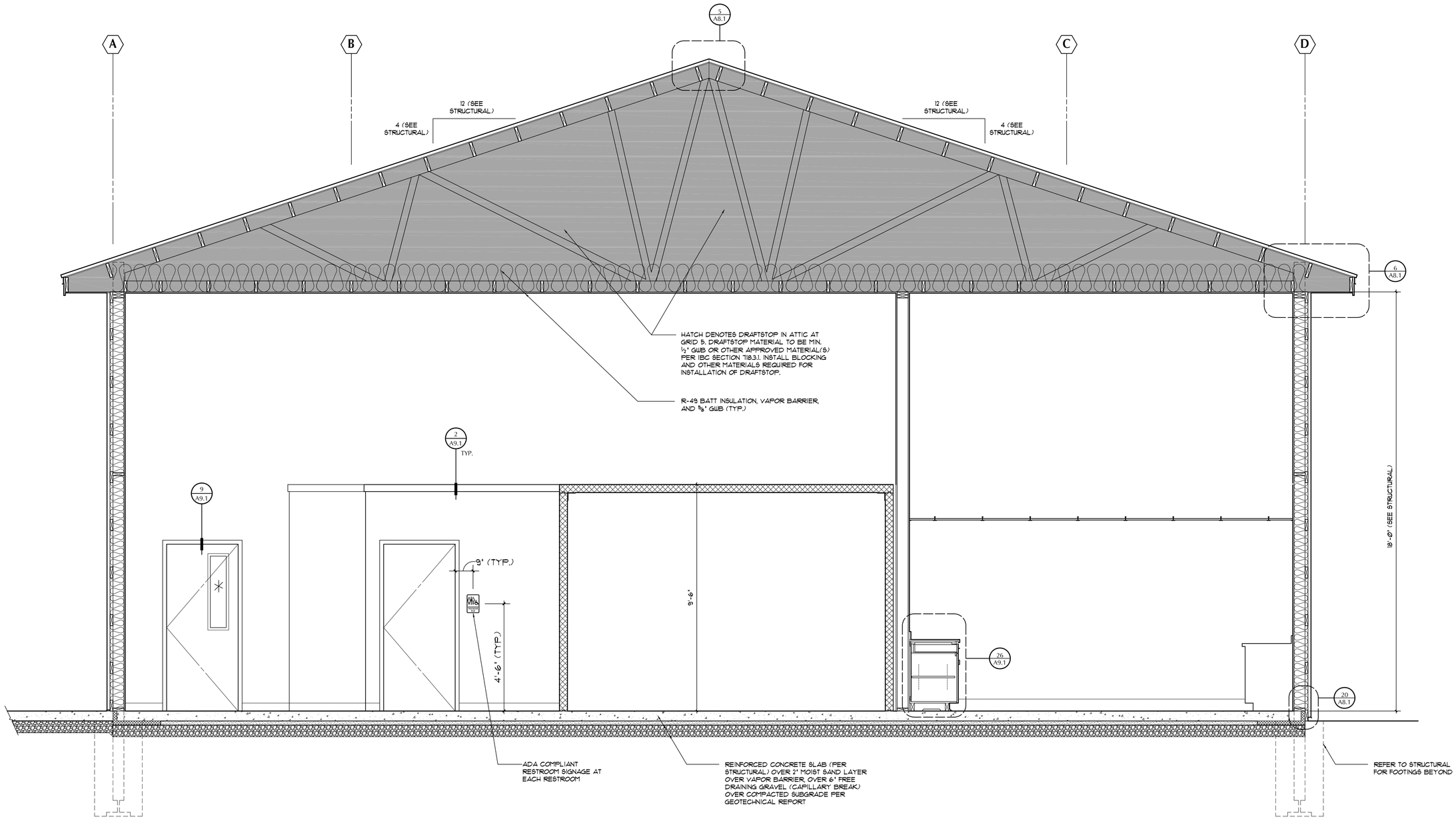
The DOH Associates, PS
ARCHITECTS and PLANNERS
7 N Wenatchee Ave Suite 500, Wenatchee, Washington 98801
Telephone (509) 662-4781 Facsimilie (509) 663-3253

BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

.DWG ID - 2344 a308b2

A3.8B2



SECTION C-C BUILDING 3

1/2"=1'-0"

0 1' 2'

Drwn: | Chkd: |

REGISTERED ARCHITECT
7083
LARRY A. DANGLE
STATE OF WASHINGTON

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CHELAN COUNTY
OLDS STATION CAMPUS

425 OHME GARDEN ROAD WENATCHEE, WASHINGTON 98801

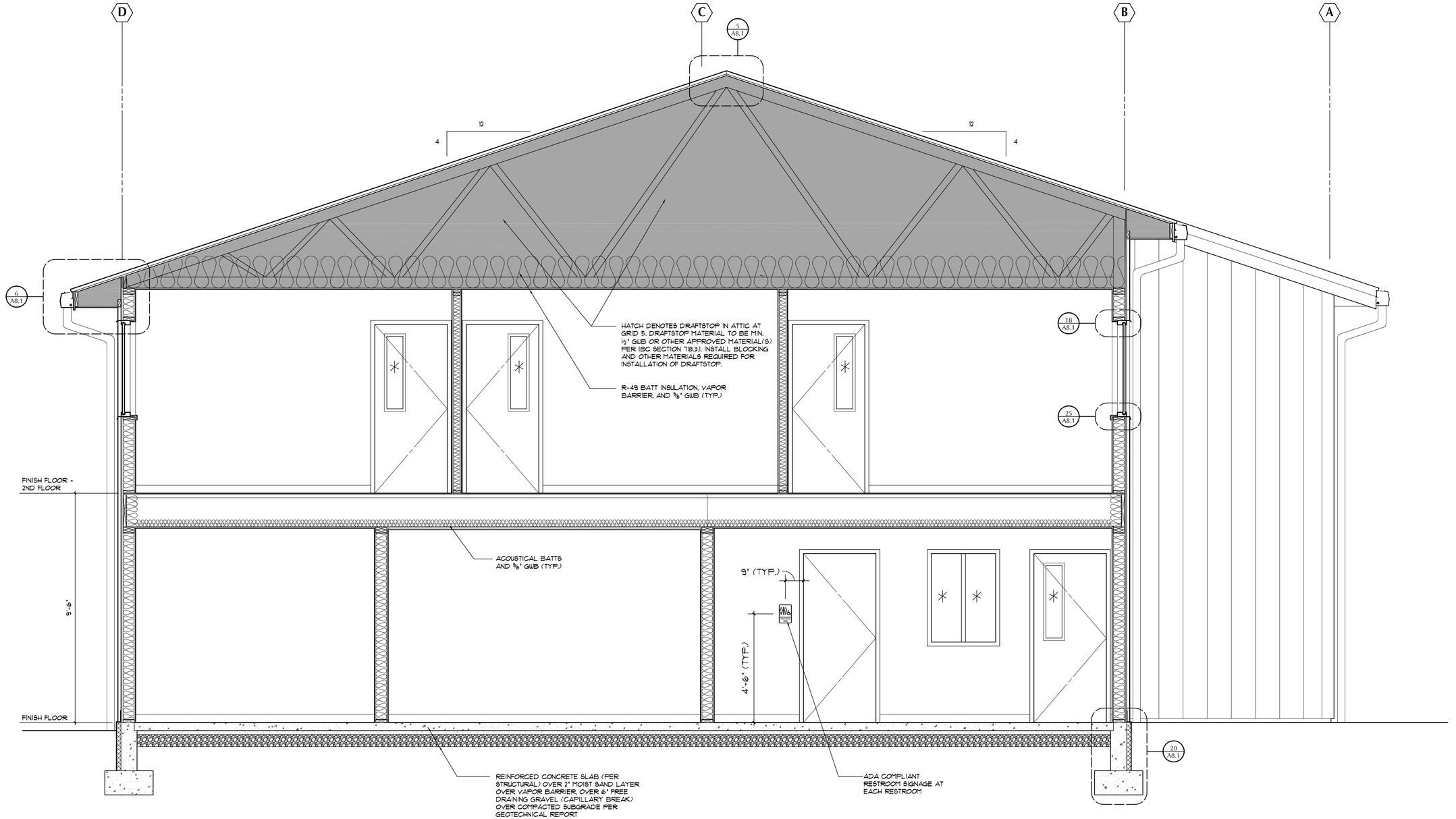
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Telephone (509) 662-4781 Facsimilie (509) 663-3253

BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

.DWG ID → 2344 a309b2

A3.9B2



SECTION A-A BUILDING 3

1/2"=1'-0"

0 1' 2'

Drwn: J Chkd: J

REGISTERED ARCHITECT
7083
LARRY V. JANGLE
STATE OF WASHINGTON

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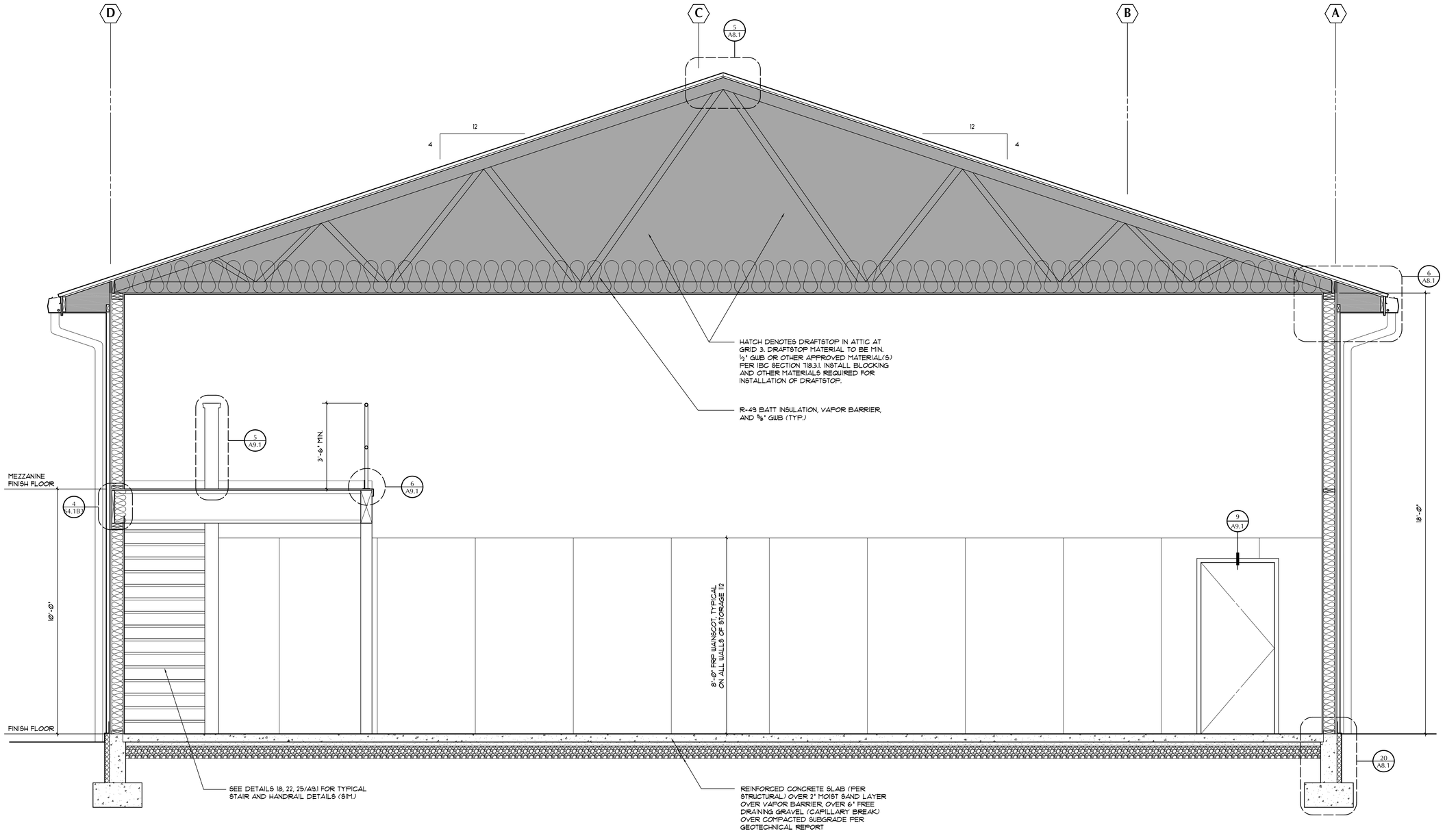
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BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
.DWG ID - 2344 a310b3

A3.10B3



SECTION B-B BUILDING 3

1/2"=1'-0"

0 1' 2'

Drwn: | Chkd: |

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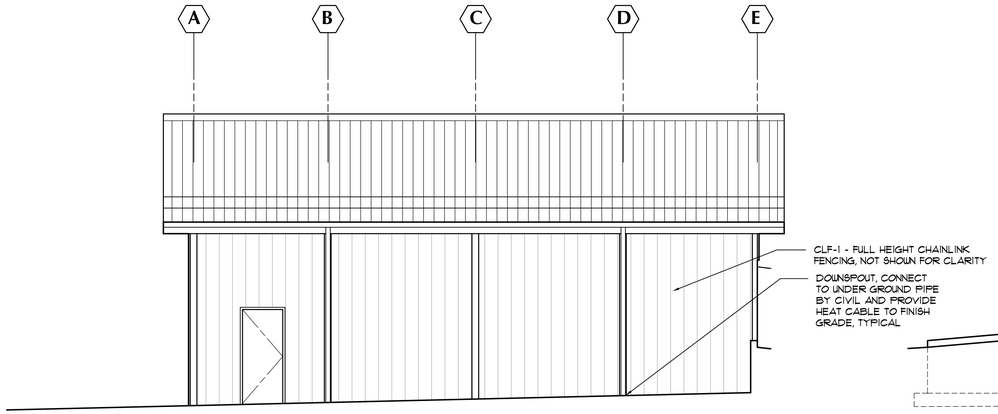
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BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
DWG ID – 2344 a311b3

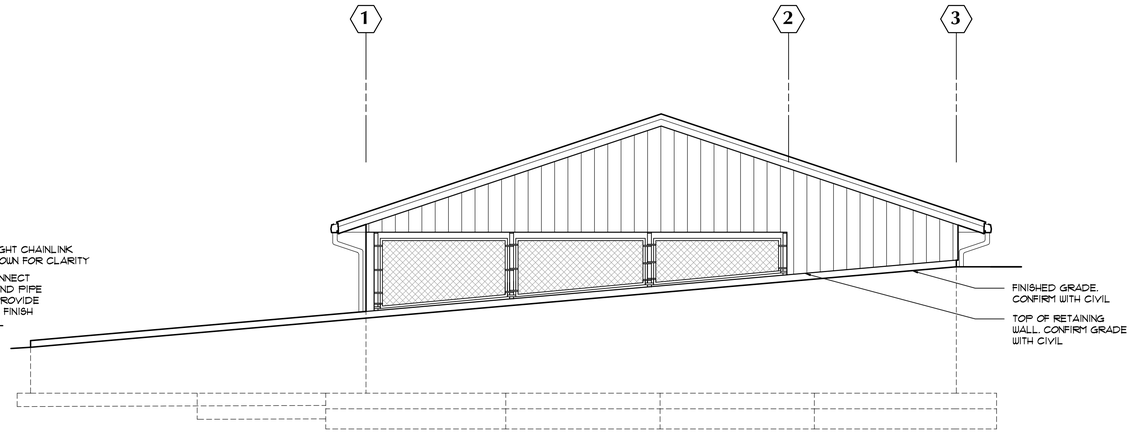
A3.11B3



EAST ELEVATION

3/16"=1'-0"

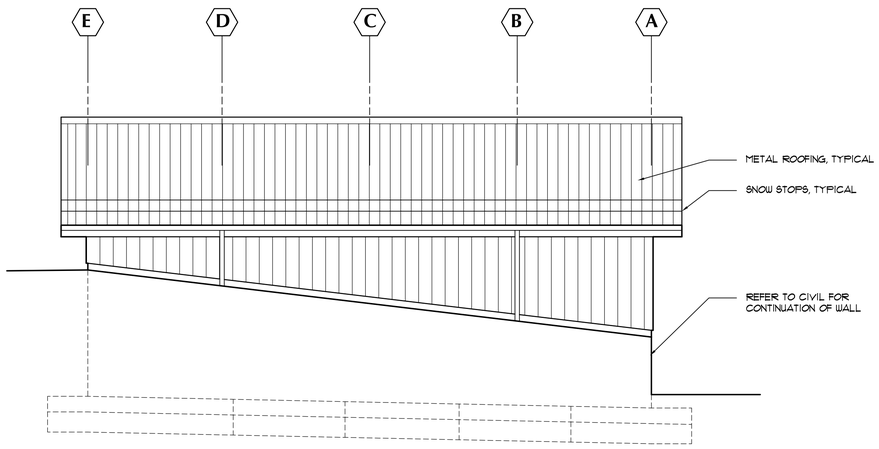
0 2' 6'



SOUTH ELEVATION

3/16"=1'-0"

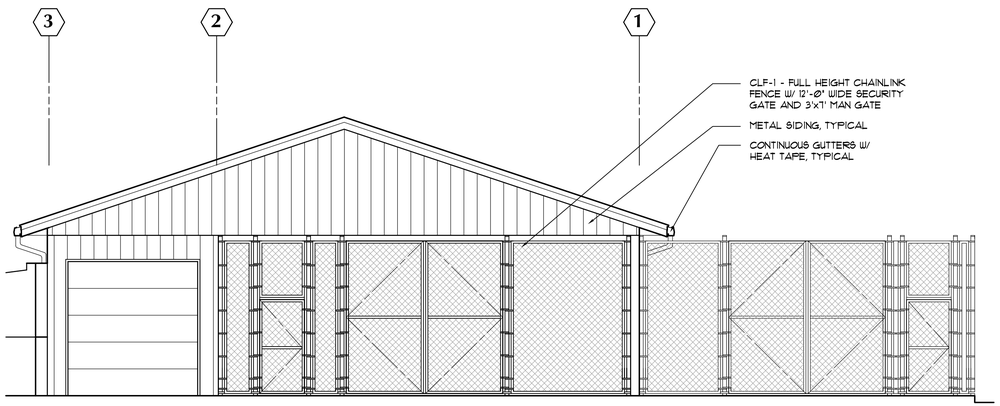
0 2' 6'



WEST ELEVATION

3/16"=1'-0"

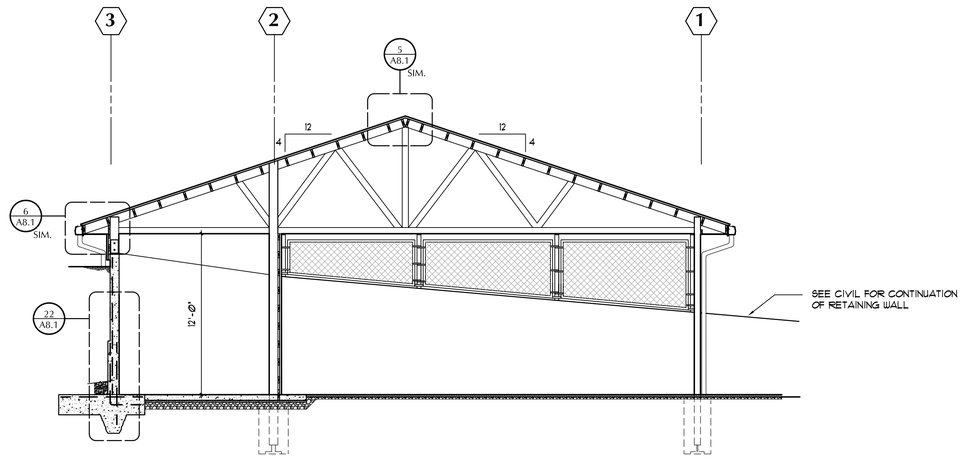
0 2' 6'



NORTH ELEVATION

3/16"=1'-0"

0 2' 6'



SECTION A-A BUILDING 4

3/16"=1'-0"

0 2' 6'

Drwn: | Chkd: |

REGISTERED ARCHITECT LARRY A. DANGLE STATE OF WASHINGTON 7083

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Telephone (509) 662-4781 Facsimilie (509) 663-3253

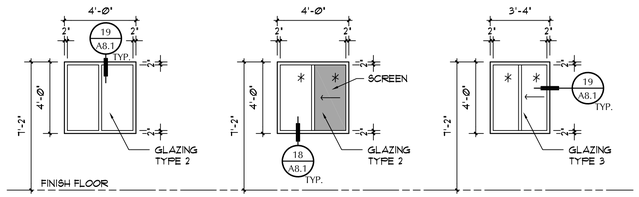
BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

DWG ID = 2344 a312b43=

A3.12B4

WINDOW SCHEDULE/ELEVATIONS



* PROVIDE TEMPERED (OR LAMINATED) SAFETY GLASS, SEE EXTERIOR ELEVATIONS (TYP.)

VIEW FROM EXTERIOR
A WINDOW TYPE A (FIXED)
SCALE: 1/4" = 1'-0"

VIEW FROM EXTERIOR
B WINDOW TYPE B (OPERABLE)
SCALE: 1/4" = 1'-0"

VIEW FROM RECEPTION OFFICE 105
C WINDOW TYPE C (OPERABLE)
SCALE: 1/4" = 1'-0"

DOOR SCHEDULE NOTES:

RATING: 1/3, 3/4, 1, 1-1/2, ETC.
INDICATES HOUR OF FIRE RATING.

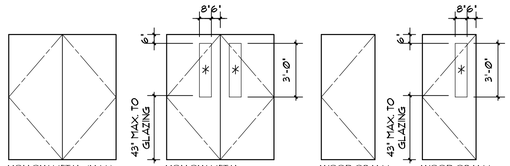
DOOR/FRAME FINISH:
PNT = PAINTED
SV = STAIN & VARNISH (OR PRE-FINISH AS APPROVED)
FAC = FACTORY OR PRE-FINISH

APPLY FINISHES BOTH SIDES, REGARDLESS OF ROOM FINISH

DOOR TYPES (AS SPECIFIED):

TYPE - 1: HOLLOW METAL (EXTERIOR)
TYPE - 2: HOLLOW METAL (INTERIOR)
TYPE - 3: WOOD
TYPE - 4: SECTIONAL OVERHEAD DOOR
TYPE - 5: COOLER DOOR

DOOR ELEVATIONS

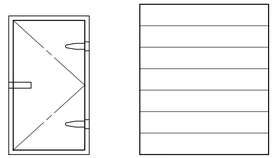


HOLLOW METAL (H.M.)
A

HOLLOW METAL
B

WOOD OR H.M.
C

WOOD OR H.M.
D



COOLER
E

SECTIONAL
F

* INDICATES TEMPERED (OR LAMINATED) SAFETY GLASS

DOOR ELEVATIONS

HOLLOW METAL
F-1

HOLLOW METAL
F-2

DOOR SCHEDULE - BUILDING 1

DOOR MARK	DOOR SIZE	THICKNESS	DOOR ELEVATION	FRAME ELEVATION	DOOR TYPE as spec'd	GLAZING TYPE as spec'd	RATING (MINUTES)	DOOR FINISH	FRAME FINISH	FRAME DETAIL	HARDWARE GROUP
101A	PR 3'-0 x 7'-0	1-3/4"	A	F-1	1	--	--	PNT	PNT	11/A9.1	4
101B	3'-0 x 7'-0	1-3/4"	D	F-2	2	1	--	PNT	PNT	10/A9.1	3
102A	3'-0 x 7'-0	1-3/4"	C	F-2	3	--	--	SV	PNT	12/A9.1	2
103A	3'-0 x 7'-0	1-3/4"	D	F-2	1	2	--	PNT	PNT	11/A9.1	5
103B	3'-0 x 7'-0	1-3/4"	D	F-2	2	1	--	PNT	PNT	10/A9.1	1
104A	12'-0 x 14'-0	1-5/8"	F	--	4	--	--	FAC	FAC	4/A9.1	18
104B	12'-0 x 14'-0	1-5/8"	F	--	4	--	--	FAC	FAC	4/A9.1	18
104C	12'-0 x 14'-0	1-5/8"	F	--	4	--	--	FAC	FAC	4/A9.1	18
104D	12'-0 x 14'-0	1-5/8"	F	--	4	--	--	FAC	FAC	4/A9.1	18
104E	3'-0 x 7'-0	1-3/4"	D	F-2	1	2	--	PNT	PNT	11/A9.1	5
105A	3'-0 x 7'-0	1-3/4"	D	F-2	1	2	--	PNT	PNT	11/A9.1	6
105B	PR 3'-0 x 7'-0	1-3/4"	B	F-1	2	1	--	PNT	PNT	10/A9.1	7
106A	3'-0 x 7'-0	1-3/4"	C	F-2	3	--	--	SV	PNT	12/A9.1	2

DOOR SCHEDULE - BUILDING 2

DOOR MARK	DOOR SIZE	THICKNESS	DOOR ELEVATION	FRAME ELEVATION	DOOR TYPE as spec'd	GLAZING TYPE as spec'd	RATING (MINUTES)	DOOR FINISH	FRAME FINISH	FRAME DETAIL	HARDWARE GROUP
101A	3'-0 x 7'-0	1-3/4"	D	F-2	3	1	--	SV	PNT	12/A9.1	8
102A	3'-0 x 7'-0	1-3/4"	D	F-2	1	2	--	PNT	PNT	11/A9.1	5
102B	3'-0 x 7'-0	1-3/4"	D	F-2	3	1	--	SV	PNT	12/A9.1	9
103A	3'-0 x 7'-0	1-3/4"	D	F-2	3	1	--	SV	PNT	12/A9.1	8
105A	3'-0 x 7'-0	1-3/4"	C	F-2	3	--	--	SV	PNT	12/A9.1	8
107A	3'-0 x 7'-0	1-3/4"	C	F-2	3	--	--	SV	PNT	12/A9.1	2
109A	3'-0 x 7'-0	1-3/4"	C	F-2	2	--	--	PNT	PNT	12/A9.1	9
110A	4'-0 x 7'-0	FAC	E	FAC	5	--	--	FAC	FAC	PER MFR	17
110B	4'-0 x 7'-0	FAC	E	FAC	5	--	--	FAC	FAC	PER MFR	17
111A	3'-0 x 7'-0	1-3/4"	C	F-2	2	--	--	SV	PNT	12/A9.1	2
112A	3'-0 x 7'-0	1-3/4"	D	F-2	1	2	--	PNT	PNT	11/A9.1	5
112B	12'-0 x 14'-0	1-5/8"	F	--	4	--	--	FAC	FAC	4/A9.1	18
112C	12'-0 x 14'-0	1-5/8"	F	--	4	--	--	FAC	FAC	4/A9.1	18
113A	3'-0 x 7'-0	1-3/4"	C	F-2	1	--	--	PNT	PNT	11/A9.1	10
113B	12'-0 x 14'-0	1-5/8"	F	--	4	--	--	FAC	FAC	4/A9.1	18
113C	12'-0 x 14'-0	1-5/8"	F	--	4	--	--	FAC	FAC	4/A9.1	18
113D	12'-0 x 14'-0	1-5/8"	F	--	4	--	--	FAC	FAC	4/A9.1	18
113E	3'-0 x 7'-0	1-3/4"	D	F-2	1	2	--	PNT	PNT	11/A9.1	5
201A	3'-0 x 7'-0	1-3/4"	D	F-2	3	1	--	SV	PNT	12/A9.1	11
202A	3'-0 x 7'-0	1-3/4"	D	F-2	3	1	--	SV	PNT	12/A9.1	11
203A	3'-0 x 7'-0	1-3/4"	D	F-2	3	1	--	SV	PNT	12/A9.1	11
204A	3'-0 x 7'-0	1-3/4"	C	F-2	3	--	--	SV	PNT	12/A9.1	11

DOOR SCHEDULE - BUILDING 3

DOOR MARK	DOOR SIZE	THICKNESS	DOOR ELEVATION	FRAME ELEVATION	DOOR TYPE as spec'd	GLAZING TYPE as spec'd	RATING (MINUTES)	DOOR FINISH	FRAME FINISH	FRAME DETAIL	HARDWARE GROUP
101A	3'-0 x 7'-0	1-3/4"	C	F-2	1	--	--	PNT	PNT	9/A9.1	5
101B	3'-0 x 7'-0	1-3/4"	D	F-2	3	1	--	SV	PNT	12/A9.1	9
102A	3'-0 x 7'-0	1-3/4"	C	F-2	1	--	--	PNT	PNT	9/A9.1	16
102B	3'-0 x 7'-0	1-3/4"	D	F-2	3	1	--	SV	PNT	12/A9.1	15
103A	3'-0 x 7'-0	1-3/4"	D	F-2	1	2	--	PNT	PNT	9/A9.1	14
104A	3'-0 x 7'-0	1-3/4"	C	F-2	3	--	--	SV	PNT	12/A9.1	2
105A	3'-0 x 7'-0	1-3/4"	D	F-2	3	1	--	SV	PNT	12/A9.1	9
107A	3'-0 x 7'-0	1-3/4"	C	F-2	3	--	--	SV	PNT	12/A9.1	13
108A	3'-0 x 7'-0	1-3/4"	D	F-2	2	1	--	PNT	PNT	12/A9.1	12
110A	3'-0 x 7'-0	1-3/4"	C	F-2	3	--	--	SV	PNT	12/A9.1	2
111A	3'-0 x 7'-0	1-3/4"	C	F-2	2	--	--	PNT	PNT	12/A9.1	2
112A	3'-0 x 7'-0	1-3/4"	C	F-2	1	--	--	PNT	PNT	9/A9.1	10
112B	3'-0 x 7'-0	1-3/4"	C	F-2	1	--	--	PNT	PNT	9/A9.1	10
112C	12'-0 x 14'-0	1-5/8"	F	--	4	--	--	FAC	FAC	3/A9.1	18
112D	12'-0 x 14'-0	1-5/8"	F	--	4	--	--	FAC	FAC	3/A9.1	18
112E	12'-0 x 14'-0	1-5/8"	F	--	4	--	--	FAC	FAC	3/A9.1	18
112F	12'-0 x 14'-0	1-5/8"	F	--	4	--	--	FAC	FAC	3/A9.1	18
112G	3'-0 x 7'-0	1-3/4"	C	F-2	1	--	--	PNT	PNT	9/A9.1	5
201A	3'-0 x 7'-0	1-3/4"	D	F-2	3	1	--	SV	PNT	12/A9.1	11
202A	3'-0 x 7'-0	1-3/4"	D	F-2	3	1	--	SV	PNT	12/A9.1	11
203A	3'-0 x 7'-0	1-3/4"	D	F-2	3	1	--	SV	PNT	12/A9.1	11
205A	3'-0 x 7'-0	1-3/4"	D	F-2	3	1	--	SV	PNT	12/A9.1	11
208A	3'-0 x 7'-0	1-3/4"	D	F-2	3	1	--	SV	PNT	12/A9.1	11
209A	3'-0 x 7'-0	1-3/4"	C	F-2	3	--	--	SV	PNT	12/A9.1	11
211A	3'-0 x 7'-0	1-3/4"	D	F-2	3	1	--	SV	PNT	12/A9.1	8
212A	3'-0 x 7'-0	1-3/4"	C	F-2	3	--	--	SV	PNT	12/A9.1	2

DOOR SCHEDULE - BUILDING 4

DOOR MARK	DOOR SIZE	THICKNESS	DOOR ELEVATION	FRAME ELEVATION	DOOR TYPE as spec'd	GLAZING TYPE as spec'd	RATING (MINUTES)	DOOR FINISH	FRAME FINISH	FRAME DETAIL	HARDWARE GROUP
102A	10'-0 x 10'-0	1-5/8"	F	--	4	--	--	FAC	FAC	4/A9.1 SIM.	18
102B	3'-0 x 7'-0	1-3/4"	C	F-2	2	--	--	PNT	PNT	12/A9.1 SIM.	5

Drwn: Chkd:

REGISTERED ARCHITECT 7083 LARRY J. DANGLE STATE OF WASHINGTON

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425 OHME GARDEN ROAD WENATCHEE, WASHINGTON 98801

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Telephone (509) 662-4781 Facsimilie (509) 663-3253

BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
.DWG ID - 2344 a401-

A4.1

FINISH CODE LIST

FLOOR		BASE		WALLS		CEILING	
Material		Material		Material		Material	
Finish		Finish		Finish		Finish	
1	CONCRETE	A	4" RUBBER	1	GWB	A	GWB
	SEALER		FACTORY		PAINT		PAINT
2	CONCRETE	B	6" RUBBER	2	FRP	B	COOLER PANEL
	SHEET VINYL TYPE-1		FACTORY		FACTORY		FACTORY
3	CONCRETE	C	FRP	3	COOLER PANEL	C	AT-1
	SHEET VINYL TYPE-2		FACTORY		FACTORY		FACTORY
4	CONCRETE	D	S.V. TYPE-2 6" COVE	4	OPEN TO STRUCTURE	D	AT-2
	CARPET TYPE-1		FACTORY		-		FACTORY
5	CONCRETE	E	RUBBER SKIRTING			E	AT-3
	ENTRANCE MAT TYPE-1		FACTORY				FACTORY
6	*WOOD	F	COOLER PANEL			F	OPEN TO STRUCTURE
	SHEET VINYL TYPE-1		FACTORY				FACTORY
7	*WOOD					G	PLYWOOD
	SHEET VINYL TYPE-3						PAINT
8	*WOOD						
	CARPET TYPE-1						
9	WOOD						
	FACTORY						
10	CONCRETE						
	RESINOUS COATINGS						
11	ASPHALT						

WINDOW TREATMENT (WT-1) - INCLUDES ALL EXTERIOR WINDOWS, SEE SPECIFICATIONS

"*WOOD" DESIGNATES ¾" APA STAMPED UNDERLAYMENT TO BE INSTALLED OVER PLYWOOD SHEATHING AS REQUIRED BY FLOORING MANUFACTURER.

ROOM FINISH SCHEDULE - BUILDING 1

ROOM NUMBER	FLOOR	BASE	NORTH WALL	SOUTH WALL	EAST WALL	WEST WALL	CEILING	WINDOW TREATMENT	REMARKS
101	1	A	1	1	1	1	A	--	
102	2	B	1	1	1	1	A	--	
103	2	A	1	1	1	1	A	WT-1	
104	1	C	1/2	1/2	1/2	1/2	A	--	
105	1	A	1	1	1	1	A	--	
106	2	B	1	1	1	1	A	--	

ROOM FINISH SCHEDULE - BUILDING 2

ROOM NUMBER	FLOOR	BASE	NORTH WALL	SOUTH WALL	EAST WALL	WEST WALL	CEILING	WINDOW TREATMENT	REMARKS
101	4	A	1	1	1	1	A	WT-1	
102	2/5	A	1	1	1	1	A	WT-1	
103	4	A	1	1	1	1	A	--	
104	2	A	1	1	1	1	A	WT-1	
105	2	A	1	1	1	1	A	--	
106	7	E	1	1	1	1	A	--	
107	2	B	1	1	1	1	A	--	
108	3	D	1	1	1	1	C	--	
109	1	A	1	1	1	1	D	--	
110	10	F	3	3	3	3	B	--	
111	2	B	1	1	1	1	A	--	
112	1	A	1/3	1	1/3	1	A	--	
113	1	C	1/2	1/2	1/2	1/2	A	--	
201	4	A	1	1	1	1	A	WT-1	
202	4	A	1	1	1	1	A	WT-1	
203	4	A	1	1	1	1	A	WT-1	
204	4	A	1	1	1	1	A	--	
205	4	A	1	1	1	1	A	--	

ROOM FINISH SCHEDULE - BUILDING 3

ROOM NUMBER	FLOOR	BASE	NORTH WALL	SOUTH WALL	EAST WALL	WEST WALL	CEILING	WINDOW TREATMENT	REMARKS
101	4	A	1	1	1	1	A	WT-1	
102	2	A	1	1	1	1	E	WT-1	
103	2/5	A	1	1	1	1	A	WT-1	
104	2	B	1	1	1	1	A	--	
105	4	A	1	1	1	1	A	WT-1	
106	7	E	1	1	1	1	A	--	
107	4	A	1	1	1	1	A	--	
108	4	A	--	1	1	1	A	--	
109	4	A	1	1	1	--	A	--	
110	2	B	1	1	1	1	A	--	
111	1	B	1	1	1	1	A	--	
112	1	C	1/2	1/2	1/2	1/2	A/F	--	
201	4	A	1	1	1	1	A	WT-1	
202	4	A	1	1	1	1	A	WT-1	
203	4	A	1	1	1	1	A	WT-1	
204	2	A	1	1	1	1	A	--	
205	4	A	1	1	1	1	A	WT-1	
206	2	A	1	1	1	1	A	--	
207	2	A	1	1	1	1	A	--	
208	4	A	1	1	1	1	A	WT-1	
209	4	A	1	1	1	1	A	--	
210	2	A	1	1	1	1	A	--	
211	4	A	1	1	1	1	A	WT-1	
212	2	B	1	1	1	1	A	--	
213	9	A	1	1	1	1	A	--	

ROOM FINISH SCHEDULE - BUILDING 4

ROOM NUMBER	FLOOR	BASE	NORTH WALL	SOUTH WALL	EAST WALL	WEST WALL	CEILING	WINDOW TREATMENT	REMARKS
101	11	--	4	4	4	4	G	--	
102	1	--	4	4	4	4	G	--	

Drwn: Chkd:

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CHELAN COUNTY OLDS STATION CAMPUS

425 OHME GARDEN ROAD WENATCHEE, WASHINGTON 98801

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7 N Wenatchee Ave Suite 500, Wenatchee, Washington 98801
Telephone (509) 662-4781 Facsimilie (509) 663-3253

BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

.DWG ID - 2344 a402-

A4.2

WALL SCHEDULE

WALL SCHEDULE GENERAL NOTES

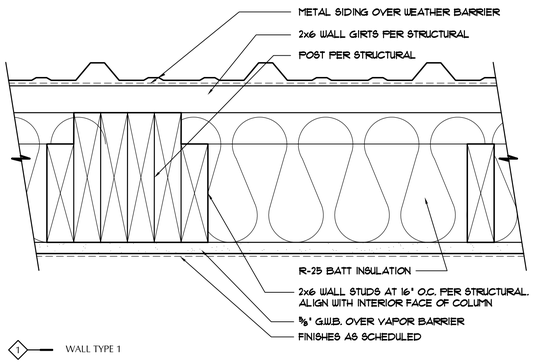
1. COORDINATE WITH ALL STRUCTURAL DRAWINGS FOR REQUIRED SHEARWALL LOCATIONS. PROVIDE PLYWOOD SHEATHING AS NOTED PER STRUCTURAL IN ADDITION TO WALL TYPE SHOWN HERE.

2. CONCEALED WALL SPACES - FIREBLOCKING SHALL BE PROVIDED IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS AS FOLLOWS:
   2.1. VERTICALLY AT CEILING AND FLOOR LEVELS.
   2.2. HORIZONTALLY AT INTERVALS NOT EXCEEDING 10'.

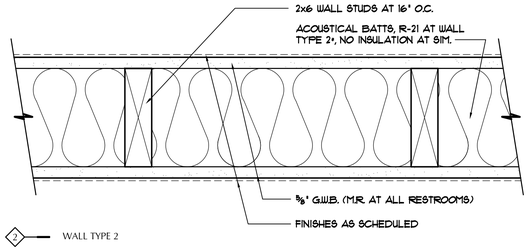
3. PROVIDE MOISTURE RESISTANT GWB AT ALL RESTROOMS WALLS AND CEILINGS.

4. PROVIDE PRESSURE TREATED WOOD AT ALL AREAS IN CONTACT WITH CONCRETE OR PROVIDE SUITABLE BARRIER BETWEEN WOOD AND CONCRETE AS APPROVED BY ARCHITECT.

5. ALL SEAMS, JOINTS, PENETRATIONS, ETC. IN THE HOUSE WRAP, EXTERIOR SHEATHING AND VAPOR BARRIER ARE TO BE SEALED, CAULKED, GLUED, ETC. TO BE AIR/WATER TIGHT

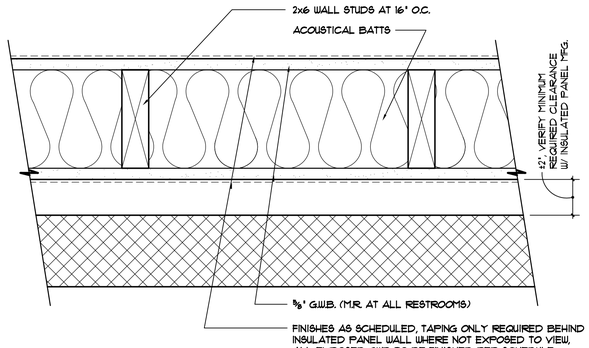


1 WALL TYPE 1

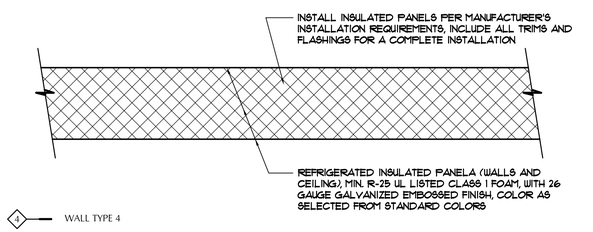


2 WALL TYPE 2

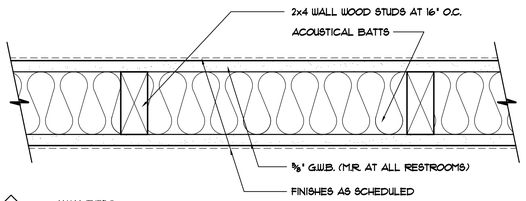
2* WALL TYPE 2*



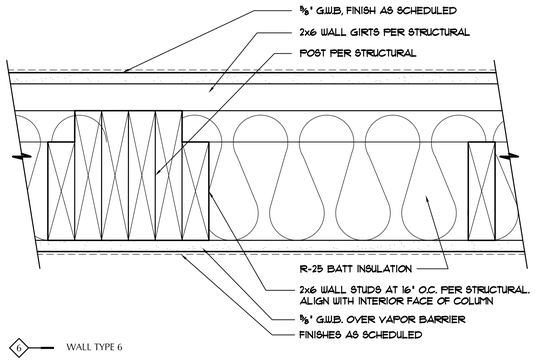
3 WALL TYPE 3



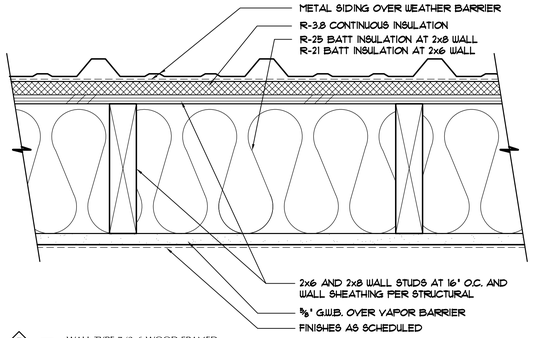
4 WALL TYPE 4



5 WALL TYPE 5

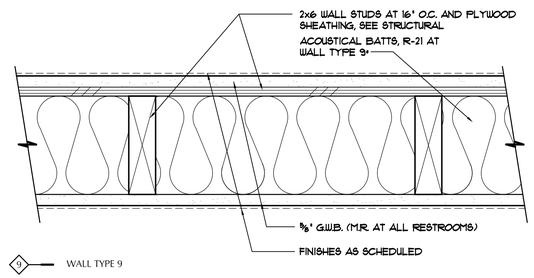


6 WALL TYPE 6



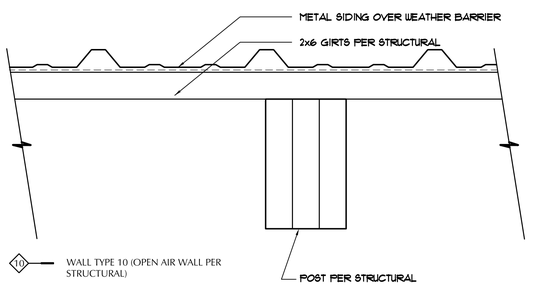
7 WALL TYPE 7 (2x6 WOOD FRAMED WALL PER STRUCTURAL)

8 WALL TYPE 8 (2x8 WOOD FRAMED WALL PER STRUCTURAL)

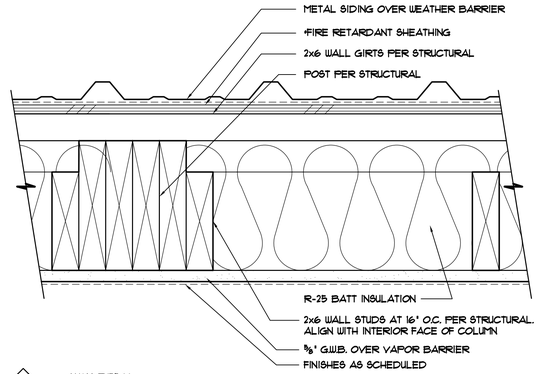


9 WALL TYPE 9

9* WALL TYPE 9*



10 WALL TYPE 10 (OPEN AIR WALL PER STRUCTURAL)



11 WALL TYPE 11

*FIRE RETARDANT COATED SHEATHING - INSTALL NOMINAL 48" WIDE X 96" TALL, WITH THE WHITE SIDE FACING OUT. INSTALL SHEATHING STAGGERED AT G.W.B. SEAMS. SECURE SHEATHING TO WOOD STUDS 12/3" LONG 6d NAILS SPACED AT 6" O.C. AROUND THE PERIMETER AND 12" O.C. IN THE FIELD. ALTERNATIVELY, USE 8d OR 10d NAILS AND THE SAME SPACING.

Drwn: | Chkd: |

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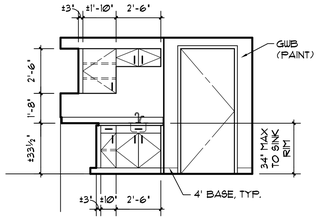
BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

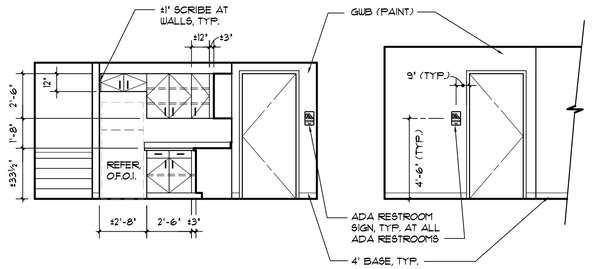
.DWG ID -- 2344 a403--

A4.3

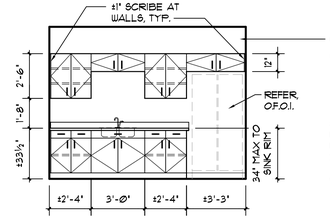
NOTE (TYPICAL ALL RESTROOMS):
PROVIDE BLOCKING AT RESTROOM WALLS FOR OWNER FURNISHED, OWNER INSTALLED (O.F.O.I.) TOILET ACCESSORIES



1 HALL/KITCHENETTE 104-B2 (SOUTH)
SCALE: 1/4" = 1'-0"

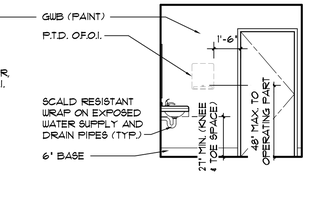


2 HALL/KITCHENETTE 104-B2 (EAST)
SCALE: 1/4" = 1'-0"

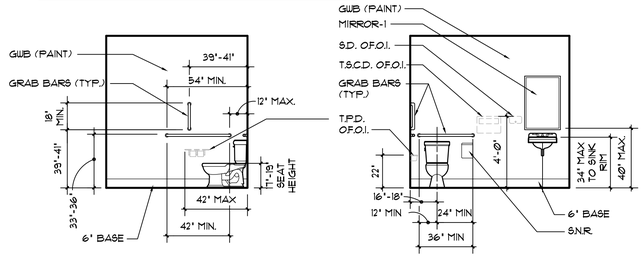


3 OFFICE 105-B1 (NORTH)
SCALE: 1/4" = 1'-0"

4 OFFICE 103-B1 (NORTH)
SCALE: 1/4" = 1'-0"

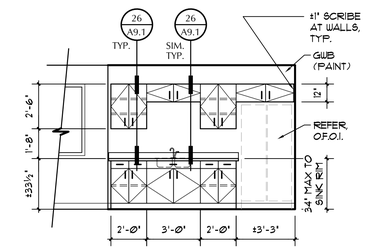


5 RESTROOM 102-B1 (SOUTH)
RESTROOM 106-B1 (SOUTH-OPP.)
SCALE: 1/4" = 1'-0"

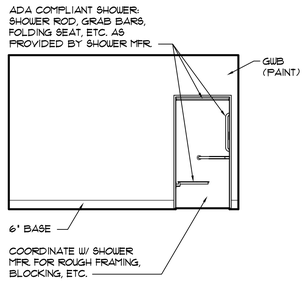


6 RESTROOM 102-B1 (NORTH)
RESTROOM 106-B1 (NORTH-OPP.)
SCALE: 1/4" = 1'-0"

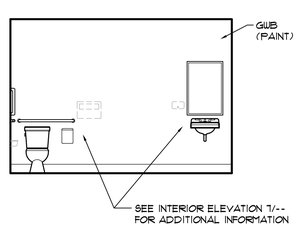
7 RESTROOM 102-B1 (EAST)
RESTROOM 106-B1 (WEST-OPP.)
SCALE: 1/4" = 1'-0"



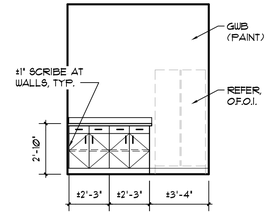
8 TRAINING 102-B3 (NORTH)
SCALE: 1/4" = 1'-0"



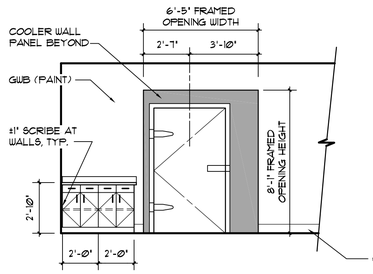
9 UNISEX ADA RESTROOM/
SHOWER ROOM 111-B2 (WEST)
SCALE: 1/4" = 1'-0"



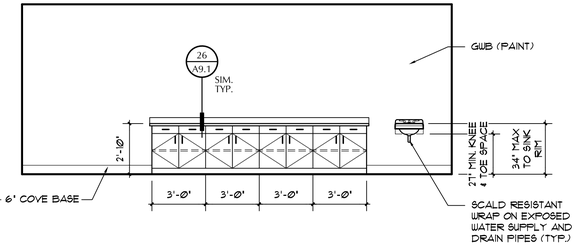
10 UNISEX ADA RESTROOM/
SHOWER ROOM 111-B2 (EAST)
SCALE: 1/4" = 1'-0"



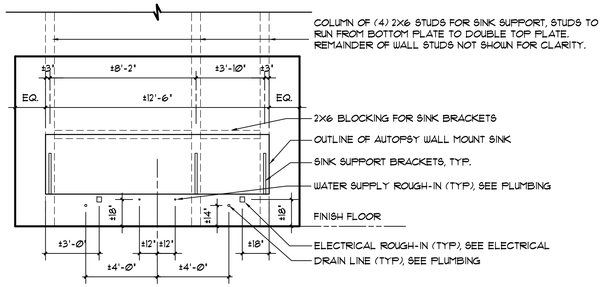
11 PROPERTY EVIDENCE
TOXICOLOGY 109-B2 (SOUTH)
SCALE: 1/4" = 1'-0"



12 EXAM ROOM 108-B2 (WEST)
SCALE: 1/4" = 1'-0"

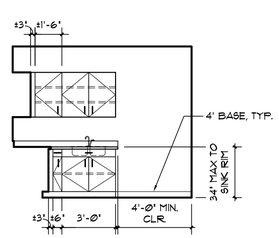


13 EXAM ROOM 108-B2 (EAST)
SCALE: 1/4" = 1'-0"

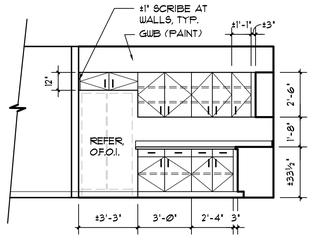


INFO. PROVIDED IS BASED ON 'MOPEC' AUTOPSY SINK. CONTRACTOR TO VERIFY ALL MECHANICAL AND ELECTRICAL ROUGH-IN AND BLOCKING REQUIREMENTS WITH SPECIFIED MANUFACTURER AND MECHANICAL AND ELECTRICAL DRAWINGS. ALL DIMENSIONS TO BE VERIFIED.

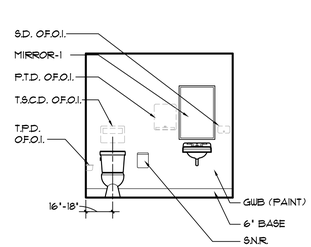
16 EXAM ROOM 108-B2 (NORTH)
SCALE: 1/4" = 1'-0"



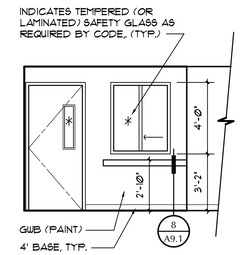
18 BREAK ROOM 207-B3 (EAST)
SCALE: 1/4" = 1'-0"



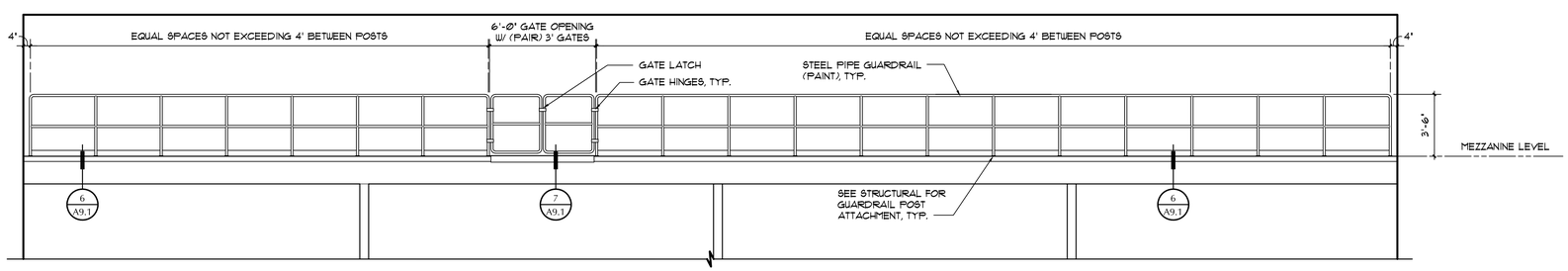
19 BREAK ROOM 207-B3 (EAST)
SCALE: 1/4" = 1'-0"



20 UNISEX RESTROOM 111-B3 (NORTH)
SCALE: 1/4" = 1'-0"



21 RECEPTION OFFICE 105-B3 (NORTH)
SCALE: 1/4" = 1'-0"



24 MEZZANINE 213-B3 (WEST)
SCALE: 1/4" = 1'-0"

Drawn: | Check: |

REGISTERED ARCHITECT 7083 LARRY A. DANGLE STATE OF WASHINGTON

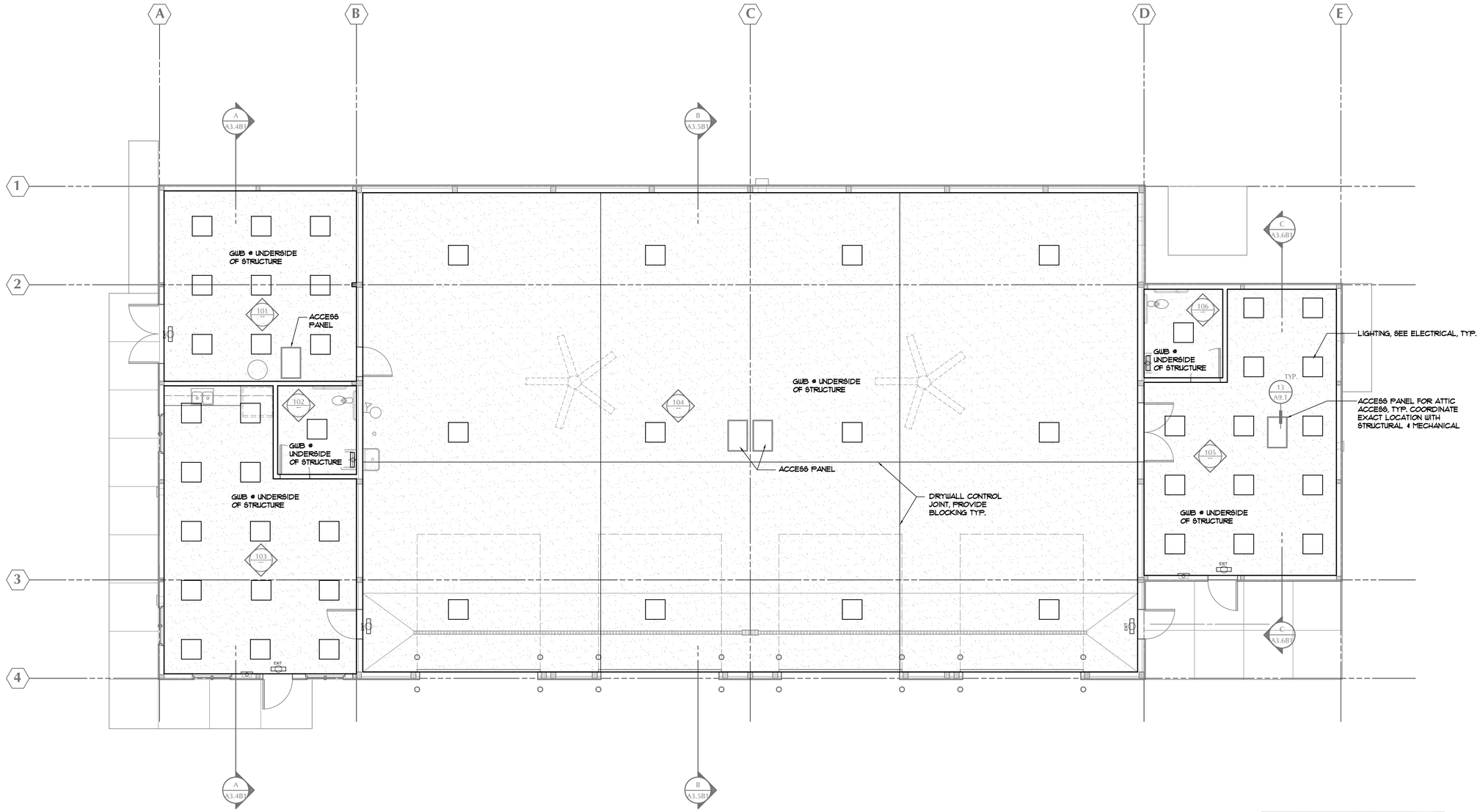
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Telephone (509) 662-4781 Facsimilie (509) 663-3253

BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
DWG ID = 2344 a501=

A5.1



REFLECTED CEILING PLAN - BUILDING 1

3/16"=1'-0"

0 2' 6'

ROOM SCHEDULE

101	COMPRESSOR ROOM/STORAGE
102	UNISEX ADA RESTROOM
103	OFFICE
104	VEHICLE REPAIR GARAGE
105	STORAGE
106	UNISEX ADA RESTROOM

Drwn: | Chkd: |

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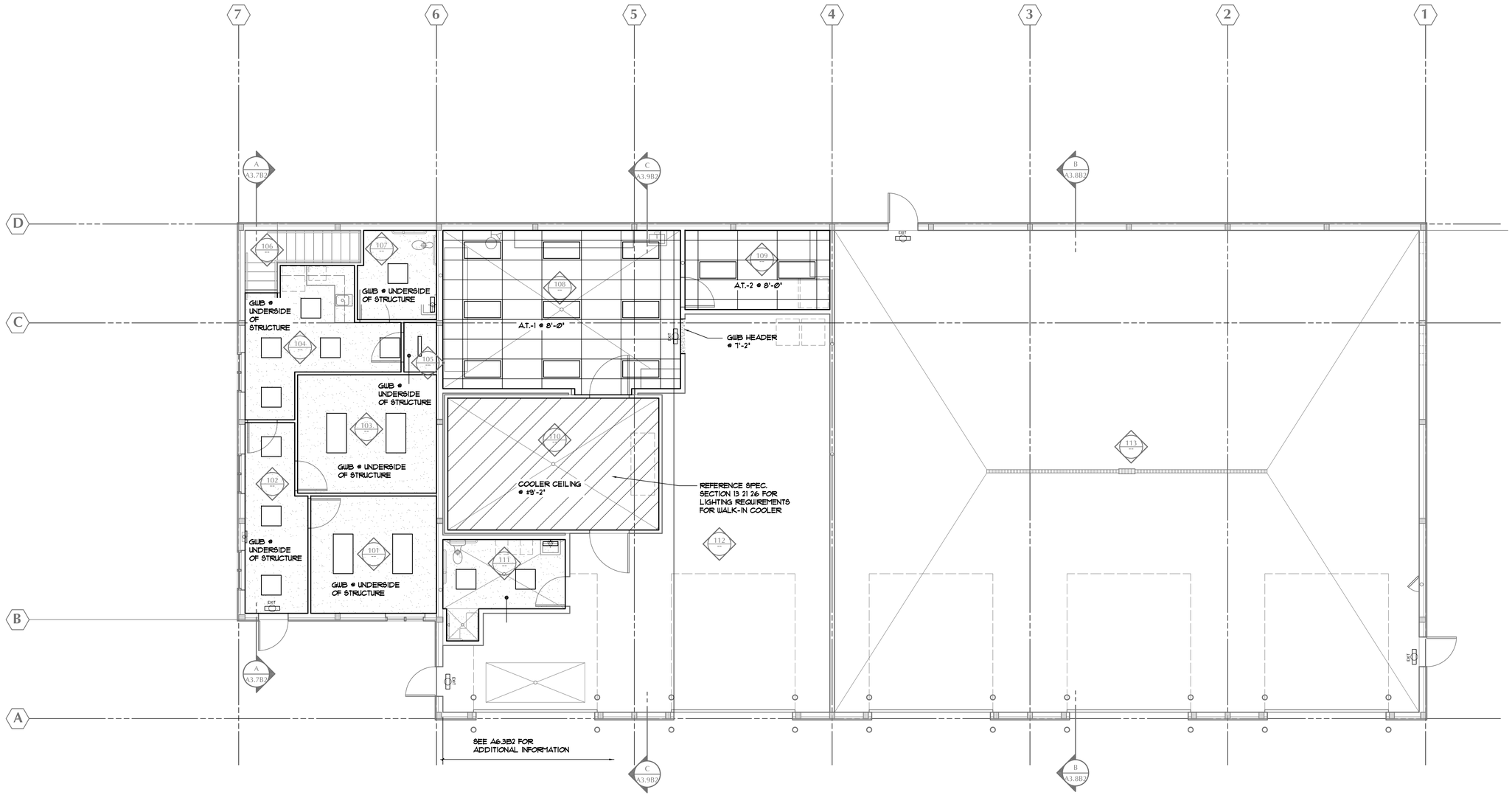
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BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

DWG ID = 2344 a601b1
2344 a201b1x64

A6.1B1



FIRST FLOOR REFLECTED PLAN - BUILDING 2

3/16"=1'-0"

0 2' 6'

ROOM SCHEDULE

101	FAMILY MEETING ROOM
102	HALL
103	CONFERENCE ROOM/STAFF
104	HALL/KITECHENETTE
105	STORAGE
106	STAIR
107	UNISEX ADA RESTROOM
108	EXAM ROOM
109	PROPERTY EVIDENCE TOXICOLOGY
110	WALK-IN COOLER
111	UNISEX ADA RESTROOM/SHOWER ROOM
112	STORAGE
113	STORAGE

Drwn: | Chkd: |

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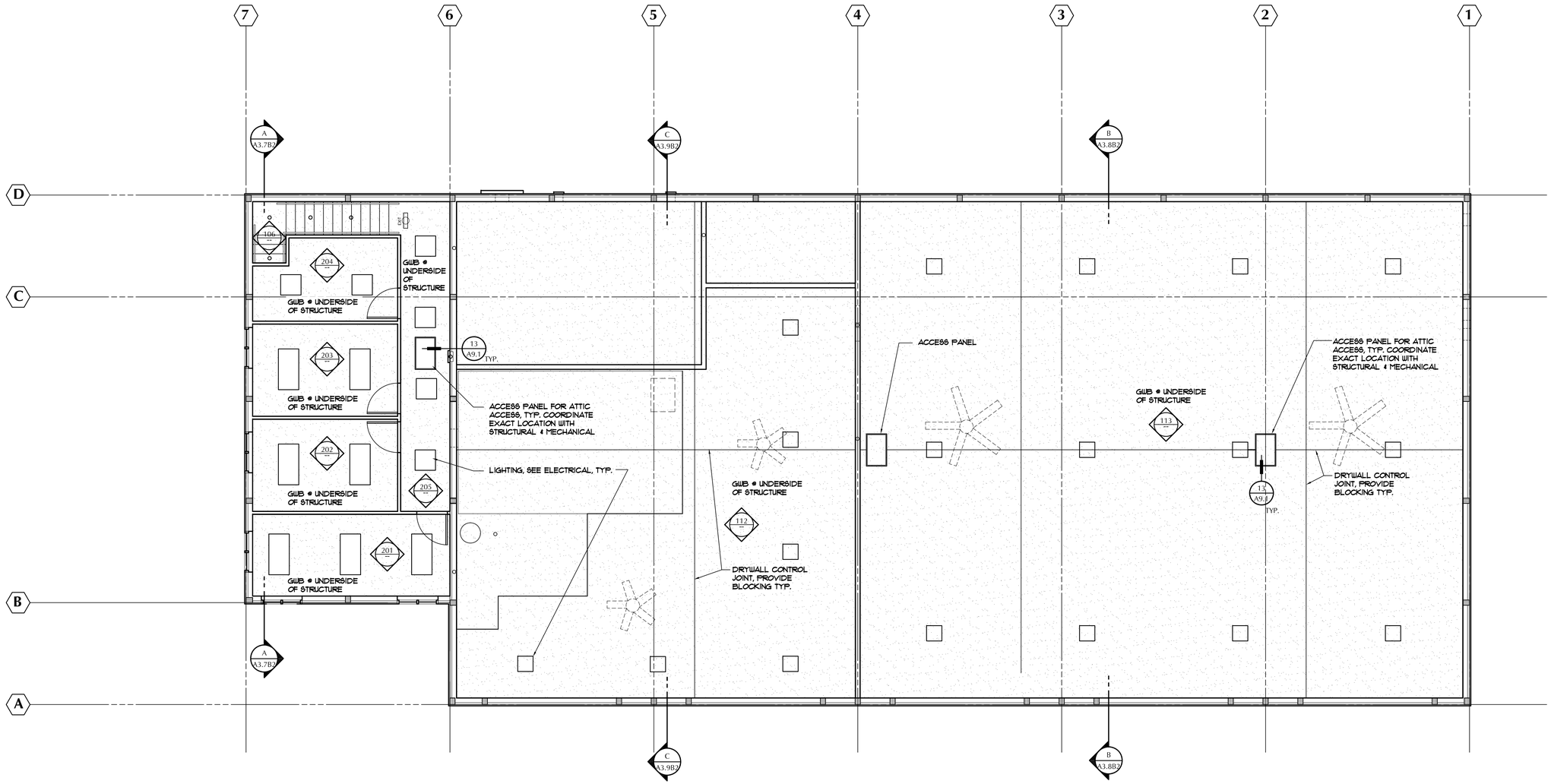
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BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

.DWG ID = 2344 a6202b2
2344 a2202b2x64

A6.2B2



SECOND FLOOR REFLECTED CEILING PLAN - BUILDING 2

3/16"=1'-0"

0 2' 6'

ROOM SCHEDULE

106	STAIR
201	OFFICE
202	OFFICE
203	OFFICE
204	STORAGE
205	HALL

Drwn: | Chkd: |

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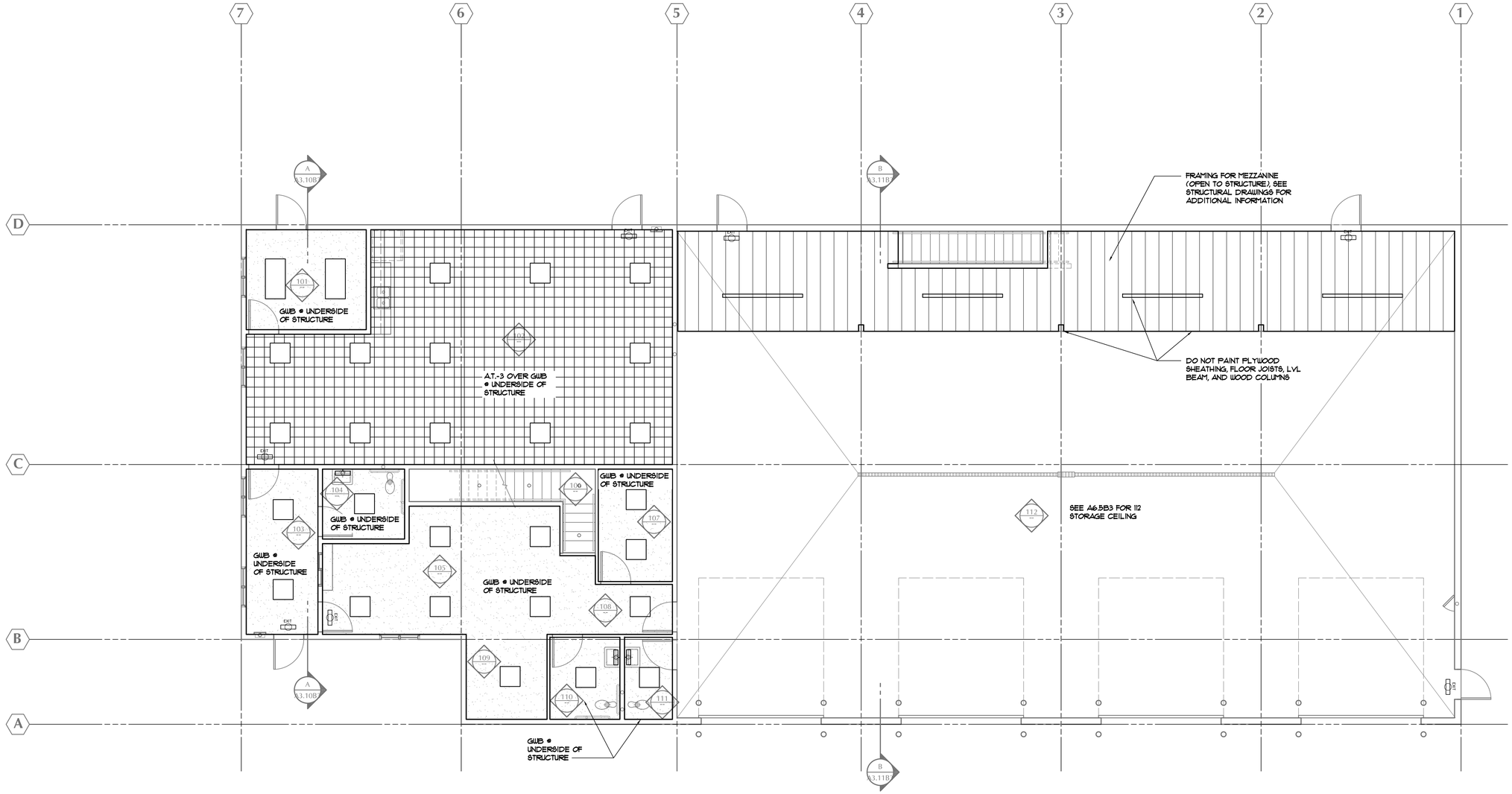
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BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

DWG ID = 2344 a6d3b2
2344 a2025x64

A6.3B2



FIRST FLOOR REFLECTED CEILING PLAN - BUILDING 3

3/16"=1'-0"

0 2' 6'

ROOM SCHEDULE

101	OFFICE
102	TRAINING
103	HALL
104	UNISEX ADA RESTROOM
105	RECEPTION OFFICE
106	STAIR
107	STORAGE
108	HALL
109	WORK AREA
110	UNISEX ADA RESTROOM
111	UNISEX RESTROOM
112	STORAGE

Drawn: | Chkd: |

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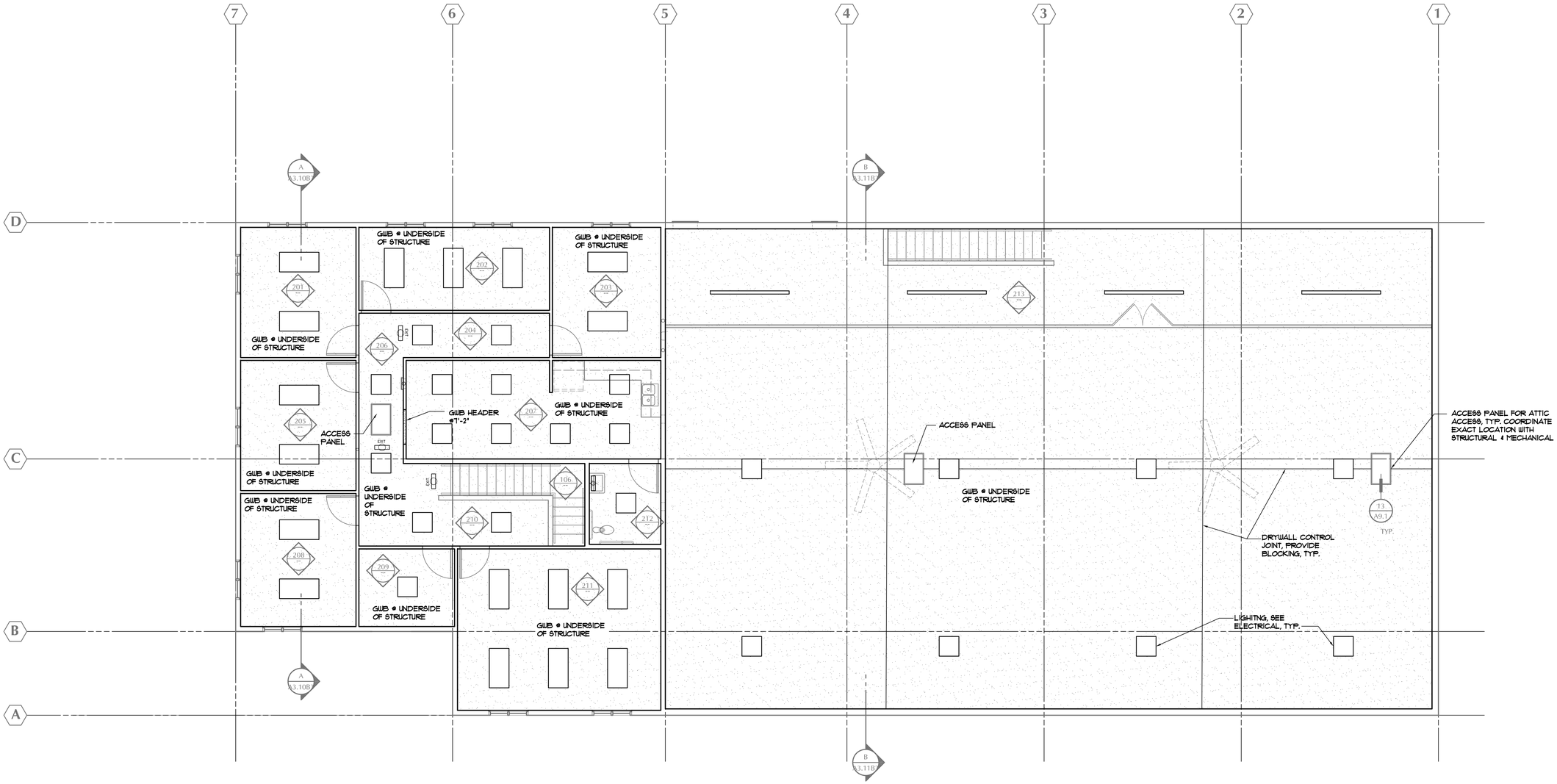
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BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

DWG ID = o2344 a604b3~
o2344 a204b3x64~

A6.4B3



SECOND FLOOR REFLECTED CEILING PLAN - BUILDING 3

3/16"=1'-0"

0 2' 6'

ROOM SCHEDULE

201	OFFICE
202	OFFICE
203	OFFICE
204	HALL
205	OFFICE
206	HALL
207	BREAK ROOM
208	OFFICE
209	STORAGE
210	HALL
211	CONFERENCE ROOM
212	UNISEX ADA RESTROOM
213	MEZZANINE

Drawn: | Chkd: |

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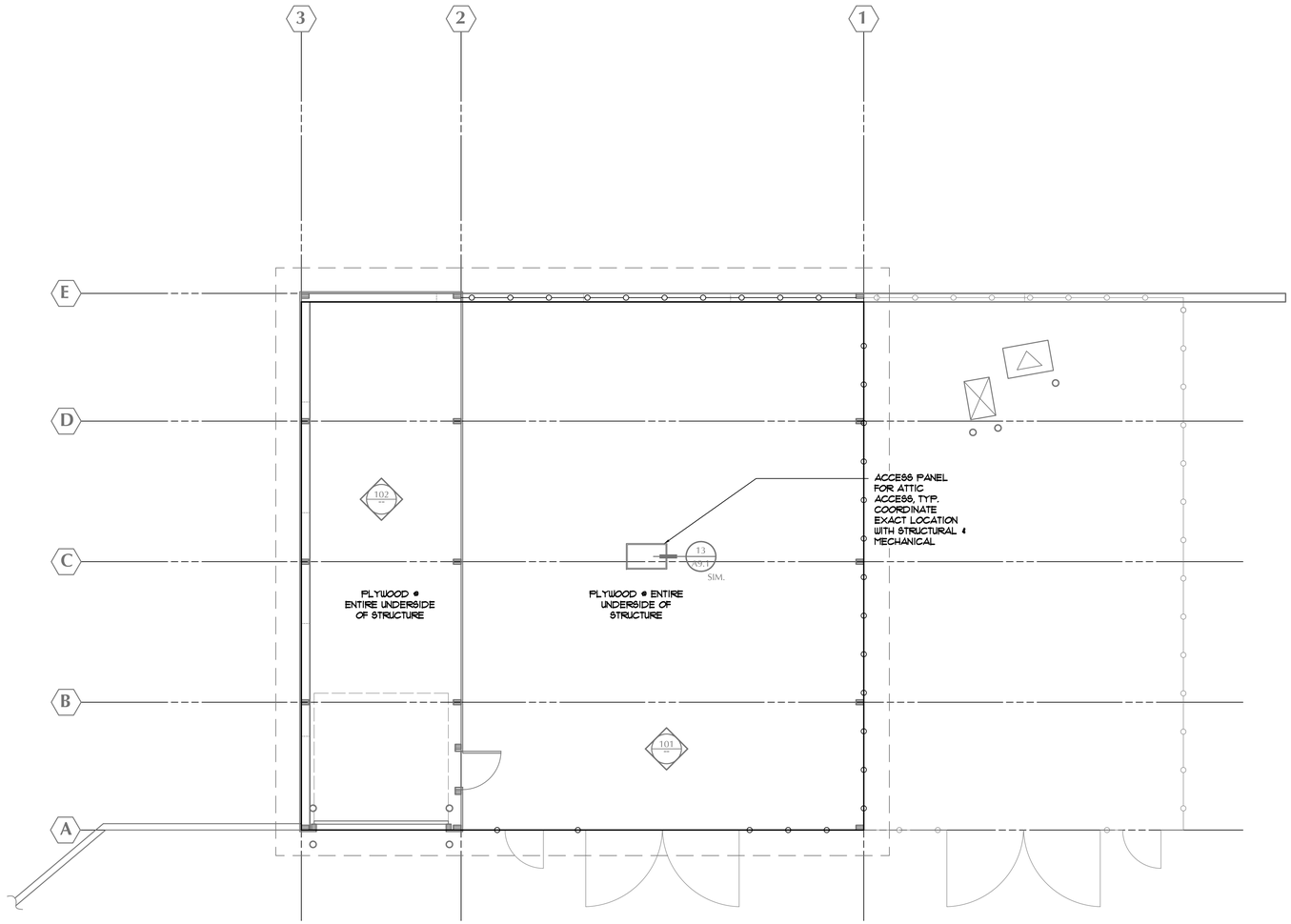
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Telephone (509) 662-4781 Facsimilie (509) 663-3253

BID SET: 1/6/2025

Job: 2344 Date: 1/6/2025

.DWG ID = a2344 s605b3= 02344 c2056.3x64=

A6.5B3



REFLECTED CEILING PLAN - BUILDING 4

3/16"=1'-0"

0 2' 6'

ROOM SCHEDULE

101 OPEN AREA - BULL PEN
102 SECURE AREA - BULL PEN

Drwn: | Chkd: |

7083 REGISTERED ARCHITECT LARRY V. DANGLE STATE OF WASHINGTON

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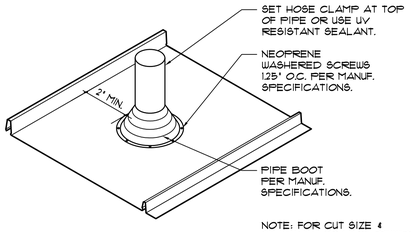
CHELAN COUNTY
OLDS STATION CAMPUS

425 OHME GARDEN ROAD WENATCHEE, WASHINGTON 98801

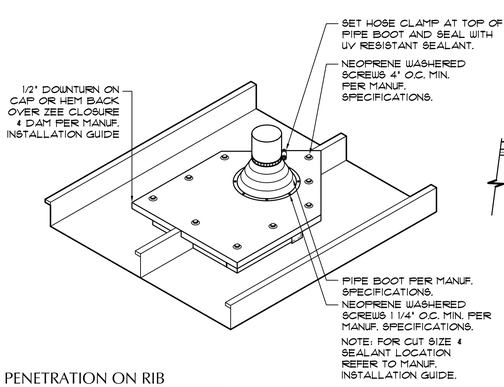
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Telephone (509) 662-4781 Facsimilie (509) 663-3253

BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
.DWG ID → o2344 o6Obs4--
o2344 o2Obs4x64--

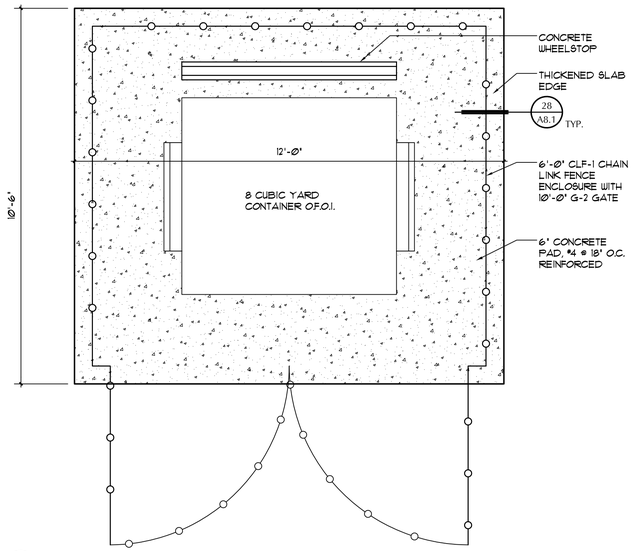
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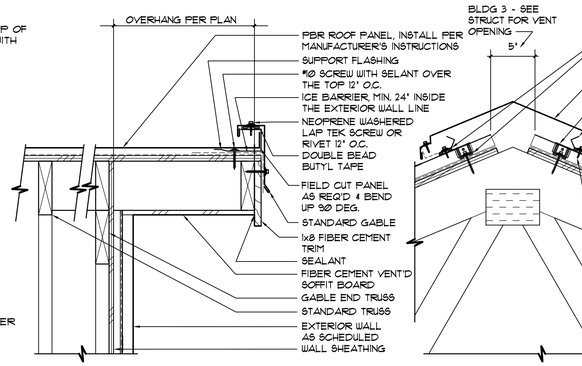
1 PIPE PENETRATION ON PAN
SCALE: N.T.S. (DIAGRAMMATIC)



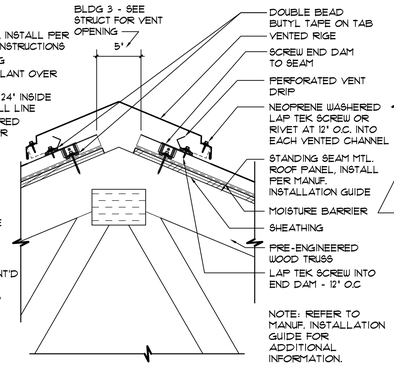
2 PIPE PENETRATION ON RIB
SCALE: N.T.S. (DIAGRAMMATIC)



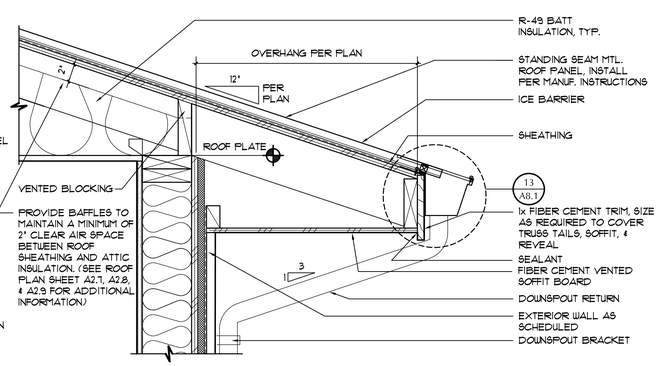
15 DUMPSTER ENCLOSURE
SCALE: 1/2" = 1'-0"
0 1' 2'



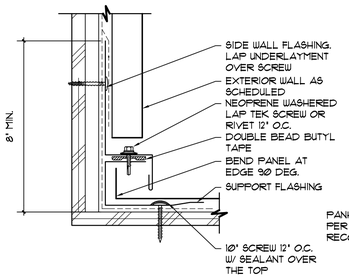
4 RAKE EDGE
SCALE: 1 1/2" = 1'-0"
0 4" 8"



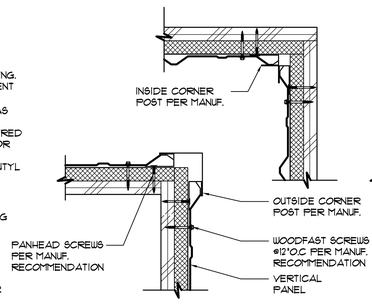
5 RIDGE VENT
SCALE: 1 1/2" = 1'-0"
0 4" 8"



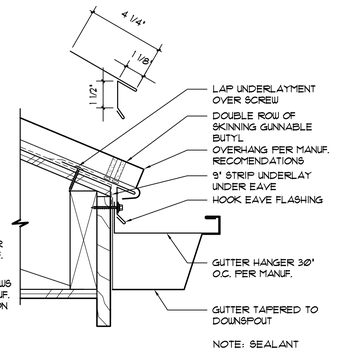
6 EAVE/GUTTER DETAIL
SCALE: 1 1/2" = 1'-0"
0 4" 8"



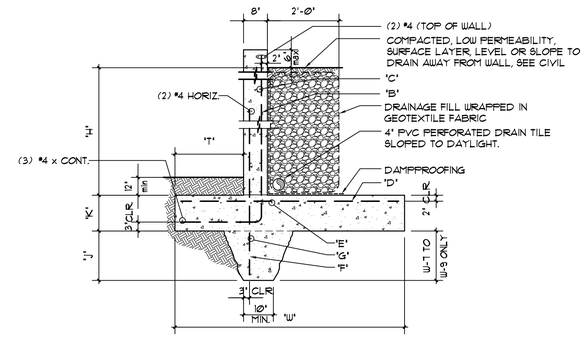
12 SIDE WALL ROOF PANEL DETAIL
SCALE: 3" = 1'-0"
0 2" 4"

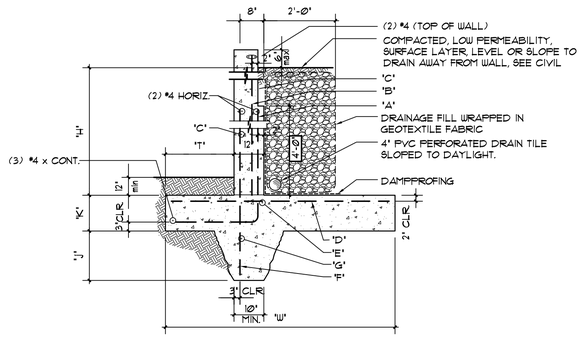


13 PANEL CORNER DETAIL
SCALE: 3" = 1'-0"
0 2" 4"



14 HOOK EAVE W/ GUTTER DETAIL
SCALE: 3" = 1'-0"
0 2" 4"





CONCRETE CANTILEVER RETAINING WALL SCHEDULE

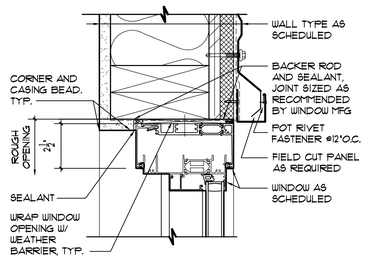
Wall	H (max)	W	T		B	C	D	E	F	G	J	K
W-3	3'	2'-0"	8"		#4@12"o.c.	#4@12"o.c.	#5@18"o.c.	(3)#4	NONE	#4@12"o.c.	NONE	9"
W-4	4'	3'-0"	8"		#4@12"o.c.	#4@12"o.c.	#5@18"o.c.	(3)#5	NONE	#4@12"o.c.	NONE	10"
W-5	5'	4'-3"	12"		#4@12"o.c.	#4@12"o.c.	#5@18"o.c.	(4)#5	NONE	#4@12"o.c.	NONE	10"
W-6	6'	5'-4"	12"		#4@12"o.c.	#4@12"o.c.	#5@12"o.c.	(5)#5	NONE	#4@12"o.c.	NONE	1'-0"
W-7	7'	5'-4"	12"		#4@12"o.c.	#4@12"o.c.	#5@12"o.c.	(5)#5	#4@12"o.c.	#4@12"o.c.	1'-0"	1'-0"
W-8	8'	6'-7"	12"		#5@12"o.c.	#4@12"o.c.	#5@12"o.c.	(6)#5	#4@12"o.c.	#4@12"o.c.	1'-4"	1'-0"
W-9	9'	7'-6"	30"		#6@12"o.c.	#4@12"o.c.	#5@12"o.c.	(8)#5	#4@12"o.c.	#4@12"o.c.	1'-6"	1'-2"

22 CONCRETE RETAINING WALL > 9-FT
SCALE: 1/2" = 1'-0"
0 1' 2'

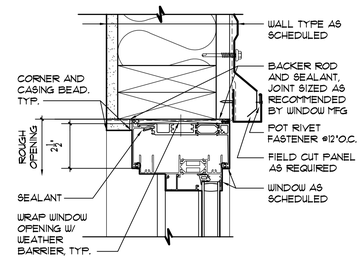
CONCRETE CANTILEVER RETAINING WALL SCHEDULE

Wall	H (max)	W	T	A	B	C	D	E	F	G	J	K
W-10	10'	9'-0"	36"	#5@12"o.c.	#4@12"o.c.	#4@12"o.c.	#6@12"o.c.	(8)#6	#5@12"o.c.	#5@12"o.c.	1'-6"	1'-6"
W-10.5	10'-6"	9'-6"	36"	#6@12"o.c.	#4@12"o.c.	#4@12"o.c.	#6@12"o.c.	(9)#6	#5@12"o.c.	#5@12"o.c.	1'-6"	1'-6"

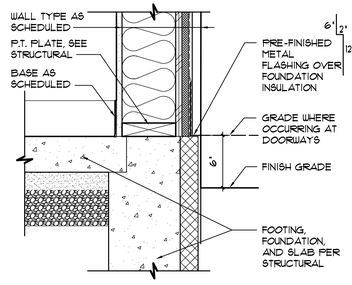
24 CONCRETE RETAINING WALL 10-FT+
SCALE: 1/2" = 1'-0"
0 1' 2'



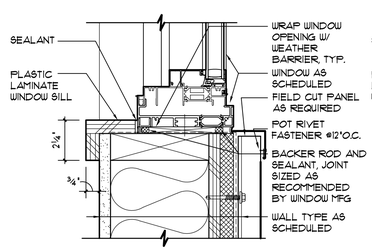
19 TYPICAL WINDOW HEAD (JAMB SIM.)
SCALE: 3" = 1'-0"
0 2" 4"



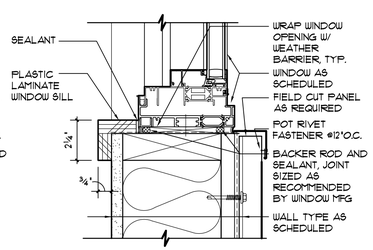
20 TYPICAL WINDOW HEAD (JAMB SIM.)
SCALE: 3" = 1'-0"
0 2" 4"



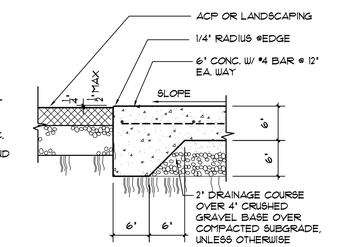
20 TYPICAL FOUNDATION
SCALE: 1 1/2" = 1'-0"
0 4" 8"



26 TYPICAL WINDOW SILL
SCALE: 3" = 1'-0"
0 2" 4"



27 TYPICAL WINDOW SILL
SCALE: 3" = 1'-0"
0 2" 4"



28 DUMPSTER PAD THICKENED EDGE
SCALE: 1" = 1'-0"
0 6" 1'

Drawn: | Chkd: |

REGISTERED ARCHITECT
7083
LARRY J. EANGLE
STATE OF WASHINGTON

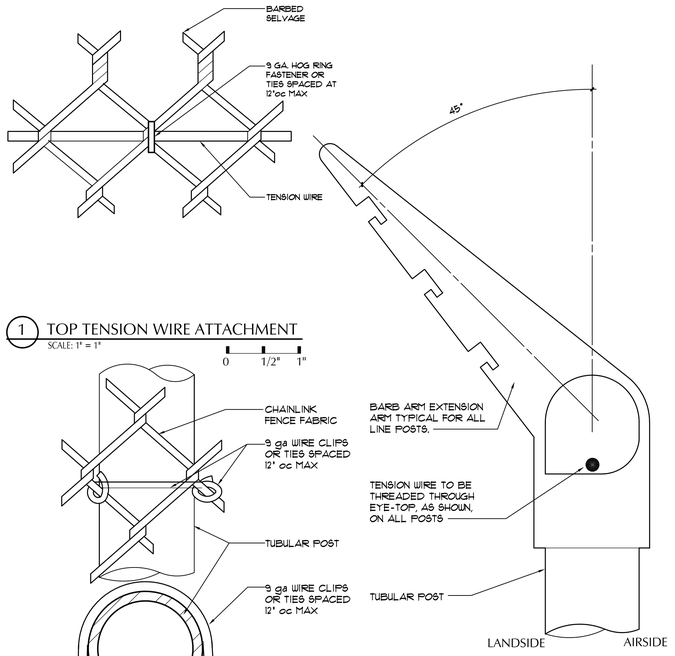
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Telephone (509) 662-4781 Facsimilie (509) 663-3253

BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
.DWG ID ~ 2344 a801~

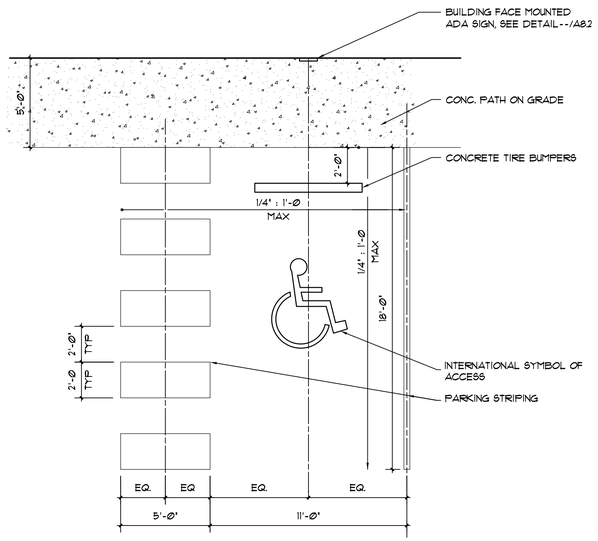
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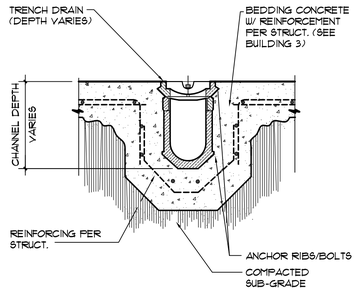
1 TOP TENSION WIRE ATTACHMENT
SCALE: 1" = 1"
0 1/2" 1"

8 FABRIC TO POST ATTACHMENT
SCALE: 1" = 1"
0 1/2" 1"

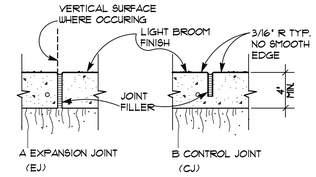
9 BARB ARM EXTENSION
SCALE: 1" = 1"
0 1/2" 1"



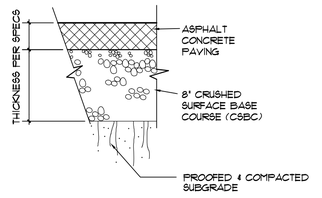
10 ADA PARKING
SCALE: 1/4" = 1'-0"
0 1' 2' 4'



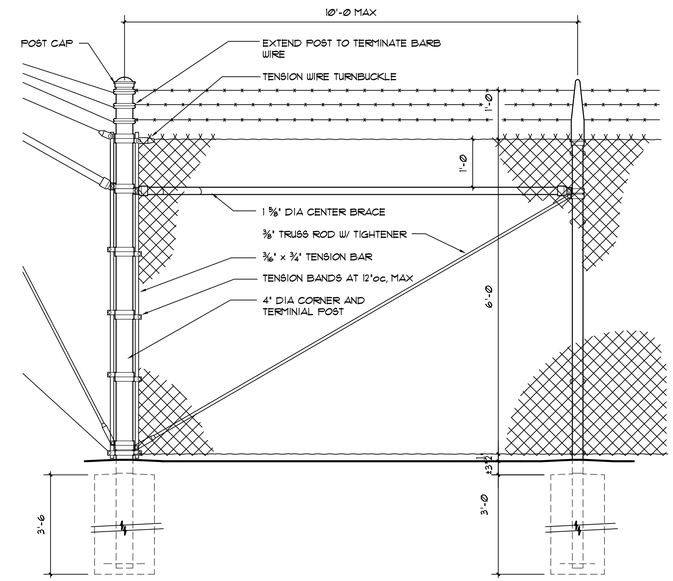
12 TRENCH DRAIN SECTION
SCALE: 1" = 1'-0"
0 3" 6" 1'



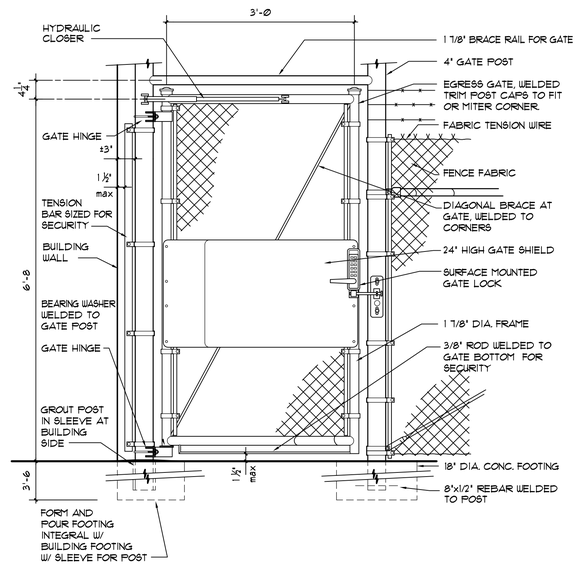
7 CONTROL JOINTS
SCALE: 1 1/2" = 1'-0"
0 4" 8"



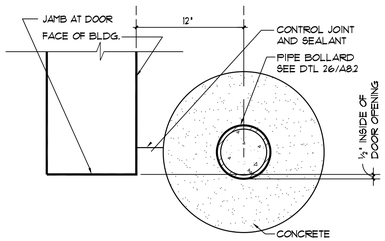
14 ASPHALT CONCRETE PAVEMENT
SCALE: 1 1/2" = 1'-0"
0 4" 8"



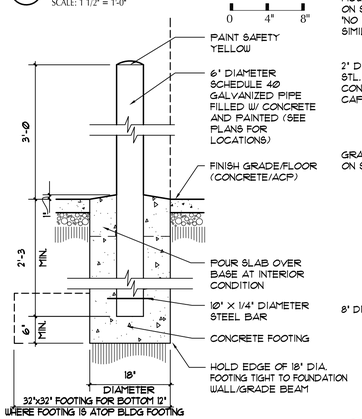
22 CORNER/TERMINAL POST
SCALE: 3/4" = 1'-0"
0 6" 1'



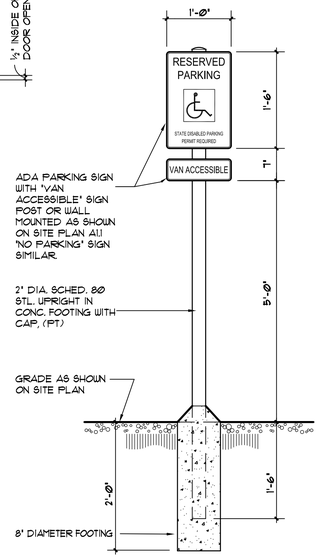
24 EGRESS GATE
SCALE: 3/4" = 1'-0"
0 6" 1'



19 BOLLARD AT BUILDING WALL
SCALE: 1 1/2" = 1'-0"
0 4" 8"



26 TRAFFIC BOLLARD
SCALE: 3/4" = 1'-0"
0 6" 1'



27 ADA SIGN
SCALE: 3/4" = 1'-0"
0 6" 1'

Drawn: Chkd:

REGISTERED ARCHITECT 7083 LARRY A. DANGLE STATE OF WASHINGTON

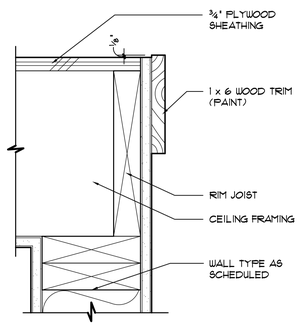
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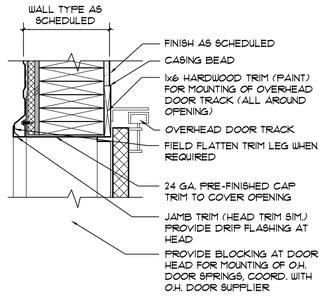
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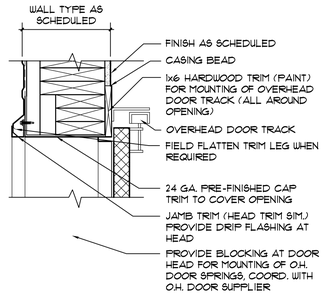
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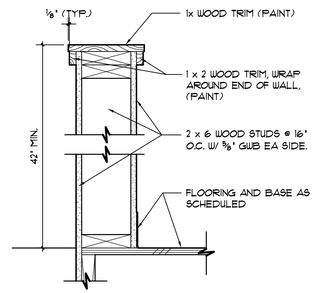
2 CEILING EDGE TRIM DETAIL
SCALE: 3" = 1'-0"



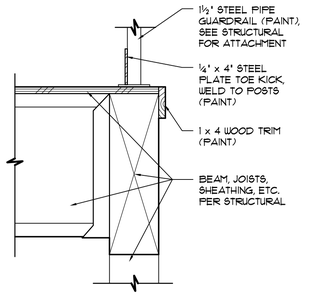
3 BUILDING 3 OVERHEAD DOOR JAMB (HEAD SIM.)
SCALE: 1 1/2" = 1'-0"



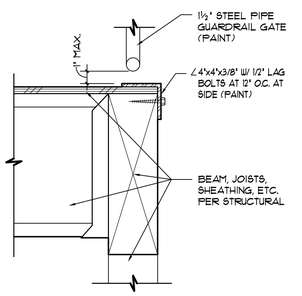
4 BUILDINGS 1, 2, AND 4 OVERHEAD DOOR JAMB (HEAD SIM.)
SCALE: 1 1/2" = 1'-0"



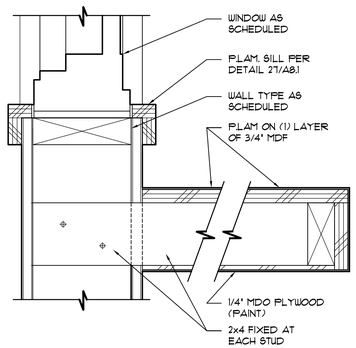
5 PARTIAL HEIGHT WALL AT STAIR
SCALE: 1 1/2" = 1'-0"



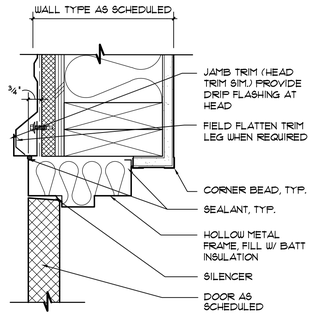
6 MEZZANINE EDGE DETAIL
SCALE: 1 1/2" = 1'-0"



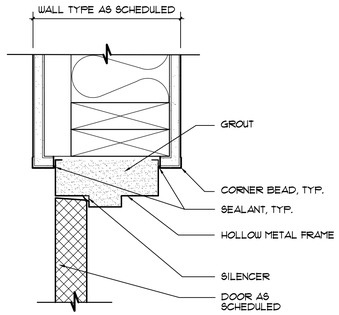
7 MEZZANINE EDGE AT GATE
SCALE: 1 1/2" = 1'-0"



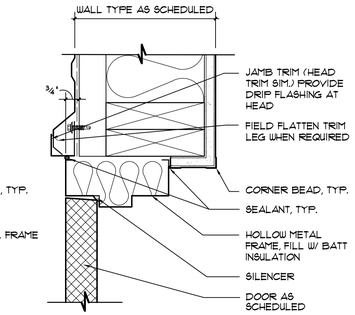
8 TRANSACTION WINDOW COUNTER
SCALE: 3" = 1'-0"



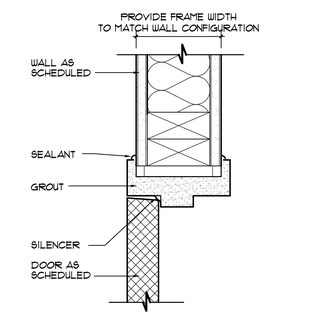
9 HOLLOW METAL FRAME JAMB/HEAD
SCALE: 3" = 1'-0"



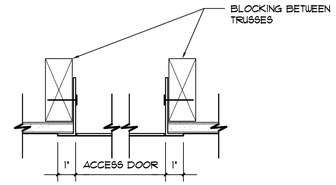
10 HOLLOW METAL FRAME JAMB/HEAD
SCALE: 3" = 1'-0"



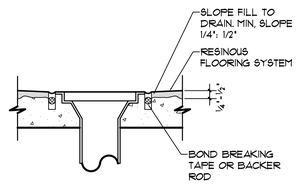
11 HOLLOW METAL FRAME JAMB/HEAD
SCALE: 3" = 1'-0"



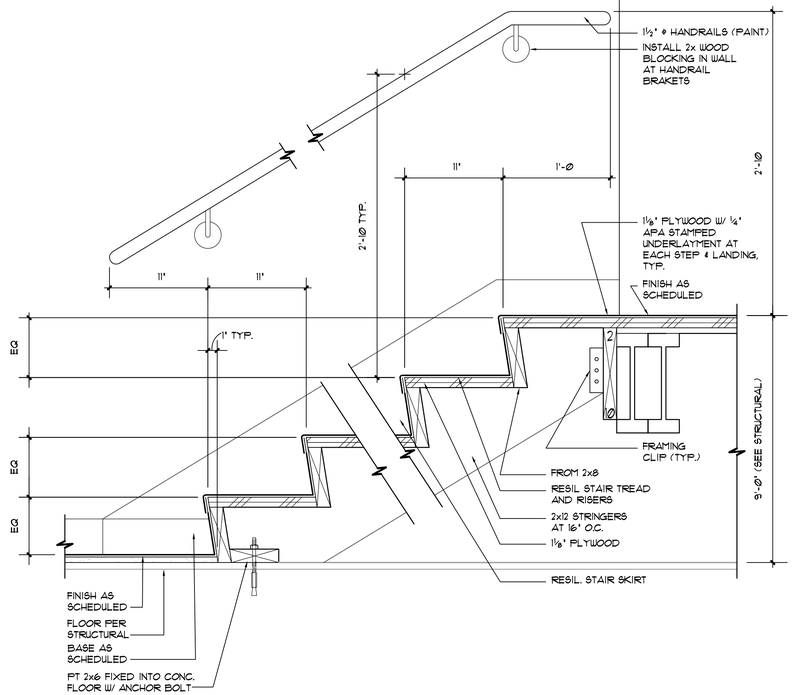
12 HOLLOW METAL FRAME JAMB/HEAD
SCALE: 3" = 1'-0"



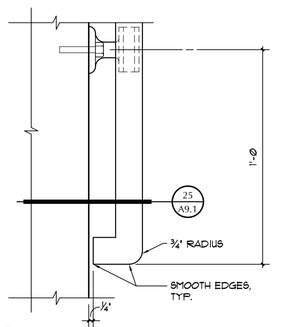
13 ACCESS PANEL
SCALE: 3" = 1'-0"



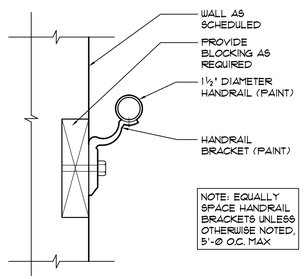
14 FLOOR DRAIN @ RESINOUS FLOORING
SCALE: 3" = 1'-0"



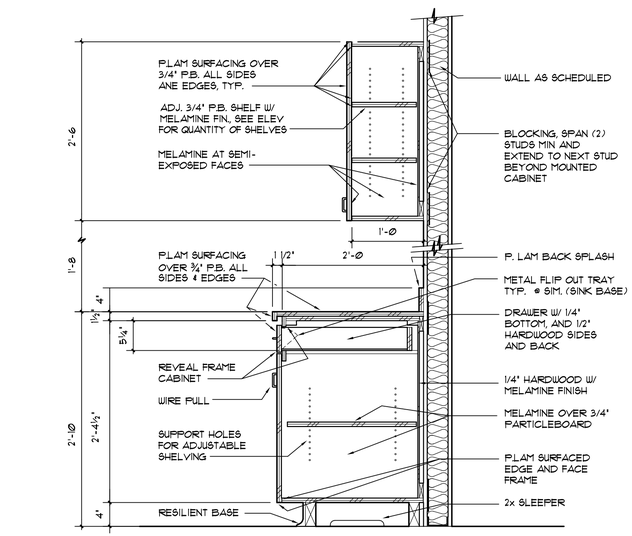
22 STAIR SECTION
SCALE: 1 1/2" = 1'-0"



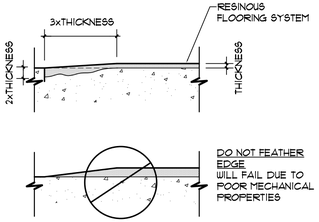
18 HANDRAIL RETURN
SCALE: 3" = 1'-0"



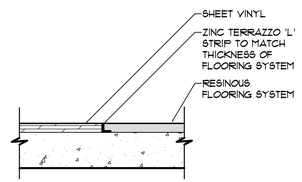
25 HANDRAIL
SCALE: 3" = 1'-0"



26 BASE/UPPER CABINET SECTION
SCALE: 1" = 1'-0"



21 TRANSITION TO CONCRETE
SCALE: 3" = 1'-0"



28 FLOORING TRANSITION
SCALE: 3" = 1'-0"

Drwn: | Chkd: |

REGISTERED ARCHITECT
7083
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Job: 2344 Date: 1/6/2025
.DWG ID – 2344 a801–

A9.1

STRUCTURAL NOTES

GENERAL:

1. Dimensions: The structural drawings shall be considered as a part of the complete set of Contract drawings, including the drawings of all disciplines. It is intended that the Structural drawings will provide sufficient dimensions to locate the primary structural elements and members. Location of secondary members which are affected by systems detailed by others may require reference to the drawings of other disciplines and layout and coordination by the contractor. If direct conflict between dimensions of two or more disciplines is encountered, such conflicts shall be resolved by the Architect. Do not use scaled dimensions. Use written dimensions or where dimensions are not provided, consult the architect for clarifications before proceeding with the work in question.

2. Omissions or conflicts between various elements of the drawings, specifications, notes, and details shall be brought to the attention of the structural engineer and resolved before proceeding with the work. The contractor must submit in writing any requests for modifications to the plans and specifications. Shop drawings submitted to the structural engineer for review do not constitute "in writing" unless it is clearly noted that specific changes are being requested.

3. Deferred Submittals: Where Structural components are fully or partially designed and detailed by the supplier or fabricator, complete shop drawings and calculations, signed and sealed by a professional engineer registered in the state where the project is located, shall be submitted to the structural engineer for review. In addition, a copy of these documents shall be submitted to the Building Official for approval in accordance with IBC Section 107.3.4.1.

4. The Contract drawings and specifications represent the finished structure. They do not indicate the method of construction. The contractor shall provide all measures necessary to protect the structure during construction. Such measures shall include but not be limited to bracing and shoring for loads due to construction equipment and materials.

DESIGN CRITERIA:
1. Used 2021 International Building Code.
2. ASD Design Loads:
   2.1. Roof: D.L. = 15#/SF., L.L. = 44#/SF. Snow.
3. Wind load = 85 MPH (nominal), 110 MPH (ultimate), exposure C, Iw = 1.0.
4. Seismic: Equivalent Static Force Design Procedure.
   Seismic Design Category D, Site Class D.
   Ss = 0.544 SDS = 0.495
   S1 = 0.215 SD1 = 0.280
   R = 2.5 - Light framed walls w/shear panels all other materials.
   Ie = 1.0.

**Per ICC Commentary:

"Wind speeds are designated as "ultimate design" or "nominal design" wind speeds and are used for either strength design or allowable stress designs respectively. The ultimate design wind speeds are indicated in Figures 1609A, B & C, and vary based on the building's risk category and location. The ultimate design for wind speeds for a Risk Category II building vary from 110 mph on the West Coast to 180 mph in hurricane-prone areas in southern Florida. These wind speeds would convert to a nominal design wind speed, or what was previously called the "basic wind speed" 85 mph for the West Coast and 139 mph for southern Florida when using allowable stress design."

QUALITY ASSURANCE:

FOUNDATIONS:
1. Maximum foundation soil bearing pressure used = 1500#/SF.

MATERIALS:

CONCRETE:
1. Mix design shall be established in accordance to Chapter 5 of ACI 318.
2. Concrete shall be a design mix producing strengths at 28 days as listed below:
   2.1. Footings: 2500 psi (4-1/2 sack mix)
   2.2. Slab on grade: 3500 psi (5-1/2 sack mix)
   (designed as 2500 psi, special inspection not required)
3. Maximum slump of concrete shall be 4" prior to the addition of admixtures.
4. Maximum aggregate size shall be the least dimension of:
   4.1. 1/5 the narrowest dimension between sides of forms.
   4.2. 3/4 the clear spacing between reinforcing bars
   4.3. 1/3 the depth of the slab.
5. Pre-Engineered Perma-Column 28 day strength f'c = 10,000 PSI.

STRUCTURAL AND MISCELLANEOUS STEEL:
1. All steel work shall conform with AISC specifications.
2. Bolts ASTM A307 for connections to concrete. Bolts ASTM A325 for steel to steel connections. Bolts to be snug tight except bolts indicated as S.C. to be fully tightened.
3. Roof Steel Panels: Shall be painted 24 Ga (MS-150), standing seam steel and shall be attached to framing per manufacturer recommendations.
4. Wall Steel Panels: Shall be painted 24 Ga (HR-34), ribbed steel and shall be attached to framing with 1 ½" x #9 screws with neoprene washers at 9" o.c.

LUMBER:
1. Sawn lumber for studs, joists, etc.(2x6 or larger) = No.2 Doug Fir larch or SPF 1250 psi. or better.
2. 2x4's = Standard Doug Fir larch.
3. Posts (Interior) = Triad Building Components MSR SPF.
   3.1. 2x8 Post Lam Uppers = 1,950Fb-1.7E
   3.2. 2x6 Post Lam Uppers = 1,650Fb-1.5E
   3.3. #1 Treated So. Pine Lam when embedment is in contact with ground. (Excludes Perma Columns)
4. Roof Sheathing = 7/16", minimum.
   4.1. Nailing = 8d(.131 Ø shank x 2 ½" long) or 1 ½" x 16Ga. staples at 6" o.c. all supported edges, 12" o.c. in field.
5. All nails are to be common nails unless noted otherwise.
6. For connections of "SIMPSON" hardware or equivalent follow manufacturers recommendations.
7. Trus-Joist products:
   7.1. Roof joists shown as TJI etc. shall be designed for the loads specified and shall conform to Trus-Joist specification.
   7.2. Joists exceeding 24' in length shall be cambered to a standard radius of R = 2250.
   7.3. Any alternate joist system(s) shall be the same depth and load Carrying capacity as the Trus-Joist system show on the drawings.
   7.4. Micro Lam (LVL) E-1,900,000 psi.
8. Structural Glued Laminated Timber (GLB) = 24f-V4 (DF/DF) with standard camber.
9. Premanufactured Trusses
   9.1. Truss Loading:
   Top Chord D.L. = 8 PSF.
   Bottom Chord D.L. = 7 PSF.
   Top Chord L.L. = 44 PSF.
   Bottom Chord L.L. = 2 PSF. Does not act concurrently with top chord L.L.
   9.2. Member Properties:
   Chords shall be #2 Douglas Fir or better.
   Webs shall have minimum Modulus of Elasticity of 1,500,000 psi.
   9.3. All truss blocking shall be provided by the truss manufacturer and constructed with approved plates.
   9.4. Truss Manufacturer shall verify all truss dimensions, accounting for tolerances, connections, and splice requirements.
   9.5. Truss profiles shown are representations of possible configurations of Web locations and member sizes. Truss manufacturer shall submit shop drawings for approval. All trusses shall be designed by a registered professional engineer and all shop drawings shall be stamped and signed by a registered professional engineer.
   9.6. Truss manufacturer shall provide proof of approved third party I inspection as required by IBC chapter 2303.4.
   9.7. Truss manufacturer shall design all truss to truss connections and shall indicate said connections on the shop drawings.
   9.8. Each truss shall be marked with the following information:
   9.8.1. Manufacturers identity.
   9.8.2. Design Load.
   9.8.3. Truss spacing.
10. All lumber in contact with concrete, masonry, or ground shall be preservative treated wood in accordance with AWPA standards. Posts embedded in the ground shall comply with UC4B .60 treatment or greater.

STEEL STRUCTURES AMERICA INC.

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01/06/2025

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SHEET LIST

S0-B1 = GENERAL NOTES
S1-B1 = FOUNDATION PLAN
S2-B1 = ROOF FRAMING PLAN
S3-B1 = SECTION AND DETAILS

ROOF SNOW LOAD FACTORS
Pf = 0.7(Ce)(Ct)(I)Pg

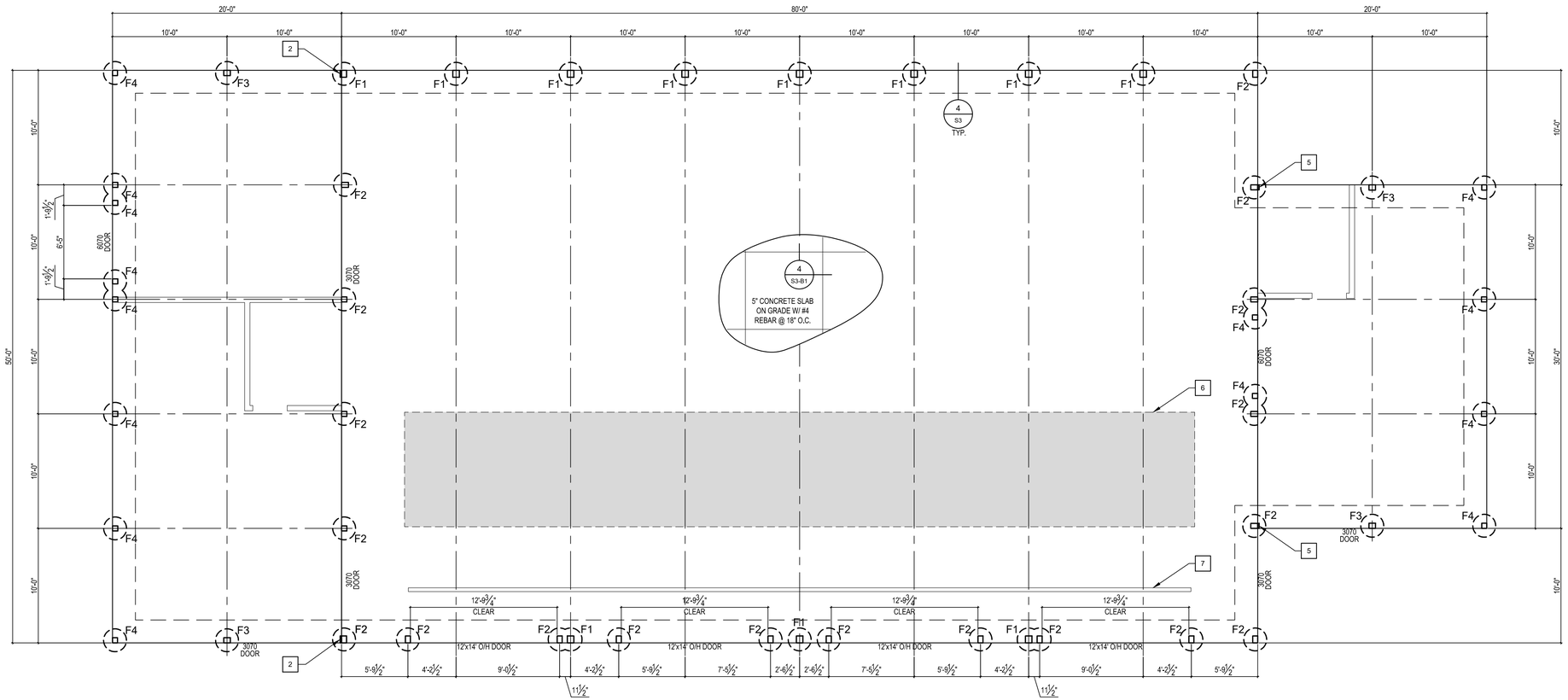
Elevation	= 692 ft.
Ground snow	= 57 psf. min.
Importance	= 1.0
Thermal (Ct)	= 1.1
Exposure (Ce)	= 1.0
Slope (Cs)	= 1.0
Roof Snow (Pf)	= 44.0
Sloped Roof Snow (Ps)	= 44.0

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S0-B1



FOUNDATION PLAN

SCALE: 3/16" = 1'-0"

FOUNDATION NOTES:

1. OSB SHIMS & TYP. NAILING ON FACES OF PERMA COLUMN LAM. TO FLUSH OUT WHERE NEEDED.
2. PROVIDE FULL HEIGHT 2x8 ON OUTSIDE FACE OF GABLE END EAVE POSTS, TO SUPPORT LOW TRUSS. ATTACH w/(2) 16d @ 12" O.C. TYP.
3. INSTALL R-10 FROST BARRIER UNDER SLAB, SEE DETAIL 5/S3-B1.
4. CONFIRM MAN DOOR LOCATIONS w/OWNER OR ARCHITECT.
5. PROVIDE FULL HEIGHT 2x6 ON OUTSIDE FACE OF GABLE END EAVE POSTS, TO SUPPORT LOW TRUSS. ATTACH w/(2) 16d @ 12" O.C. TYP.
6. EXTENT OF 7" DEEP THICKENED SLAB FOR FUTURE "2-POST LIFT" BY OWNER. SEE DETAIL 18/S3-B1.
7. TRENCH DRAIN PER ARCHITECT.

FOOTING SCHEDULE

MARK	"D"	DEPTH	POST - LOWER	POST - UPPER	DETAIL	BELL - WIDTH	BELL - DEPTH
F1	2'-0"Ø	4'-0"	Perma-Column 8400	(4) 2x8 SPF	6/S3-B1	3'-0"Ø	10"
F2	2'-0"Ø	4'-0"	Perma-Column 8300	(3) 2x8 SPF	6/S3-B1	-----	-----
F3	2'-0"Ø	4'-0"	Perma-Column 6400	(4) 2x6 SPF	6/S3-B1	3'-0"Ø	10"
F4	2'-0"Ø	4'-0"	Perma-Column 6300	(3) 2x6 SPF	6/S3-B1	-----	-----

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01/06/2025

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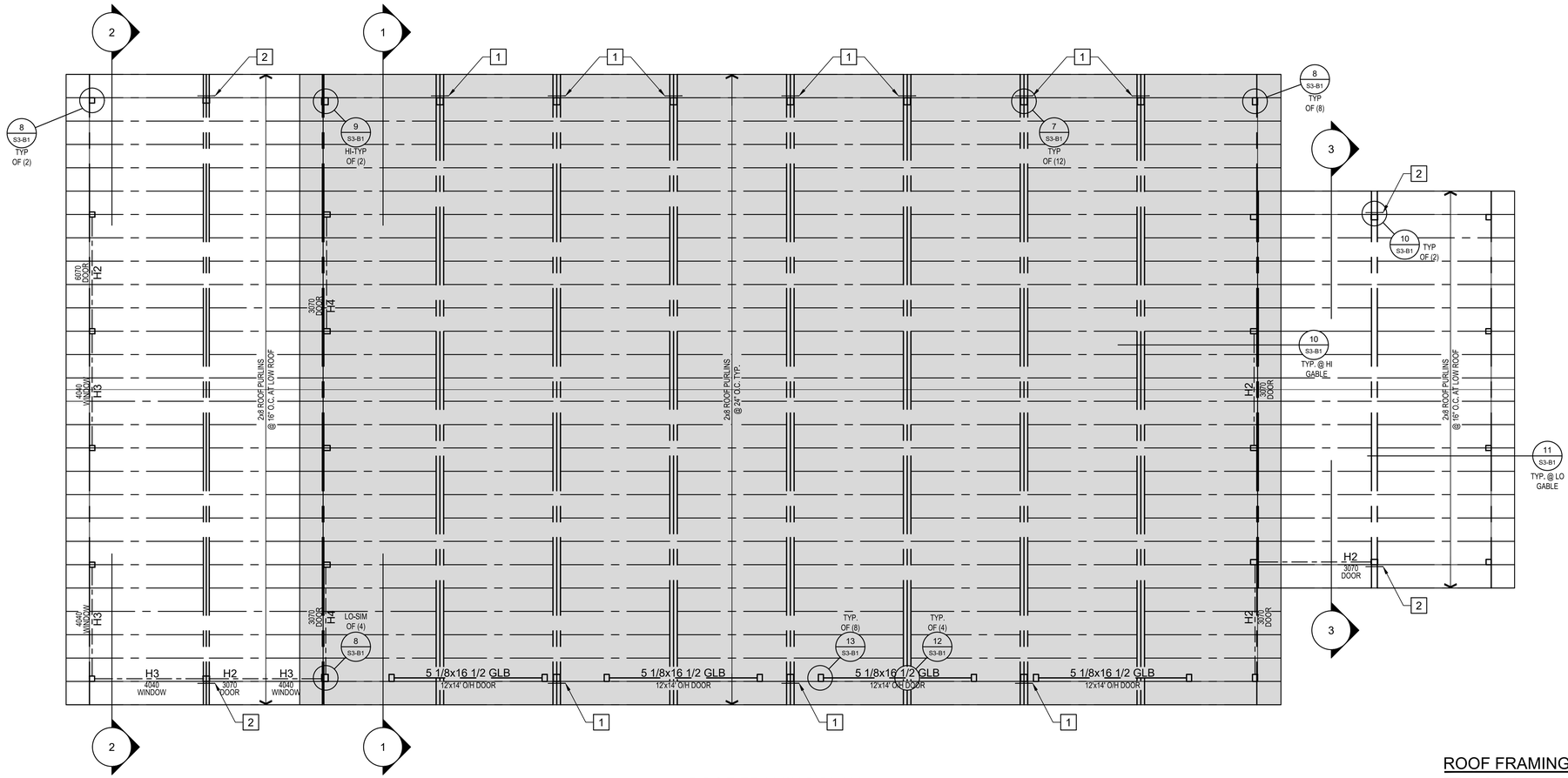
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Job: 2344 Date: 1/6/2025
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S1-B1



ROOF FRAMING PLAN

SCALE: 3/16" = 1'-0"

ROOF FRAMING NOTES:

1. (2) LSTA18 STRAP- PLACE AT INSIDE OF FASCIA BOARD IF NO OVERHANGS. PLACE AT INSIDE FACE OF TOP WALL GIRT IF OVERHANGS
2. (1) LSTA18 STRAP- PLACE AT INSIDE OF FASCIA BOARD IF NO OVERHANGS. PLACE AT INSIDE FACE OF TOP WALL GIRT IF OVERHANGS
3. CONFIRM WINDOW & MAN DOOR LOCATIONS w/OWNER OR ARCHITECT.
4. 7/16" MIN. ROOF SHEATHING ON ALL ROOF SURFACES. TYP. ATTACH PER LUMBER NOTE 4/S0-B1

HEADER SCHEDULE		
MARK	MEMBER	SUPPORT
H1	V = (1) 2x10 DF#2 H = (1) 2x8 DF#2	(1) 2x8 TRIMMER
H2	V = (1) 2x6 DF#2 H = (1) 2x6 DF#2	-----
H3	V = (1) 2x6 DF#2	-----
H4	H = (1) 2x8 DF#2	-----
NOTE: REFER TO DETAILS 14,15,16 & 17/S3-B1 FOR HEADER FRAMING CONDITIONS.		

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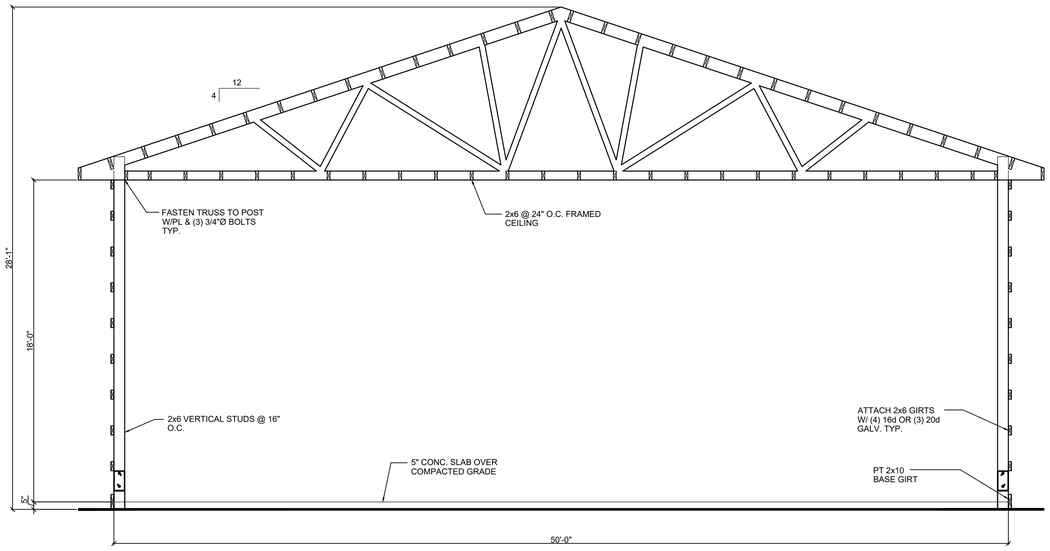
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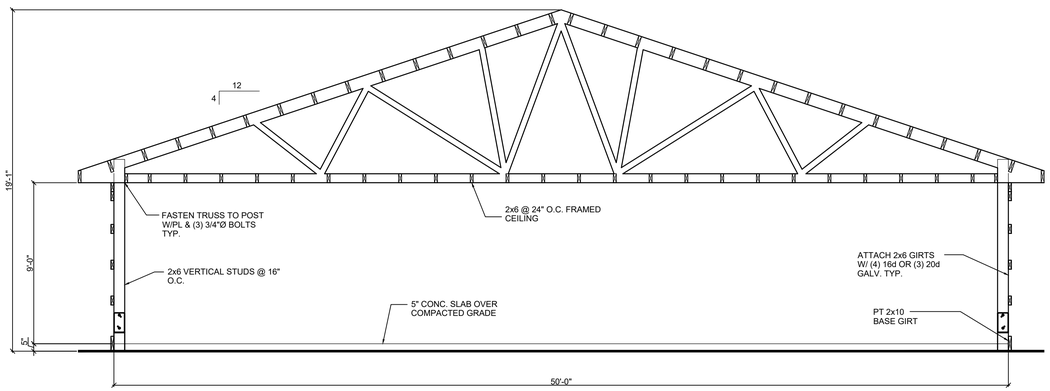
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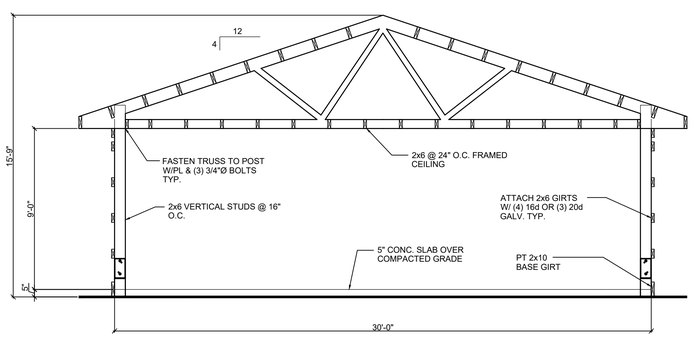
S2-B1



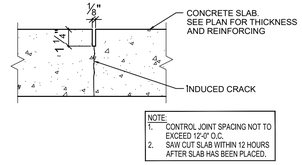
1 SECTION 1-1
SCALE: 1/4"=1'-0"



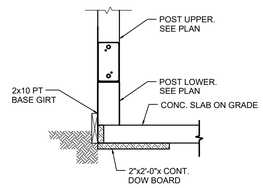
2 SECTION 2-2
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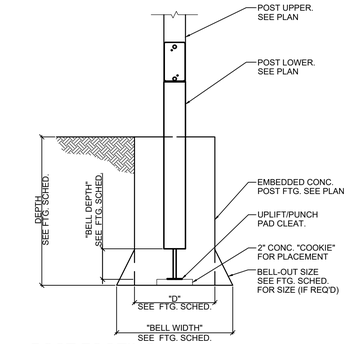
3 SECTION 3-3
SCALE: 1/4"=1'-0"



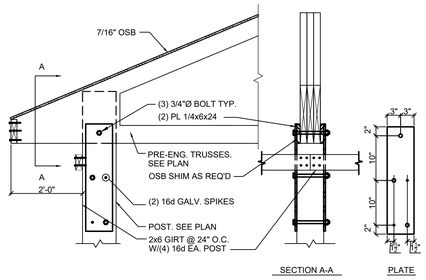
4 CONTROL JOINT DETAIL
SCALE: 1 ½"=1'-0"



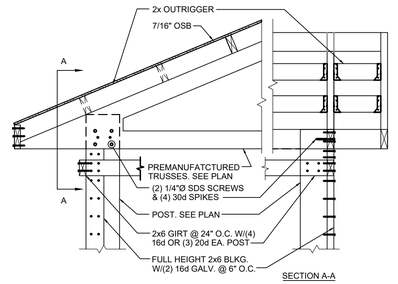
5 EXTERIOR FROST WALL
SCALE: 1/2"=1'-0"



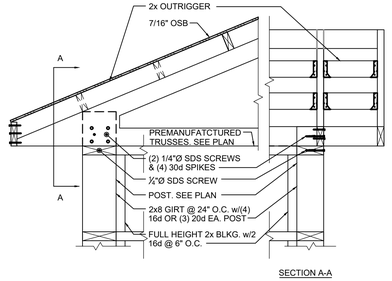
6 POST FOOTING
SCALE: 1/2"=1'-0"



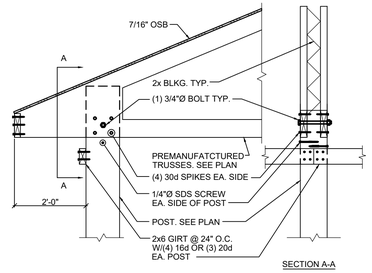
7 3-PLY TRUSS BEARING DETAIL
SCALE: 1/2"=1'-0"



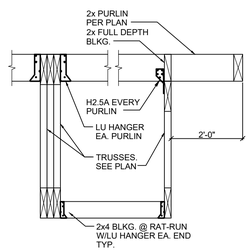
8 GABLE END TRUSS BEARING DETAIL
SCALE: 1/2"=1'-0"



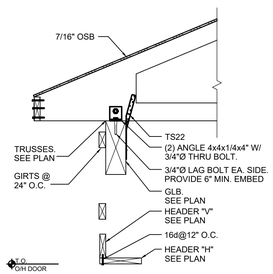
9 GABLE END TRUSS BEARING DETAIL
SCALE: 1/2"=1'-0"



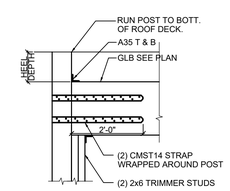
10 MAIN FRAME TRUSS BEARING DETAIL
SCALE: 1/2"=1'-0"



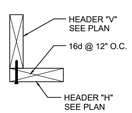
11 GABLE TRUSS FRAMING DETAIL
SCALE: 1/2"=1'-0"



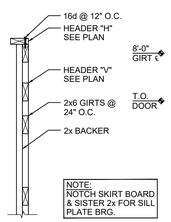
12 TRUSS TO GLB DETAIL
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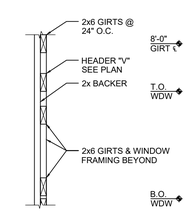
13 JAMB DETAIL
SCALE: 1/2"=1'-0"



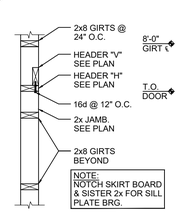
14 HEADER DETAIL
SCALE: 1"=1'-0"



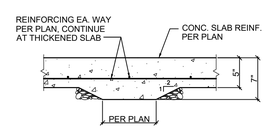
15 MAN DOOR HEADER DETAIL
SCALE: 1/2"=1'-0"



16 WINDOW HEADER
SCALE: 1/2"=1'-0"



17 MAN DOOR HEADER DETAIL
SCALE: ½"=1'-0"



18 THICKENED SLAB DETAIL
SCALE: 1"=1'-0"

STEEL STRUCTURES AMERICA INC.

JASON O. CLARK
STATE OF WASHINGTON
47402
REGISTERED PROFESSIONAL ENGINEER
01/06/2025
Drwn: Chkd:

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CHELAN COUNTY
OLDS STATION CAMPUS
425 OHME GARDEN ROAD WENATCHEE, WASHINGTON 98801

The DOH Associates, PS
ARCHITECTS and PLANNERS
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BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
DWG ID –

S3-B1

STRUCTURAL NOTES

GENERAL:

1. Dimensions: The structural drawings shall be considered as a part of the complete set of Contract drawings, including the drawings of all disciplines. It is intended that the Structural drawings will provide sufficient dimensions to locate the primary structural elements and members. Location of secondary members which are affected by systems detailed by others may require reference to the drawings of other disciplines and layout and coordination by the contractor. If direct conflict between dimensions of two or more disciplines is encountered, such conflicts shall be resolved by the Architect. Do not use scaled dimensions. Use written dimensions or where dimensions are not provided, consult the architect for clarifications before proceeding with the work in question.

2. Omissions or conflicts between various elements of the drawings, specifications, notes, and details shall be brought to the attention of the structural engineer and resolved before proceeding with the work. The contractor must submit in writing any requests for modifications to the plans and specifications. Shop drawings submitted to the structural engineer for review do not constitute "in writing" unless it is clearly noted that specific changes are being requested.

3. Deferred Submittals: Where Structural components are fully or partially designed and detailed by the supplier or fabricator, complete shop drawings and calculations, signed and sealed by a professional engineer registered in the state where the project is located, shall be submitted to the structural engineer for review. In addition, a copy of these documents shall be submitted to the Building Official for approval in accordance with IBC Section 107.3.4.1.

4. The Contract drawings and specifications represent the finished structure. They do not indicate the method of construction. The contractor shall provide all measures necessary to protect the structure during construction. Such measures shall include but not be limited to bracing and shoring for loads due to construction equipment and materials.

DESIGN CRITERIA:
1. Used 2021 International Building Code.
2. ASD Design Loads:
   2.1. Roof: D.L. = 15#/SF., L.L. = 44#/SF. Snow.
3. Wind load = 85 MPH (nominal), 110 MPH (ultimate), exposure C, Iw = 1.0.
4. Seismic: Equivalent Static Force Design Procedure.
   Seismic Design Category D, Site Class D.
   Ss = 0.544 SDS = 0.495
   S1 = 0.215 SD1 = 0.280
   R = 2.5 - Light framed walls w/shear panels all other materials.
   Ie = 1.0.

**Per ICC Commentary:

"Wind speeds are designated as "ultimate design" or "nominal design" wind speeds and are used for either strength design or allowable stress designs respectively. The ultimate design wind speeds are indicated in Figures 1609A, B & C, and vary based on the building's risk category and location. The ultimate design for wind speeds for a Risk Category II building vary from 110 mph on the West Coast to 180 mph in hurricane-prone areas in southern Florida. These wind speeds would convert to a nominal design wind speed, or what was previously called the "basic wind speed" 85 mph for the West Coast and 139 mph for southern Florida when using allowable stress design."

QUALITY ASSURANCE:

FOUNDATIONS:
1. Maximum foundation soil bearing pressure used = 1500#/SF.

MATERIALS:

CONCRETE:
1. Mix design shall be established in accordance to Chapter 5 of ACI 318.
2. Concrete shall be a design mix producing strengths at 28 days as listed below:
   2.1. Footings: 2500 psi (4-1/2 sack mix)
   2.2. Slab on grade: 3500 psi (5-1/2 sack mix)
   (designed as 2500 psi, special inspection not required)
3. Maximum slump of concrete shall be 4" prior to the addition of admixtures.
4. Maximum aggregate size shall be the least dimension of:
   4.1. 1/5 the narrowest dimension between sides of forms.
   4.2. 3/4 the clear spacing between reinforcing bars
   4.3. 1/3 the depth of the slab.
5. Pre-Engineered Perma-Column 28 day strength f'c = 10,000 PSI.

STRUCTURAL AND MISCELLANEOUS STEEL:
1. All steel work shall conform with AISC specifications.
2. Bolts ASTM A307 for connections to concrete. Bolts ASTM A325 for steel to steel connections. Bolts to be snug tight except bolts indicated as S.C. to be fully tightened.
3. Roof Steel Panels: Shall be painted 24 Ga (MS-150), standing seam steel and shall be attached to framing per manufacturer recommendations.
4. Wall Steel Panels: Shall be painted 24 Ga (HR-34), ribbed steel and shall be attached to framing with 1 ½" x #9 screws with neoprene washers at 9" o.c.

LUMBER:
1. Sawn lumber for studs, joists, etc.(2x6 or larger) = No.2 Doug Fir larch or SPF 1250 psi. or better.
2. 2x4's = Standard Doug Fir larch.
3. Posts (Interior) = Triad Building Components MSR SPF.
   3.1. 2x8 Post Lam Uppers = 1,950Fb-1.7E
   3.2. 2x6 Post Lam Uppers = 1,650Fb-1.5E
   3.3. #1 Treated So. Pine Lam when embedment is in contact with ground. (Excludes Perma Columns)
4. Roof Sheathing = 7/16", minimum.
   4.1. Nailing = 8d(.131 Ø shank x 2 ½" long) or 1 ½" x 16Ga. staples at 6" o.c. all supported edges, 12" o.c. in field.
5. Loft Sheathing = ¾", minimum.
   5.1. Nailing = 10d(.148 Ø shank x 3" long) at 6" o.c. all supported edges, 12" o.c. in field.
6. All nails are to be common nails unless noted otherwise.
7. For connections of "SIMPSON" hardware or equivalent follow manufacturers recommendations.
8. Trus-Joist products:
   8.1. Roof joists shown as TJI etc. shall be designed for the loads specified and shall conform to Trus-Joist specification.
   8.2. Joists exceeding 24' in length shall be cambered to a standard radius of R = 2250.
   8.3. Any alternate joist system(s) shall be the same depth and load Carrying capacity as the Trus-Joist system show on the drawings.
   8.4. Micro Lam (LVL) E-1,900,000 psi.
9. Structural Glued Laminated Timber (GLB) = 24f-V4 (DF/DF) with standard camber.
10. Premanufactured Trusses
    10.1. Truss Loading:
    Top Chord D.L. = 8 PSF.
    Bottom Chord D.L. = 7 PSF.
    Top Chord L.L. = 44 PSF.
    Bottom Chord L.L. = 2 PSF. Does not act concurrently with top chord L.L.
    10.2. Member Properties:
    Chords shall be #2 Douglas Fir or better.
    Webs shall have minimum Modulus of Elasticity of 1,500,000 psi.
    10.3. All truss blocking shall be provided by the truss manufacturer and constructed with approved plates.
    10.4. Truss Manufacturer shall verify all truss dimensions, accounting for tolerances, connections, and splice requirements.
    10.5. Truss profiles shown are representations of possible configurations of Web locations and member sizes. Truss manufacturer shall submit shop drawings for approval. All trusses shall be designed by a registered professional engineer and all shop drawings shall be stamped and signed by a registered professional engineer.
    10.6. Truss manufacturer shall provide proof of approved third party I inspection as required by IBC chapter 2303.4.
    10.7. Truss manufacturer shall design all truss to truss connections and shall indicate said connections on the shop drawings.
    10.8. Each truss shall be marked with the following information:
    10.8.1. Manufacturers identity.
    10.8.2. Design Load.
    10.8.3. Truss spacing.
11. All lumber in contact with concrete, masonry, or ground shall be preservative treated wood in accordance with AWPA standards. Posts embedded in the ground shall comply with UC4B .60 treatment or greater.

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SHEET LIST

S0-B2 = GENERAL NOTES
S1-B2 = FOUNDATION PLAN
S2-B2 = ROOF FRAMING PLAN
S3-B2 = SECTION AND DETAILS

ROOF SNOW LOAD FACTORS
Pf = 0.7(Ce)(Ct)(I)Pg

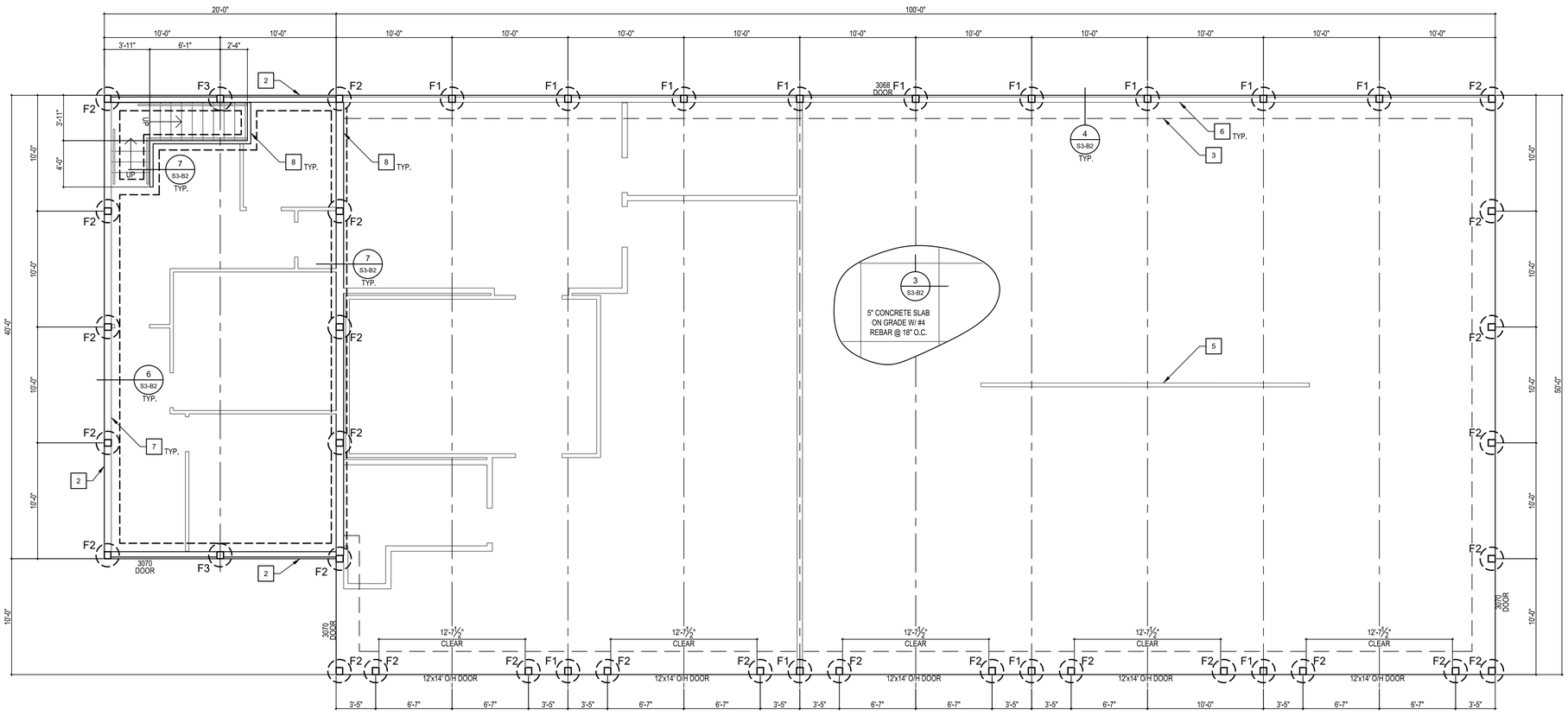
Elevation	= 692 ft.
Ground snow	= 57 psf. min.
Importance	= 1.0
Thermal (Ct)	= 1.1
Exposure (Ce)	= 1.0
Slope (Cs)	= 1.0
Roof Snow (Pf)	= 44.0
Sloped Roof Snow (Ps)	= 44.0

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S0-B2



FOUNDATION PLAN

SCALE: 3/16" = 1'-0"

FOUNDATION NOTES:

1. OSB SHIMS & TYP. NAILING ON FACES OF PERMA COLUMN LAM. TO FLUSH OUT WHERE NEEDED.
2. INSTALL R-10 VERTICAL FROST BARRIER AT FACE OF THICKENED FOOTING, SEE DETAIL 6/S3-B2.
3. INSTALL R-10 FROST BARRIER UNDER SLAB, SEE DETAIL 4/S3-B2.
4. CONFIRM MAN DOOR LOCATIONS w/OWNER OR ARCHITECT.
5. TRENCH DRAIN PER ARCHITECT.
6. INFILL NON-BEARING WALL: 2x6 STUDS FRAMED @ 16" O.C. w/PT 2x SILL PLATE w/MIN. ⅝"Ø x4" EXPANSION ANCHORS AND STD. WASHERS @ 5' O.C. & 12" FROM ENDS.
7. INFILL BEARING WALL W/ THICKENED EDGE FOOTING: 2x6 STUDS FRAMED @ 16" O.C. w/PT 2x SILL PLATE w/MIN. ⅝"Ø x4" EXPANSION ANCHORS AND STD. WASHERS @ 5' O.C. & 12" FROM ENDS. SEE DETAIL 6/S3-B2
8. INFILL BEARING WALL W/ THICKENED FOOTING: 2x6 STUDS FRAMED @ 16" O.C. w/PT 2x SILL PLATE w/MIN. ⅝"Ø x4" EXPANSION ANCHORS AND STD. WASHERS @ 5' O.C. & 12" FROM ENDS. SEE DETAIL 7/S3-B2

FOOTING SCHEDULE

MARK	"D"	DEPTH	POST - LOWER	POST - UPPER	DETAIL	BELL - WIDTH	BELL - DEPTH
F1	2'-0"Ø	4'-0"	Perma-Column 8400	(4) 2x8 SPF	5/S3-B2	3'-0"Ø	10"
F2	2'-0"Ø	4'-0"	Perma-Column 8300	(3) 2x8 SPF	5/S3-B2	-----	-----
F3	2'-0"Ø	4'-0"	Perma-Column 6400	(4) 2x6 SPF	5/S3-B2	3'-0"Ø	10"
F4	2'-0"Ø	4'-0"	Perma-Column 6300	(3) 2x6 SPF	5/S3-B2	-----	-----

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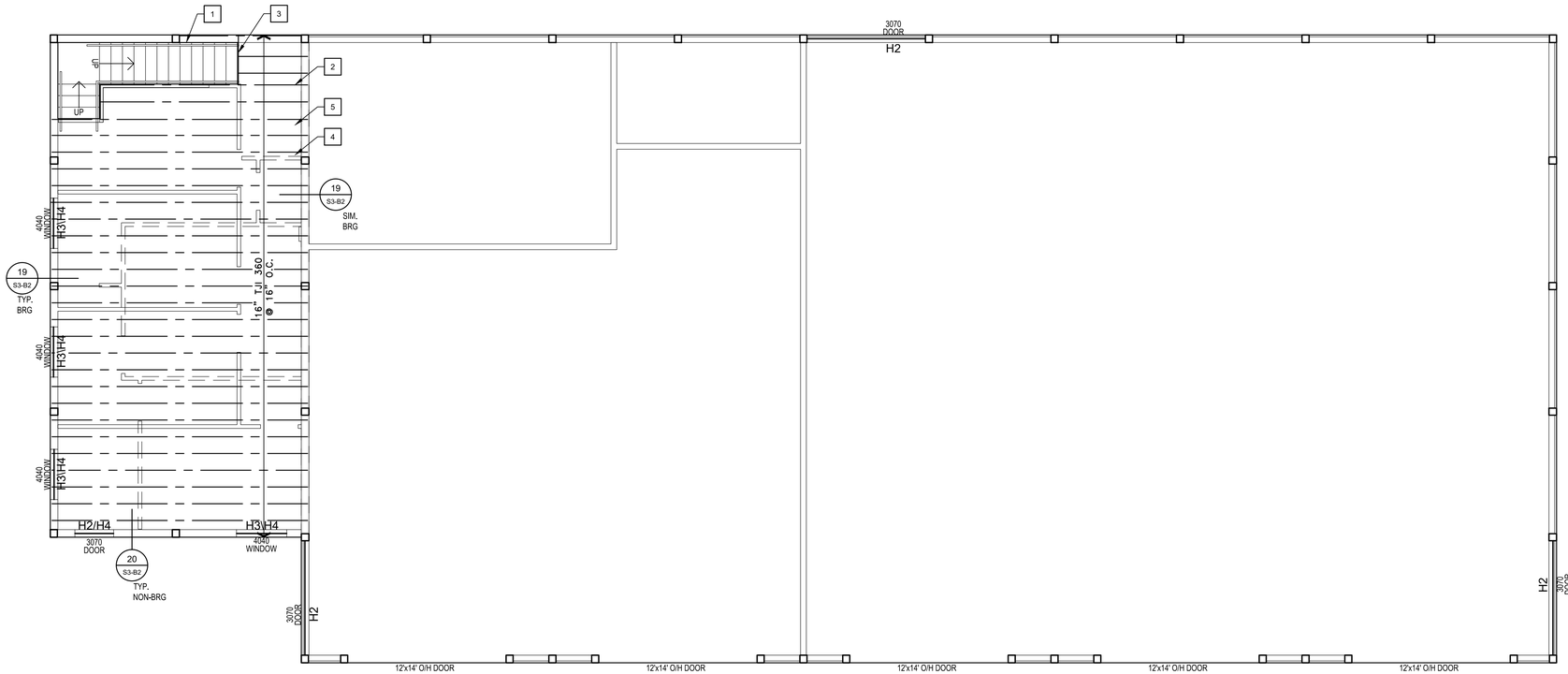
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S1-B2



LOFT FRAMING PLAN

SCALE: 3/16" = 1'-0"

FOUNDATION NOTES:

1. STAIR STRINGERS SHALL BE 1 ¾"x14" LVL
2. USE 1 ¾"x16" LVL RIM JOIST
3. USE 1 ¾"x16" LVL HEADER FOR STAIR ATTACHMENT w/ IUS1.81/16 FACE MOUNT HANGERS AT SUPPORTING MEMBER.
4. NON-BEARING WALLS PER ARCHITECT. DASHED WALLS ARE WALLS BELOW.
5. ¾" LOFT SHEATHING. ATTACH PER LUMBER NOTE 5/S0-B2

HEADER SCHEDULE		
MARK	MEMBER	SUPPORT
H1	(1) 2x10 DF#2 V; (1) 2x8 DF#2 H	(1) 2x8 TRIMMER
H2	(1) 2x6 DF#2 V; (1) 2x8 DF#2 H	-
H3	(1) 2x6 DF#2 V	-
H4	(3) 2x10 DF#2 V	(2) 2x6 TRIMMER (1) 2x6 KING
NOTE: REFER TO DETAILS 15, 16, 17 & 18/S3-B2 FOR HEADER FRAMING CONDITIONS.		

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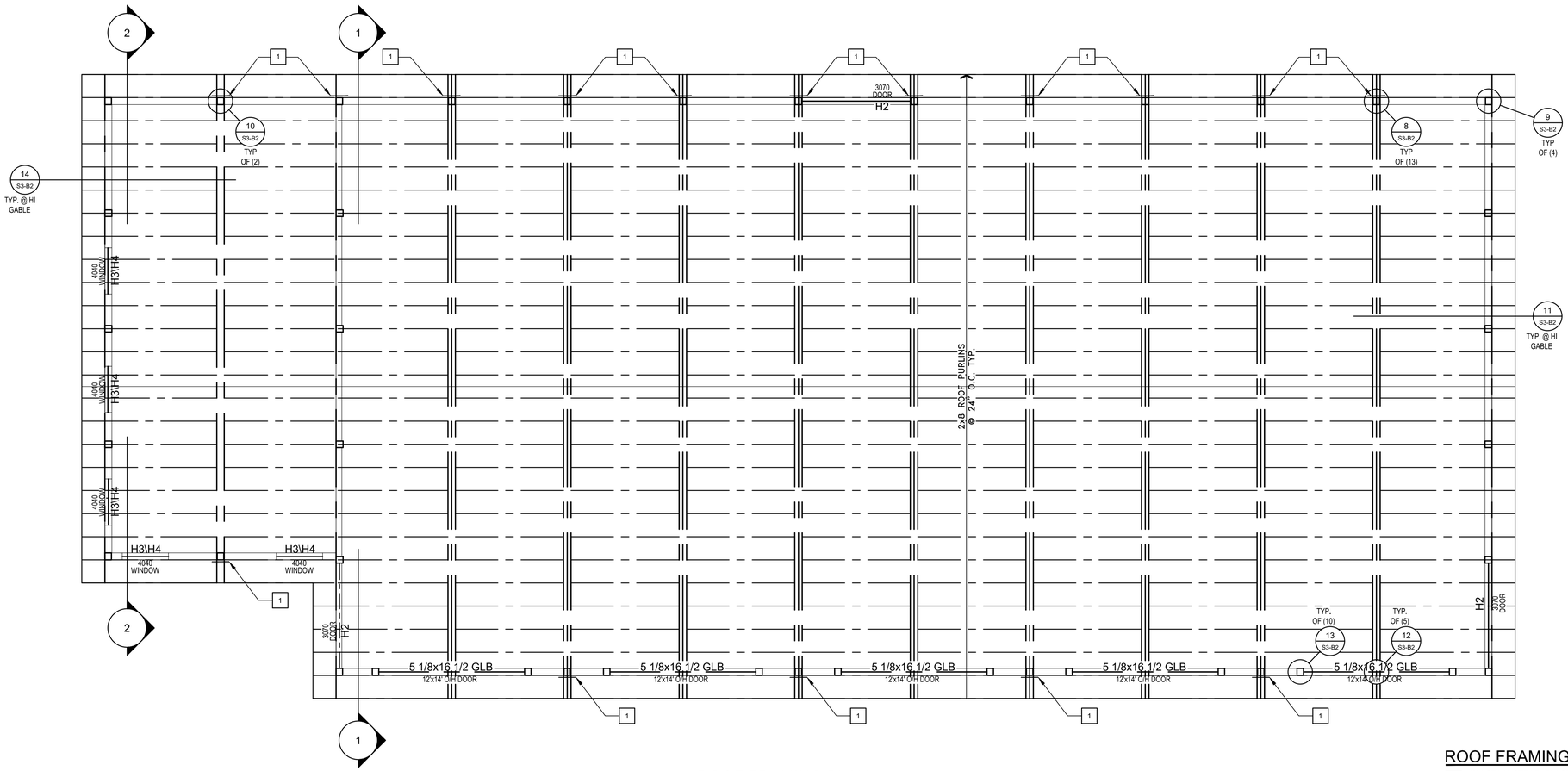
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S2.1-B2



ROOF FRAMING PLAN

SCALE: 3/16" = 1'-0"

ROOF FRAMING NOTES:

1. (2) LSTA18 STRAP- PLACE AT INSIDE OF FASCIA BOARD IF NO OVERHANGS. PLACE AT INSIDE FACE OF TOP WALL GIRT IF OVERHANGS
2. CONFIRM WINDOW & MAN DOOR LOCATIONS w/OWNER OR ARCHITECT.
3. 7/16" MIN. ROOF SHEATHING ON ALL ROOF SURFACES. TYP. ATTACH PER LUMBER NOTE 4/S0-B2

HEADER SCHEDULE		
MARK	MEMBER	SUPPORT
H1	V = (1) 2x10 DF#2 H = (1) 2x8 DF#2	(1) 2x8 TRIMMER
H2	V = (1) 2x6 DF#2 H = (1) 2x6 DF#2	-----
H3	V = (1) 2x6 DF#2	-----
NOTE: REFER TO DETAILS 15, 16, 17 & 18/S3-B2 FOR HEADER FRAMING CONDITIONS.		

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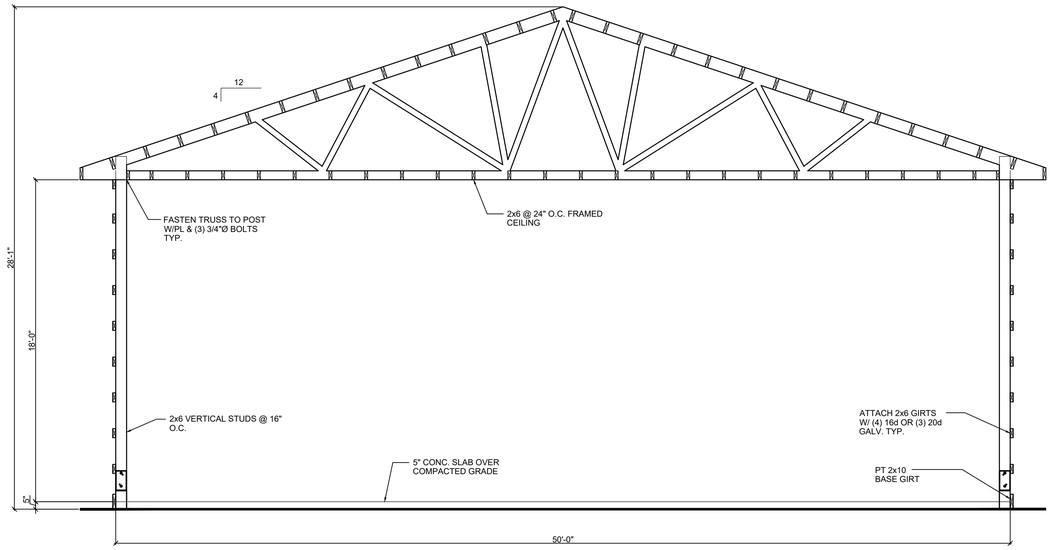
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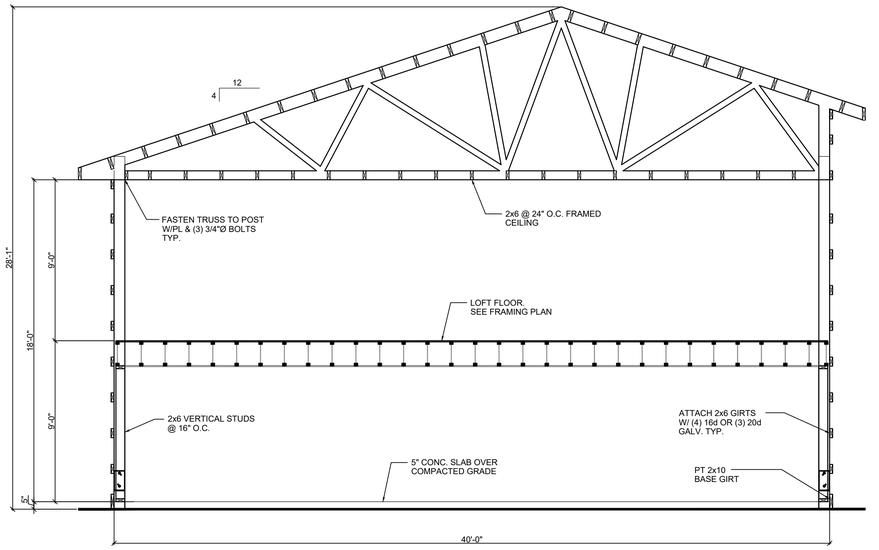
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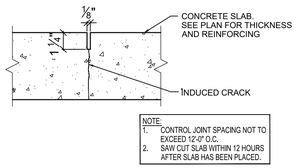
S2.2-B2



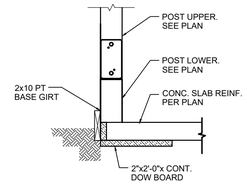
1 SECTION 1-1
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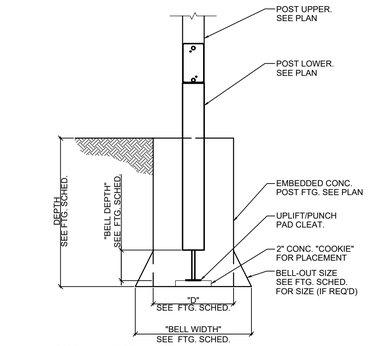
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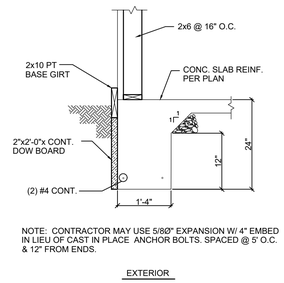
3 CONTROL JOINT DETAIL
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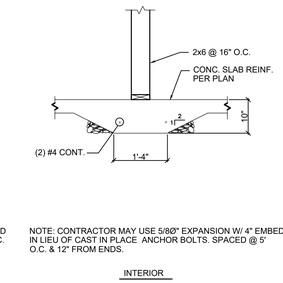
4 EXTERIOR FROST WALL
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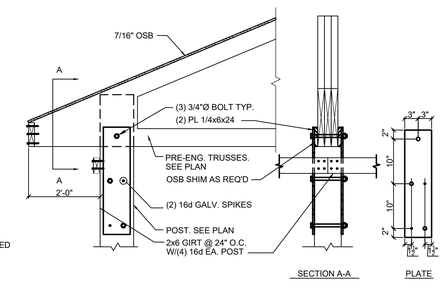
5 POST FOOTING
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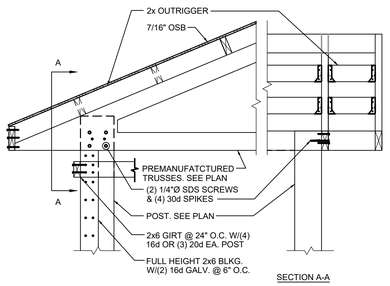
6 THICKENED SLAB DETAIL
SCALE: 1/2"=1'-0"



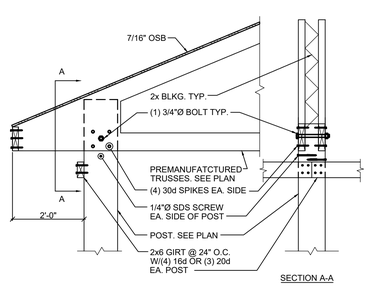
7 THICKENED SLAB DETAIL
SCALE: 1/2"=1'-0"



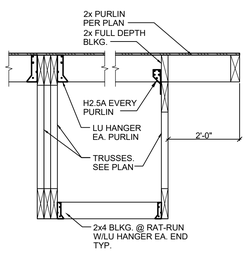
8 3-PLY TRUSS BEARING DETAIL
SCALE: 1/2"=1'-0"



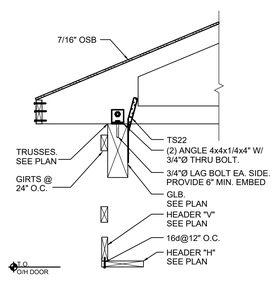
9 GABLE END TRUSS BEARING DETAIL
SCALE: 1/2"=1'-0"



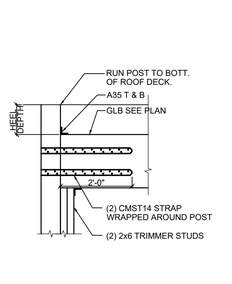
10 MAIN FRAME TRUSS BEARING DETAIL
SCALE: 1/2"=1'-0"



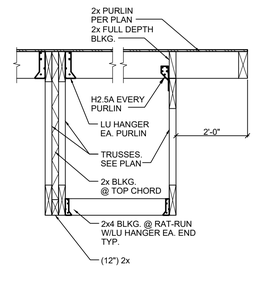
11 GABLE TRUSS FRAMING DETAIL
SCALE: 1/2"=1'-0"



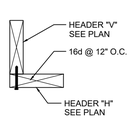
12 TRUSS TO GLB DETAIL
SCALE: 1/2"=1'-0"



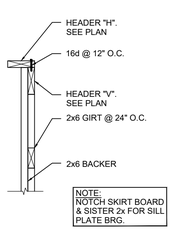
13 JAMB DETAIL
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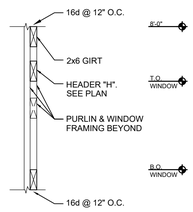
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SCALE: 1/2"=1'-0"



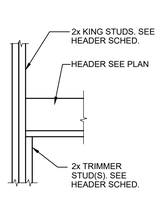
15 HEADER DETAIL
SCALE: 1"=1'-0"



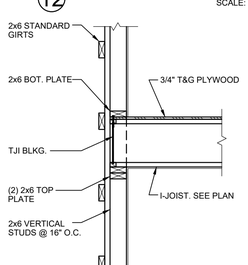
16 MAN DOOR HEADER DETAIL
SCALE: 1/2"=1'-0"



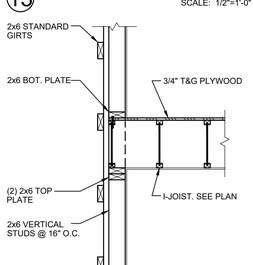
17 WINDOW HEADER
SCALE: 1/2"=1'-0"



18 FLOOR BEARING DETAIL
SCALE: 1/2"=1'-0"



19 FLOOR BEARING DETAIL
SCALE: 1/2"=1'-0"



20 FLOOR BEARING DETAIL
SCALE: 1/2"=1'-0"

STEEL STRUCTURES AMERICA INC.

JASON O. CLARK
STATE OF WASHINGTON
47402
REGISTERED PROFESSIONAL ENGINEER
01/06/2025

Drwn: Chkd:

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CHELAN COUNTY
OLDS STATION CAMPUS

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BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
DWG ID –

S3-B2

STRUCTURAL NOTES:

APPLY THE FOLLOWING MINIMUM SPECIFICATIONS UNLESS NOTED OTHERWISE ON THE CONSTRUCTION DOCUMENTS.

REFERENCE CODE:
INTERNATIONAL BUILDING CODE, 2021 - LATEST EDITION REFERS TO CURRENT LOCALLY ADOPTED EDITION OF THE INTERNATIONAL BUILDING CODE.

DESIGN DATA:

SNOW LOADS:

GROUND SNOW LOAD, P_G	: 57 PSF
SNOW EXPOSURE FACTOR, C_E	: 1.0
SNOW LOAD IMPORTANCE FACTOR, I	: 1.2
THERMAL FACTOR, C_T	: 1.0
DESIGN ROOF SNOW LOAD	: 48 PSF

ROOF LOADS:

ROOF SNOW LOAD	: 48 PSF
ROOF DEAD LOAD	: 20 PSF (INCLUDES 5 PSF SOLAR READINESS)
TOTAL	: 68 PSF
RAIN INTENSITY, I	: 1.0 IN/HR

SOLAR READINESS LOADS:

SOLAR ZONE LOAD	: 5 PSF
SOLAR ZONE AREA	: ALL ROOF
INVERTER ZONE LOAD	: 175 PSF
INVERTER ZONE AREA	: (SEE ARCH.)

MEZZANINE LOADS:

MEZZANINE FLOOR LIVE LOAD	: 125 PSF
MEZZANINE FLOOR DEAD LOAD	: 20 PSF
TOTAL	: 145 PSF

WIND DESIGN DATA:

WIND DESIGN PROCEDURE	: MWFRS DIRECTIONAL PROCEDURE
ULTIMATE DESIGN WIND SPEED	: VULT = 111 MPH (RISK CATEGORY IV BLDG)
EXPOSURE CATEGORY	: C
INTERNAL PRESSURE COEFFICIENT, GCPI	: 0.18
ENCLOSURE CATEGORY	: ENCLOSED

SEISMIC DESIGN DATA:

SEISMIC IMPORTANCE FACTOR, I	: 1.0
RISK CATEGORY	: II
MAPPED SPECTRAL RESPONSE ACCELERATIONS	: S_S= 0.51: S_1= 0.17
SITE CLASS	: D (ASSUMED)
SPECTRAL RESPONSE COEFFICIENTS	: S_{DS}= 0.45 : S_{D1}= 0.28
SEISMIC DESIGN CATEGORY	: D
BASIC SEISMIC FORCE-RESISTING SYSTEM	: LIGHT FRAMED WALLS WITH WOOD PANELS
DESIGN BASE SHEAR	: 32.2 KIPS
SEISMIC RESPONSE COEFFICIENT(S), C_S	: 0.103
RESPONSE MODIFICATION FACTOR(S), R	: 6.5
ANALYSIS PROCEDURE USED	:EQUIVALENT LATERAL FORCE

SOIL PROPERTIES:

ALLOWABLE SOIL BEARING PRESSURE	:1500 PSF
PASSIVE PRESSURE	: 150 PSF/FT
ACTIVE PRESSURE (UNRESTRAINED)	: 40 PSF/FT
ACTIVE PRESSURE (RESTRAINED)	: 60 PSF/FT
SOIL UNIT WEIGHT	: 100 PCF
COEFFICIENT OF FRICTION	: 0.30
SPECIAL LOADS	: NONE

SYSTEMS AND COMPONENTS REQUIRING SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE SEE SHEET S1.1.

DEFERRED SUBMITTALS AND REQUIRED SHOP DRAWINGS:
STRUCTURAL STEEL
REINFORCING STEEL
CONCRETE MIX DESIGN
TRUSSES

STRUCTURAL TESTS AND INSPECTIONS:
STRUCTURAL TESTS AND INSPECTIONS SHALL BE PERFORMED AS REQUIRED BY CHAPTER 17, INTERNATIONAL BUILDING CODE, AS REQUIRED BY THE LOCAL BUILDING OFFICIAL AND AS SPECIFICALLY REQUIRED IN THE CONSTRUCTION DOCUMENTS. SEE SHEET S1.1 FOR ADDITIONAL INFORMATION.

FOUNDATIONS:
MAXIMUM ALLOWABLE SOIL BEARING PRESSURE IS 1500 PSF AS RECOMMENDED BY THE GEOTECHNICAL REPORT DATED SEPTEMBER 21, 2024 PREPARED BY NELSON GEOTECHNICAL ASSOCIATES, INC. REFER TO GEOTECHNICAL REPORT FOR ALL SOIL PREPARATION RECOMMENDATIONS.

EXTERIOR FOOTINGS SHALL BEAR 2'-0" MINIMUM (U.N.O.) BELOW NEAREST EXTERIOR FINISH GRADE ON UNDERLYING MEDIUM DENSE NATIVE SOIL MATERIAL PREPARED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. STRUCTURAL FILL MATERIAL SHALL BE AS SPECIFIED, PLACED, AND COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. SEE FOUNDATION SOIL PREPARATION NOTES THIS SHEET. DO NOT BACKFILL RETAINING WALLS FOR 21 DAYS OR UNTIL CONCRETE REACHES DESIGN STRENGTH PER CYLINDER TESTS.

CONCRETE:
MIXING, PLACING, AND DESIGN OF ALL CONCRETE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "INTERNATIONAL BUILDING CODE," ACI 318, AND ACI 301. CONCRETE SHALL BE MADE WITH PORTLAND CEMENT ASTM C150 TYPE I OR TYPE II, COARSE AND FINE AGGREGATE ASTM C33, WATER CLEAN AND POTABLE, POZZOLITH OR POZZOLITH POLYHEED ADMIXTURE ASTM C494. COARSE AGGREGATE FOR 6" SLABS SHALL BE 1-1/2" MINUS. COARSE AGGREGATE FOR 4" SLABS SHALL BE 1" MINUS.

THE AMBIENT TEMPERATURE MUST BE 40 DEGREES FAHRENHEIT AND RISING TO PLACE ANY CONCRETE UNLESS IT IS INSULATED OR HEATED TO MAINTAIN AT LEAST 50 DEGREES FAHRENHEIT FOR SEVEN DAYS. CONCRETE CONTAINING "MASTERSET FP 20" AT 60 TO 90 OUNCES PER 100 LBS. OF CEMENT MAY BE PLACED IN AMBIENT TEMPERATURES AS LOW AS 20 DEGREES FAHRENHEIT UNTIL INITIAL SET HAS BEEN REACHED. AMBIENT TEMPERATURES MAY FALL BELOW 20 DEGREES FAHRENHEIT AFTER INITIAL SET HAS BEEN REACHED AND THE HARDENED CONCRETE HAS BEEN SEALED TO PREVENT THE INGRESS OF ADDITIONAL WATER.

RECOMMENDED CURING OF CONCRETE SLABS SHALL CONSIST OF WET CURING WITH BURLAP AND VISQUEEN (OR EQUAL) FOR A PERIOD OF NOT LESS THAN SEVEN DAYS. SLAB SHALL NOT BE ALLOWED TO DRY DURING THIS PERIOD. IF THE CONTRACTOR CHOOSES AN ALTERNATE METHOD OF CURING, CONTRACTOR ASSUMES THE RISK ASSOCIATED WITH THE ALTERNATE METHOD.

MATERIALS:

USE	MINIMUM F'C AT 28 DAYS	MAXIMUM SLUMP INCHES[1]	MAXIMUM WATER CEMENT RATIO[2] NON-AIR-ENT	MAXIMUM WATER CEMENT RATIO[2] AIR-ENT	MINIMUM[3] SACKS/C.Y.
FOOTINGS/ FOUNDATION WALLS	3000	5	.58	-	5
RETAINING WALLS	3000	5	.58	-	5
INTERIOR SLABS ON GRADE	3500	4	.51	-	5-1/2
SLABS ON VAPOR BARRIER	4500	4	.42	-	6
EXTERIOR SLABS ON GRADE	4500	4	-	.45	5-1/2
ALL STRUCTURAL CONCRETE	3000	5	.58	.46	5
SETTING BEARING PLATES	5000[4]	-	-	-	-

NOTE: THESE SUGGESTED RATIOS ARE PRESENTED AS A GUIDELINE FOR BATCH PLANT OPERATOR TO DETERMINE FINAL MIX DESIGN. ALTERNATE MIXES MAY BE UTILIZED WHEN PAST PERFORMANCE OF SAID MIX HAS PROVEN TO MEET REQUIRED STRENGTH AND SERVICEABILITY REQUIREMENTS.

1. MAXIMUM SLUMP SHALL BE SLUMP CORRESPONDING TO MAXIMUM WATER/CEMENT RATIO OR AS INDICATED ABOVE WHICHEVER IS LESS. CONTRACTOR MAY ADD JOB SITE WATER TO THE CONCRETE MIX ONLY IF BATCH TICKET PROVIDES QUANTITY OF WATER (IN GALLONS ALLOWED) SO AS TO NOT EXCEED SPECIFIED CONCRETE WATER/CEMENT RATIO. AT CONTRACTOR'S OPTION, CONTRACTOR MAY USE MASTER BUILDERS INC. ADMIXTURE SYSTEMS TO PRODUCE FLOWABLE CONCRETE. MAXIMUM SLUMP WITH ADMIXTURES SHALL NOT EXCEED EIGHT INCHES. THE WATER/CEMENT RATIO OF THE APPROVED MIXES SHALL BE MAINTAINED OR LOWERED WHEN FLOWABLE CONCRETE IS USED. A MASTER BUILDERS CONCRETE TECHNICIAN SHALL ASSIST IN DETERMINING MIX PROPORTIONS FOR FLOWABLE CONCRETE.
2. ADD TO ALL CONCRETE FLATWORK EXPOSED TO ANY FREEZE/THAW CYCLES, MASTER BUILDERS MASTERAIR AE 90 AIR ENTRAINING AGENT TO ATTAIN 7 PERCENT ENTRAINED AIR, BY VOLUME, CONFORMING TO ASTM C260. AIR CONTENT SHALL BE CROSS CHECKED BY A UNIT WEIGHT OF THE SAME CONCRETE SAMPLE. ADJUST AIR AS REQUIRED TO CONFORM WITH ACI 318 TABLE 19.3.3.1 FOR MAXIMUM AGGREGATE SIZE.
3. SACKS OF CEMENT/CUBIC YARD ARE LISTED AS MINIMUM. ADDITIONAL CEMENT OR ADMIXTURES SHALL BE USED TO ATTAIN MAXIMUM WATER/CEMENT RATIO WHERE REQUIRED.
4. FOR BASE PLATE OR EQUIPMENT GROUT USE MASTER BUILDERS MASTERFLOW 928 OR EQUAL. GROUTING MAY BE PERFORMED WITH AMBIENT TEMPERATURES BETWEEN 40 DEGREES FAHRENHEIT AND 100 DEGREES FAHRENHEIT. FOR DYNAMIC BASE PLATE AND EQUIPMENT GROUT USE MASTER BUILDERS MASTERFLOW 885.

VAPOR BARRIER:
VAPOR BARRIER SHALL CONFORM TO ASTM E1745 CLASS A OR ASTM E1993 WITH A PERMEANCE OF 0.01 PERMS OR LESS AND SHALL NOT BE POLYETHYLENE BASED. VAPOR BARRIER SHALL BE 15-MIL STEGO WRAP VAPOR BARRIER BY STEGO INDUSTRIES OR PRECON BY W.R. MEADOWS. INSTALL VAPOR BARRIER DIRECTLY UNDER ALL INTERIOR SLABS ON GRADE IN ACCORDANCE WITH ASTM E1643 AND MANUFACTURER RECOMMENDATIONS. EXTEND CONTINUOUS VAPOR BARRIER ALONG SIDEWALLS OF AND UNDER SLAB DEPRESSIONS. LAP JOINTS 6 INCHES MINIMUM AND SEAL WATERTIGHT BY ADHESIVE OR TAPE AS RECOMMENDED BY MANUFACTURER. SEAL ALL PENETRATIONS, BLOCKOUTS, AND MEMBRANE PERIMETER WITH TAPE AND MASTIC AS RECOMMENDED BY MANUFACTURER TO CREATE A CONTINUOUS SEALED BARRIER. REPAIR ALL PUNCTURES OR DAMAGE TO VAPOR BARRIER IMMEDIATELY PRIOR TO CONCRETE POUR IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. BARRIER SHALL NOT BE PUNCTURED DURING PREPARATION, CONCRETE POUR, OR FINISH WORK.

REINFORCING STEEL:
REINFORCING STEEL SHALL BE OF NEW BILLET STOCK ASTM A615-90, GRADE 60, FY=60,000 PSI EXCEPT #3 BARS SHALL BE GRADE 40. WELDABLE REINFORCING STEEL SHALL BE ASTM A706, GRADE 60-W. WELDED WIRE REINFORCEMENT (WWR) SHALL BE ASTM A1064, 4 X 4 - W2.9 X W2.9 SMOOTH WIRE. REINFORCING STEEL SHALL BE SECURELY TIED IN PLACE WITH #16 DOUBLE ANNEALED IRON WIRE. REINFORCING STEEL AND WELDED WIRE REINFORCEMENT SHALL BE SUPPORTED ON WELL CURED CONCRETE BLOCKS OR CHAIRS. IN BEAMS AND STRUCTURAL SLABS, REINFORCING SHALL BE SUPPORTED ON CHAIRS. ALTERNATE HOOK DIRECTION AT ALL TIES AND STIRRUPS. REINFORCING STEEL SHALL BE DETAILED BY AN EXPERIENCED DETAILER IN ACCORDANCE WITH ACI 315 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE," EXCEPT AS SHOWN. SEE 1 & 2|- FOR REBAR FABRICATION DETAILS. SHOP DRAWINGS INCLUDING PLACING PLANS SHALL BE SUBMITTED (IF REQUESTED) FOR REVIEW PRIOR TO FABRICATION. ALL LAP SPLICES SHALL BE "CLASS B" SPLICES WITH A MINIMUM LAP LENGTH OF 45 BAR DIAMETERS FOR #6 AND SMALLER BARS, AND 58 BAR DIAMETERS FOR #7 AND #8 BARS. MECHANICAL SPLICING OF BARS SHALL UTILIZE MECHANICAL COUPLERS THAT DEVELOP A MINIMUM OF 125% OF THE SPECIFIED YIELD STRENGTH OF THE REINFORCING BAR. COUPLERS SHALL CONFORM TO ACI 318 AND AASHTO REQUIREMENTS. CONTRACTOR SHALL SUBMIT MECHANICAL COUPLER PRODUCT INFORMATION FOR REVIEW PRIOR TO CONSTRUCTION. SPLICES AT BEAMS, COLUMNS, STRUCTURAL SLABS, AND WALLS SHALL NOT BE PERMITTED EXCEPT AS SHOWN ON THE CONSTRUCTION DOCUMENTS. LAP ADJOINING PIECES OF WELDED WIRE REINFORCEMENT (SIDES AND ENDS) AT LEAST 12" OR ONE FULL MESH SPACING PLUS 2", WHICHEVER IS GREATER. OFFSET END LAPS IN ADJACENT WIDTHS TO PREVENT CONTINUOUS LAPS IN EITHER DIRECTION.

REINFORCING SHALL BE WITHIN 1/2" TOLERANCE OF CLEAR DISTANCE SHOWN ON CONSTRUCTION DOCUMENTS. WET-SETTING OF REINFORCING STEEL IS NOT ACCEPTABLE.

CONCRETE COVER FOR REINFORCING PLACEMENT SHALL BE:

3" FOR CONCRETE POURED AGAINST EARTH;
2" FOR FORMED CONCRETE WITH EARTH BACKFILL;
1-1/2" FOR THE OUTSIDE FACE OF WALLS EXPOSED TO WEATHER;
1-1/2" FOR SLABS ON MOISTURE BARRIER.
WALLS:

	THICKNESS	HORIZONTAL	VERTICAL
REINFORCING (GRADE 60)	6" WALL & UNDER	#4 AT 18" O.C.	#4 AT 18" O.C.
	8" WALL	#5 AT 18" O.C.	#5 AT 18" O.C.
	10" WALL	#4 AT 18" E.F.	#4 AT 18" E.F.
	12" WALL	#4 AT 18" E.F.	#4 AT 18" O.C.
	ALL OTHER WALLS	.12 OF 1%	.12 OF 1%

PROVIDE #3 HAIRPIN BARS WITH 12" LEGS AT 6" O.C. (MINIMUM) AT HEAD OF ALL OPENINGS. PROVIDE 2-#5 EXTRA BARS EXTENDING 25" (MINIMUM) BEYOND CORNERS AT TOP, BOTTOM, AND EACH SIDE OF OPENING. USE (2) #5x4'-0" DIAGONAL AT EACH CORNER EXCEPT FOR 6" WALLS USE (1) #5 DIAGONAL AT EACH CORNER. AT WALL CORNERS AND INTERSECTIONS, EXTEND HORIZONTAL WALL REINFORCING TO 2" FROM OUTSIDE FACE AND LAP WITH HOOK BARS OF SAME SIZE AND SPACING. LAP OUTSIDE FACE ONLY AT CORNERS. WALL STUBS SHALL BE SAME SIZE AND SPACING AS VERTICAL STEEL.

EPOXY GROUTING:
THE CONTRACTOR SHALL EPOXY GROUT BARS (REBAR, DOWELS, AND THREADED RODS) TO THE DEPTH IN EXISTING CONCRETE OR MASONRY AS INDICATED IN THE PLANS. HOLE DIAMETER SHALL BE PER MANUFACTURER'S WRITTEN INSTRUCTIONS. EPOXY GROUT FOR EXISTING CONCRETE SHALL BE SIMPSON "SET-XP", HILTI "HIT-HY 200", OR APPROVED EQUAL. EPOXY GROUT FOR EXISTING CONCRETE MASONRY SHALL BE SIMPSON "SET-XP", HILTI "HIT-HY270", OR APPROVED EQUAL. DUST AND DEBRIS FROM THE DRILLING OPERATION SHALL BE CLEANED AND BLOWN FREE FROM THE HOLE PRIOR TO THE PLACEMENT OF THE EPOXY. EPOXY GROUT SHALL BE MIXED AND PLACED AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS. BARS SHALL BE INSERTED INTO THE HOLE WITHIN THE MANUFACTURER'S RECOMMENDED TIME PERIOD. ANY BARS WHICH ARE NOT SECURELY GROUTED SHALL BE REPLACED WITH PROPERLY GROUTED BARS.

THE INSTALLATION AND INSPECTION REQUIREMENTS OF ACI 318-14 SECTIONS 17.8.2.2, 17.8.2.3 AND 17.8.2.4 (WHICH LIST REQUIREMENTS FOR ADHESIVE ANCHORS INSTALLED HORIZONTALLY OR VERTICALLY) SHALL APPLY TO VERTICALLY DOWNWARD PLACED ANCHORS. ALL INSTALLERS AND THE SPECIAL INSPECTOR MUST BE TRAINED BY THE EPOXY MANUFACTURER FOR INSTALLATION OF DEEPLY EMBEDDED ADHESIVE ANCHORS USING THE HILTI PISTON PLUG DELIVERY SYSTEM AND INSTALLED TO RESIST SUSTAINED TENSION LOADS. CONTINUOUS SPECIAL INSPECTION IN ACCORDANCE WITH TABLE 1705.3 OF THE 2015 IBC SHALL BE PROVIDED TO ENSURE HOLE PREPARATION AND EPOXY INSTALLATION IS ACCOMPLISHED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

TIMBER FRAMING:
STRUCTURAL TIMBER AND LUMBER SHALL BE SURFACED KILN DRIED STRESS GRADE DOUGLAS FIR - LARCH AS FOLLOWS:

TIMBER STRESS GRADE:

USE	GRADE
6x	NO. 1
4x AND 3x	NO. 2
EXTERIOR AND BEARING STUD WALLS	NO. 2
ROOF JOIST, FLOOR JOIST	NO. 2
INTERIOR STUDS AT NON-BEARING WALLS	STANDARD
TOP & BOTTOM PLATES AT BEARING WALLS	NO. 2
ALL OTHER LUMBER	STANDARD/BETTER

NO END SPLITS SHALL BE ALLOWED IN STRUCTURAL MEMBERS. SOLID BLOCKING OF NOT LESS THAN 2" NOMINAL THICKNESS SHALL BE PROVIDED AT ENDS AND AT ALL SUPPORTS OF JOISTS AND RAFTERS. ALL NAILS SHALL BE COMMON UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DOCUMENTS AND NAILING SHALL BE AS PER 2304.10.1 OF THE LATEST EDITION OF THE "INTERNATIONAL BUILDING CODE." ALL BOLT HEADS AND NUTS BEARING ON WOOD SHALL BE PROVIDED WITH A WASHER.

WOOD PERMANENTLY EXPOSED TO WEATHER SHALL BE TREATED WITH AN APPROVED PRESERVATIVE. WOOD BEARING ON OR INSTALLED WITHIN 1" OF CONCRETE SHALL BE TREATED WITH AN APPROVED PRESERVATIVE OR SHALL BE SEPARATED FROM THE CONCRETE BY 30# (MINIMUM) BUILDING PAPER. IF PRESSURE TREATED LUMBER IS USED, CONTRACTOR SHALL ENSURE THAT ALL STEEL IN CONTACT WITH PRESSURE TREATED WOOD IS CORROSION PROTECTED. PRESSURE TREATED LUMBER SHALL MATCH THE SPECIES AND GRADE IN THE TABLE ABOVE. HEMFIR BOTTOM PLATES WILL BE REJECTED. FASTENERS FOR PRESERVATIVE-TREATED AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER.

TYPICAL SILL BOLTS AT NON SHEAR WALLS SHALL BE 5/8" DIAMETER AT 6'-0" O.C.; EMBED 7". PLATE WASHERS A MINIMUM OF 3" BY 3" BY 0.229 THICK OR SIMPSON "BPS" BEARING PLATES SHALL BE USED ON EACH SILL BOLT AT SHEAR WALLS. ALL EXTERIOR WALLS SHALL BE SW6 UNLESS NOTED OTHERWISE. NAILERS TO STEEL BEAMS SHALL BE ATTACHED WITH 5/8" DIAMETER BOLTS AT 3'-0" O.C., STAGGER EACH SIDE OF WEB. ALL LAG SCREWS SHALL BE PLACED IN PRE-DRILLED HOLES. HOLE FOR UNTHREADED SHANK SHALL BE SAME DIAMETER AS SHANK WITH DEPTH EQUAL TO SHANK PENETRATION. LEAD HOLE FOR THREADED PORTION SHALL BE ONE HALF THE DIAMETER OF THE SHANK DIAMETER. USE WOOD ADHESIVE AS LUBRICANT.

BETWEEN SUPPORTS PROVIDE BLOCKING OR BRIDGING AT 8'-0" O.C. FOR FLOOR JOISTS, 10'-0" O.C. FOR ROOF JOISTS. CUTTING AND NOTCHING OF STRUCTURAL MEMBERS IS NOT ALLOWED. A MAXIMUM 1" DIAMETER HOLE MAY BE DRILLED IN THE CENTER THIRD OF THE MEMBER DEPTH WITHIN THE CENTER THIRD OF THE MEMBER SPAN, ALL OTHER HOLES SHALL BE APPROVED BY THE ENGINEER. MAKE ALL BEARINGS FULL, UNLESS OTHERWISE INDICATED ON THE CONSTRUCTION DOCUMENTS. FINISH ALL BEARING SURFACES ON WHICH STRUCTURAL MEMBERS ARE TO REST SO AS TO GIVE SURE AND EVEN SUPPORT.

WHERE FRAMING MEMBERS SLOPE, CUT OR NOTCH THE ENDS AS REQUIRED TO GIVE UNIFORM BEARING SURFACE. POST BUNDLES, ENDS AND BASES SHALL BE INSTALLED FLUSH AGAINST WOOD PLATES. ALL FRAMING SHALL BE DONE BY QUALIFIED INDIVIDUALS IN ACCORDANCE WITH GOOD CONSTRUCTION STANDARDS AND PRACTICE.

STRUCTURAL GLU-LAMINATED LUMBER:
STRUCTURAL GLU-LAMINATED LUMBER SHALL BE FABRICATED TO THE REQUIREMENTS OF ANSI A190.1. LUMBER SHALL BE VISUALLY GRADED WESTERN SPECIES. COMBINATION 24F-V4 DF/DF FOR SIMPLE BEAMS. 24F-V8 DF/DF FOR CANTILEVER BEAMS. COMBINATION 2 FOR COLUMNS, AND COMBINATION 5 FOR TRUSS MEMBERS, PER TABLE 5A AND 5B 2018 NDS SUPPLEMENT. CAMBER SIMPLE BEAMS WITH SPAN 10' OR GREATER TO 2,000' RADIUS UNLESS NOTED OTHERWISE. LAMINATED MEMBERS SHALL BE AITC CERTIFIED. USE WATERPROOF GLUE.

LAMINATED VENEER LUMBER LVL:
FRAMING MEMBERS SHOWN ON CONSTRUCTION DOCUMENTS AS "LVL" SHALL BE LAMINATED VENEER LUMBER. ERECTION, INSTALLATION, AND ANCHORAGE SHALL BE MANUFACTURER'S STANDARD. CONNECTION OF MULTIPLE MEMBERS SHALL BE AS RECOMMENDED BY THE MANUFACTURER. ALL LVL MATERIAL SHALL BE MINIMUM 2.0E, 2600 FB.

REDLAM LVL STUDS:
FRAMING MEMBERS SHOWN ON CONSTRUCTION DOCUMENTS AS "LVL STUD" SHALL BE REDLAM AS MANUFACTURED BY REDBUILT, LLC, OR EQUAL. ERECTION, INSTALLATION, AND ANCHORAGE SHALL BE MANUFACTURER'S STANDARD. CONNECTION OF MULTIPLE MEMBERS SHALL BE AS RECOMMENDED BY THE MANUFACTURER. ALL LVL STUD MATERIAL SHALL BE MINIMUM 2.0E, 2750 FB, 2635 FC, REDLAM.

WOOD FRAMING HARDWARE:
ALL WOOD FRAMING HARDWARE AND ACCESSORIES SHALL BE SIMPSON OR EQUAL UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DOCUMENTS. HARDWARE AND ACCESSORIES SHALL BE INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS. INSTALL HARDWARE WITH MAXIMUM NUMBER OF FASTENERS UNLESS NOTED OTHERWISE. FASTENERS AND HANGERS FOR PRESERVATIVE-TREATED AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER.

PLYWOOD:
PLYWOOD ROOF AND WALL SHEATHING SHALL BE APA C-D EXPOSURE 1 PER IBC SECTION 2304 UNLESS NOTED OTHERWISE. PLYWOOD FLOOR SHEATHING SHALL BE T & G APA STURD-I-FLOOR EXPOSURE 1. WOOD STRUCTURAL PANELS OTHER THAN PLYWOOD AND CONFORMING TO IBC SECTION 2304 MAY BE SUBSTITUTED WHERE PLYWOOD IS SPECIFIED. WOOD STRUCTURAL PANELS SHALL CONFORM TO UNITED STATES VOLUNTARY PRODUCT STANDARD PS2-18.

MAXIMUM NAIL SPACING SHALL BE 6" O.C. AT ALL SUPPORTED PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. NAILS SHALL BE 10d COMMON FOR SHEATHING. STAGGER END LAPS AT ROOF AND FLOOR SHEATHING. ALL PANEL EDGES SHALL BE BLOCKED AT PLYWOOD SHEATHED WALLS AND AS INDICATED ON PLANS FOR ROOF AND FLOOR SHEATHING. SUPPORT SHALL BE SUPPLIED TO ALL PLYWOOD EDGES WITH PLYCLIPS, BLOCKING, TONGUE AND GROOVE PLYWOOD JOINTS OR OTHER APPROVED METHODS PER APA RECOMMENDATION. PLYCLIPS ARE NOT ALLOWED FOR FLOOR SHEATHING.

OSB/PLYWOOD WEB JOISTS:
JOISTS SHOWN ON PLANS AS "RED-J" SHALL BE MANUFACTURED BY "REDBUILT, LLC" OR APPROVED EQUAL. ERECTION, ANCHORAGE, AND BRIDGING SHALL BE MANUFACTURER'S STANDARD. JOIST ASSEMBLY SHALL BE TESTED AND APPROVED UNDER IBC TESTING PROCEDURES. COMPLETE JOIST DESIGN SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS PERMITTED AND SUBMITTED (IF REQUESTED) FOR REVIEW PRIOR TO FABRICATION. JOIST MANUFACTURER SHALL PROVIDE ALL SPECIALTY ITEMS SUCH AS BLOCKING, BRIDGING, ETC. REQUIRED FOR A NORMAL AND COMPLETE INSTALLATION OF THE JOISTS. JOIST FLANGES SHALL BE LVL. ALTERNATE JOIST OR TRUSS SYSTEM SHALL BE TESTED, AND THE RESULTS OF LOAD TESTS ON COMPONENT PARTS AND FULL SCALE TESTS ON JOISTS AS WELL AS AN ANALYSIS OF TEST RESULTS SHALL BE SUBMITTED (IF REQUESTED) FOR REVIEW.

PRE-ENGINEERED WOOD TRUSSES:
WOOD TRUSSES SHALL BE PRE-MANUFACTURED TRUSSES, ENGINEERED FOR THE LOADS AS INDICATED ABOVE AND MANUFACTURED IN CONFORMANCE WITH THE INTERNATIONAL BUILDING CODE, SECTION 2304, AND THE LATEST EDITION OF AF & PA NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION AND ANSI/TPI 1. ERECTION, ANCHORAGE, AND BRIDGING SHALL BE PER MANUFACTURER'S STANDARD. CHORDS AND WEBS SHALL BE STRESS GRADE LUMBER. WEB MEMBERS SHALL BE CONNECTED TO CHORDS WITH LIGHT GAGE STEEL GUSSET PLATES. COMPLETE TRUSS DESIGN SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS PERMITTED AND SHALL BE SUBMITTED (IF REQUESTED) FOR REVIEW PRIOR TO FABRICATION. TRUSS MANUFACTURER SHALL SPECIFY AND PROVIDE ALL SPECIALTY ITEMS SUCH AS BLOCKING, BRIDGING, TRUSS TO TRUSS CONNECTIONS, TRUSS TO BEAM CONNECTIONS, ETC. REQUIRED FOR A NORMAL AND COMPLETE INSTALLATION OF THE TRUSSES. ROOF OVERBUILD FRAMING SHALL BE BY TRUSS MANUFACTURER. HANDLING, INSTALLATION, AND BRACING SHALL BE IN ACCORDANCE WITH ABOVE REFERENCED STANDARDS AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

NON-BEARING WALLS SHALL BE HELD AWAY FROM THE TRUSS BOTTOM CHORD WITH AN APPROVED FASTENER (SUCH AS SIMPSON STC) TO ENSURE THAT THE TRUSS BOTTOM CHORD WILL NOT BEAR ON THE WALL.

TEMPORARY SHORING:
THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SHORING DURING CONSTRUCTION TO ENSURE THAT THE EXISTING STRUCTURE IS STABLE UNTIL THE NEW CONSTRUCTION WORK IS COMPLETE. IF NECESSARY, THE CONTRACTOR SHALL CONSULT A SPECIALTY STRUCTURAL ENGINEER, LICENSED IN THE STATE OF WORK, FOR DESIGN ASSISTANCE PRIOR TO PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UNDERSTANDING MEANS AND METHODS REQUIREMENTS, AS WELL AS OSHA REGULATIONS FOR THE PROJECT CONSTRUCTION.

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE 2021 EDITION.
2. ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES, THE MORE STRINGENT TO GOVERN DISCREPANCIES BETWEEN CONTRACT DOCUMENTS AND CODES. THESE DISCREPANCIES SHALL BE BROUGHT TO THE CONSULTANT'S ATTENTION PROMPTLY AND RESOLUTION OBTAINED BEFORE PROCEEDING.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE PROCEEDING WITH THE WORK. ALL DIMENSIONS AND EXISTING CONDITIONS MUST BE VERIFIED AND/OR DETERMINED IN THE FIELD.
4. THE CONSTRUCTION DOCUMENTS MAY NOT SHOW SOME OBSTRUCTIONS. CONTRACTORS ARE TO CAREFULLY INSPECT THE EXISTING FACILITIES BEFORE PREPARING THEIR PROPOSAL AND BEFORE PROCEEDING WITH THE WORK. EVEN THOUGH NOT SHOWN OR SPECIFICALLY MENTIONED, THE REMOVAL AND REPLACEMENT OF MINOR OBSTRUCTIONS SHOULD BE ANTICIPATED AND ACCOMPLISHED.
5. **CONSTRUCTION DOCUMENTS ARE NOT TO BE SCALED**. DIMENSIONAL DATA SHALL BE OBTAINED FROM WRITTEN INFORMATION ONLY. VERIFY ALL DIMENSIONS BEFORE PROCEEDING. ANY DIMENSIONAL DEVIATION FROM THAT SHOWN ON CONSTRUCTION DOCUMENTS, WHICH MAY AFFECT INTENT OF DESIGN OR PROPER INCORPORATION OF ELEMENTS, SHALL BE BROUGHT TO CONSULTANT'S ATTENTION PROMPTLY AND RESOLUTION OBTAINED BEFORE PROCEEDING.
6. CONSTRUCTION DOCUMENTS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION AND ARE NOT INTENDED TO SHOW EVERY DETAIL OR CONDITION OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY AS INDICATED BUT ARE SIMILAR CHARACTER TO THE DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL. THE CONSULTANT ASSUMES NO LIABILITY OR RESPONSIBILITY FOR ERRORS OR CONFLICTS WHICH MAY OCCUR BECAUSE OF THE CONSULTANT'S EXCLUSION FROM PARTICIPATION IN THE ACTUAL CONSTRUCTION PHASE OF THE PROJECT.
7. THE CONSTRUCTION SITE MAY HAVE LIMITED ACCESS. THE CONTRACTOR SHOULD INSPECT THE SITE AND MAKE THEIR OWN DETERMINATION REGARDING ACCESS.
8. CONTRACTOR SHALL COORDINATE WORK WITH OWNER TO MINIMIZE INTERFERENCE WITH THE OWNER'S NORMAL OPERATIONS. ACCESS TO THE EXISTING FACILITIES WILL BE REQUIRED AT ALL TIMES.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL THE REQUIRED SAFETY PRECAUTIONS AND THE MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE WORK.
10. CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING UTILITIES WHICH MAY BE PRESENT AND ARE NOT SCHEDULED OR REQUIRED TO BE CHANGED.
11. THE CONTRACTOR SHALL EMPLOY SAFE EXCAVATION PRACTICES IN ACCORDANCE WITH STATE SAFETY REQUIREMENTS AND OSHA SAFETY AND HEALTH STANDARDS FOR CONSTRUCTION (29CFR1926).
12. CONSULTANT SHALL BE INFORMED IMMEDIATELY OF ANY DISCREPANCY BETWEEN CONSTRUCTION DOCUMENTS AND SITE CONDITIONS THAT CAUSE SPECIFIED DESIGN OR M

STRUCTURAL STATEMENT OF SPECIAL INSPECTIONS

STATEMENT OF SPECIAL INSPECTIONS

THIS STATEMENT OF SPECIAL INSPECTIONS IS SUBMITTED FOR STRUCTURAL ITEMS ONLY, AS A CONDITION FOR PERMIT ISSUANCE IN ACCORDANCE WITH THE SPECIAL INSPECTION AND TESTING REQUIREMENTS OF THE CURRENTLY ADOPTED INTERNATIONAL BUILDING CODE (IBC). IN ACCORDANCE WITH THE IBC, THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE ACTING AS THE OWNER'S AGENT, IS REQUIRED TO EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM REQUIRED INSPECTIONS. THE PERMIT APPLICANT IS RESPONSIBLE FOR HIRING THE SPECIAL INSPECTOR AND MUST INCUR ALL ASSOCIATED COSTS.

QUALIFICATIONS OF SPECIAL INSPECTOR

THE QUALIFICATIONS OF ALL PERSONNEL PERFORMING SPECIAL INSPECTION OR TESTING ARE SUBJECT TO THE APPROVAL OF THE BUILDING OFFICIAL. THE SPECIAL INSPECTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO THE BUILDING OFFICIAL DEMONSTRATING HIS OR HER COMPETENCE AND RELEVANT EXPERIENCE OR TRAINING. THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND ENGINEERS OF RECORD INVOLVED IN THE DESIGN OF THE PROJECT ARE PERMITTED TO ACT AS THE APPROVED AGENCY AND THEIR PERSONNEL ARE PERMITTED TO ACT AS THE SPECIAL INSPECTOR FOR THE WORK DESIGNED BY THEM, PROVIDED THEY QUALIFY AS SPECIAL INSPECTORS.

RESPONSIBILITIES

A. OWNER RESPONSIBILITIES

1. THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE ACTING AS THE OWNER'S AGENT, SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED ON THIS SHEET. THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS PERFORMED BY THE JURISDICTION.

EXCEPTION: APPROVED FABRICATORS

FABRICATOR APPROVAL: SPECIAL INSPECTIONS REQUIRED BY SECTION 1705 ARE NOT REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. FOR STEEL CONSTRUCTION, AISC CERTIFIED FABRICATORS SHALL BE CONSIDERED "APPROVED". AT COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE OWNER OR OWNER'S AUTHORIZED AGENT STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. ALL WORK COMPLETED IN THE FIELD OR BY A FABRICATOR WHICH IS NOT APPROVED SHALL BE INSPECTED ACCORDING TO THE REQUIREMENTS OF THIS SHEET. THE FOLLOWING TABLE SUMMARIZES THE EXCEPTION FOR APPROVED FABRICATORS.

IBC REQUIREMENT PER CHAPTER 17	RESPONSIBLE PARTY AND/OR CHECK WRITER IF THE FABRICATOR FOR YOUR PROJECT IS:	
	APPROVED	NOT APPROVED
QUALIFY SPECIAL INSPECTORS/FIRMS FOR STEEL FABRICATION	NOT REQUIRED	DESIGN PROFESSIONAL IS RESPONSIBLE WITH THE COST BORNE BY THE OWNER
DEVELOP STATEMENT OF SPECIAL INSPECTIONS FOR STEEL FABRICATION	NOT REQUIRED	DESIGN PROFESSIONAL AT THE OWNER'S EXPENSE
APPROVE STATEMENT OF SPECIAL INSPECTIONS AND SPECIAL INSPECTORS/FIRMS FOR STEEL FABRICATION	NOT REQUIRED	BUILDING OFFICIAL ON A PROJECT-BY-PROJECT BASIS AT THE BUILDING CODE AUTHORITY'S EXPENSE
CONDUCT SPECIAL INSPECTIONS FOR STEEL FABRICATION AND PREPARE REPORTS	NOT REQUIRED	SPECIAL INSPECTOR AT THE OWNER'S EXPENSE
DEVELOP CRITERIA, PREPARE AUDIT PLAN, SELECT AUDITORS, AND PERIODICALLY VERIFY FABRICATOR QUALITY MANAGEMENT SYSTEM	QMC; OR IAS-ACCREDITED INSPECTION AGENCY AT THE FABRICATOR'S EXPENSE	SPECIAL INSPECTOR ON A PROJECT-BY-PROJECT BASIS AT THE OWNER'S EXPENSE
IDENTIFY AND RESOLVE DISCREPANCIES WITH APPROVED CONSTRUCTION DOCUMENTS	FABRICATOR IS RESPONSIBLE	SPECIAL INSPECTOR AND DESIGN PROFESSIONAL AT OWNER'S RISK AND EXPENSE
SUBMIT CERTIFICATE OF COMPLIANCE TO BUILDING OFFICIAL	FABRICATOR IS RESPONSIBLE	SPECIAL INSPECTOR AND DESIGN PROFESSIONAL AT OWNER'S EXPENSE

B. DUTIES OF THE SPECIAL INSPECTOR

RECORDS OF EACH INSPECTION MUST BE SUBMITTED TO THE BUILDING OFFICIAL SO AS TO COMPILE A COMPLETE LEGAL RECORD OF THE PROJECT. THESE RECORDS MUST INCLUDE ALL INSPECTIONS MADE, VIOLATIONS, AND DISCREPANCIES. BEFORE A CERTIFICATE OF OCCUPANCY IS ISSUED, A FINAL REPORT MUST BE SUBMITTED INDICATING THAT ALL SPECIAL INSPECTIONS HAVE BEEN MADE AND ALL DISCREPANCIES HAVE BEEN RESOLVED OR REMOVED IN ORDER TO SHOW COMPLIANCE WITH THE APPLICABLE CODE REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE SPECIAL INSPECTOR TO DOCUMENT AND SUBMIT INSPECTION RECORDS TO THE BUILDING OFFICIAL AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE OF THE PROJECT. SPECIFIC DUTIES ARE OUTLINED BELOW:

1. OBSERVE THE WORK. THE INSPECTOR SHALL OBSERVE THE WORK FOR COMPLIANCE WITH THE JURISDICTION APPROVED PLANS, SPECIFICATIONS, AND APPLICABLE PROVISIONS OF THE IBC. THE ARCHITECT/ENGINEER REVIEWED SHOP DRAWINGS, AND/OR PLACEMENT DRAWINGS, MAY BE USED ONLY AS AN AID TO INSPECTION AND ARE NOT CONTRACT DOCUMENTS. INSPECTIONS ARE FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS.
   i. CONTINUOUS SPECIAL INSPECTION - THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED.
   ii. PERIODIC SPECIAL INSPECTION - THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED AT THE COMPLETION OF THE WORK.
2. REPORT NON-CONFORMING ITEMS: THE INSPECTOR SHALL BRING NON-CONFORMING ITEMS TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR, AND NOTE ALL SUCH ITEMS IN THE DAILY REPORT. IF ANY ITEM IS NOT RESOLVED IN A TIMELY MANNER AND IS ABOUT TO BE INCORPORATED IN THE WORK, THE SPECIAL INSPECTOR SHALL IMMEDIATELY NOTIFY THE JURISDICTION, THE ENGINEER AND ARCHITECT.
3. FURNISH DAILY REPORTS: THE SPECIAL INSPECTOR SHALL COMPLETE A DAILY REPORT FOR EACH DAYS INSPECTIONS. THE DAILY REPORTS SHALL REMAIN AT THE JOB SITE WITH THE CONTRACTOR FOR THE BUILDING DEPARTMENTS INSPECTOR. THE REPORTS SHALL INCLUDE THE FOLLOWING:
   i. NAME OF SPECIAL INSPECTOR, DATE, TIME, TEMPERATURE, AND WEATHER CONDITIONS.
   ii. DESCRIPTION OF THE INSPECTIONS, WITH LOCATIONS AND TESTS PERFORMED.
   iii. LISTING ANY NON-CONFORMING ITEMS.
   iv. INCLUDE HOW ITEMS WERE RESOLVED OR UNRESOLVED.
   v. LIST ANY CHANGES OR CORRECTIONS TO NON-CONFORMING ISSUES AUTHORIZED BY THE ENGINEER, ARCHITECT, OR JURISDICTION'S BUILDING INSPECTORS.
4. FURNISH WEEKLY REPORTS: THE INSPECTION AGENCY SHALL FURNISH WEEKLY REPORTS OF THE TESTS AND INSPECTIONS PERFORMED DIRECTLY TO THE BUILDING DEPARTMENT. REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, ARCHITECT, AND/OR OTHERS AS DESIGNATED. WEEKLY REPORT MAY BE A COMPILATION OF DAILY REPORTS.
5. PREPARE FINAL REPORT: THE INSPECTION AGENCY SHALL PREPARE A FINAL SIGNED REPORT TO THE BUILDING DEPARTMENT STATING THAT ALL ITEMS REQUIRING SPECIAL INSPECTIONS AND TESTING WERE FULFILLED. ALL DISCREPANCIES WERE CORRECTED OR RESOLVED, AND ALL WORK REQUIRING SPECIAL INSPECTIONS IS IN CONFORMANCE WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS. ANY ITEMS UNRESOLVED OR DISCREPANCIES IN COVERAGE (I.E., MISSED INSPECTIONS, PERIODIC INSPECTIONS WHEN CONTINUOUS WAS REQUIRED, ETC.) SHALL BE SPECIFICALLY ITEMIZED IN THIS REPORT.

C. CONTRACTOR'S RESPONSIBILITIES

1. NOTIFY THE AGENCY: THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE INSPECTION AGENCY IN SUFFICIENT TIME FOR SCHEDULING PERSONNEL TO PERFORM REQUIRED INSPECTIONS.
2. PROVIDE WRITTEN STATEMENT OF RESPONSIBILITY: THE CONTRACTOR SHALL PROVIDE A WRITTEN STATEMENT OF RESPONSIBILITY AS REQUIRED IN SECTION 1704.4 FOR CONSTRUCTION DESIGNATED MAIN-WIND OR SEISMIC FORCE RESISTING SYSTEM. THE STATEMENT OF CONTRACTOR RESPONSIBILITY IS REQUIRED WHEREVER THE STATEMENT OF SPECIAL INSPECTIONS INCLUDE ADDITIONAL WIND- OR SEISMIC-RESISTANCE INSPECTIONS. THIS STATEMENT BY THE CONTRACTOR IS SEPARATE FROM THE STATEMENT OF SPECIAL INSPECTIONS. IT IS THE CONTRACTOR'S ACKNOWLEDGEMENT OF THE SPECIAL INSPECTIONS OR TESTING THAT ARE BEYOND WHAT IS TYPICALLY REQUIRED.
3. PROVIDE ACCESS TO JURISDICTION APPROVED PLANS: THE APPROVED PLANS SHALL BE READILY ACCESSIBLE AT THE JOB SITE.
4. PROVIDE ACCESS TO WORK: THE CONTRACTOR SHALL PROVIDE REASONABLE ACCESS TO ALL WORK REQUIRING SPECIAL INSPECTION.
5. RETAINING SPECIAL INSPECTION REPORTS AT THE JOB SITE: RETAIN AT THE JOB SITE ALL SPECIAL INSPECTION RECORDS SUBMITTED BY THE SPECIAL INSPECTOR, AND PROVIDE THESE RECORDS FOR REVIEW BY THE BUILDING DEPARTMENT INSPECTOR UPON REQUEST.
6. NOTIFY JURISDICTION OF SPECIAL INSPECTIONS PRIOR TO SCHEDULED INSPECTION TIME.

D. JURISDICTION'S RESPONSIBILITIES

1. TO VERIFY COMPLIANCE: THE JURISDICTION IS REQUIRED TO APPROVE EACH SPECIAL INSPECTOR BASED ON SUBMITTED QUALIFICATIONS, TO OVERSEE THE IMPLEMENTATION OF STRUCTURAL TESTS AND SPECIAL INSPECTION REQUIREMENTS FOUND IN IBC CHAPTER 17.
2. REVIEW SPECIAL INSPECTIONS: THE BUILDING DEPARTMENT SHALL REVIEW ALL SPECIAL INSPECTORS AND SPECIAL INSPECTION REQUIREMENTS.
3. MONITOR SPECIAL INSPECTIONS: WORK REQUIRING SPECIAL INSPECTIONS, AND THE PERFORMANCE OF SPECIAL INSPECTORS, SHALL BE MONITORED BY THE BUILDING DEPARTMENT INSPECTOR. JURISDICTIONAL APPROVAL MUST BE OBTAINED PRIOR TO PLACEMENT OF CONCRETE OR OTHER SIMILAR ACTIVITIES IN ADDITION TO THAT OF THE SPECIAL INSPECTOR.
4. ISSUE CERTIFICATE OF OCCUPANCY: THE BUILDING DEPARTMENT WILL ONLY ISSUE A CERTIFICATE OF OCCUPANCY AFTER ALL SPECIAL INSPECTION REPORTS AND THE FINAL SPECIAL INSPECTION REPORT, HAVE BEEN SUBMITTED AND ACCEPTED.

E. REGISTERED DESIGN PROFESSIONAL RESPONSIBILITIES

1. THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE (ENGINEER OR ARCHITECT), SHALL INCLUDE SPECIAL INSPECTION REQUIREMENTS AND SPECIFICATIONS ON THE PLANS.
2. PREPARE THE STATEMENT OF SPECIAL INSPECTIONS IN ACCORDANCE WITH IBC SECTION 1704.3.1 AND IDENTIFY STRUCTURAL TESTING FOR SEISMIC RESISTANCE PER IBC SECTION 1705.12 (WHEN REQUIRED). THE STATEMENT OF SPECIAL INSPECTIONS SHALL IDENTIFY ITEMS FABRICATED ON THE PREMISES OF AN APPROVED FABRICATOR WHERE SPECIAL INSPECTIONS ARE NOT REQUIRED BY SECTION 1704.2.5.1.
3. REVIEW THE SPECIAL INSPECTION REPORTS AND PROVIDE CORRECTIVE ACTION FOR WORK THAT MAY NOT CONFORM TO THE APPROVED PLANS.
4. PROVIDE STRUCTURAL OBSERVATION PER IBC SECTION 1704.6 IF REQUIRED (IF ANY OF THE FOLLOWING ARE CHECKED "YES", THEN STRUCTURAL OBSERVATION IS REQUIRED):

STRUCTURAL OBSERVATION FOR SEISMIC RESISTANCE:

	STRUCTURE ASSIGNED TO SEISMIC DESIGN CATEGORY D, E, OR F AND ONE OR MORE OF THE FOLLOWING CONDITIONS EXIST:
✔	1. THE STRUCTURE IS CLASSIFIED AS RISK CATEGORY III OR IV.
	2. THE HEIGHT OF THE STRUCTURE IS GREATER THAN 75 (22860 MM) FEET ABOVE THE BASE AS DEFINED IN ASCE7
	3. THE STRUCTURE IS ASSIGNED TO SEISMIC DESIGN CATEGORY E, IS CLASSIFIED AS RISK CATEGORY I OR II IN ACCORDANCE WITH TABLE 1604.5, AND IS GREATER THAN TWO STORIES ABOVE GRADE PLANE.
SEISMIC SYSTEMS AND SEISMIC FORCE – RESISTING SYSTEMS THAT ARE REQUIRED TO HAVE STRUCTURAL OBSERVATION:	
1.	NONE
2.	

STRUCTURAL OBSERVATION FOR WIND REQUIREMENTS:

	1. VULT IS 130 MPH OR GREATER AND THE STRUCTURE IS CLASSIFIED AS RISK CATEGORY III OR IV.
MAIN WIND-FORCE-RESISTING SYSTEMS AND COMPONENTS AND CLADDING THAT ARE REQUIRED TO HAVE STRUCTURAL OBSERVATION:	
1.	NONE
2.	

GENERAL STRUCTURAL OBSERVATION:

✔	1. THE STRUCTURE IS CLASSIFIED AS RISK CATEGORY IV.
	2. STRUCTURE IS A BUILDING WITH AN OCCUPIED FLOOR LOCATED MORE THAN 75 FEET ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS.
	3. WHEN SO DESIGNATED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE FOR THE STRUCTURAL DESIGN
	4. WHEN SUCH OBSERVATION IS SPECIFICALLY REQUIRED BY THE BUILDING OFFICIAL
STRUCTURAL SYSTEMS AND COMPONENTS AND CLADDING THAT ARE REQUIRED TO HAVE STRUCTURAL OBSERVATION:	
1.	NONE
2.	

WOOD CONSTRUCTION - IBC SECTION 1705.5

THE FABRICATION PROCESS OF WOOD STRUCTURAL ELEMENTS AND ASSEMBLIES (SUCH AS WOOD TRUSSES) THAT IS BEING PERFORMED ON THE PREMISES OF A FABRICATOR'S SHOP MUST HAVE SPECIAL INSPECTION IN ACCORDANCE WITH SECTION 1704.2.5. AS NOTED IN SECTION 1704.2.5.2, SPECIAL INSPECTION IS NOT REQUIRED IN AN APPROVED FABRICATOR'S SHOP.

VERIFICATION AND INSPECTION	REQUIRED	EXTENT: CONTINUOUS, PERIODIC, OR SUBMITTAL	REFERENCED STANDARD
1. HIGH-LOAD DIAPHRAGMS: (PER IBC 2306.3(2))			
A. VERIFY WOOD STRUCTURAL PANEL SHEATHING FOR GRADE AND THICKNESS.		P	IBC 1705.5.1
B. VERIFY THE NOMINAL SIZE OF FRAMING MEMBERS AT ADJOINING PANEL EDGES.		P	
C. VERIFY THE NAIL OR STAPLE DIAMETER AND LENGTH.		P	
D. VERIFY THE NUMBER OF FASTENER LINES.		P	
E. VERIFY THE SPACING BETWEEN FASTENERS IN EACH LINE AND AT EDGE MARGINS.		P	
2. METAL-PLATE-CONNECTED WOOD TRUSSES SPANNING 60 FT OR GREATER:			
A. VERIFY THAT THE TEMPORARY INSTALLATION RESTRAINT/BRACING AND THE PERMANENT INDIVIDUAL TRUSS MEMBER RESTRAINT/BRACING ARE INSTALLED IN ACCORDANCE WITH THE APPROVED TRUSS SUBMITTAL.		C	IBC 1706.6.2

CONCRETE CONSTRUCTION - IBC SECTION 1705.3

VERIFICATION AND INSPECTION	REQUIRED	EXTENT: CONTINUOUS, PERIODIC, OR SUBMITTAL	REFERENCED STANDARD	IBC REFERENCE
1. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	✔	P	ACI 318 CH. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH IBC TABLE 1705.3.				
A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706,	✔	P	AWS D1.4, ACI 318:26.6.4	
B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16" ; AND	✔	P	AWS D1.4, ACI 318:26.6.4	
C. INSPECT ALL OTHER WELDS.	✔	C	AWS D1.4, ACI 318:26.6.4	
3. INSPECTION OF ANCHORS CAST IN CONCRETE .	✔	P	ACI 318: 17.8.2	
4. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. SEE NOTE 2.				
A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARD INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	✔	C	ACI 318: 17.8.2.4	
B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	✔	P	ACI 318: 17.8.2	
5. VERIFY USE OF REQUIRED DESIGN MIX.	✔	P	ACI 318: CH 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	✔	C	ASTM C 172 ASTM C 31 ACI 318: 26.5, 26.12	1908.10
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	✔	C	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	✔	P	ACI 318: 26.5.3-26.5.5	1908.9
9. INSPECTION OF PRESTRESSED CONCRETE:		-		
A. APPLICATION OF PRESTRESSING FORCES.		C	ACI 318: 26.10	-
B. GROUTING OF BONDED PRESTRESSING TENDONS.		C	ACI 318: 26.10	-
10. INSPECT ERECTION OF PRECAST MEMBERS.		P	ACI 318: CH 26.9	-
11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.		P	ACI 318: 26.11.2	-
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.		P	ACI 318: 26.11.1(b)	-

NOTES:

1. WHERE APPLICABLE, SEE ALSO IBC SECTION 1705.12, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE.
2. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH 17.8.2 IN ACI 318, OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING PROFESSIONAL PRIOR TO THE COMMENCEMENT OF THE WORK.

SOILS & FOUNDATION CONSTRUCTION - IBC SECTION 1705.6, 1705.7, 1705.8 AND 1705.9

VERIFICATION AND INSPECTION	REQUIRED	EXTENT: CONTINUOUS, PERIODIC, OR SUBMITTAL	REFERENCED STANDARD
1. INSPECTION OF SOILS:			
A. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	✔	P	IBC TABLE 1705.6
B. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	✔	P	
C. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	✔	P	
D. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	✔	C	
E. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	✔	P	
2. DRIVEN DEEP FOUNDATIONS:			
A. VERIFY ELEMENT MATERIALS, SIZES AND LENGTHS COMPLY WITH THE REQUIREMENTS.		C	IBC TABLE 1705.7
B. DETERMINE CAPACITIES OF TEST ELEMENTS AND CONDUCT ADDITIONAL LOAD TESTS, AS REQUIRED.		C	
C. OBSERVE DRIVING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.		C	
D. VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM TYPE AND SIZE OF HAMMER, RECORD NUMBER OF BLOWS PER FOOT OF PENETRATION, DETERMINE REQUIRED PENETRATIONS TO ACHIEVE DESIGN CAPACITY, RECORD TIP AND BUTT ELEVATIONS AND DOCUMENT ANY DAMAGE TO FOUNDATION ELEMENT.		C	
E. FOR STEEL ELEMENTS, PERFORM ADDITIONAL INSPECTIONS IN ACCORDANCE WITH IBC SECTION 1705.2.			
F. FOR CONCRETE ELEMENTS AND CONCRETE-FILLED ELEMENTS, PERFORM ADDITIONAL INSPECTIONS IN ACCORDANCE WITH IBC SECTION 1705.3.			
G. FOR SPECIALTY ELEMENTS, PERFORM ADDITIONAL INSPECTIONS AS DETERMINED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.			
3. CAST-IN-PLACE DEEP FOUNDATIONS:			
A. INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.		C	IBC TABLE 1705.8
B. VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM ELEMENT DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END-BEARING STRATA CAPACITY. RECORD CONCRETE OR GROUT VOLUMES.		C	
C. FOR CONCRETE ELEMENTS, PERFORM TESTS AND ADDITIONAL-SPECIAL INSPECTIONS IN ACCORDANCE WITH IBC SECTION 1705.3.			
4. HELICAL PILE FOUNDATIONS:			
A. INSPECT PILE INSTALLATION AND RECORD INSTALLATION EQUIPMENT USED, PILE DIMENSIONS, TIP ELEVATIONS, FINAL DEPTH, FINAL INSTALLATION TORQUE AND OTHER PERTINENT INSTALLATION DATA AS REQUIRED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.		C	IBC 1705.9

WIND RESISTANCE - STRUCTURAL IBC SECTION 1705.11

VERIFICATION AND INSPECTION	REQUIRED	EXTENT: CONTINUOUS OR PERIODIC	REFERENCE STANDARD
1. STRUCTURAL WOOD			
A. FIELD GLUING ELEMENTS OF THE MAIN WINDFORCE-RESISTING SYSTEM		C	IBC 1705.11.1
B. NAILING, BOLTING, ANCHORING AND OTHER FASTENINGS WITHIN THE MAIN WINDFORCE-RESISTING SYSTEM, INCLUDING WOOD SHEAR WALLS, WOOD DIAPHRAGMS, DRAG STRUTS, BRACES, AND HOLD-DOWNS. EXCEPTION: SPECIAL INSPECTIONS ARE NOT REQUIRED FOR WOOD SHEAR WALLS, SHEAR PANELS AND DIAPHRAGMS, INCLUDING NAILING, BOLTING, ANCHORING AND OTHER FASTENING TO OTHER ELEMENTS OF THE MAIN WINDFORCE-RESISTING SYSTEM, WHERE THE FASTENER SPACING OF THE SHEATHING IS MORE THAN 4 INCHES ON CENTER.	✔	P	
2. COLD-FORMED STEEL LIGHT-FRAME CONSTRUCTION			
A. WELDING OPERATIONS OF ELEMENTS OF THE MAIN WINDFORCE-RESISTING SYSTEM		P	IBC 1705.11.2
B. SCREW ATTACHMENT, BOLTING, ANCHORING AND OTHER FASTENING OF ELEMENTS OF THE MAIN WINDFORCE-RESISTING SYSTEM, INCLUDING SHEAR WALLS, BRACES, DIAPHRAGMS, COLLECTORS (DRAG STRUTS) AND HOLD-DOWNS. EXCEPTION: SPECIAL INSPECTION IS NOT REQUIRED FOR COLD-FORMED STEEL LIGHT-FRAME SHEAR WALLS AND DIAPHRAGMS, INCLUDING SCREWING, BOLTING, ANCHORING, AND OTHER FASTENING TO COMPONENTS OF THE WINDFORCE RESISTING SYSTEM, COLLECTORS (DRAG STRUTS) AND HOLD-DOWNS WHERE EITHER OF THE FOLLOWING APPLIES: 1. THE SHEATHING IS GYPSUM BOARD OR FIBERBOARD. 2. THE SHEATHING IS WOOD STRUCTURAL PANEL OR STEEL SHEETS ON ONLY ONE SIDE OF THE SHEAR WALL, SHEAR PANEL OR DIAPHRAGM ASSEMBLY AND THE FASTENER SPACING OF THE SHEATHING IS MORE THAN 4 INCHES ON CENTER.		P	
3. WIND-RESISTING COMPONENTS			
A. ROOF CLADDING, ROOF DECK AND ROOF FRAMING CONNECTIONS.	✔	P	IBC 1705. 11.3
B. EXTERIOR WALL COVERING AND WALL CONNECTIONS TO ROOF AND FLOOR DIAPHRAGMS AND FRAMING.	✔	P	

EXCEPTION: SPECIAL INSPECTION FOR WIND RESISTANCE REQUIRED FOR STRUCTURES IN:

1. EXPOSURE CATEGORY B, WHERE V_{ASD} = 120 MPH OR GREATER.
2. EXPOSURE CATEGORY C OR D, WHERE V_{ASD} = 110 MPH OR GREATER.

NOTE: $V_{ASD} = V_{ULT} \sqrt{.6}$ (IBC SECTION 1609.3.1)

SEISMIC RESISTANCE - STRUCTURAL IBC SECTION 1705.12

VERIFICATION AND INSPECTION	REQUIRED	EXTENT: O - OBSERVE ON RANDOM DAILY BASIS. P - PERFORM PRIOR TO ACCEPTANCE. D - PREPARE REPORT	REFERENCED STANDARD
1. STRUCTURAL STEEL:			
WELDING			
A. VISUAL INSPECTION TASKS PRIOR TO WELDING:			
1) MATERIAL IDENTIFICATION (TYPE/ GRADE).		O	AISC 341, J6-1
2) WELDER IDENTIFICATION SYSTEM.		O	
3) FIT UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY). - JOINT PREPARATION - DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL). - CLEANLINESS (CONDITION OF STEEL SURFACES). - BACKING TYPE AND FIT (IF APPLICABLE).		O	
4) CONFIGURATION AND FINISH OF ACCESS HOLES.		O	
5) FIT-UP OF FILLET WELDS. - DIMENSIONS (ALIGNMENT, GAPS AT ROOT). - CLEANLINESS (CONDITION OF STEEL SURFACES). - TACKING (TACK WELD QUALITY AND LOCATION).		O	
B. VISUAL INSPECTION TASKS DURING WELDING:			
1) WELDING PROCEDURE SPECIFICATIONS FOLLOWED. - SETTINGS ON WELDING EQUIPMENT. - TRAVEL SPEED. - SELECTED WELDING MATERIALS. - SHIELDING GAS TYPE/FLOW RATE. - PREHEAT APPLIED. - INTERPASS TEMPERATURE MAINTAINED (MIN/MAX). - PROPER POSITION (F, V, H, OH). - ENTERIES OF FILLER MATERIALS AVOIDED UNLESS APPROVED.		O	AISC 341, J6-1
2) USE OF QUALIFIED WELDERS.		O	
3) CONTROL AND HANDLING OF WELDING CONSUMABLES. - PACKAGING. - EXPOSURE CONTROL.		O	
4) ENVIRONMENTAL CONDITIONS. - WIND SPEED WITHIN LIMITS. - PRECIPITATION AND TEMPERATURE.		O	
5) WELDING TECHNIQUES. - INTERPASS AND FINAL CLEANING. - EACH PASS WITHIN PROFILE LIMITATIONS. - EACH PASS MEETS QUALITY REQUIREMENTS.		O	
6) NO WELDING OVER CRACKED TACKS.		O	
C. VISUAL INSPECTION TASKS AFTER WELDING:			
1) WELDS CLEANED.		O	AISC 341, J6-1
2) SIZE, LENGTH, AND LOCATION OF WELDS.		P	
3) WELDS MEET VISUAL ACCEPTANCE CRITERIA. - CRACK PROHIBITION. - WELD/BASE-METAL FUSION. - CRATER CROSS SECTION. - WELD PROFILES AND SIZE. - UNDERCUT. - POROSITY.		P & D	
4) PLACEMENT OF REINFORCING OR CONTOURING FILLET WELDS (IF REQUIRED).		P & D	
5) BACKING REMOVED, WELD TABS REMOVED AND FINISHED, AND FILLET WELDS ADDED (IF REQUIRED).		P & D	
6) REPAIR ACTIVITIES.		P & D	
D. NON-DESTRUCTIVE TESTING OF WELDED JOINTS AS REQUIRED BY REFERENCED STANDARD.		P & D	AISC 341, J6.2
BOLTING			
E. INSPECTION TASKS PRIOR TO BOLTING:			
1) PROPER FASTENERS SELECTED FOR THE JOINT DETAIL.		O	AISC 341, J7
2) PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL.		O	
3) CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS.		O	
4) PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED FOR FASTENER ASSEMBLIES AND METHODS USED.		O & D	
5) PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS.		O	
F. INSPECTION TASKS DURING BOLTING:			
1) FASTENER ASSEMBLIES PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED.		O	AISC 341, J7
2) JOINT BROUGHT TO THE SNUG TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION.		O	
3) FASTENER COMPONENT NOT

SHEAR WALL SCHEDULE

PLYWOOD SHEAR WALLS

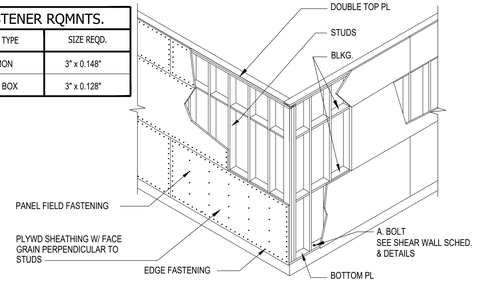
TYPE	WALL SHEATHING	FASTENERS @ WALL SHEATHING	(2)2x FRAMING FASTENING (STUD TO STUD)	A. BOLT SPACING	BLOCKING REQ'D.?
SW3	½" PLYWD. (1) FACE	10d @ 3" O.C. EDGES, 10d @ 12" O.C. FIELD	10d @ 3" O.C. (STAGGERED)	⅝"Ø @ 16" O.C.	YES
SW4	½" PLYWD. (1) FACE	10d @ 4" O.C. EDGES, 10d @ 12" O.C. FIELD	10d @ 4" O.C.	⅝"Ø @ 16" O.C.	YES
SW6	½" PLYWD. (1) FACE	10d @ 6" O.C. EDGES, 10d @ 12" O.C. FIELD	10d @ 6" O.C.	⅝"Ø @ 32" O.C.	YES

NOTES:
1. SEE 2/- FOR ADDITIONAL INFORMATION.
2. HOLDOWNS SPECIFIED TO BE LOCATED AT EACH END OF WALL AND AT EACH END OF OPENINGS IN WALL. SEE PLANS FOR SIZE AND LOCATION. PROVIDE DOUBLE STUD (MINIMUM) AT HOLDOWN LOCATIONS AND INSTALL PER MANUFACTURER RECOMMENDATIONS. EMBED ANCHOR BOLTS WITHIN 3" CLEAR OF BOTTOM OF THICKENED SLABS AND 12" (MINIMUM) AT FOUNDATION WALLS.
3. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3-INCH NOMINAL OR WIDER OR SHALL BE (2)2x FRAMING AND NAILS SHALL BE STAGGERED WHERE NAIL SPACING IS LESS THAN 6" O.C.
4. EPOXY ANCHOR BOLTS OF SAME SIZE AND SPACING AS SPECIFIED ANCHOR BOLTS MAY BE INSTALLED IN LIEU OF ANCHOR BOLTS AT CONTRACTOR'S OPTION EXCEPT AT HOLDOWN LOCATIONS. EMBEDMENT SHALL BE THE SAME AS SPECIFIED FOR ANCHOR BOLTS.
5. BOLTS SHALL BE EMBEDDED AT LEAST 7 INCHES INTO THE CONCRETE AND SHALL BE SPACED NOT MORE THAN SPECIFIED. THERE SHALL BE A MINIMUM OF TWO BOLTS PER PIECE WITH ONE BOLT LOCATED NOT MORE THAN 12 INCHES OR LESS THAN SEVEN BOLT DIAMETERS FROM EACH END OF THE PIECE. A PROPERLY SIZED NUT AND WASHER SHALL BE TIGHTENED ON EACH BOLT TO THE PLATE.
6. PLATE WASHERS A MINIMUM OF 3 INCH BY 3 INCH BY 0.229 INCH THICK OR SIMPSON "BPS" BEARING PLATES SHALL BE USED ON EACH BOLT AND SHALL BE GALVANIZED. SEE 5/- FOR ALLOWABLE PLATE SIZES AND CONFIGURATIONS.
7. SEE STRUCTURAL NOTES (SHEET S1.1B3) AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

1 SHEAR WALL SCHEDULE
NO SCALE

NOTES:
1. ALL PANEL EDGES SHALL BE BACKED W/ 2" NOMINAL OR WIDER BLOCKING @ PLYWOOD SHEATHED WALLS.
2. PLYWOOD WALL SHEATHING SHALL BE ½" APA C-D EXPOSURE 1 WITH PANEL SPAN RATING OF 24/0.
3. NAILS SHALL BE DRIVEN FLUSH BUT SHALL NOT FRACTURE SURFACE OF PLYWOOD SHEATHING.
4. NAILS FOR PLYWOOD WALL SHEATHING SHALL BE COMMON OR GALVANIZED BOX. GALVANIZED NAILS SHALL BE HOT DIPPED OR TUMBLED. SPECIFIED NAILING APPLIES TO NAILS AT ALL TOP & BOTTOM PLATES & BLOCKING. PANEL FIELD NAILS SHALL BE SPACED @ 12" O.C. (MAX.).
5. PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS OR FRAMING SHALL BE 3-INCH NOMINAL OR THICKER OR SHALL BE (2)2x. NAILS ON EACH SIDE SHALL BE STAGGERED WHERE PLYWOOD IS APPLIED ON BOTH FACES OF THE WALL AND NAIL SPACING IS LESS THAN 6" O.C.
6. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3-INCH NOMINAL OR WIDER OR SHALL BE (2)2x AND NAILS SHALL BE STAGGERED WHERE NAIL SPACING IS LESS THAN 6" O.C.
7. FASTENERS FOR ATTACHMENT OF GYPSUM WALLBOARD SHALL BE #6x1-⅝" TYPE W OR TYPE S SCREWS. SPECIFIED ATTACHMENT APPLIES TO SCREWS AT ALL TOP & BOTTOM PLATES AND BLOCKING (WHERE SPECIFIED). PANEL FIELD FASTENING SHALL BE SPACED AT 12" O.C. (MAX.).
8. SEE STRUCTURAL NOTES (SHEET S1.1B3) AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

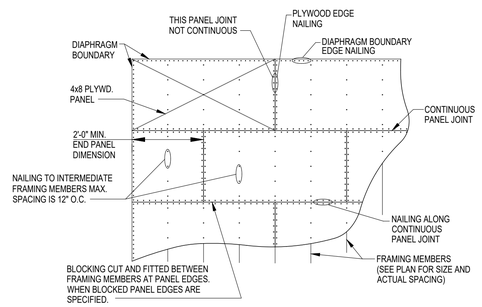
FASTENER RQMNTS.	
NAIL TYPE	SIZE REQD.
10d COMMON	3" x 0.148"
10d GALV. BOX	3" x 0.128"



2 DETAIL
NO SCALE

WALL PANEL LAYOUT & NAILING DETAIL

NOTES:
1. PLYWOOD ROOF SHEATHING SHALL BE 5/8" APA C-D EXPOSURE 1 WITH PANEL SPAN RATING 32/16.
2. PLYWOOD FLOOR SHEATHING SHALL BE T&G ¾" APA RATED STURD-I-FLOOR EXPOSURE 1 WITH PANEL SPAN RATING 24. GLUE TO ALL SUPPORTS.
3. NAILS FOR SHEATHING ATTACHMENT SHALL BE 10d COMMON. MINIMUM SHEATHING NAILING SHALL BE:
   10d AT 6" O.C. AT DIAPHRAGM BOUNDARIES
   10d AT 6" O.C. AT ALL SUPPORTED PANEL EDGES
   10d AT 12" O.C. AT INTERMEDIATE SUPPORTS
4. NAILS SHALL BE DRIVEN FLUSH BUT SHALL NOT FRACTURE THE SURFACE OF PLYWOOD SHEATHING.
5. SUPPORT SHALL BE SUPPLIED TO ALL PLYWOOD EDGES WITH PLYCLIPS, BLOCKING, TONGUE AND GROOVE PLYWOOD JOINTS, OR OTHER APPROVED METHODS PER APA RECOMMENDATION. PLYCLIPS SHALL NOT BE USED AT FLOOR SHEATHING.
6. SEE 4/- AND 8/- FOR ADDITIONAL INFORMATION.
7. SEE STRUCTURAL NOTES (SHEET S1.1B3) AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.



3 PLAN
NO SCALE

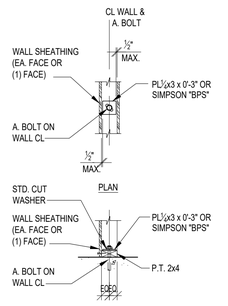
PLYWOOD LAYOUT & NAILING PLAN

ROOF AND FLOOR PLYWD/NAILING SCHEDULE

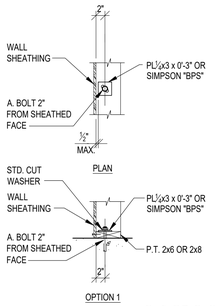
MARK	BOUNDARY NAILING	NAILING ALONG CONT. PANEL JOINT @ BLKG	PLYWD. EDGE NAILING	INTERMEDIATE FRMG. MEMBER NAILING	PANEL EDGE BLKG.
(A)	10d @ 6" O.C.	10d @ 6" O.C.	10d @ 6" O.C.	10d @ 12" O.C.	WHERE INDICATED ON PLAN

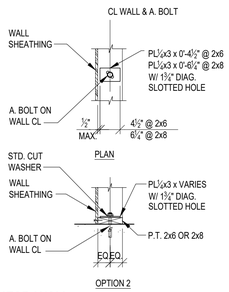
NOTES:
1. SEE DETAIL 3/- FOR TYPICAL PLYWOOD PANEL LAYOUT. SEE 8/- FOR PLYWOOD NAILING DIAGRAM.
2. ROOF SHEATHING TO BE 5/8" PLYWOOD APA C-D EXPOSURE 1 WITH PANEL SPAN RATING OF 32/16.
3. PLYWOOD FLOOR SHEATHING SHALL BE T&G ¾" APA RATED STURD-I-FLOOR EXPOSURE 1 WITH PANEL SPAN RATING 24. GLUE TO ALL SUPPORTS. NAIL ALL FLOOR AREAS PER MARK (A)
4. ALL PANEL EDGE BLOCKING TO BE MINIMUM 2x4 FLAT.
5. SUPPORT SHALL BE SUPPLIED TO ALL PLYWOOD EDGES WITH PLYCLIPS, BLOCKING, T&G PLYWOOD JOINTS OR OTHER APPROVED METHOD PER APA RECOMMENDATIONS. PROVIDE BLOCKING WHERE INDICATED ON PLANS AND DETAILS. PLYCLIPS SHALL NOT BE USED AT FLOOR SHEATHING.
6. NAILS SHALL BE DRIVEN FLUSH BUT SHALL NOT FRACTURE SURFACE OF PLYWOOD SHEATHING.
7. SEE STRUCTURAL NOTES (SHEET S1.1B3) AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

4 ROOF & FLOOR PLYWD./NAILING SCHEDULE
NO SCALE



2x4 SHEAR WALL

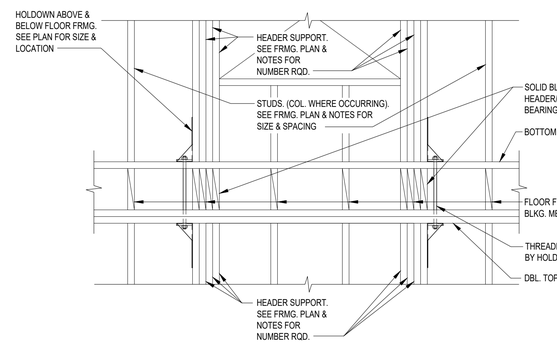




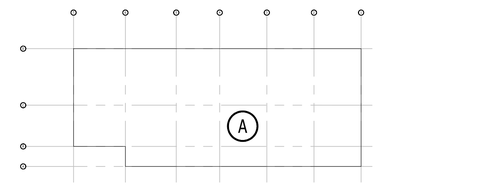
2x6 OR 2x8 SHEAR WALL W/ SHEATHING (1) FACE

NOTES:
1. ANCHOR BOLTS, PL½", AND SIMPSON "BPS" SHALL BE GALVANIZED.

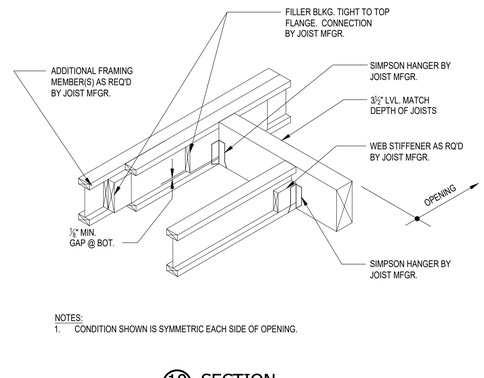
5 SHEAR WALL BOTTOM PLATE ANCHORS
NO SCALE



7 SECTION
N.T.S.

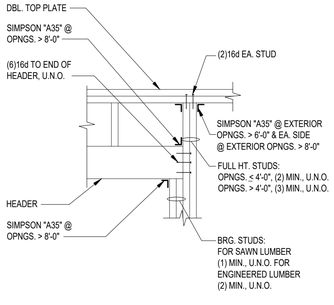


8 PLYWD./NAILING DIAGRAM
NO SCALE

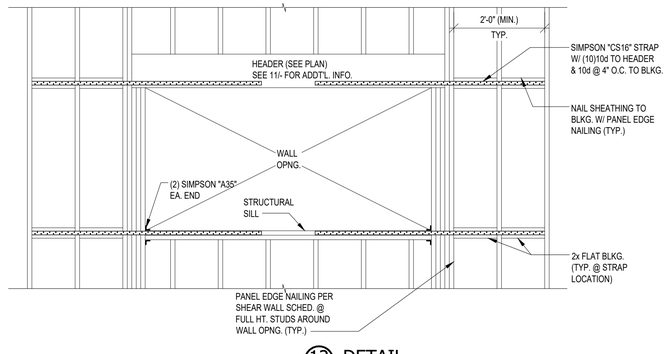


NOTES:
1. CONDITION SHOWN IS SYMMETRIC EACH SIDE OF OPENING.

10 SECTION
N.T.S.



11 DETAIL
N.T.S.



12 DETAIL
N.T.S.

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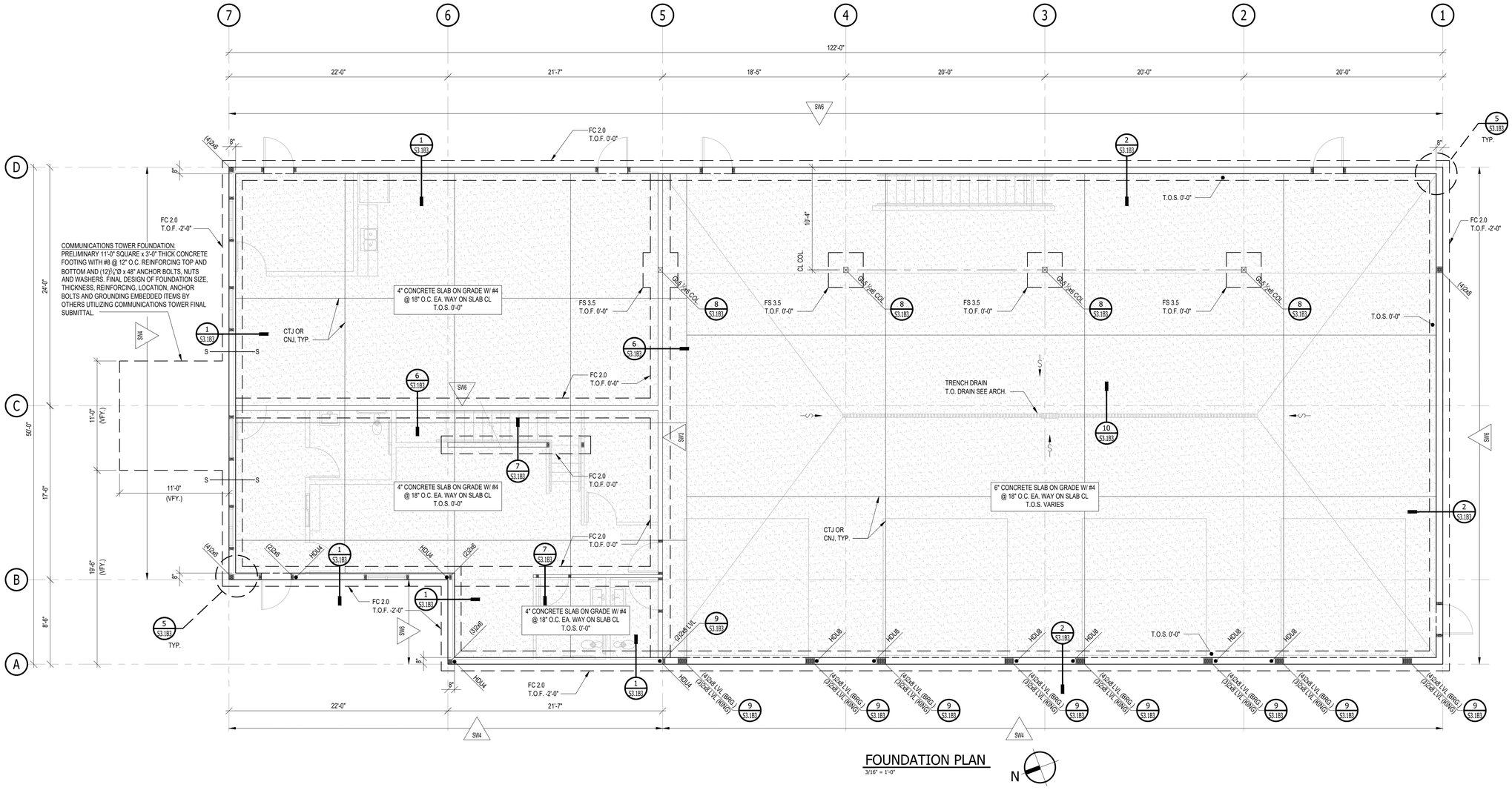
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Job: 2344 Date: 1/6/2025
.DWG ID – 2243 c001–.dwg

S1.3B3



FOUNDATION PLAN

3/16" = 1'-0"

N

FOOTING SCHEDULE												
ID	WIDTH	LENGTH	DEPTH	REINF. CROSSWISE				REINF. LENGTHWISE				REMARKS
				NO	SIZE	LENGTH	SPACING	NO	SIZE	LENGTH	SPACING	
FC2.0	2'-0"	CONT.	12"	--	#4	1'-8"	18" O.C.	3	#4	--	EQ.	CONT. FTG.
FS3.5	3'-6"	3'-6"	12"	4	#4	3'-2"	EQ.	4	#4	3'-2"	EQ.	SPREAD FTG. - REINF. TOP & BOT.

FOUNDATION PLAN NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, WALLS, AND OTHER INFORMATION NOT SHOWN OR NOTED.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE PROCEEDING WITH THE WORK. ALL DIMENSIONS AND EXISTING CONDITIONS MUST BE VERIFIED AND/OR DETERMINED IN THE FIELD.
3. THE CONSTRUCTION DOCUMENTS MAY NOT SHOW SOME OBSTRUCTIONS. EVEN THOUGH NOT SHOWN OR SPECIFICALLY MENTIONED, THE REMOVAL AND REPLACEMENT OF MINOR OBSTRUCTIONS SHOULD BE ANTICIPATED AND ACCOMPLISHED.
4. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AND/OR SHORING OF THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
5. FOR FOUNDATION SOIL PREPARATION, SEE GEOTECH REPORT AND FOUNDATION NOTES ON SHEET S1.1B3.
6. CONTRACTOR TO EQUAL SPACE CONTROL AND CONSTRUCTION JOINTS PER THE FOUNDATION PLAN. CONTRACTOR SHALL PLACE CONTROL AND CONSTRUCTION JOINTS SO THAT THE MAXIMUM LENGTH OF ANY SECTION OF SLAB IS (36) TIMES THE NET SLAB THICKNESS. MAXIMUM SLAB SECTION RECTANGULAR RATIO SHALL BE 2:1. SEE DETAIL 11 & 12/S3.1B3.
7. TYPICAL FLOOR CONSTRUCTION TO BE 4" OR 6" CONCRETE SLAB ON GRADE WITH #4 @ 18" O.C. EACH WAY ON SLAB CENTERLINE. SEE PLAN (THIS SHEET) FOR SLAB THICKNESS.
8. WOOD STUD BEARING WALLS AND SHEAR WALLS ARE 2x6 AT 16" O.C.
9. SILL BOLTS SHALL BE SPACED NO FARTHER APART THAN SPECIFIED. THERE SHALL BE A MINIMUM OF TWO BOLTS PER BOTTOM PLATE WITH ONE BOLT LOCATED NOT MORE THAN 12" OR LESS THAN 7 BOLT DIAMETERS FROM EACH END OF EACH BOTTOM PLATE. A PROPERLY SIZED NUT AND WASHER SHALL BE TIGHTENED ON EACH BOLT TO THE PLATE. FASTENERS FOR PRESERVATIVE-TREATED AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER.
10. PLATE WASHERS A MINIMUM OF 3" BY 3" BY 0.229" THICK OR SIMPSON "BPS" BEARING PLATES SHALL BE USED ON EACH SILL BOLT AT SHEAR WALLS AND SHALL BE GALVANIZED.
11. SEE 3/S3.1B3 WHERE PIPING OCCURS PERPENDICULAR TO FOUNDATION WALL.
12. THICKEN INTERIOR FOOTING TO EXTERIOR WALL TOP OF FOOTING DEPTH AT ALL INTERIOR AND EXTERIOR WALLS.
13. SEE FRAMING PLANS AND NOTES ON SHEET S2.2B3 AND S2.3B3 FOR ADDITIONAL INFORMATION.
14. SEE STRUCTURAL NOTES. SEE SHEET S1.1B3 FOR ADDITIONAL INFORMATION.

15. LEGEND:

FS#	-DENOTES SPREAD FOOTING. SEE FOOTING SCHEDULE (THIS SHEET) FOR ADDITIONAL INFORMATION.
FC#	-DENOTES CONTINUOUS FOOTING. SEE FOOTING SCHEDULE (THIS SHEET) FOR ADDITIONAL INFORMATION.
S-S	-DENOTES FOOTING STEP. SEE 4/S3.1B3 FOR ADDITIONAL INFORMATION.
T.O.F.	-DENOTES TOP OF FOOTING ELEVATION.
T.O.S.	-DENOTES TOP OF SLAB ELEVATION
F.F.	-DENOTES TOP OF FINISHED FLOOR ELEVATION.
	-DENOTES FLOOR SLOPE DIRECTION.
SW#	-DENOTES SHEAR WALL BELOW FLOOR FRAMING TO FOUNDATION. SEE SHEAR WALL SCHEDULE (1/S1.3B3) FOR ADDITIONAL INFORMATION. ALL EXTERIOR WALLS SHALL BE SHEAR WALL TYPE UNLESS NOTED OTHERWISE.
HDU#	-DENOTES SIMPSON HOLD DOWN TYPE & LOCATION. PROVIDE DOUBLE STUD (MINIMUM) AT HOLD DOWN LOCATIONS AND INSTALL PER MANUFACTURER RECOMMENDATIONS.
CTJ	-DENOTES CONTROL JOINT. SEE SECTION 11 & 12/S3.1B3 FOR ADDITIONAL INFORMATION.
CNJ	-DENOTES CONSTRUCTION JOINT. SEE SECTION 11 & 12/S3.1B3 FOR ADDITIONAL INFORMATION.
☒	-DENOTES WOOD COLUMN LOCATIONS. WHERE COLUMN OCCURS IN STUD WALL, CENTER COLUMN ON CENTERLINE OF STUD WALL TYPICAL UNLESS NOTED OTHERWISE.

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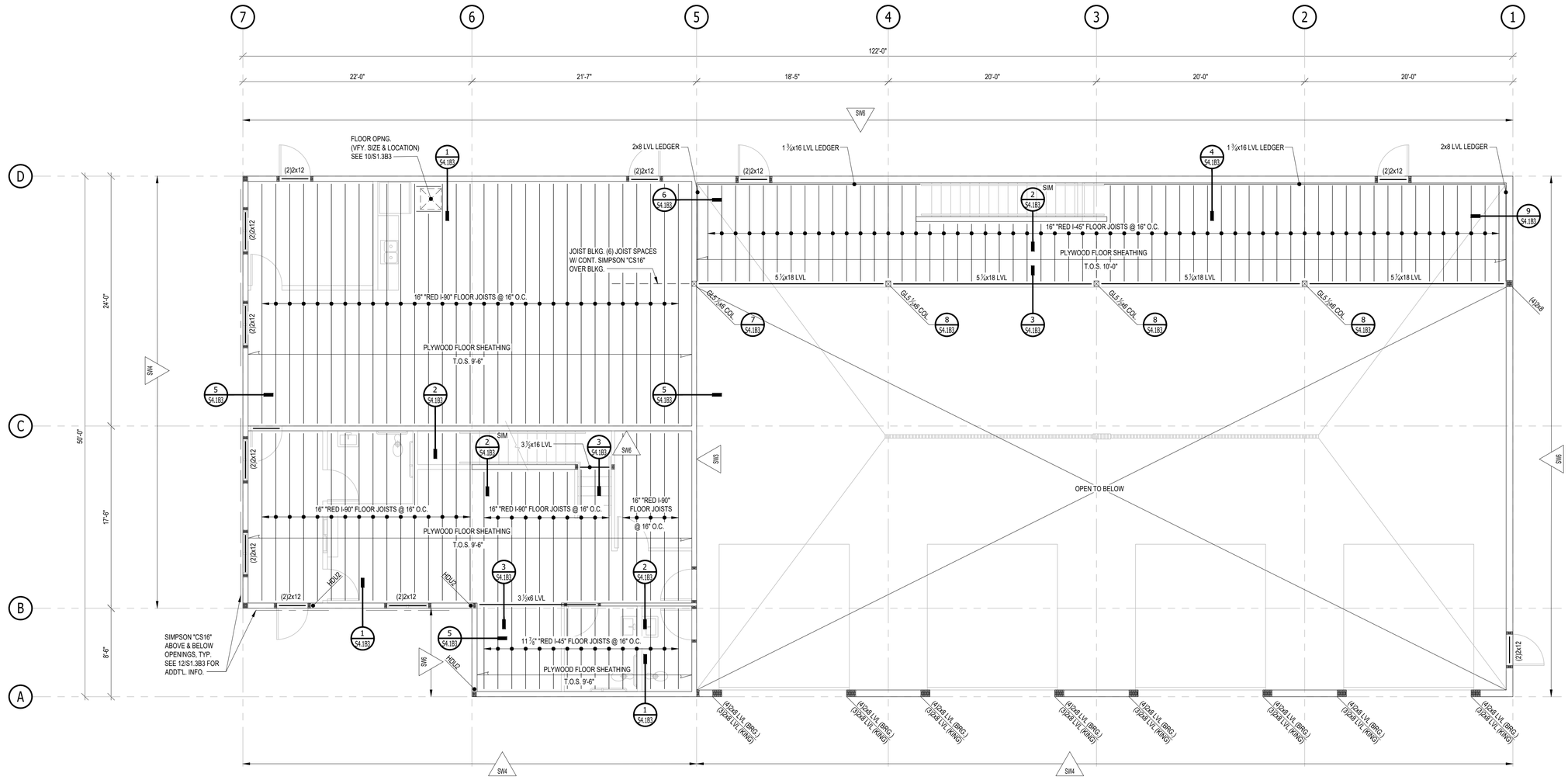
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Job: 2344 Date: 1/6/2025
.DWG ID – 2243 c001–.dwg

S2.1B3



FLOOR FRAMING PLAN

3/16" = 1'-0"

N

FLOOR FRAMING PLAN NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, WALLS, AND OTHER INFORMATION NOT SHOWN OR NOTED.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE PROCEEDING WITH THE WORK. ALL DIMENSIONS AND EXISTING CONDITIONS MUST BE VERIFIED AND/OR DETERMINED IN THE FIELD.
3. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AND/OR SHORING OF THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
4. PLYWOOD FLOOR SHEATHING TO BE ¾" APA RATED STURD-I-FLOOR EXPOSURE 1 WITH PANEL SPAN RATING 48. USE TONGUE AND GROOVE PLYWOOD OR BLOCK PANEL EDGES. GLUE TO ALL SUPPORTS.
5. GLU-NAIL FLOOR PLYWOOD TO FRAMING MEMBER WITH THE FOLLOWING:

   16d AT 6" O.C. AT DIAPHRAGM BOUNDARIES;
   16d AT 6" O.C. AT SUPPORTED PANEL EDGES;
   16d AT 12" O.C. AT INTERMEDIATE SUPPORTS.

   SEE PLYWOOD LAYOUT AND NAILING PLAN (3/S1.3B3) FOR NAILING AND TYPICAL PLYWOOD PANEL LAYOUT.
6. STAGGER SPLICES ON CONTINUOUS TOP PLATES AND NAIL WITH 12d AT 6" O.C. STAGGERED. MINIMUM OF SIXTEEN (16) NAILS BETWEEN ADJACENT SPLICES.
7. EXTERIOR AND INTERIOR BEARING WALLS ARE 2X6 WOOD STUDS AT 16" O.C. TYPICAL. WHERE STUD LENGTH EXCEEDS 12'-0" PROVIDE 2x6 LVL STUDS @ 16" O.C.
8. MINIMUM BEAM/HEADER SIZE SHALL BE (3) 2x10 AT 2x6 STUD WALLS AND (2) 2x10 AT 2x4 STUD WALLS.
9. FLOOR FRAMING TO BE PRE-ENGINEERED I-JOISTS, ENGINEERED AND MANUFACTURED IN CONFORMANCE WITH THE INTERNATIONAL BUILDING CODE. ERECTION, ANCHORAGE, AND BRIDGING TO BE PER MANUFACTURER'S STANDARDS. MANUFACTURER SHALL PROVIDE ALL SPECIALTY ITEMS SUCH AS BLOCKING, BRIDGING, SPECIFICATION OF JOIST TO JOIST CONNECTIONS, ETC. REQUIRED FOR COMPLETE ENGINEERED ROOF FRAMING SYSTEM.
10. ALL BEAMS AND HEADERS TO HAVE DOUBLE STUD SUPPORTS (MINIMUM) EXCEPT WHERE OTHERWISE NOTED. SEE 11/S1.3B3.
11. PROVIDE SOLID BEARING TO FLOOR FRAMING AND FOUNDATION BELOW WITH SAME SIZE AND NUMBER OF STUDS (MINIMUM) BELOW ALL BEAM AND HEADER BEARING POINTS (SEE 7/S1.3B3 FOR ADDITIONAL INFORMATION).
12. FOR OPENINGS IN WOOD FLOOR FRAMING, SEE 10/S1.3B3 FOR ADDITIONAL INFORMATION. NOT ALL OPENINGS ARE SHOWN OR NOTED.
13. BLOCK ALL JOINTS ON WALLS SHEATHED WITH PLYWOOD. SEE WALL PANEL LAYOUT AND NAILING DETAIL (2/S1.3B3) FOR ADDITIONAL INFORMATION.
14. SEE ROOF FRAMING PLAN AND NOTES (SHEET S2.3B3) FOR ADDITIONAL INFORMATION.
15. SEE STRUCTURAL NOTES (SHEET S1.1B3) FOR ADDITIONAL INFORMATION.
16. **LEGEND:**

SW#	-DENOTES SHEAR WALL BELOW FLOOR FRAMING TO FOUNDATION. SEE SHEAR WALL SCHEDULE (1/S1.3B3) FOR ADDITIONAL INFORMATION. ALL EXTERIOR WALLS SHALL BE SHEAR WALL TYPE UNLESS NOTED OTHERWISE.
HDU#	-DENOTES HOLDOWN SIZE AND LOCATION. SEE 7/S1.3B3.
T.O.S.	-DENOTES TOP OF SHEATHING ELEVATION.
T.O.B.	-DENOTES TOP OF BEAM ELEVATION.
F.F.	-DENOTES TOP OF FINISH FLOOR ELEVATION.
	-DENOTES FLOOR SHEATHING SPAN DIRECTION.
☒	-DENOTES WOOD COLUMN LOCATION BELOW FLOOR FRAMING (U.N.O.). WHERE COLUMN OCCURS IN STUD WALL, CENTER COLUMN ON CENTERLINE OF STUD WALL TYPICAL UNLESS NOTED OTHERWISE.

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D. HEDDEN
STATE OF WASHINGTON
EXPIRES: 10/10/2025
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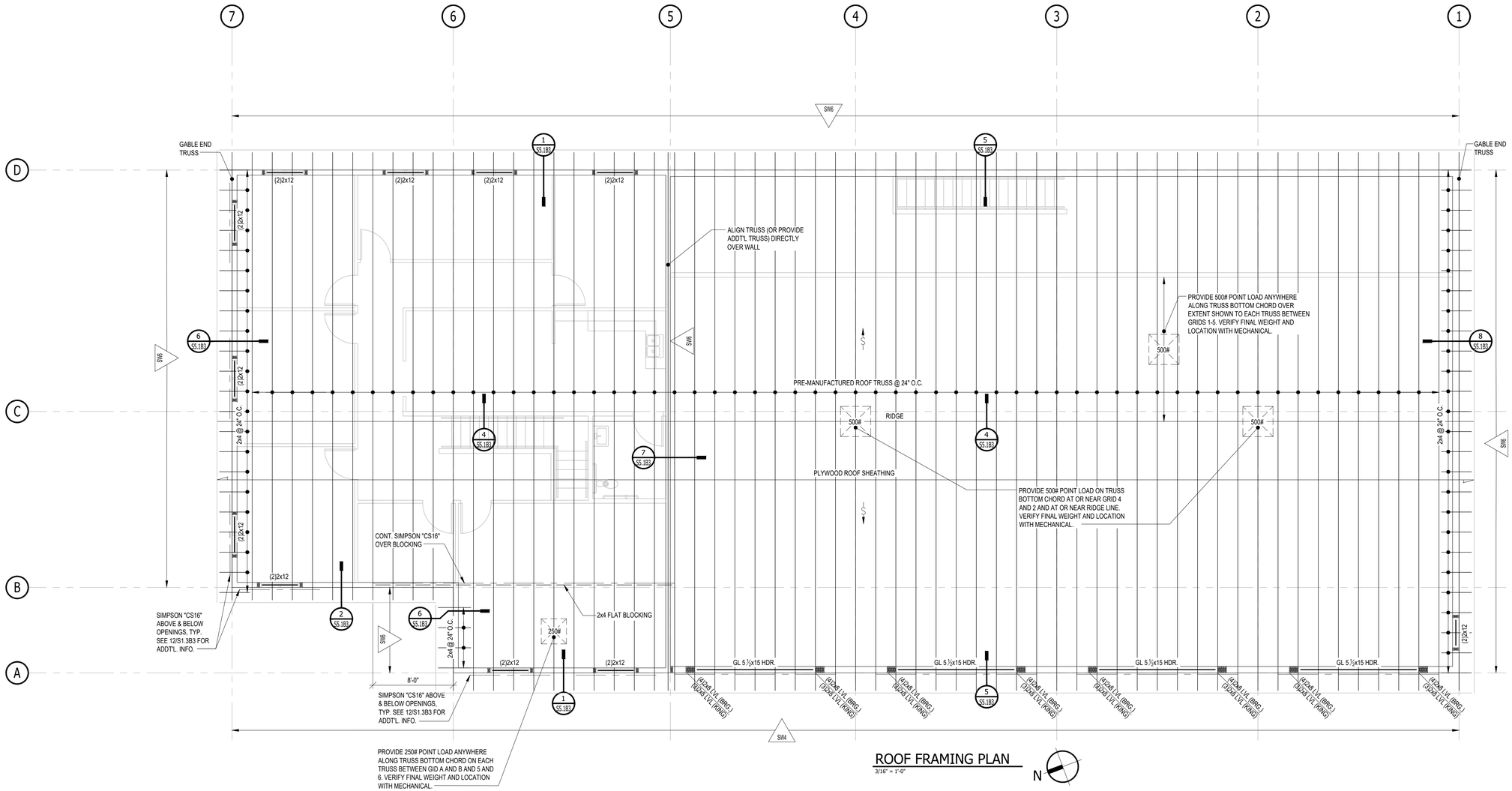
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Job: 2344 Date: 1/6/2025
.DWG ID – 2243 s001-..dwg

S2.2B3



ROOF FRAMING PLAN

3/16" = 1'-0"

N

ROOF FRAMING PLAN NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, WALLS, AND OTHER INFORMATION NOT SHOWN OR NOTED.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE PROCEEDING WITH THE WORK. ALL DIMENSIONS AND EXISTING CONDITIONS MUST BE VERIFIED AND/OR DETERMINED IN THE FIELD.
3. THE CONSTRUCTION DOCUMENTS MAY NOT SHOW SOME OBSTRUCTIONS. EVEN THOUGH NOT SHOWN OR SPECIFICALLY MENTIONED, THE REMOVAL AND REPLACEMENT OF MINOR OBSTRUCTIONS SHOULD BE ANTICIPATED AND ACCOMPLISHED.
4. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AND/OR SHORING OF THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
5. ROOF SLOPE IS TO BE 4:12 TYPICAL.
6. PLYWOOD ROOF SHEATHING TO BE ⅝" APA C-D EXPOSURE 1 WITH PANEL SPAN RATING 40/20. PLYWOOD SHALL BE CONTINUOUS UNDER ALL OVERBUILD AREAS.
7. ROOF PLYWOOD NAILING TO BE:

   10d AT 6" O.C. AT DIAPHRAGM BOUNDARIES;
   10d AT 6" O.C. AT ALL SUPPORTED PANEL EDGES;
   10d AT 12" O.C. AT INTERMEDIATE SUPPORTS.

   SEE PLYWOOD LAYOUT AND NAILING PLAN (DETAIL 3/S1.3B3) FOR NAILING AND TYPICAL PLYWOOD PANEL LAYOUT.
8. SUPPORT SHALL BE SUPPLIED TO ALL PLYWOOD EDGES WITH PLYCLIPS, BLOCKING, TONGUE & GROOVE PLYWOOD JOINTS.
9. ROOF FRAMING TO BE PRE-ENGINEERED TRUSSES, ENGINEERED AND MANUFACTURED IN CONFORMANCE WITH THE INTERNATIONAL BUILDING CODE. ERECTION, ANCHORAGE, AND BRIDGING TO BE PER MANUFACTURER'S STANDARDS. MANUFACTURER SHALL PROVIDE ALL SPECIALTY ITEMS SUCH AS BLOCKING, BRIDGING, SPECIFICATION OF TRUSS TO TRUSS CONNECTIONS, ETC. REQUIRED FOR COMPLETE ENGINEERED ROOF FRAMING SYSTEM.
10. ANCHOR ROOF FRAMING TO WALL TOP PLATE OR HEADERS WITH SIMPSON "H1" HURRICANE TIES, MINIMUM.
11. STAGGER SPLICES ON CONTINUOUS TOP PLATE AND NAIL WITH 12d AT 6" O.C. STAGGERED. MINIMUM OF SIXTEEN (16) NAILS BETWEEN ADJACENT SPLICES.
12. EXTERIOR WALLS AND INTERIOR BEARING WALLS ARE 2x6 AT 16" O.C. WHERE STUD LENGTH EXCEEDS 12'-0" PROVIDE 2x6 LVL STUDS AT 16" O.C.
13. MINIMUM BEAM AND HEADER SIZE SHALL BE (2) 2x12.
14. ALL BEAMS AND HEADERS TO HAVE DOUBLE STUD SUPPORTS (MINIMUM) EXCEPT WHERE OTHERWISE NOTED.
15. PROVIDE SOLID BEARING TO FLOOR FRAMING AND FOUNDATION BELOW WITH SAME SIZE AND NUMBER OF STUDS (MINIMUM) BELOW ALL BEAM AND HEADER BEARING POINTS. (DETAIL 11/S1.3B3).
16. BLOCK ALL JOINTS ON WALLS SHEATHED WITH PLYWOOD. SEE WALL PANEL LAYOUT AND NAILING DETAIL (2/S1.3B3) FOR ADDITIONAL INFORMATION.
17. SEE STRUCTURAL NOTES (SHEET S1.1B3) FOR ADDITIONAL INFORMATION.
18. **LEGEND:**

SW#	-DENOTES SHEAR WALL BELOW FLOOR FRAMING TO FOUNDATION. SEE SHEAR WALL SCHEDULE (1/S1.3B3) FOR ADDITIONAL INFORMATION. ALL EXTERIOR WALLS SHALL BE SHEAR WALL TYPE UNLESS NOTED OTHERWISE.
T.O.B.	-DENOTES TOP OF BEAM ELEVATION.
F.F.	-DENOTES TOP OF FINISH FLOOR.
	-DENOTES ROOF SLOPE DIRECTION.
	-DENOTES ROOF SHEATHING SPAN DIRECTION.
	-DENOTES WOOD COLUMN LOCATION. WHERE COLUMN OCCURS IN STUD WALL, CENTER COLUMN ON CENTERLINE OF STUD WALL TYPICAL UNLESS NOTED OTHERWISE.
:#	-DENOTES APPROXIMATE SIZE, LOCATION, AND WEIGHT OF MECHANICAL EQUIPMENT. VERIFY WITH MECHANICAL. SEE MECH. FOR ADDITIONAL INFORMATION.

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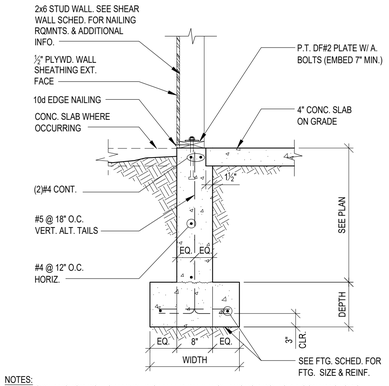
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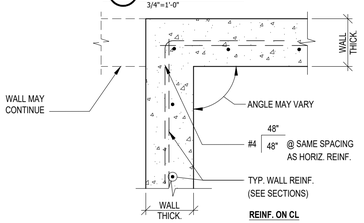
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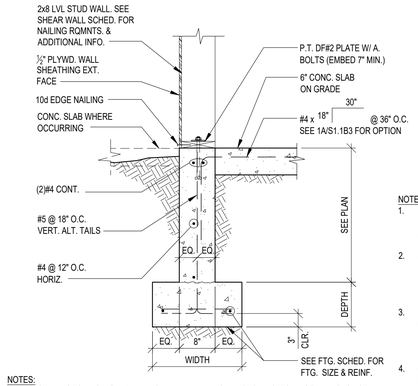
S2.3B3



NOTES:
1. EPOXY ANCHOR BOLTS MAY BE INSTALLED IN LIEU OF ANCHOR BOLTS AT CONTRACTOR'S OPTION. EMBED DEPTH SHALL MATCH ANCHOR BOLT EMBED DEPTH.
2. SEE SHEAR WALL SCHEDULE (1/S1.3B3) FOR PLATE SIZE, WASHER REQUIREMENTS AND ANCHOR BOLT SPACING.

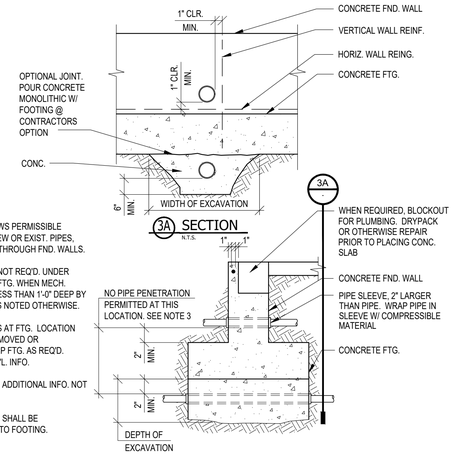
1 SECTION
3/4"=1'-0"





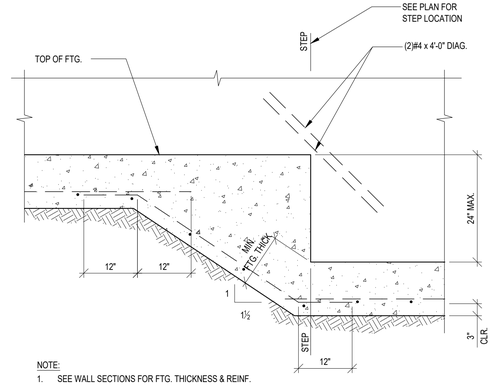
NOTES:
1. EPOXY ANCHOR BOLTS MAY BE INSTALLED IN LIEU OF ANCHOR BOLTS AT CONTRACTOR'S OPTION. EMBED DEPTH SHALL MATCH ANCHOR BOLT EMBED DEPTH.
2. SEE SHEAR WALL SCHEDULE (1/S1.3B3) FOR PLATE SIZE, WASHER REQUIREMENTS AND ANCHOR BOLT SPACING.

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



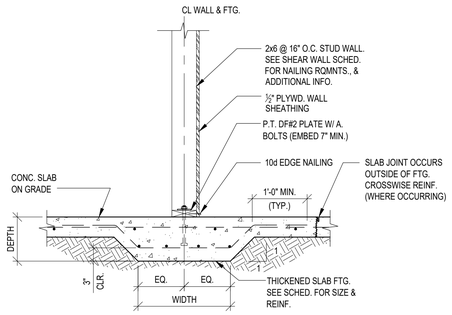
NOTES:
1. THIS DETAIL SHOWS PERMISSIBLE LOCATIONS OF NEW OR EXIST. PIPES, CONDUITS, ETC. THROUGH FND. WALLS.
2. CONC. BACKFILL NOT REQ'D. UNDER NON-BRG. WALL FTG. WHEN MECH. EXCAVATION IS LESS THAN 1'-0" DEEP BY 1'-0" WIDE UNLESS NOTED OTHERWISE.
3. IF PIPING OCCURS AT FTG. LOCATION AND CANNOT BE MOVED OR RE-LOCATED, STEP FTG. AS REQ'D. SEE 4/- FOR ADDT'L. INFO.
4. WALL ABOVE AND ADDITIONAL INFO. NOT SHOWN.
5. CONDUIT OR PIPE SHALL BE PERPENDICULAR TO FOOTING.

3 DETAIL
NO SCALE



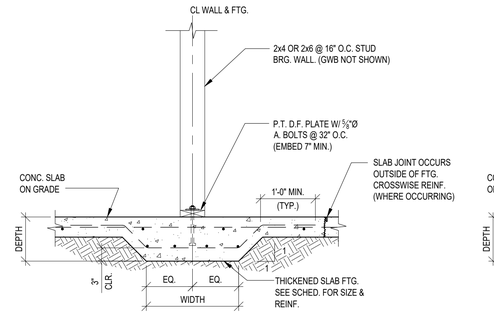
NOTE:
1. SEE WALL SECTIONS FOR FTG. THICKNESS & REINF.

4 SECTION
N.T.S.



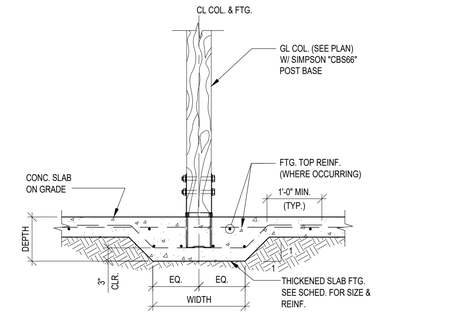
NOTES:
1. WHERE CHANGE IN SLAB ELEVATION OCCURS, SEE 11 AND 12/- FOR SLAB STEP INFORMATION.
2. EPOXY ANCHOR BOLTS MAY BE INSTALLED IN LIEU OF ANCHOR BOLTS AT CONTRACTOR'S OPTION. EMBED DEPTH SHALL MATCH ANCHOR BOLT EMBED DEPTH.
3. SEE SHEAR WALL SCHEDULE (1/S1.3B3) FOR PLATE SIZE, WASHER REQUIREMENTS AND ANCHOR BOLT SPACING.

6 SECTION
3/4"=1'-0"

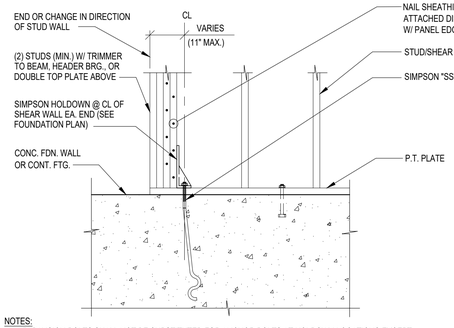


NOTES:
1. EPOXY ANCHOR BOLTS MAY BE INSTALLED IN LIEU OF ANCHOR BOLTS AT CONTRACTOR'S OPTION. EMBED DEPTH SHALL MATCH ANCHOR BOLT EMBED DEPTH.
2. SEE STRUCTURAL NOTES (S1.1B3) FOR ADDITIONAL INFORMATION.

11 SECTION
3/4"=1'-0"

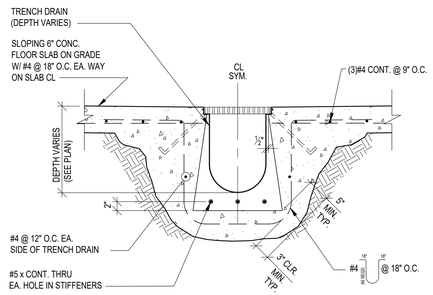


12 SECTION
3/4"=1'-0"



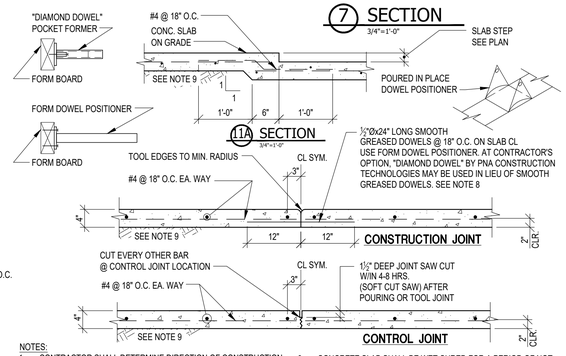
NOTES:
1. EXPANSION BOLTS SHALL NOT BE SUBSTITUTED FOR ANCHOR BOLTS AT HOLDOWN LOCATIONS EXCEPT AT EXISTING CONCRETE. PROVIDE EPOXY ANCHOR BOLTS OF SAME SIZE AND EMBEDMENT OF HOLDOWN ANCHOR BOLTS AT EXISTING CONCRETE.

9 SECTION
3/4"=1'-0"



NOTES:
1. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

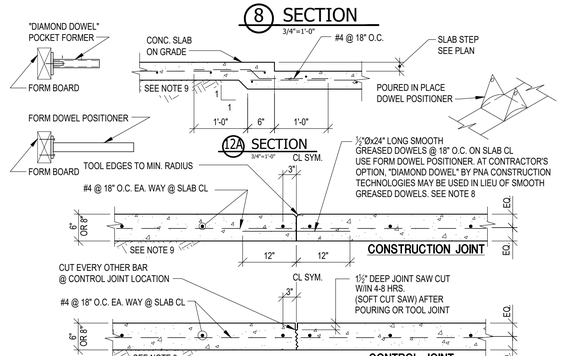
10 DETAIL
3/4"=1'-0"



NOTES:
1. CONTRACTOR SHALL DETERMINE DIRECTION OF CONSTRUCTION AND CONTROL JOINTS INDICATED ON THE FOUNDATION PLANS TO FACILITATE THE CONSTRUCTION PROCESS.
2. DOWELS MUST BE PARALLEL TO EA. OTHER & PERPENDICULAR TO THE JOINT.
3. PLACE NO DOWEL WITHIN 12" OF AN INTERSECTING JOINT.
4. COARSE AGGREGATE SHALL BE 1" MINUS FOR 4" SLAB ON GRADE.
5. CONTRACTOR MAY ONLY ADD JOB SITE WATER TO MIX IF BATCH TICKET PROVIDES QUANTITY OF WATER IN GALLONS (ALLOWED) SO AS TO NOT EXCEED SPECIFIED CONCRETE WATER CEMENT RATIO.
6. CONCRETE SLAB SHALL BE WET CURED FOR A PERIOD OF NOT LESS THAN SEVEN DAYS. CONTRACTOR SHALL PROVIDE WATER AS REQUIRED. NO PORTIONS OF THE SLAB SHALL BE ALLOWED TO DRY DURING THIS PERIOD.
7. PROVIDE 2½" CLEAR BTWN. REINFORCING AND FORMS.
8. DIAMOND DOWEL SYSTEM AS MANUFACTURED BY PNA CONSTRUCTION.
9. AT DEPRESSED SLAB OR SLAB STEP, SEE 11A/- FOR ADDITIONAL INFO.

7 SECTION
3/4"=1'-0"

11A SECTION
3/4"=1'-0"



NOTES:
1. CONTRACTOR SHALL DETERMINE DIRECTION OF CONSTRUCTION AND CONTROL JOINTS INDICATED ON THE FOUNDATION PLANS TO FACILITATE THE CONSTRUCTION PROCESS.
2. DOWELS MUST BE PARALLEL TO EA. OTHER & PERPENDICULAR TO THE JOINT.
3. PLACE NO DOWEL WITHIN 12" OF AN INTERSECTING JOINT.
4. COARSE AGGREGATE SHALL BE 1 TO 1½" MINUS FOR 6" AND 8" SLAB ON GRADE.
5. CONTRACTOR MAY ONLY ADD JOB SITE WATER TO MIX IF BATCH TICKET PROVIDES QUANTITY OF WATER IN GALLONS (ALLOWED) SO AS TO NOT EXCEED SPECIFIED CONCRETE WATER CEMENT RATIO.
6. CONCRETE SLAB SHALL BE WET CURED FOR A PERIOD OF NOT LESS THAN SEVEN DAYS. CONTRACTOR SHALL PROVIDE WATER AS REQUIRED. NO PORTIONS OF THE SLAB SHALL BE ALLOWED TO DRY DURING THIS PERIOD.
7. PROVIDE 2½" CLEAR BTWN. REINFORCING AND FORMS.
8. DIAMOND DOWEL SYSTEM AS MANUFACTURED BY PNA CONSTRUCTION.
9. AT DEPRESSED SLAB OR SLAB STEP, SEE12A/- FOR ADDITIONAL INFO.

8 SECTION
3/4"=1'-0"

12 SECTION
3/4"=1'-0"

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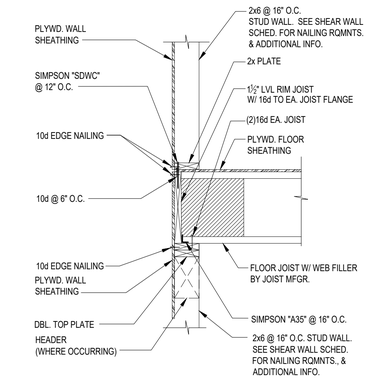
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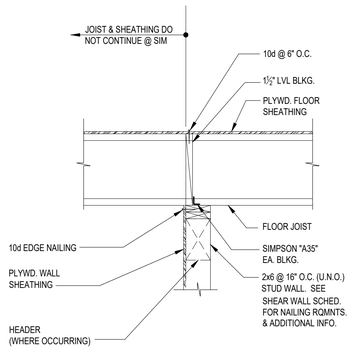
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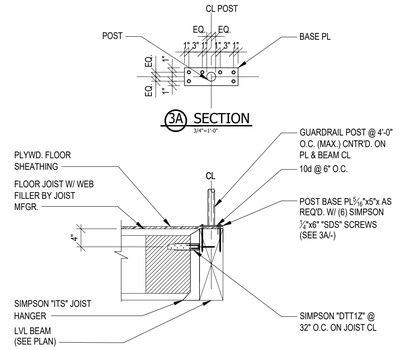
S3.1B3



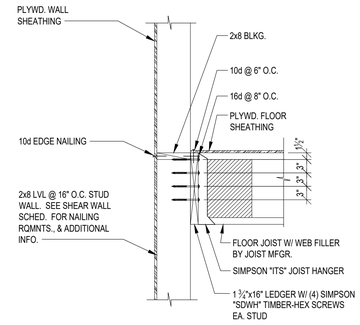
1 SECTION
3/4" = 1'-0"



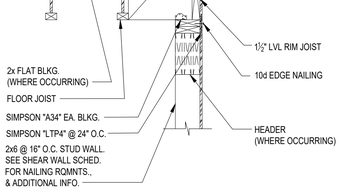
2 SECTION
3/4" = 1'-0"



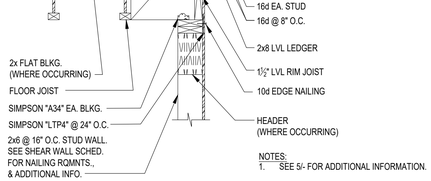
3 SECTION
3/4" = 1'-0"



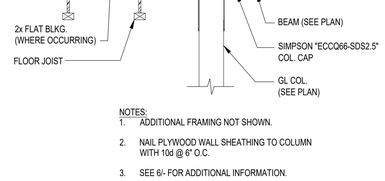
4 SECTION
3/4" = 1'-0"



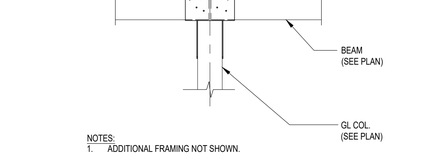
5 SECTION
3/4" = 1'-0"



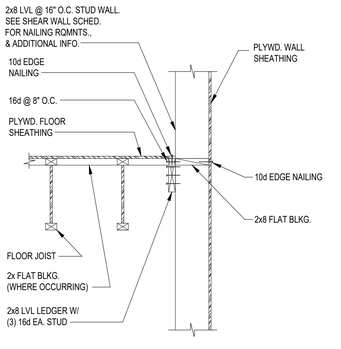
6 SECTION
3/4" = 1'-0"



7 SECTION
3/4" = 1'-0"



8 SECTION
3/4" = 1'-0"



9 SECTION
3/4" = 1'-0"

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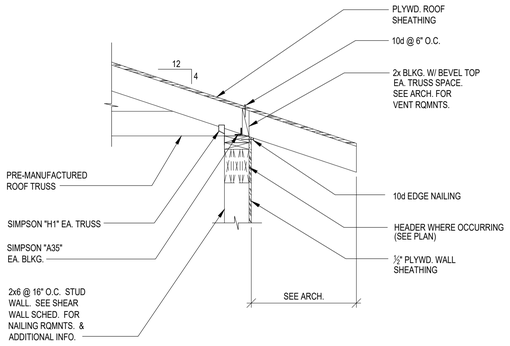
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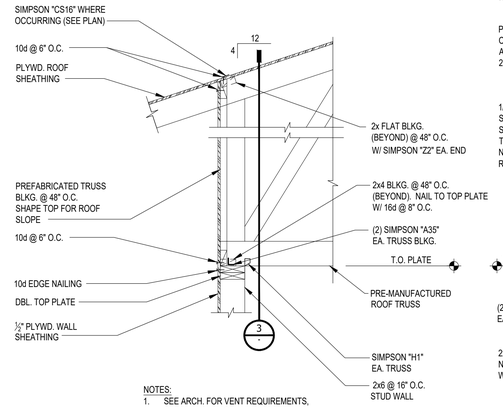
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S4.1B3



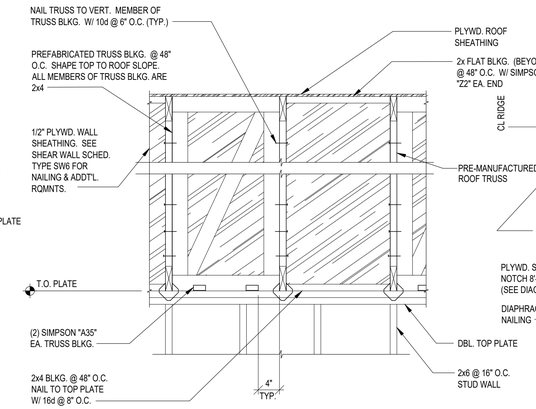
NOTES:
1. SEE ARCH. FOR VENT REQUIREMENTS, OVERHANG LENGTH, AND SOFFIT.

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

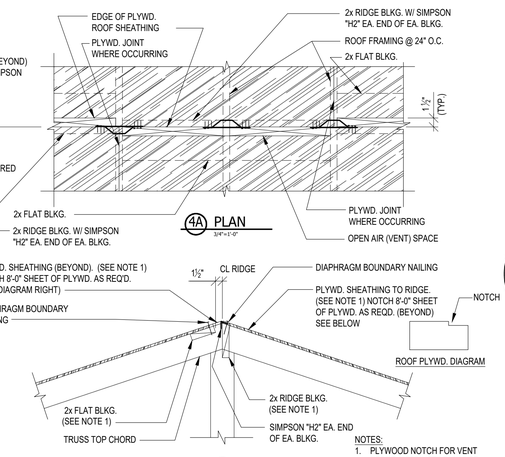


NOTES:
1. SEE ARCH. FOR VENT REQUIREMENTS, OVERHANG LENGTH, AND SOFFIT.

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



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



4A PLAN
3/4" = 1'-0"

NOTES:
1. PLYWOOD NOTCH FOR VENT SPACE ALTERNATES EACH SIDE OF RIDGE AT 4'-0" O.C.
2. SEE 4A/- FOR PLAN VIEW.

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

NOTES:
1. SEE ARCH. FOR VENT REQUIREMENTS, OVERHANG LENGTH, AND SOFFIT.

5 SECTION
3/4" = 1'-0"

NOTES:
1. SEE ARCH. FOR VENT REQUIREMENTS, OVERHANG LENGTH, AND SOFFIT.

6 SECTION
3/4" = 1'-0"

6A SECTION
3/4" = 1'-0"

7 SECTION
3/4" = 1'-0"

8 SECTION
3/4" = 1'-0"

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S5.1B3

STRUCTURAL NOTES

GENERAL:

1. Dimensions: The structural drawings shall be considered as a part of the complete set of Contract drawings, including the drawings of all disciplines. It is intended that the Structural drawings will provide sufficient dimensions to locate the primary structural elements and members. Location of secondary members which are affected by systems detailed by others may require reference to the drawings of other disciplines and layout and coordination by the contractor. If direct conflict between dimensions of two or more disciplines is encountered, such conflicts shall be resolved by the Architect. Do not use scaled dimensions. Use written dimensions or where dimensions are not provided, consult the architect for clarifications before proceeding with the work in question.

2. Omissions or conflicts between various elements of the drawings, specifications, notes, and details shall be brought to the attention of the structural engineer and resolved before proceeding with the work. The contractor must submit in writing any requests for modifications to the plans and specifications. Shop drawings submitted to the structural engineer for review do not constitute "in writing" unless it is clearly noted that specific changes are being requested.

3. Deferred Submittals: Where Structural components are fully or partially designed and detailed by the supplier or fabricator, complete shop drawings and calculations, signed and sealed by a professional engineer registered in the state where the project is located, shall be submitted to the structural engineer for review. In addition, a copy of these documents shall be submitted to the Building Official for approval in accordance with IBC Section 107.3.4.1.

4. The Contract drawings and specifications represent the finished structure. They do not indicate the method of construction. The contractor shall provide all measures necessary to protect the structure during construction. Such measures shall include but not be limited to bracing and shoring for loads due to construction equipment and materials.

DESIGN CRITERIA:
1. Used 2021 International Building Code.
2. ASD Design Loads:
   2.1. Roof: D.L. = 10#/SF., L.L. = 48#/SF. Snow.
3. Wind load = 85 MPH (nominal), 110 MPH (ultimate), exposure C, Iw = 1.0.
4. Seismic: Equivalent Static Force Design Procedure.
   Seismic Design Category D, Site Class D.
   Ss = 0.544 SDS = 0.495
   S1 = 0.215 SD1 = 0.280
   R = 2.5 - Light framed walls w/shear panels all other materials.
   Ie = 1.0.

**Per ICC Commentary:

"Wind speeds are designated as "ultimate design" or "nominal design" wind speeds and are used for either strength design or allowable stress designs respectively. The ultimate design wind speeds are indicated in Figures 1609A, B & C, and vary based on the building's risk category and location. The ultimate design for wind speeds for a Risk Category II building vary from 110 mph on the West Coast to 180 mph in hurricane-prone areas in southern Florida. These wind speeds would convert to a nominal design wind speed, or what was previously called the "basic wind speed" 85 mph for the West Coast and 139 mph for southern Florida when using allowable stress design."

QUALITY ASSURANCE:

FOUNDATIONS:
1. Maximum foundation soil bearing pressure used = 1500#/SF.

MATERIALS:

CONCRETE:
1. Mix design shall be established in accordance to Chapter 5 of ACI 318.
2. Concrete shall be a design mix producing strengths at 28 days as listed below:
   2.1. Footings: 2500 psi (4-1/2 sack mix)
   2.2. Slab on grade: 3500 psi (5-1/2 sack mix)
   (designed as 2500 psi, special inspection not required)
3. Maximum slump of concrete shall be 4" prior to the addition of admixtures.
4. Maximum aggregate size shall be the least dimension of:
   4.1. 1/5 the narrowest dimension between sides of forms.
   4.2. 3/4 the clear spacing between reinforcing bars
   4.3. 1/3 the depth of the slab.
5. Pre-Engineered Perma-Column 28 day strength f'c = 10,000 PSI.

STRUCTURAL AND MISCELLANEOUS STEEL:
1. All steel work shall conform with AISC specifications.
2. Bolts ASTM A307 for connections to concrete. Bolts ASTM A325 for steel to steel connections. Bolts to be snug tight except bolts indicated as S.C. to be fully tightened.
3. Roof Steel Panels: Shall be painted 24 Ga (MS-150), standing seam steel and shall be attached to framing per manufacturer recommendations.
4. Wall Steel Panels: Shall be painted 24 Ga (HR-34), ribbed steel and shall be attached to framing with 1 ½" x #9 screws with neoprene washers at 9" o.c.

LUMBER:
1. Sawn lumber for studs, joists, etc.(2x6 or larger) = No.2 Doug Fir larch or SPF 1250 psi. or better.
2. 2x4's = Standard Doug Fir larch.
3. Posts (Interior) = Triad Building Components MSR SPF.
   3.1. 2x8 Post Lam Uppers = 1,950Fb-1.7E
   3.2. 2x6 Post Lam Uppers = 1,650Fb-1.5E
   3.3. #1 Treated So. Pine Lam when embedment is in contact with ground. (Excludes Perma Columns)
4. Roof Sheathing = 7/16", minimum.
   4.1. Nailing = 8d(.131 Ø shank x 2 ½" long) or 1 ½" x 16Ga. staples at 6" o.c. all supported edges, 12" o.c. in field.
5. All nails are to be common nails unless noted otherwise.
6. For connections of "SIMPSON" hardware or equivalent follow manufacturers recommendations.
7. Trus-Joist products:
   7.1. Roof joists shown as TJI etc. shall be designed for the loads specified and shall conform to Trus-Joist specification.
   7.2. Joists exceeding 24' in length shall be cambered to a standard radius of R = 2250.
   7.3. Any alternate joist system(s) shall be the same depth and load Carrying capacity as the Trus-Joist system show on the drawings.
   7.4. Micro Lam (LVL) E-1,900,000 psi.
8. Structural Glued Laminated Timber (GLB) = 24f-V4 (DF/DF) with standard camber.
9. Premanufactured Trusses
   9.1. Truss Loading:
   Top Chord D.L. = 8 PSF.
   Bottom Chord D.L. = 2 PSF.
   Top Chord L.L. = 48 PSF.
   Bottom Chord L.L. = 2 PSF. Does not act concurrently with top chord L.L.
   9.2. Member Properties:
   Chords shall be #2 Douglas Fir or better.
   Webs shall have minimum Modulus of Elasticity of 1,500,000 psi.
   9.3. All truss blocking shall be provided by the truss manufacturer and constructed with approved plates.
   9.4. Truss Manufacturer shall verify all truss dimensions, accounting for tolerances, connections, and splice requirements.
   9.5. Truss profiles shown are representations of possible configurations of Web locations and member sizes. Truss manufacturer shall submit shop drawings for approval. All trusses shall be designed by a registered professional engineer and all shop drawings shall be stamped and signed by a registered professional engineer.
   9.6. Truss manufacturer shall provide proof of approved third party I inspection as required by IBC chapter 2303.4.
   9.7. Truss manufacturer shall design all truss to truss connections and shall indicate said connections on the shop drawings.
   9.8. Each truss shall be marked with the following information:
   9.8.1. Manufacturers identity.
   9.8.2. Design Load.
   9.8.3. Truss spacing.
10. All lumber in contact with concrete, masonry, or ground shall be preservative treated wood in accordance with AWPA standards. Posts embedded in the ground shall comply with UC4B .60 treatment or greater.

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01/06/2025

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SHEET LIST

S0-B4 = GENERAL NOTES
S1-B4 = FOUNDATION PLAN
S2-B4 = ROOF FRAMING PLAN
S3-B4 = SECTION AND DETAILS
S4-B4 = ELEVATIONS

ROOF SNOW LOAD FACTORS
Pf = 0.7(Ce)(Ct)(I)Pg

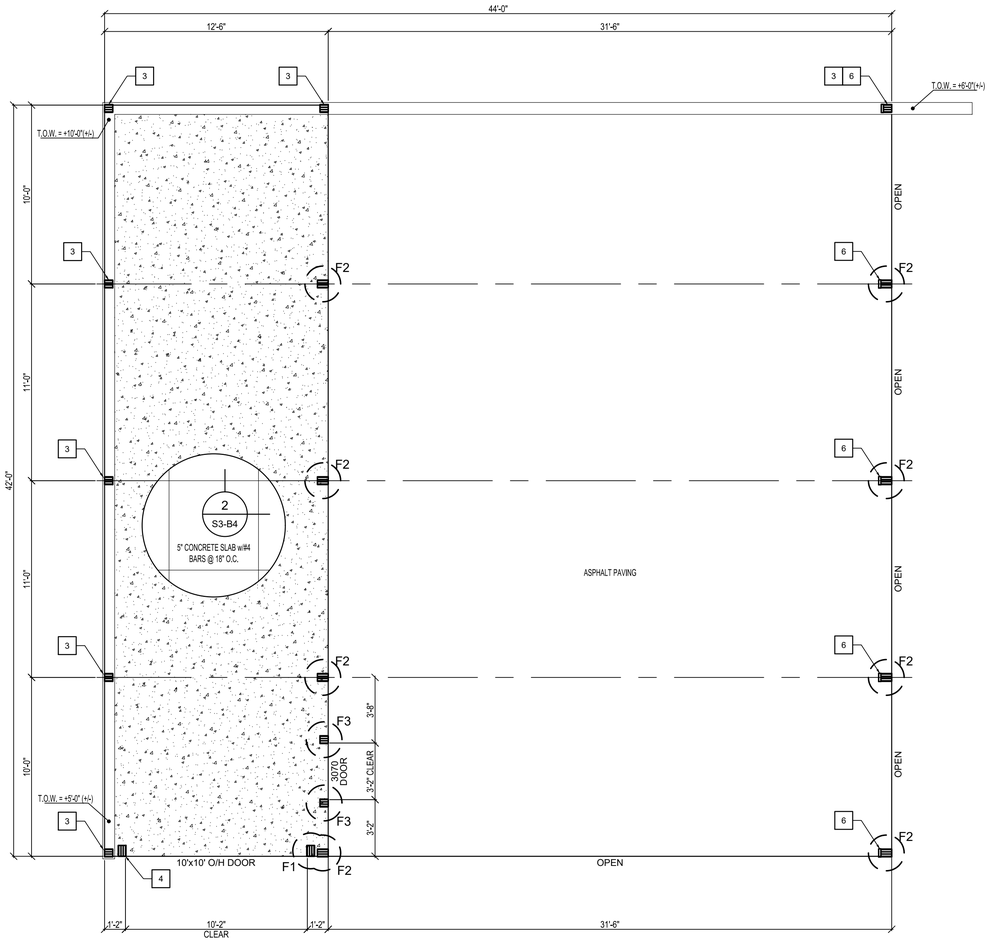
Elevation	= 692 ft.
Ground snow	= 57 psf. min.
Importance	= 1.0
Thermal (Ct)	= 1.2
Exposure (Ce)	= 1.0
Slope (Cs)	= 1.0
Roof Snow (Pf)	= 48.0
Sloped Roof Snow (Ps)	= 48.0

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S0-B4



FOUNDATION PLAN

SCALE: 3/32" = 1'-0"

FOUNDATION NOTES:

1. OSB SHIMS & TYP. NAILING ON FACES OF PERMA COLUMN LAM. TO FLUSH OUT WHERE NEEDED.
2. 8" THICK CONCRETE RETAINING WALL BY OTHERS. ASSUMED WALL HEIGHTS AS SHOWN.
3. CAST IN PLACE SWP84 "STURDI-WALL PLUS" BRACKETS FOR (3) 2x8 SPF POST. CENTER POST WITH CENTER OF 8" CONCRETE STEM WALL. SEE DETAIL 11/S3-B4 AND 12/S3-B4.
4. POST INSTALLED SW63 "STURDI-WALL" BRACKETS FOR (3) 2x6 SPF POST. INSTALL TOP OF SLAB POURED ON TOP OF CONCRETE WALL FOOTING. SEE DETAIL 13/S3-B4.
5. CONFIRM MAN DOOR LOCATIONS
6. PROVIDE 2x6 STRONGBACKS ON INSIDE FACE OF UNBRACED POSTS. ATTACH w/(2) 16d @ 12" O.C. TYP.

FOOTING SCHEDULE

MARK	"D"	DEPTH	POST - LOWER	POST - UPPER	DETAIL	BELL - WIDTH	BELL - DEPTH
F1	2'-0"Ø	4'-0"	Perma-Column 8300	(3) 2x8 SPF	3/S3-B4	-----	-----
F2	2'-0"Ø	4'-0"	Perma-Column 8300	(3) 2x8 SPF	3/S3-B4	3'-0"Ø	10"
F3	2'-0"Ø	4'-0"	Perma-Column 8300	(3) 2x6 SPF	3/S3-B4	-----	-----
F4	-----	-----	-----	-----	-----	-----	-----

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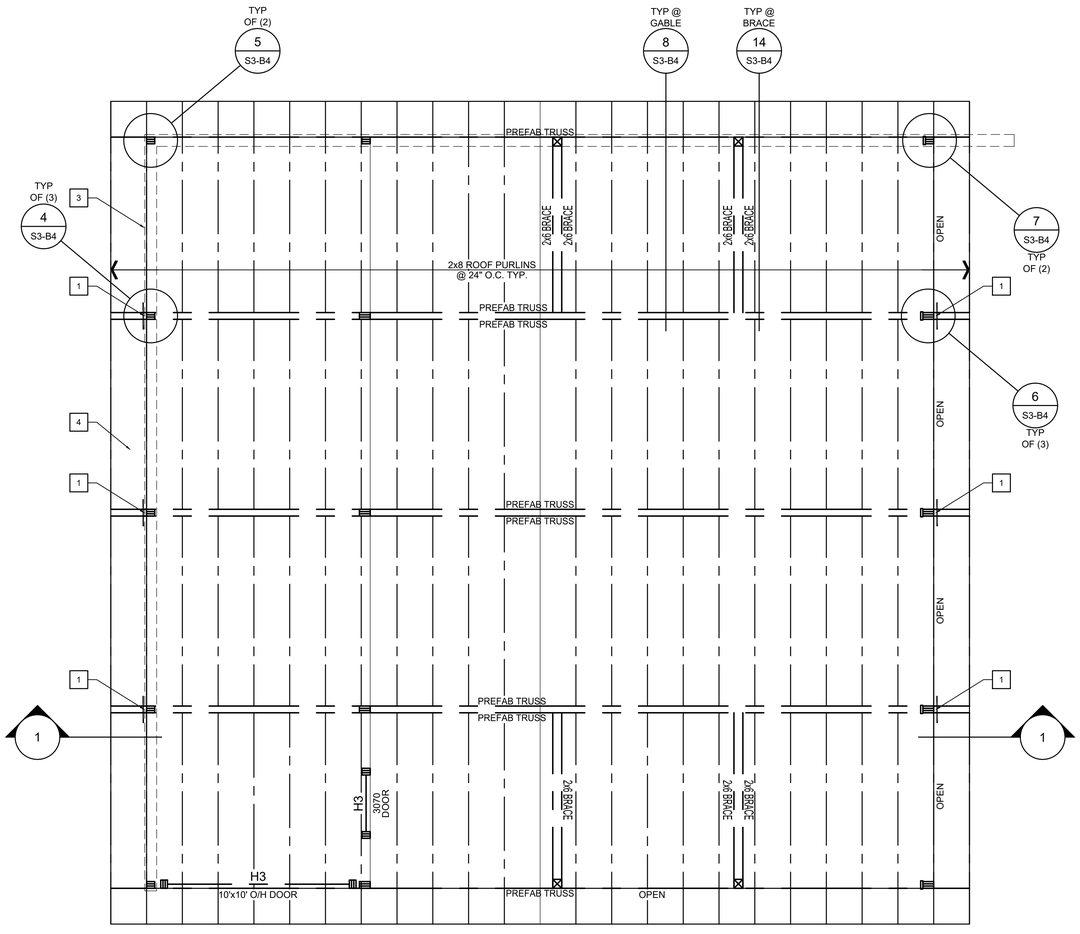
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S1-B4



ROOF FRAMING PLAN

SCALE: 3/32" = 1'-0"

ROOF FRAMING NOTES:

1. LSTA18 STRAP- PLACE AT INSIDE OF FASCIA BOARD IF NO OVERHANGS. PLACE AT INSIDE FACE OF TOP WALL GIRT IF OVERHANGS
2. CONFIRM WINDOW & MAN DOOR LOCATIONS w/OWNER.
3. 8" THICK CONCRETE RETAINING WALL BELOW, BY OTHERS.
4. 7/16" MIN. ROOF SHEATHING ON ALL ROOF SURFACES. TYP. ATTACH PER LUMBER NOTE 4/S0-B3

HEADER SCHEDULE		
MARK	MEMBER	SUPPORT
H1	V = (1) 2x10 DF#2 H = (1) 2x8 DF#2	(1) 2x8 TRIMMER
H2	V = (1) 2x6 DF#2 H = (1) 2x6 DF#2	-----
H3	V = (1) 2x6 DF#2	-----
NOTE: REFER TO DETAILS 9 & 10/S3-B4 FOR HEADER FRAMING CONDITIONS.		

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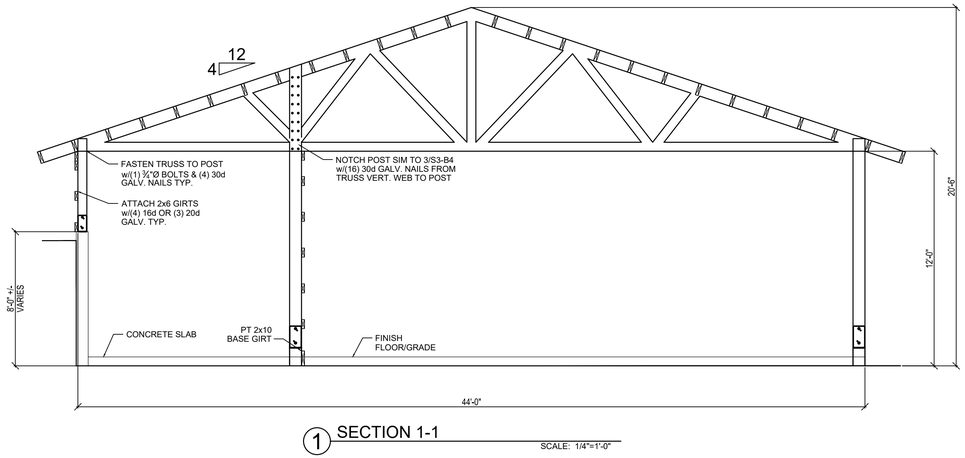
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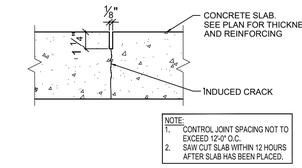
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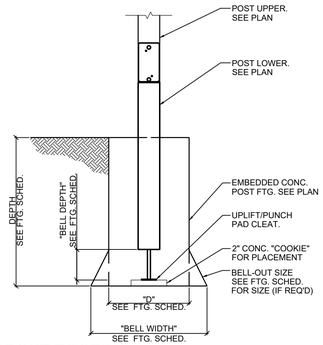
S2-B4



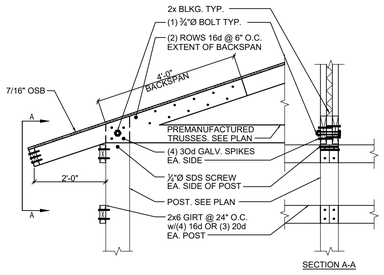
1 SECTION 1-1
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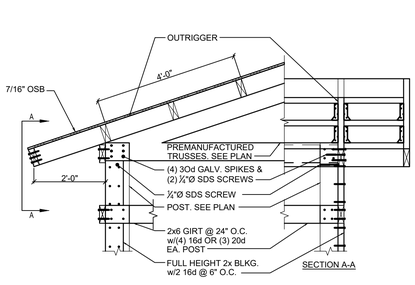
2 CONTROL JOINT DETAIL
SCALE: 1 ½"=1'-0"



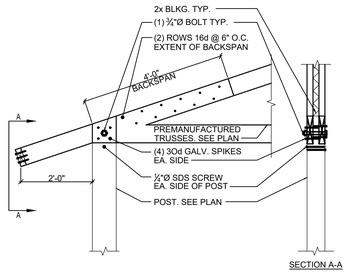
3 POST FOOTING
SCALE: 1/2"=1'-0"



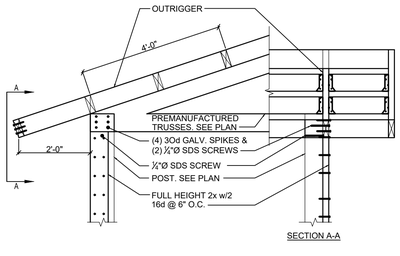
4 MAIN FRAME TRUSS BEARING DETAIL
SCALE: 1/2"=1'-0"



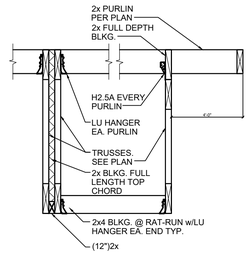
5 GABLE END TRUSS BEARING DETAIL
SCALE: 1/2"=1'-0"



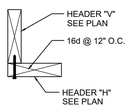
6 MAIN FRAME TRUSS BEARING DETAIL
SCALE: 1/2"=1'-0"



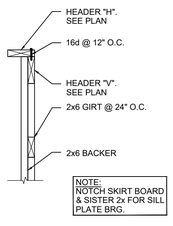
7 GABLE END TRUSS BEARING DETAIL
SCALE: 1/2"=1'-0"



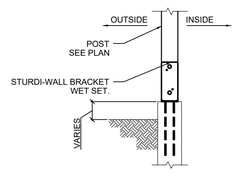
8 GABLE TRUSS FRAMING DETAIL
SCALE: 1/2"=1'-0"



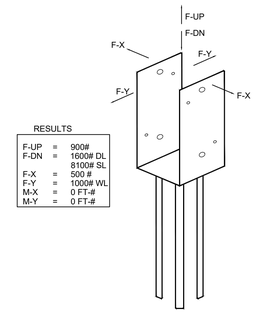
9 HEADER DETAIL
SCALE: 1"=1'-0"



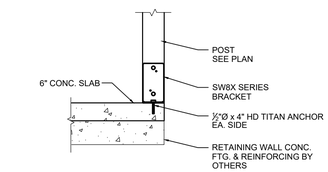
10 MAN DOOR HEADER DETAIL
SCALE: 1/2"=1'-0"



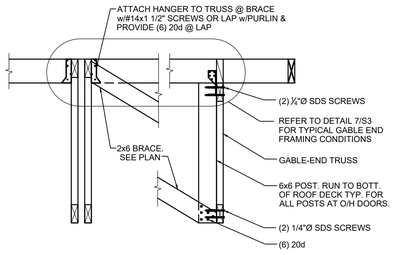
11 8" THICK RETAINING WALL DETAIL
SCALE: 1/2"=1'-0"



12 8" THICK RETAINING WALL DETAIL
SCALE: 1/2"=1'-0"



13 SLAB CONNECTION DETAIL
SCALE: 1/2"=1'-0"



14 SLAB CONNECTION DETAIL
SCALE: 1/2"=1'-0"

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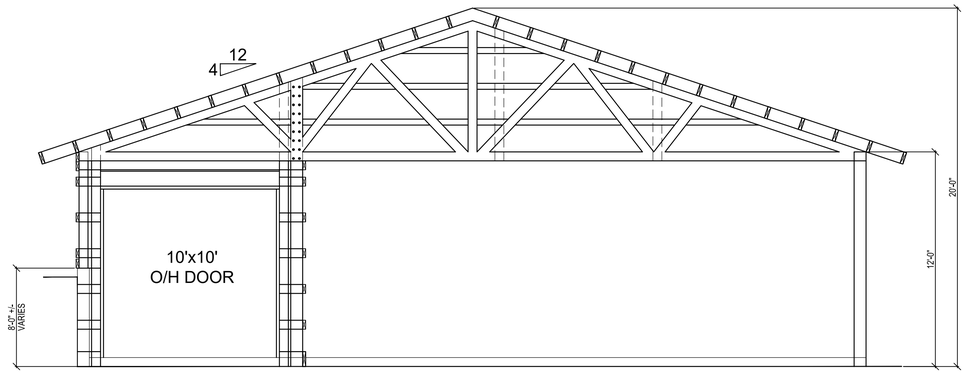
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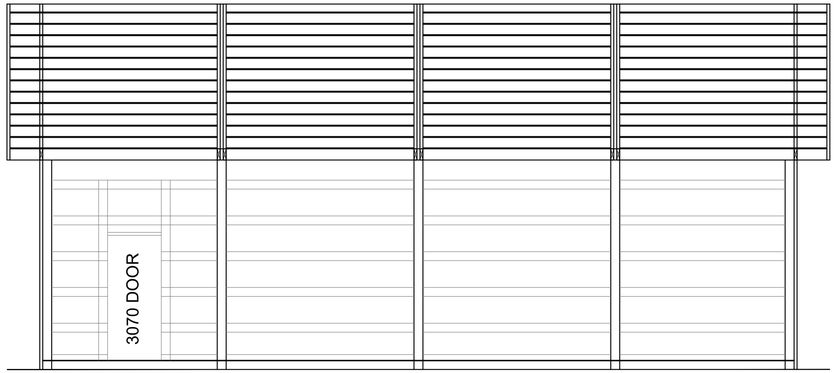
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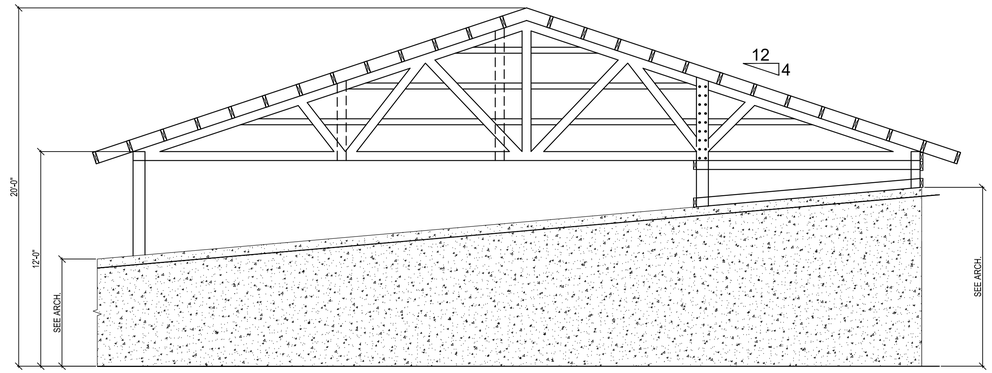
S3-B4



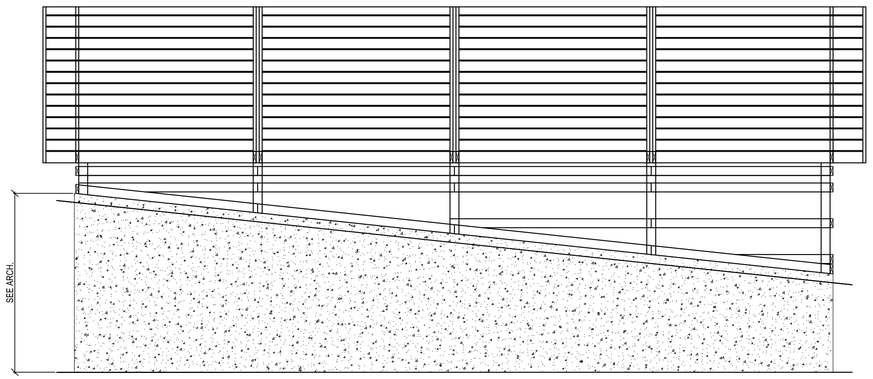
1 FRONT ELEVATION
SCALE: 1/4"=1'-0"



2 RIGHT ELEVATION
SCALE: 1/4"=1'-0"



3 REAR ELEVATION
SCALE: 1/4"=1'-0"



4 LEFT ELEVATION
SCALE: 1/4"=1'-0"

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S4-B4

PLUMBING LEGEND

SYMBOL	DEFINITION	ABBREV.
	COLD WATER	CW
	HOT WATER	HW
	HOT WATER RETURN	HWR
NPW	NON-POTABLE COLD WATER	NPCW
T	TEMPERED HOT WATER	THW
	SOFT COLD WATER	CSW
HSW	HOT SOFT WATER	HSW
LCW	LAB COLD WATER	LCW
LHW	LAB HOT WATER	LHW
180°	HOT WATER W/TEMP. INDICATED	-
	HOT WATER HEAT TRACED	HTRHW
RO	REVERSE OSMOSIS WATER	RO
	DEIONIZED WATER	DE
DW	DISTILLED WATER	DW
G	NATURAL GAS (BELOW 1PSI)	NG
G(#PSI)	NATURAL GAS (ABOVE 1PSI)	NG(#PSI)
LPG	LIQUID PROPANE GAS	LPG
O	OXYGEN	O
F	FIRE PROTECTION PIPING	FP
SS	SANITARY SEWER (SITE)	SS
PS	PUMPED SANITARY SEWER (SITE)	PS
SD	STORM DRAIN (SITE)	SD
	WASTE PIPING	W
	VENT PIPING	V
ARW	ACID RESISTANT WASTE PIPING	ARW
ACID	ACID RESISTANT VENT PIPING	ARV
IW	INDIRECT WASTE PIPING	IW
RWL	RAIN WATER LEADER PIPING	RWL
ORWL	OVERFLOW RAIN WATER LEADER PIPING	ORWL
CD	CONDENSATE DRAIN PIPING	CD
GW	GREASE WASTE PIPING	GW
COTG	CLEAN OUT TO GRADE	COTG
COTF	CLEAN OUT TO FLOOR	COTF
WCO	WALL CLEAN OUT	WCO
CO	CLEAN OUT	CO

PLUMBING/PIPING SYMBOLS

	ELBOW UP
	ELBOW DOWN
	TEE UP
	TEE DOWN
	CONCENTRIC REDUCER/INCREASER
	ECCENTRIC REDUCER/INCREASER
	UNION
	RISE/DROP IN PIPE
	RISE/DROP IN PIPE & 90° TURN
	VENT THRU ROOF
	CAP
	CLEAN-OUT (WALL OR CEILING)
	CLEAN-OUT (FLUSH TO FLOOR OR GRADE)
	FLOOR DRAIN
	CIRCULATING PUMP (POINTS IN DIRECTION OF FLOW)
	VALVE (AS INDICATED OR SPECIFIED)
	CHECK VALVE
	PRESSURE & TEMPERATURE (RELIEF VALVE)
	PRESSURE REDUCING VALVE (POINTS TOWARDS LOW PRESSURE)
	GAS VALVE
	SOLENOID VALVE
	HOSE BIBB
	CIRCUIT SETTER
	VALVE BOX W/ VALVE (AS SPECIFIED)
	CONNECTION TO EXISTING
	EXTENSION & CONTINUATION
	DIRECTION OF HW RECIRCULATION LINE

WSEC COMPLIANCE

1. WATER HEATING EQUIPMENT AND HOT WATER STORAGE TANKS SHALL MEET THE REQUIREMENTS OF SECTION C404.2 AND TABLE C404.2 OF THE WSEC.
2. DOMESTIC HOT WATER RE-CIRCULATION AND HEAT TRACE SYSTEMS SHALL MEET THE EFFICIENT HEATED WATER SUPPLY PIPING REQUIREMENTS OF SECTION C404.3 OF THE WSEC. PIPING SHALL BE INSTALLED TO COMPLY WITH C404.3.1 MAXIMUM ALLOWABLE PIPE LENGTH METHOD OR C404.3.2 MAXIMUM ALLOWABLE PIPE VOLUME METHOD.
3. PROVIDE HEAT TRAP ON SUPPLY AND DISCHARGE PIPING FROM WATER HEATER AS REQUIRED IN SECTION C404.4 OF WSEC. RHEEM SP2003 OR EQUAL.
4. ELECTRIC WATER HEATERS LOCATED IN UNCONDITIONED SPACES OR ON CONCRETE FLOORS SHALL BE SEPARATED FORM THE SUPPORTING SURFACE WITH R-10 INSULATION AS DESCRIBED IN SECTION C404.5 OF THE WSEC.
5. PIPE INSULATION - PER WSEC C404.6. FOR AUTOMATIC-CIRCULATING HOT WATER AND HEAT-TRACED SYSTEMS, PIPING SHALL BE INSULATED PER TABLE C403.10.3 AND NOT LESS THAN 1 INCH (25 MM) OF INSULATION HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 BTU PER INCH/H • FT2 • °F (1.53 W PER 25 MM/M2 • K).
6. HEATED WATER CIRCULATING AND TEMPERATURE MAINTENANCE SYSTEMS SHALL BE INSTALLED TO COMPLY WITH SECTION C404.7.
   A. CIRCULATION SYSTEM SHALL BE ACTIVATED UPON INDICATION OF DEMAND AND SHUT OFF WHEN THE RETURN WATER TEMPERATURE IS SATISFIED.
   B. HEAT TRACE SYSTEM SHALL AUTOMATICALLY REGULATE ENERGY INPUT TO MAINTAIN THE SYSTEM TEMPERATURE WHEN HEATED WATER IS USED IN THE OCCUPANCY AND SHALL BE OFF WHEN THERE IS NO HOT WATER DEMAND.
7. PROVIDE RECORD DRAWINGS, OPERATING AND MAINTENANCE MANUALS, ENERGY CODE COMPLIANCE FORMS, AND SYSTEMS OPERATION TRAINING DOCUMENTS AS DESCRIBED IN SECTION C103.6.1 THROUGH C103.6.4 TO THE OWNER WITHIN 180 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE AS REQUIRED BY SECTION C103.6 OF THE WSEC.
8. COMMISSIONING SHALL BE PROVIDED AND REPORT OF COMMISSIONING SHALL BE SUBMITTED TO THE OWNER AS REQUIRED BY SECTION C408.1 OF THE WSEC.
9. ABS PIPING MATERIAL NOT ALLOWED IN FIRE RATED PLENUMS PER WAC.

ADDITIONAL SYMBOLS

# / #	SECTION DESIGNATION / SHEET NUMBER
# / #	DETAIL NUMBER / SHEET NUMBER

PLUMBING PUMP SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER AND MODEL NUMBER	FLOW (GPM)	HEAD (FEET)	ELECTRICAL				NOTES
					VOLTAGE	PHASE	HP	RPM	
CP-1	INLINE	TACO 006e3	2	8	115	1	44 WATTS	-	1, 2, 3, 4

NOTES:
1. PROVIDE ECM MOTOR AND MOTOR SPEED ADJUSTMENT
2. PROVIDE UNION FITTINGS AND BUILT IN CHECK AND STOP VALVES
3. PROVIDE ADJUSTABLE SPEED SWITCH
4. PROVIDE INTEGRAL AQUASTAT CONTROL

ELECTRIC TANK TYPE WATER HEATER SCHEDULE

SYMBOL	DESCRIPTION	SERVICE	MANUFACTURER AND MODEL NUMBER	TANK SIZE (GALLONS)	EFFICIENCY (UEF)	ELECTRIC HEAT			RECOVERY				ELECTRICAL			NOTES
						ELEMENTS (QTY)KW	STEPS	OPERATION	GPH	INLET TEMP. (°F)	OUTLET TEMP. (°F)	TOTAL FIRST HOUR CAPACITY (GPh)	VOLTAGE	PHASE	AMPS	
WH-2	TANK TYPE	RESTROOMS	RHEEM ELD50	50	0.93	(2) 5.0	1	NON-SIMULTANEOUS	25	40	120	60	208	1	24	1, 2

NOTES:
1. PROVIDE P&T RELIEF VALVE
2. PROVIDE EXPANSION TANK AMTROL ST-5

ELECTRIC TANKLESS WATER HEATER SCHEDULE

SYMBOL	LOCATION	MANUFACTURER AND CATALOG #	CAPACITY					ELECTRICAL				NOTES
			MAX. FLOW (GPM)	MIN. FLOW (GPM)	PRESS. DROP (FEET)	EWT (°F)	LWT (°F)	HEATER (KW)	ENERGY FACTOR	VOLT/PH	AMPS	
WH-1	SEE PLANS	CMI-20L/240	.5	.35	-	40	110	4.8	0.99%	240/1	20	1

NOTES:
1. PROVIDE ASME PRESSURE RELIEF VALVE

AIR COMPRESSOR SCHEDULE

#	MFG	MODEL	SERVICE	CFM	PRESSURE (PSI)	TANK (GALLONS)	MOTOR			NOTES
							HP	VOLTS	PHASE	
C-1	OWNER SUPPLIED	-	SHOP COMPRESSED AIR	38	175	120	10	208	1	1

NOTES
1. PROVIDE SOUND ENCLOSURE

PLUMBING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER AND CATALOG #	FAUCET/FLUSH VALVE	CONNECTIONS				NOTES
				HW	CW	W	V	
WC-1	WATER CLOSET, FLOOR MOUNT, FLUSH TANK (ACCESSIBLE)	KOHLER HIGHLINE K-25224-0 (1.28 GPF)	ELONGATED OPEN FRONT SEAT, SUPPLY, STOP	-	1/2"	3"	2"	PROVIDE FLUSH HANDLE TO COMPLY WITH ADA REQUIREMENTS. SEE ARCHITECTURAL PLANS FOR LOCATION OF ADA FIXTURES
L-1	LAVATORY WALL MOUNT	KOHLER GREENWICH K-2031-0 20"X18"	KOLHER K-97283-4 SINGLE HANDLE, 0.5 GPM FLOW	1/2"	1/2"	1-1/2"	1-1/2"	GRID STRAINER, TAIL PIECE, P-TRAP, SUPPLIES, STOPS, PROVIDE MANUAL MIXING VALVE TO LIMIT HOT WATER SUPPLY TO 105°F
S-1	SINGLE COMPARTMENT COUNTER MOUNT, STAINLESS STEEL SINK, 22"X22"X5.5"	ELKAY LRAD222255	AMERICAN STANDARD, EDGEWATER, 4932300.002, SINGLE HANDLE, PULL DOWN SPOUT, 1.8 GPM	1/2"	1/2"	2"	2"	BASKET STRAINER, TAIL PIECE, P-TRAP, SUPPLIES, STOPS, ARCHITECTURAL PLANS FOR LOCATION OF ADA FIXTURES, PROVIDE INSULATION ON SUPPLIES AND DRAIN ON ADA FIXTURES, PROVIDE MANUAL MIXING VALVE TO LIMIT HOT WATER SUPPLY TO 105°F
S-2	DOUBLE COMPARTMENT COUNTER MOUNT, STAINLESS STEEL SINK, 33"X22"X5.5"	ELKAY LRAD332255	AMERICAN STANDARD, EDGEWATER, 4932300.002, SINGLE HANDLE, PULL DOWN SPOUT, 1.8 GPM	1/2"	1/2"	2"	2"	BASKET STRAINER, TAIL PIECE, P-TRAP, SUPPLIES, STOPS, ARCHITECTURAL PLANS FOR LOCATION OF ADA FIXTURES, PROVIDE INSULATION ON SUPPLIES AND DRAIN ON ADA FIXTURES, PROVIDE MANUAL MIXING VALVE TO LIMIT HOT WATER SUPPLY TO 105°F
IB-1	ICE MAKER WALL BOX	GUY GRAY #MIB1AB	-	-	1/2"	-	-	1/4 TURN VALVE, WATER HAMMER ARRESTOR
WB-1	CLOTHES WASHER WALL BOX	GUY GRAY #MWB16	-	1/2"	1/2"	2"	2"	1/2 TURN VALVES, REVERSIBLE DRAIN, WATER HAMMER ARRESTORS
TS-1	TRENCH DRAIN SUMP	ZURN Z-887-FGF	CATCH BASIN	-	-	-	-	SEE DRAWINGS FOR DRAIN WASTE AND VENT SIZE
FD-1	FLOOR DRAIN	JR SMITH FIG 2005	ROUND STRAINER, NICKEL BRONZE STRAINER, TRAP PRIMER CONNECTION	-	-	-	-	SEE DRAWINGS FOR DRAIN WASTE AND VENT SIZE, PROVIDE P-TRP WITH TRAP PRIMER CONNECTION.
TD-1	TRENCH DRAIN	ZURN Z-886-FGF	SAND INTERCEPTOR DRAIN WITH CAST IRON GRATES	-	-	-	-	SEE DRAWINGS FOR DRAIN WASTE AND VENT SIZE
OIL-1	OIL INTERCEPTOR	STRIEM OT-500	FLOW CONTROL, EXTENSIONS AS REQUIRED	-	-	4"	3"	FOR BELOW FLOOR MOUNTING
US-1	TRAP STANDARD UTILITY SINK, 24"X20" TRAP MOUNT	KOHLER K-6716	KOHLER K-8907 DUAL HANDLE, CHROME PLATED, PALE HOOK, VACUUM BREAKER, INTEGRAL STOPS, 3/4" HOSE END, TOP REINFORCING BAR AND MOUNTING BRACKET	1/2"	1/2"	3"	2"	PROVIDE ADJUSTABLE FLOOR MOUNT TRAP AND GRID DRAIN (K-6673), WALL SUPPORT
AS-1	AUTOPSY SINK	MOPEC AUTOPSY DUALAPPROACH CC300	-	(2)1/2"	(2)1/2"	(2) 1-1/2"	(2) 1-1/2"	SUPPLIES / STOPS, P-TRAP. PROVIDE INSULATION ON SUPPLIES AND DRAIN.
HB-1	NON-FREEZE WALL HYDRANT	WOODFORD MODEL 65	VACUUM BREAKER	-	3/4"	-	-	-
HB-2	WALL HYDRANT	WOODFORD MODEL 101	-	-	3/4"	-	-	-
ES-1	EMERGENCY SHOWER/EYE WASH	GUARDIAN G1993	FC20 20 GPM FLOW REGULATOR, TMV G3802LF MIXING VALVE	1"	1"	-	-	UNIT TO BE ABS CONSTRUCTION
SH-1	SHOWER (ACCESSIBLE)	AQUATIC 1363BFSD 36"X36"X75.25"	PRESSURE BALANCE SHOWER VALVE TO LIMIT HOT WATER SUPPLY TO 105°F , HAND HELD SHOWER HEAD WITH 30" SS SLIDE BAR, 60" HOSE, AND VACUUM BREAKER, 1.8 GPM MAX FLOW	1/2"	1/2"	2"	2"	PROVIDE SHOWER GRID DRAIN AND PTRAP, FOLD UP SEAT, L-SHAPED AND VERTICAL SS GRAB BARS, SHOWER ROD, CURTAIN, AND RINGS.
BFP-1	REDUCED PRESSURE BACK FLOW PREVENTER	WATTS LF009 QT	LEAD FREE, QUARTER TURN VALVES AIR GAP FITTING	-	-	-	-	SEE FLOOR PLANS FOR SIZE
YH-1	NON-FREEZE YARD HYDRANT	WOODFORD MODEL Y1	VACUUM BREAKER	-	1"	-	-	SPECIFY BURY DEPTH
HR-1	HOSE REEL - AIR	HANNAY 718-30-31-20D	-	-	1/2"	-	-	-

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Job: 2344 Date: 01/06/2025
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P0.01

DRAINAGE SIZING CALCULATIONS UPC CHAPTER 7						
FIXTURE	MINIMUM TRAP ARM	QUANTITY	DRAINAGE FU (PER TABLE 702.1)			TOTAL
			PRIVATE	PUBLIC	ASSEMBLY	
LAVATORY	1-1/4"	2		1.0		2.0
SINK KITCHEN DOMESTIC	1-1/2"	1		2.0		2.0
WC 1.28 GPF TANK	3"	2		4.0		8.0
BATH OR BATH/SHOWER	1-1/2"	1		2.0		2.0
SERVICE OR MOP SINK	3"	1		3.0		3.0
FLOOR DRAIN	2"	1		0.0		0.0
TOTAL FIXTURE UNITS						17.0

DRAINAGE SIZING CALCULATIONS UPC CHAPTER 7						
FIXTURE	MINIMUM TRAP ARM	QUANTITY	DRAINAGE FU (PER TABLE 702.1)			TOTAL
			PRIVATE	PUBLIC	ASSEMBLY	
LAVATORY	1-1/4"	3		1.0		3.0
SINK KITCHEN DOMESTIC	1-1/2"	3		2.0		6.0
WC 1.28 GPF TANK	3"	2		4.0		8.0
SHOWER	2"	1		2.0		2.0
CLOTHES WASHER	2"	1		3.0		3.0
FLOOR DRAIN	2"	5		0.0		0.0
TOTAL FIXTURE UNITS						22.0

DRAINAGE SIZING CALCULATIONS UPC CHAPTER 7						
FIXTURE	MINIMUM TRAP ARM	QUANTITY	DRAINAGE FU (PER TABLE 702.1)			TOTAL
			PRIVATE	PUBLIC	ASSEMBLY	
LAVATORY	1-1/4"	4		1.0		4.0
SINK KITCHEN DOMESTIC	1-1/2"	2		2.0		4.0
WC 1.28 GPF TANK	3"	4		4.0		16.0
FLOOR DRAIN	2"	1		0.0		0.0
TOTAL FIXTURE UNITS						24.0

5 BUILDING 1 WASTE SERVICE CALCULATION

SCALE: NOT TO SCALE

WATER SIZING CALCULATIONS UPC APPENDIX "A"					
FIXTURE	QUANTITY	CW FU (PER TABLE A 103.1)			TOTAL
		PRIVATE	PUBLIC	ASSEMBLY	
LAVATORY	2		1.0		2.0
SINK KITCHEN DOMESTIC	1		1.5		1.5
WC (FLUSH TANK)	2		2.5		5.0
SHOWER	1		2.0		2.0
SERVICE OR MOP SINK	1		3.0		3.0
HOSE BIBB	1		2.5		2.5
ADDITIONAL HOSE BIBB	5		1.0		5.0
TOTAL FIXTURE UNITS					21.0
ESTIMATED CONT. FLOW (GPM) FLUSH TANK CHARTS A 103.1(1) & (2)					15.0
MINIMUM PIPE SIZE					1"
METER SIZE					1"
PRESSURE LOSS ALLOWANCE CALCULATION					
BUILDING HEIGHT (FT)	20.0		PRESSURE AT MAIN (PSI)		60
LONGEST PIPE LENGTH (FT)	100.0				
PRESSURE LOSS AT METER (CHART A 102.2)			5		
ELEVATION LOSS (HEIGHT(FT) * 1(PSI)/2.33(FT))			8.58		
MINIMUM PRESSURE AT LAST FIXTURE (PSI)			15		
PRESSURE LOSS (PSI)			28.58		
AVAILABLE PRESSURE (PSI)			31.42		
MAXIMUM AVAILABLE PRESSURE LOSS/100 FT			31.42		
MAXIMUM DESIGN VELOCITY FOR PIPE SIZING COLD WATER = 8 FPS HOT WATER = 5 FPS (UPC 610.12.1)					

3 BUILDING 2 WASTE SERVICE CALCULATION

SCALE: NOT TO SCALE

WATER SIZING CALCULATIONS UPC APPENDIX "A"					
FIXTURE	QUANTITY	CW FU (PER TABLE A 103.1)			TOTAL
		PRIVATE	PUBLIC	ASSEMBLY	
LAVATORY	3		1.0		3.0
SINK KITCHEN DOMESTIC	3		1.5		4.5
WC (FLUSH TANK)	2		2.5		5.0
SHOWER	1		2.0		2.0
CLOTHES WASHER	1		4.0		4.0
HOSE BIBB	1		2.5		2.5
ADDITIONAL HOSE BIBB	1		1.0		1.0
TOTAL FIXTURE UNITS					22.0
ESTIMATED CONT. FLOW (GPM) FLUSH TANK CHARTS A 103.1(1) & (2)					15.0
MINIMUM PIPE SIZE					1"
METER SIZE					1"
PRESSURE LOSS ALLOWANCE CALCULATION					
BUILDING HEIGHT (FT)	20.0		PRESSURE AT MAIN (PSI)		60
LONGEST PIPE LENGTH (FT)	100.0				
PRESSURE LOSS AT METER (CHART A 102.2)			5		
ELEVATION LOSS (HEIGHT(FT) * 1(PSI)/2.33(FT))			8.58		
MINIMUM PRESSURE AT LAST FIXTURE (PSI)			15		
PRESSURE LOSS (PSI)			28.58		
AVAILABLE PRESSURE (PSI)			31.42		
MAXIMUM AVAILABLE PRESSURE LOSS/100 FT			31.42		
MAXIMUM DESIGN VELOCITY FOR PIPE SIZING COLD WATER = 8 FPS HOT WATER = 5 FPS (UPC 610.12.1)					

1 BUILDING 3 WASTE SERVICE CALCULATION

SCALE: NOT TO SCALE

WATER SIZING CALCULATIONS UPC APPENDIX "A"					
FIXTURE	QUANTITY	CW FU (PER TABLE A 103.1)			TOTAL
		PRIVATE	PUBLIC	ASSEMBLY	
LAVATORY	4		1.0		4.0
SINK KITCHEN DOMESTIC	2		1.5		3.0
WC (FLUSH TANK)	4		2.5		10.0
HOSE BIBB	1		2.5		2.5
TOTAL FIXTURE UNITS					19.5
ESTIMATED CONT. FLOW (GPM) FLUSH TANK CHARTS A 103.1(1) & (2)					15.0
MINIMUM PIPE SIZE					1"
METER SIZE					1"
PRESSURE LOSS ALLOWANCE CALCULATION					
BUILDING HEIGHT (FT)	20.0		PRESSURE AT MAIN (PSI)		60
LONGEST PIPE LENGTH (FT)	100.0				
PRESSURE LOSS AT METER (CHART A 102.2)			5		
ELEVATION LOSS (HEIGHT(FT) * 1(PSI)/2.33(FT))			8.58		
MINIMUM PRESSURE AT LAST FIXTURE (PSI)			15		
PRESSURE LOSS (PSI)			28.58		
AVAILABLE PRESSURE (PSI)			31.42		
MAXIMUM AVAILABLE PRESSURE LOSS/100 FT			31.42		
MAXIMUM DESIGN VELOCITY FOR PIPE SIZING COLD WATER = 8 FPS HOT WATER = 5 FPS (UPC 610.12.1)					

6 BUILDING 1 WATER SERVICE CALCULATION

SCALE: NOT TO SCALE

4 BUILDING 2 WATER SERVICE CALCULATION

SCALE: NOT TO SCALE

2 BUILDING 3 WATER SERVICE CALCULATION

SCALE: NOT TO SCALE

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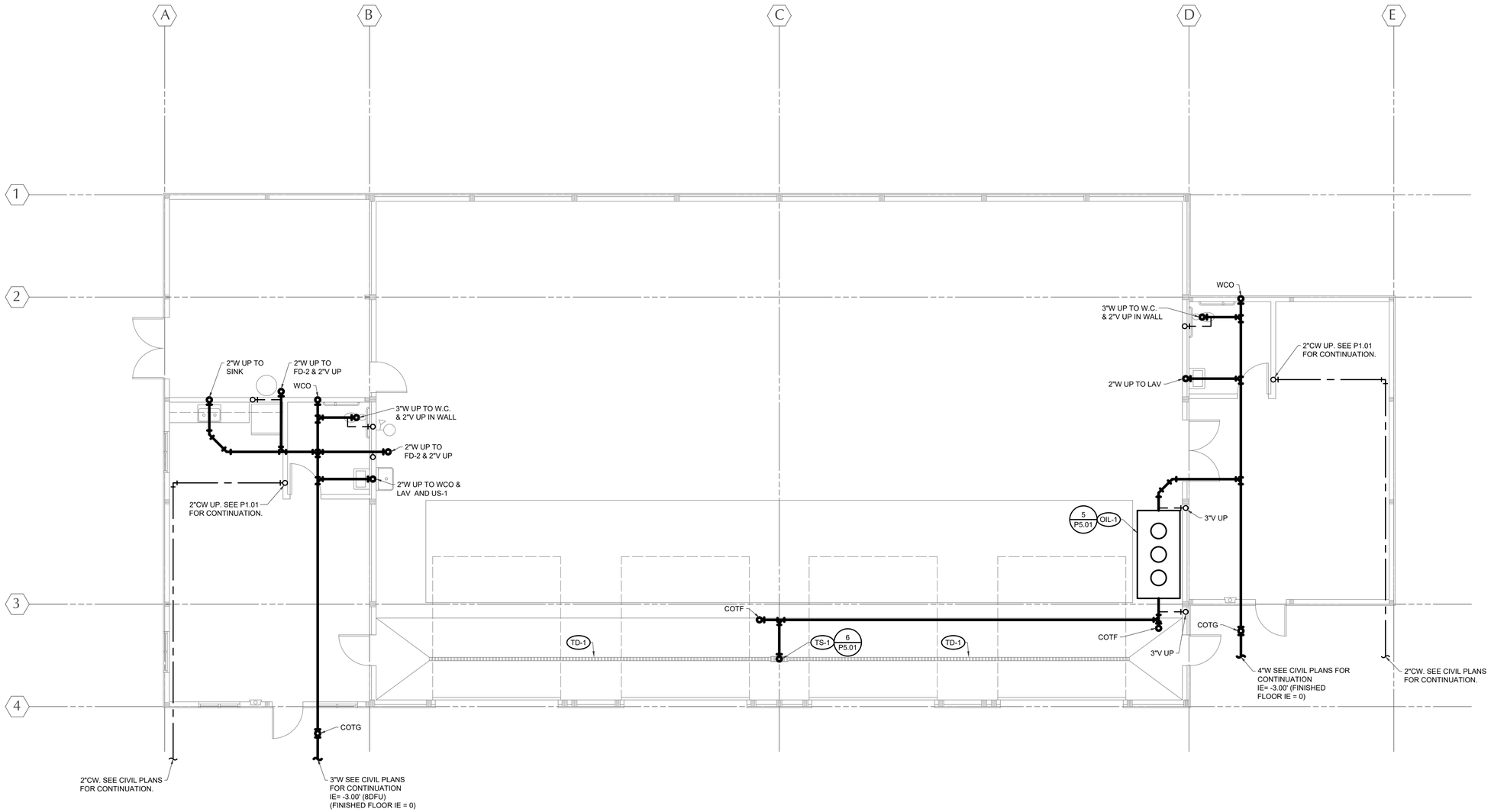
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BID SET: 01/06/2025
Job: 2344 Date: 01/06/2025
JOB ID –

P0.02

GENERAL NOTES

1. SLOPE ALL SEWERS @ 1/4" PER FOOT UNLESS APPROVED BY LOCAL JURISDICTION. LINES 4" AND LARGER MAY BE SLOPED AT 1/8" PER FOOT UPON APPROVAL OF LOCAL JURISDICTION AND COMPLYING WITH REDUCED FIXTURE UNIT CAPACITY PER THE UPC.
2. FOR THE PURPOSES OF CLEARNESS AND LEGIBILITY, DRAWINGS ARE DIAGRAMMATIC AND FOR DESIGN INTENT ONLY. CONTRACTOR MUST VERIFY ALL DIMENSIONS BY FIELD MEASUREMENT BEFORE BEGINNING ANY FABRICATION OR CONSTRUCTION.
3. ALL WORK SHALL BE COMPLETED IN STRICT ACCORDANCE WITH THE CURRENT STATE AND LOCAL PLUMBING CODES AND ORDINANCES.
4. CONTRACTOR SHALL INSTALL ALL EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
5. COORDINATE EXACT LOCATION OF PIPING WITH OTHER TRADES.
6. ALL VENT PIPING SHALL BE ABOVE FLOOD RIM LEVEL OF HIGHEST FIXTURE BEFORE CONNECTION TO COMMON VENTS.
7. HORIZONTAL DRAINAGE PIPE SHALL BE PROVIDED WITH A CLEANOUT AT ITS UPPER TERMINAL, AND EACH RUN OF PIPING, THAT IS MORE THAN 100' IN TOTAL DEVELOPED LENGTH. CLEANOUTS SHALL BE PROVIDED IN A DRAINAGE LINE FOR EACH AGGREGATE HORIZONTAL CHANGE OF DIRECTION EXCEEDING ONE HUNDRED THIRTY FIVE DEGREES.
8. THE CONTRACTOR SHALL PROVIDE FIRE CAULKING AT ALL PIPING PENETRATIONS OF FIRE RATED ASSEMBLIES OR PROVIDE FIRE RATED SEALS FOR NON-RATED PLASTIC PIPING PENETRATIONS OF RATED ASSEMBLIES AS REQUIRED. SEAL PER IBC 714.4.3, IBC 715, & IMC 602.2.2. DETAILS FOR ALL ASSEMBLY MUST BE SUBMITTED FOR APPROVAL.



NORTH

1 BUILDING 1 FOUNDATION PLAN - PLUMBING

SCALE: 3/16" = 1'-0"

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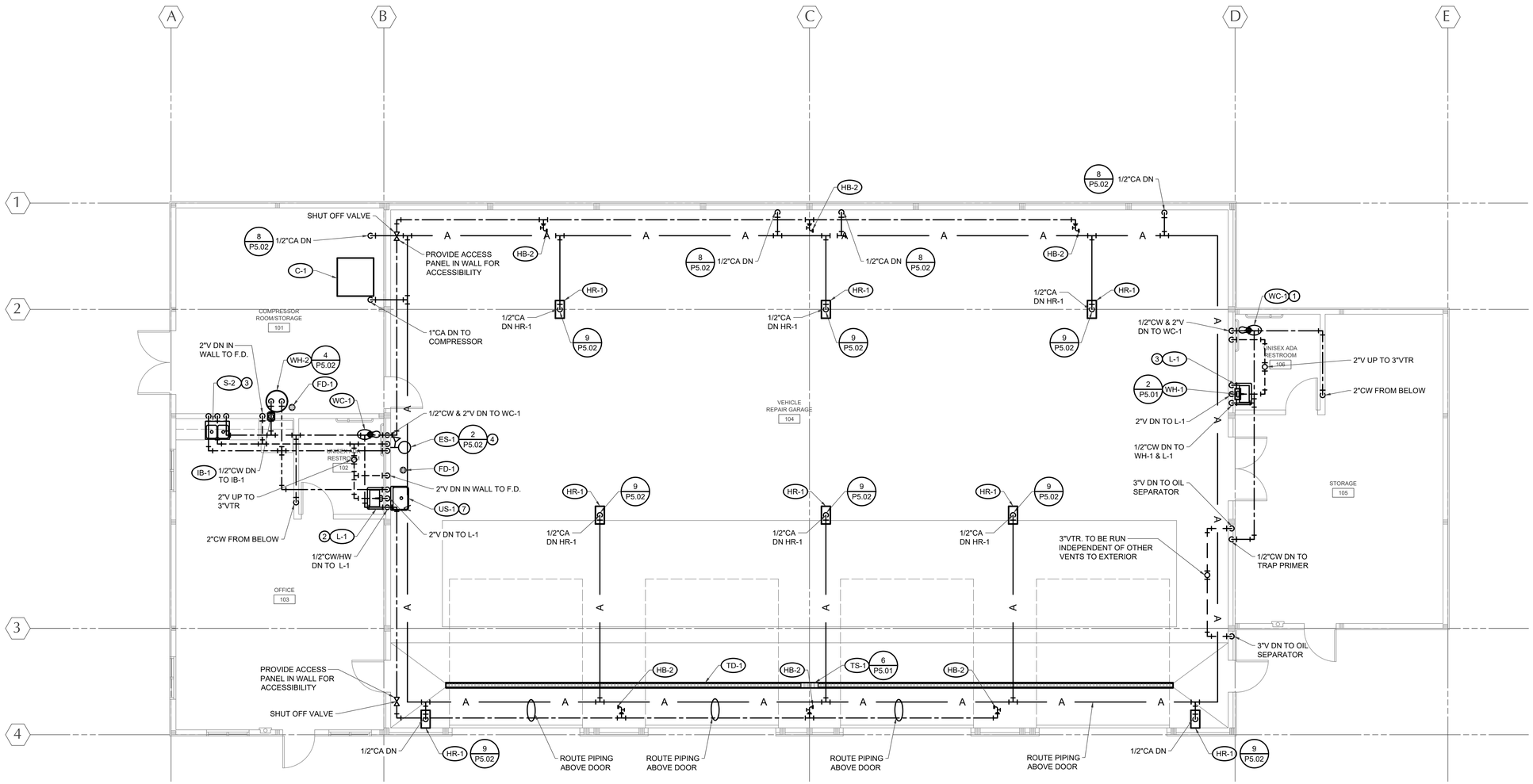
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KEYED NOTES

1. 1/2"CW DN TO WC-1.
2. 1/2"CW/HW DN TO L-1.
3. 1/2"CW DN TO L-1.
4. 3/4"CW/HW DN TO ES-1.
5. 1/2"CW/HW DN TO S-2.
6. 3/4"CW DN TO HC-2.
7. 1/2"CW/HW DN TO US-1

GENERAL NOTES

1. SLOPE ALL SEWERS @ 1/4" PER FOOT UNLESS APPROVED BY LOCAL JURISDICTION. LINES 4" AND LARGER MAY BE SLOPED AT 1/8" PER FOOT UPON APPROVAL OF LOCAL JURISDICTION AND COMPLYING WITH REDUCED FIXTURE UNIT CAPACITY PER THE UPC.
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NORTH

1 BUILDING 1 MAIN FLOOR PLAN - PLUMBING

SCALE: 3/16" = 1'-0"

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EXPIRES 2/20/25

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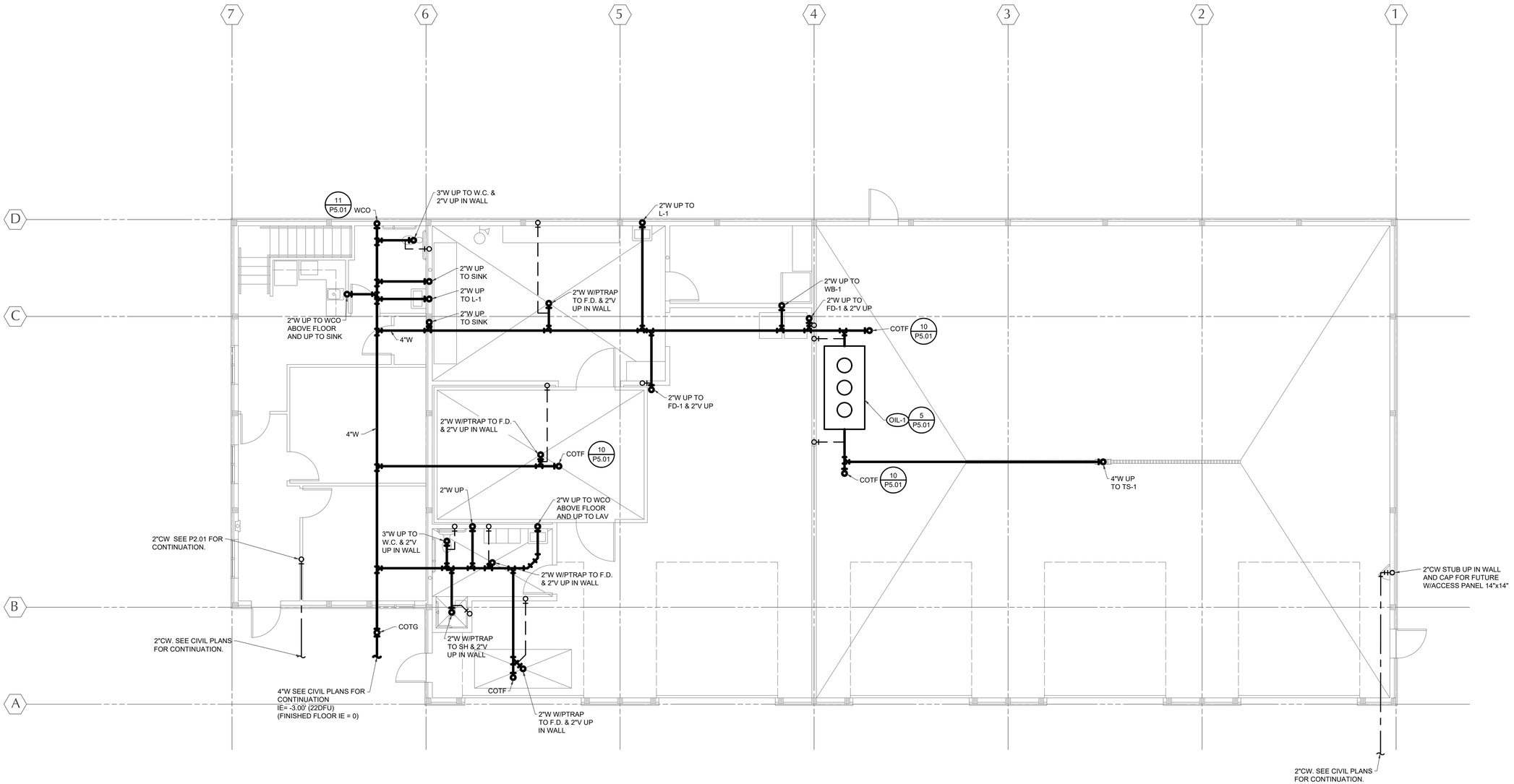
Job: 2344 Date: 01/06/2025

DWG ID –

P1.01

GENERAL NOTES

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1 BUILDING 2 FOUNDATION PLAN - PLUMBING

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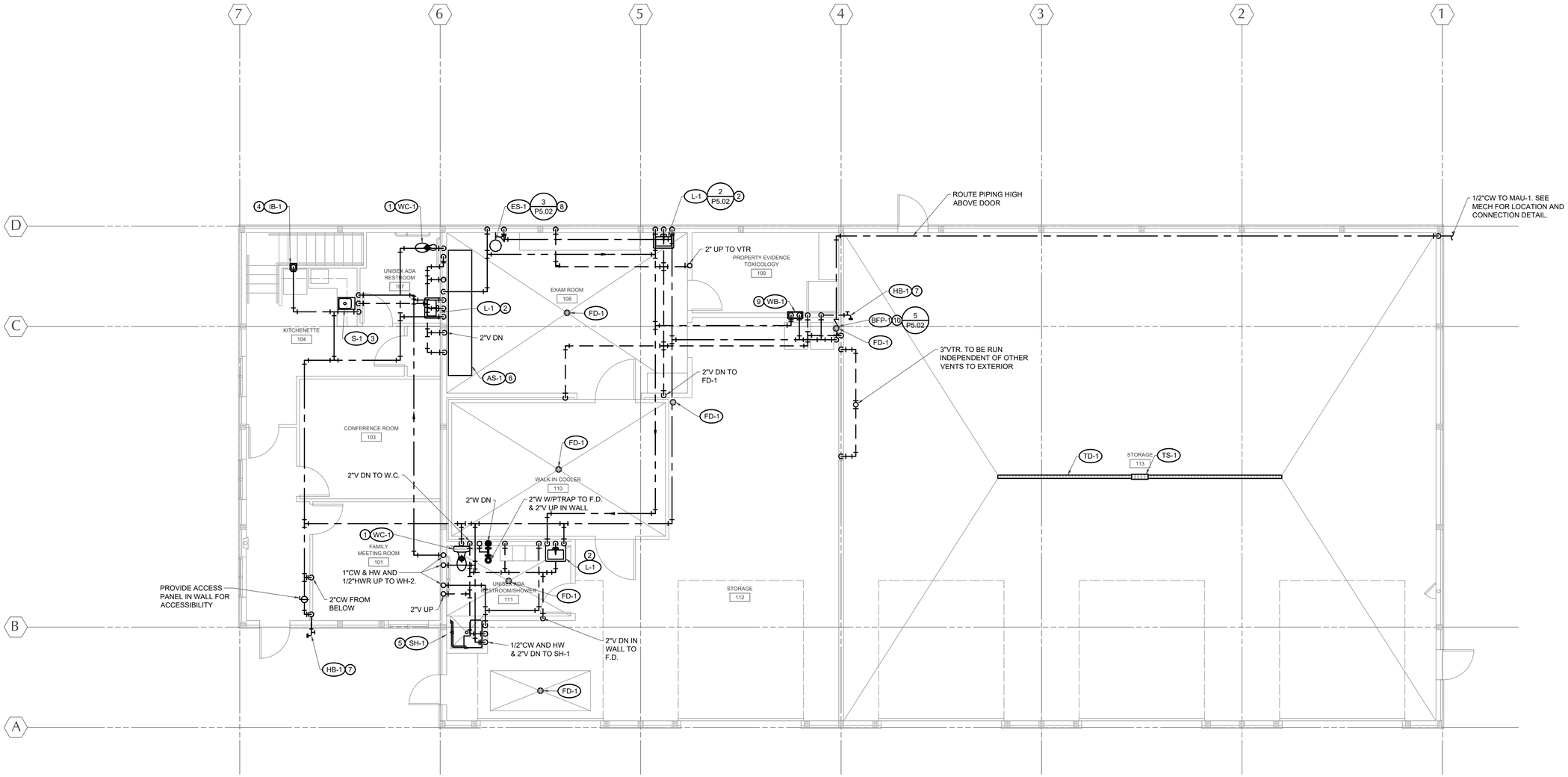
P2.00

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4. 1/2"CW DN TO IB-1
5. 1/2"CW & HW DN TO SH-1
6. 1/2"CW & HW DN TO AS-1 (2)
7. 3/4"CW DN TO HB-1
8. 3/4"CW & HW DN TO ES-1
9. 1/2"CW & HW DN TO WB-1
10. 1/2"CW DN TO BFP-1

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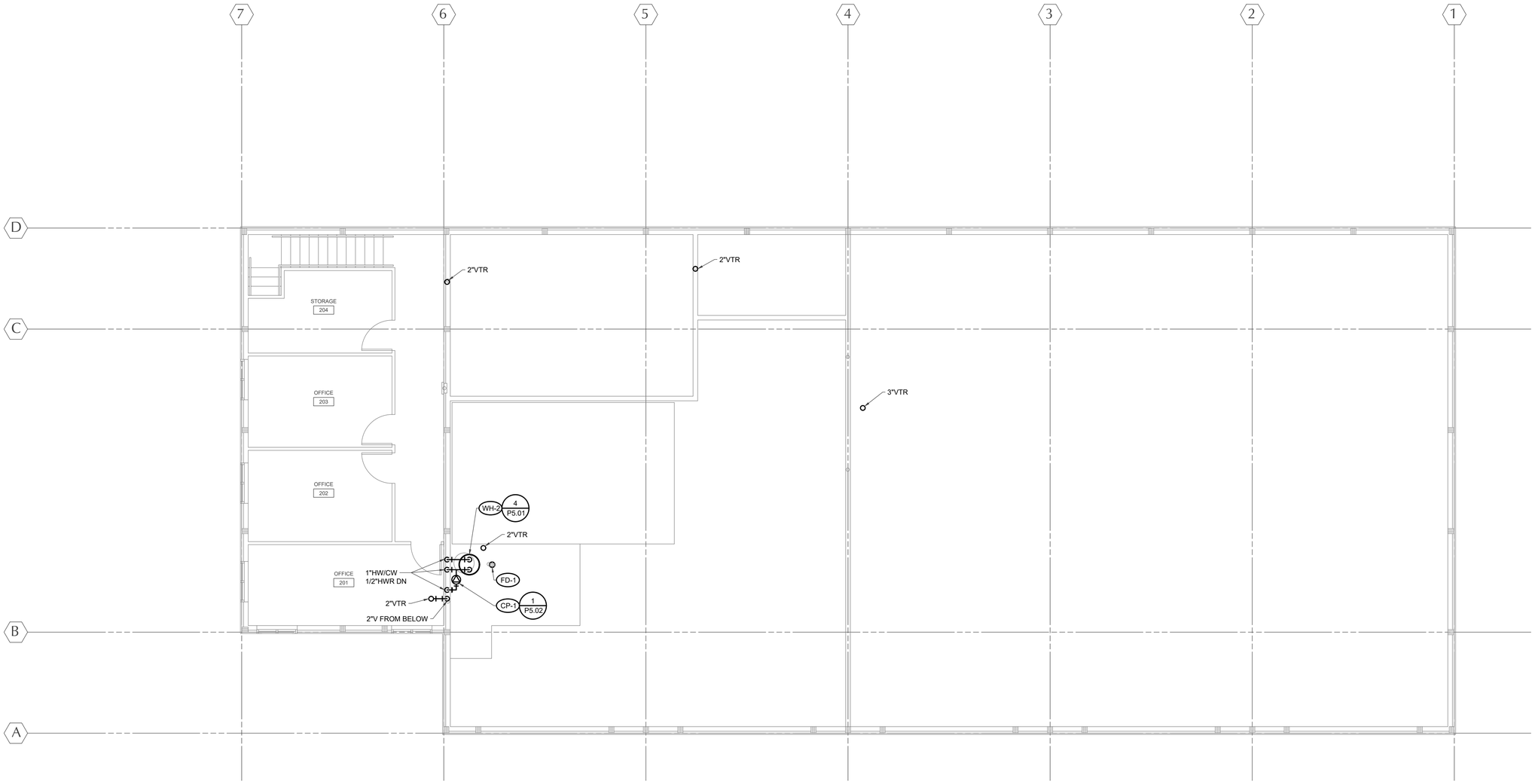
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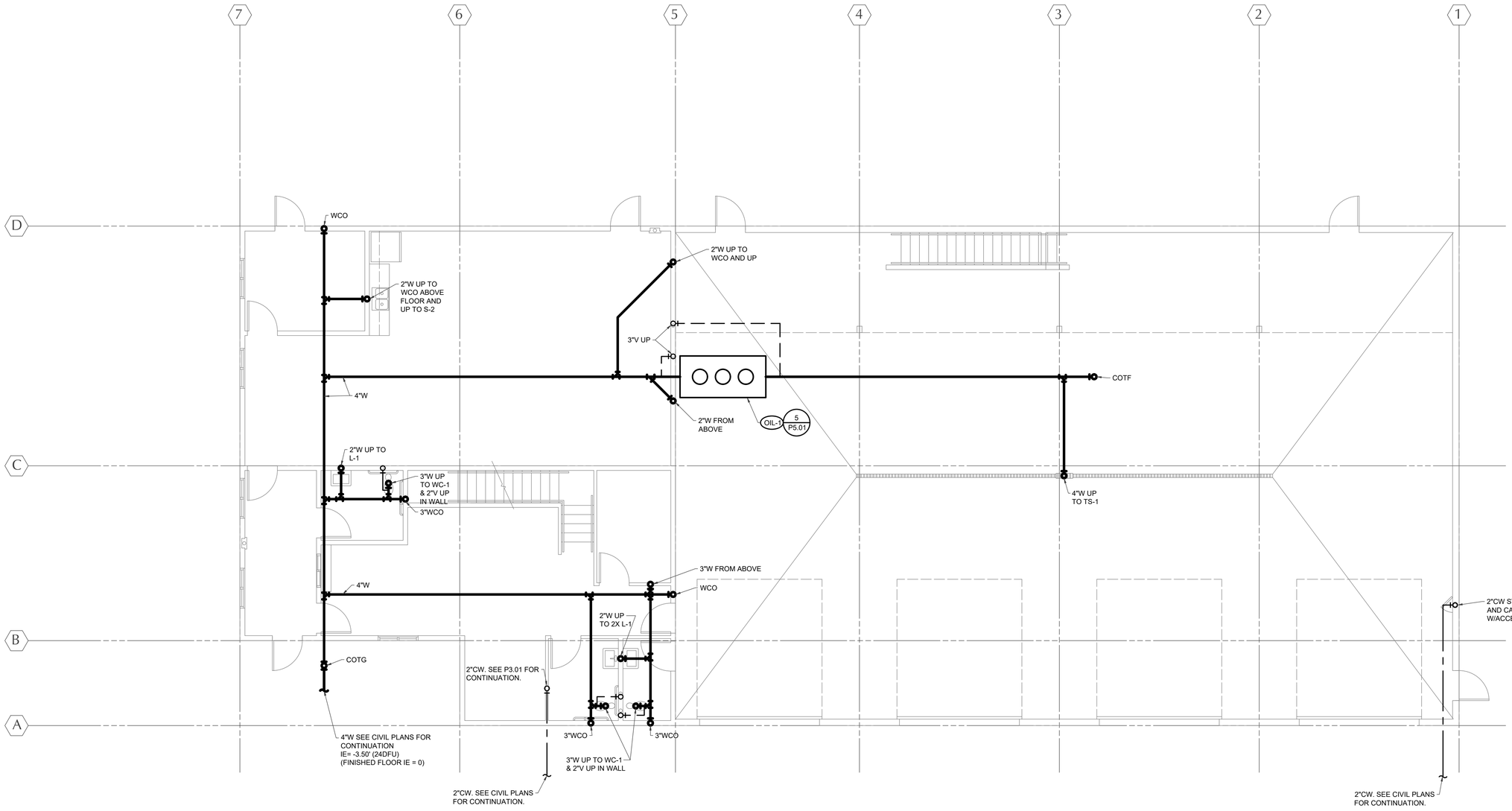
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P2.02

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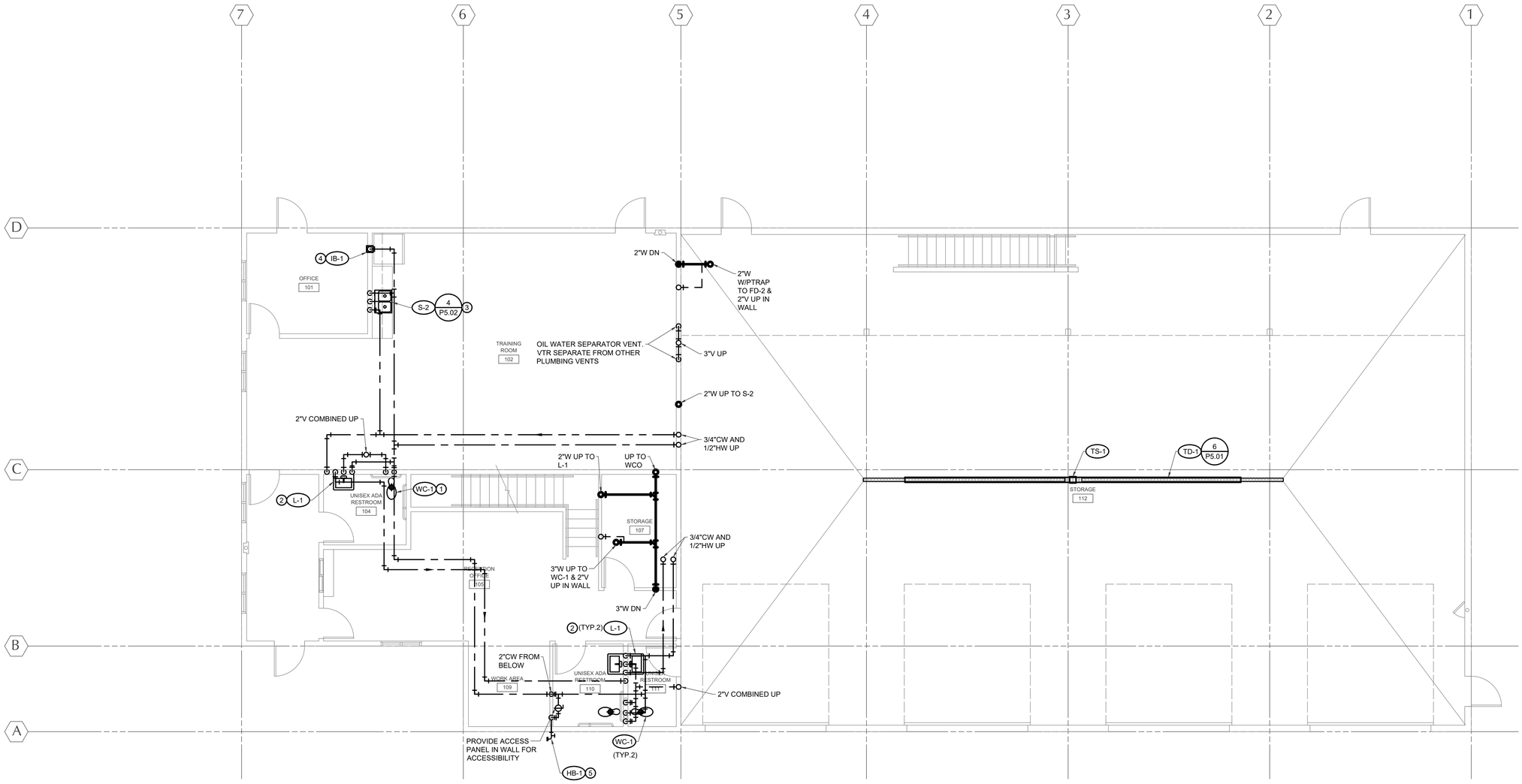
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3. 1/2"CW & HW DN TO S-2
4. 1/2"CW DN TO IB-1
5. 3/4"CW DN TO HB-1

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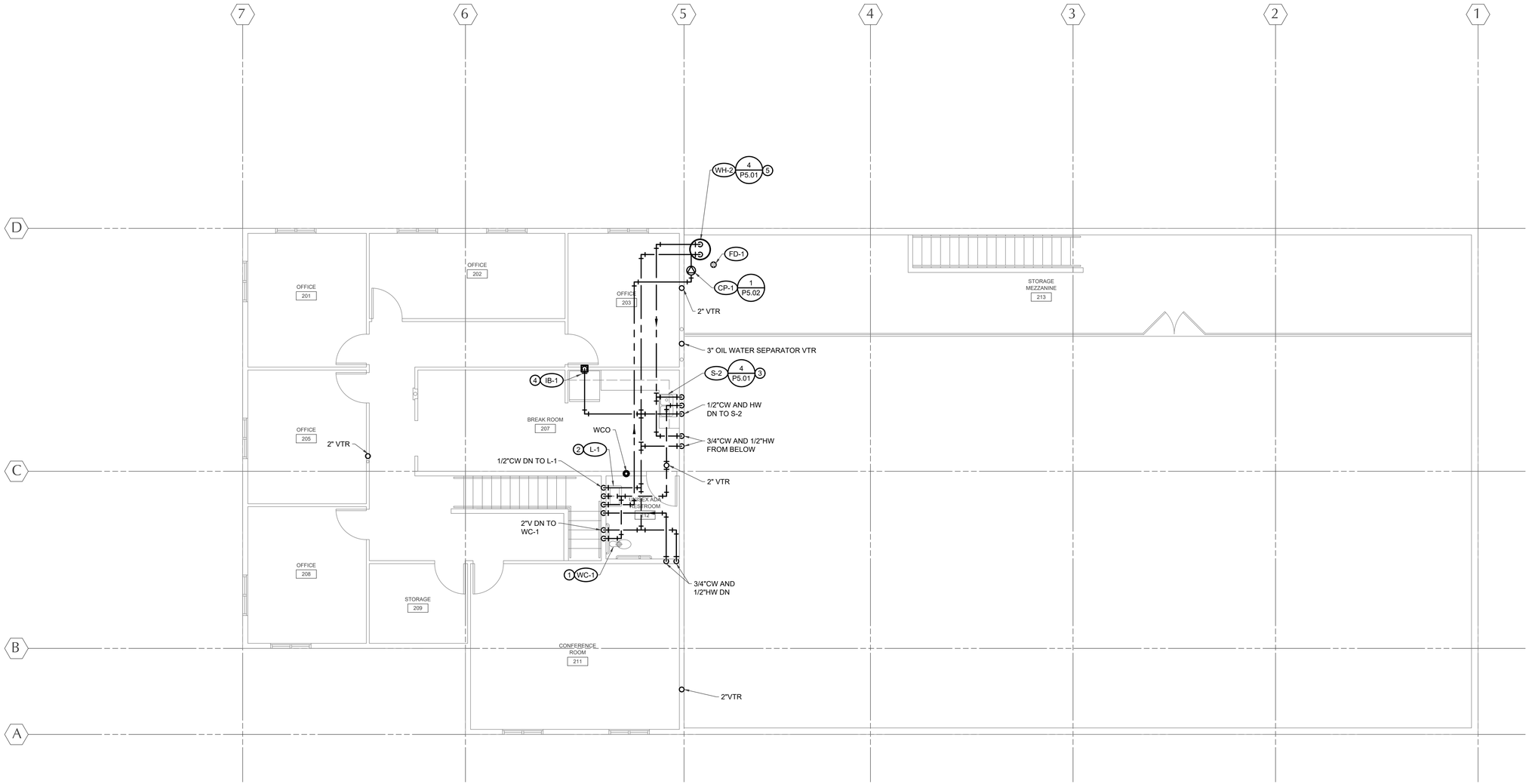
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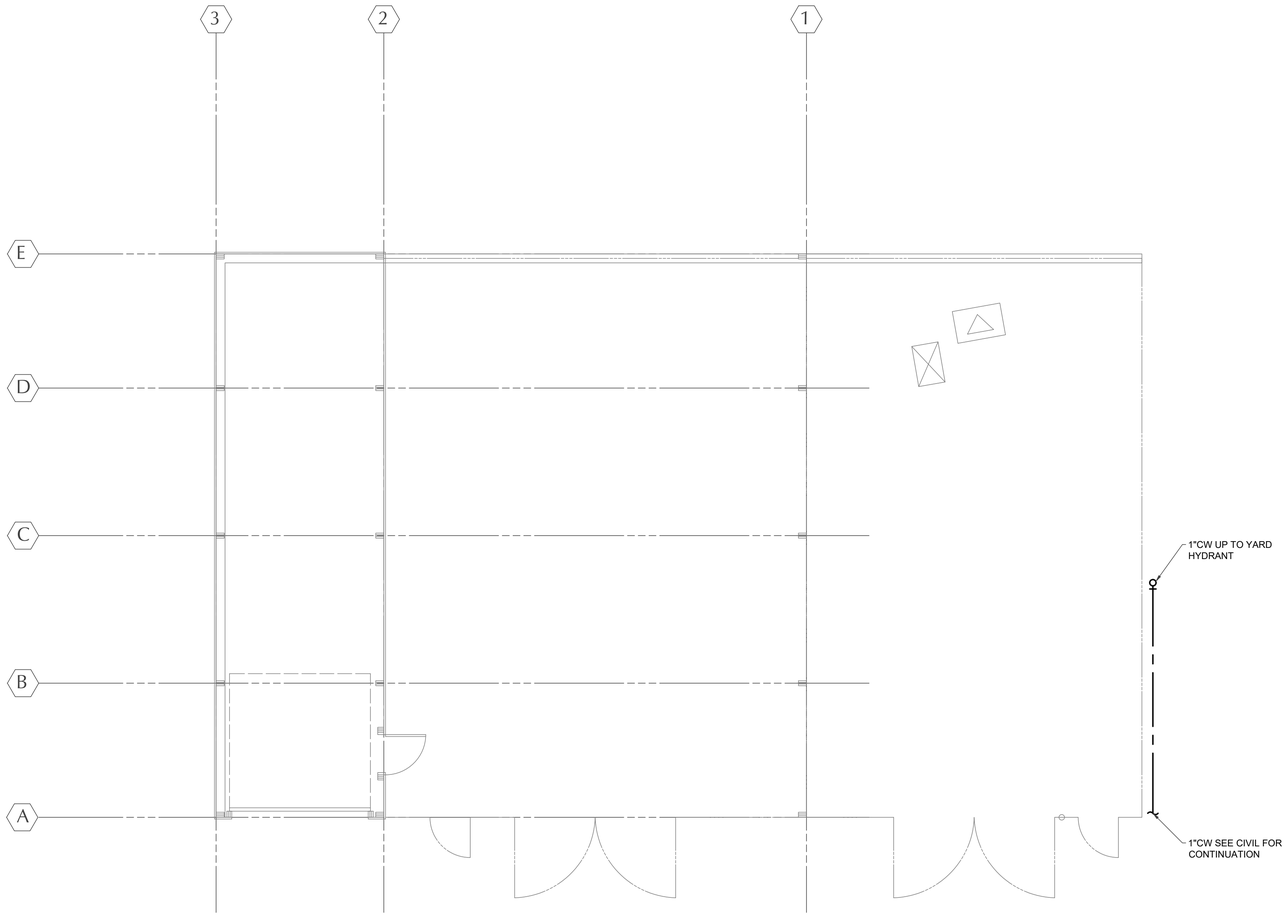
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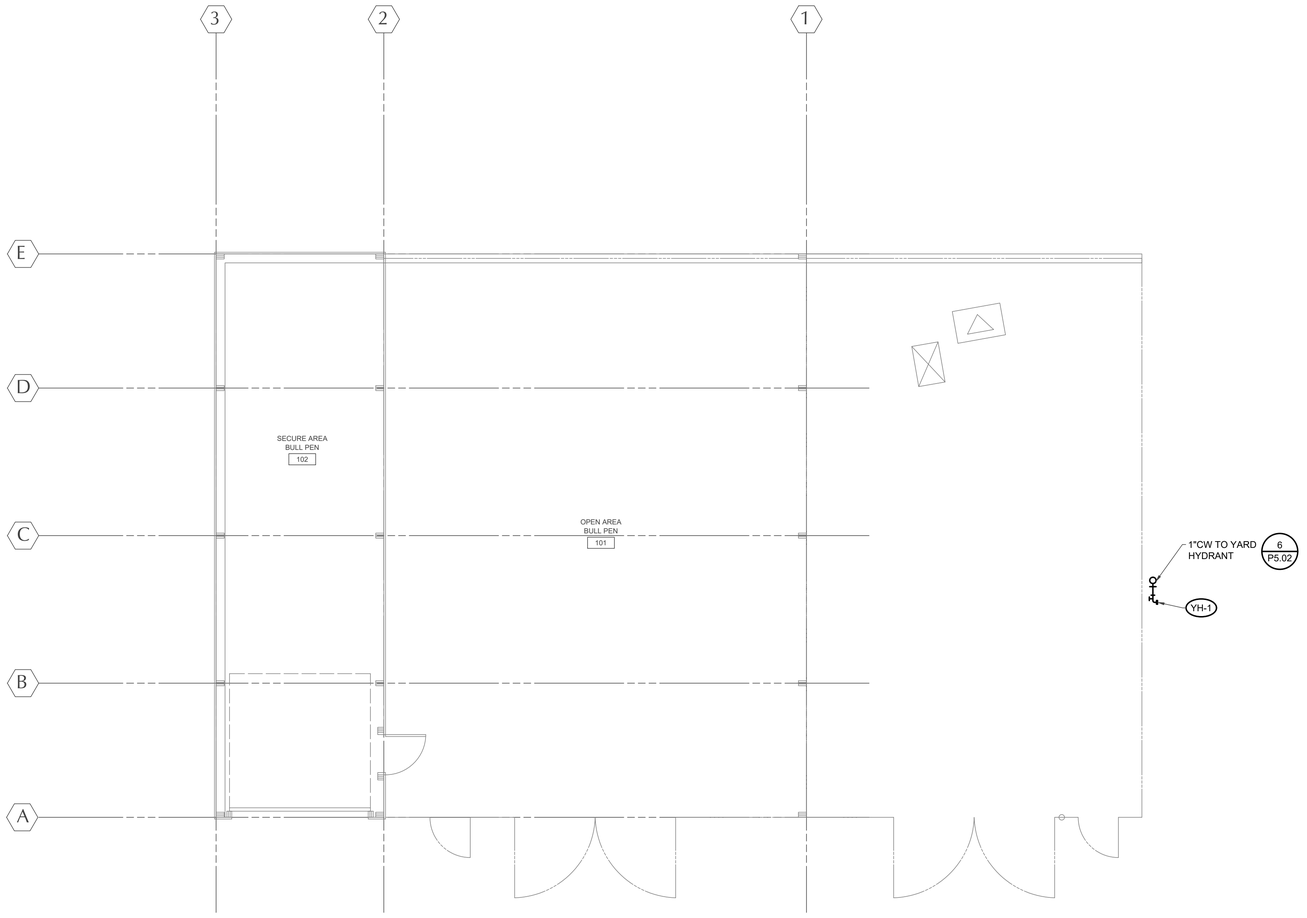
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NORTH

1 BUILDING 4 MAIN FLOOR PLAN - PLUMBING

SCALE: 3/16" = 1'-0"

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STATE OF WASHINGTON
4496
REGISTERED
PROFESSIONAL ENGINEER

EXPIRES 2/20/25

Drwn: TAM Chkd: MAK

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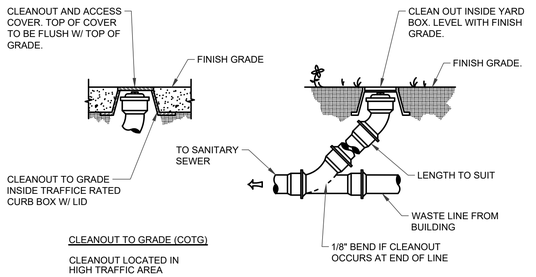
CHELAN COUNTY
OLDS STATION CAMPUS

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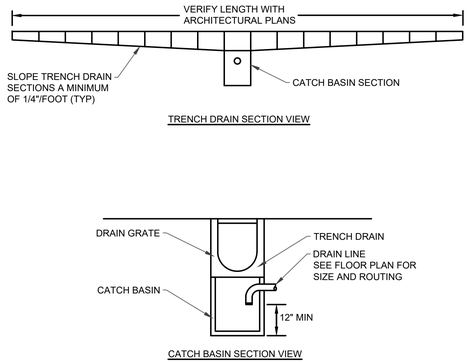
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Job: 2344 Date: 01/06/2025
DWG ID –

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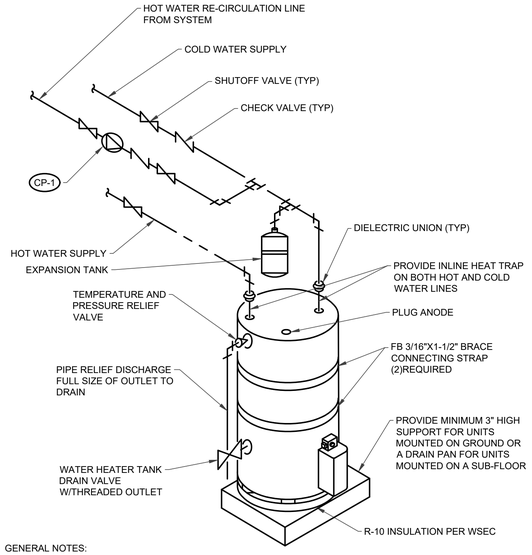
9 CLEAN-OUT TO GRADE DETAIL

SCALE: NOT TO SCALE



6 TRENCH DRAIN DETAIL

SCALE: NOT TO SCALE

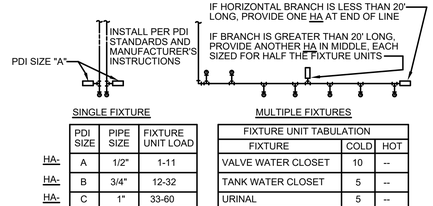


GENERAL NOTES:

1. THE DOMESTIC HOT WATER RECIRCULATION PUMP IS TO BE CONNECTED TO A MINIMUM OF A 7-DAY TIME CLOCK THAT IS CAPABLE OF BEING SET FOR AT LEAST SEVEN (7) DIFFERENT DAY TYPES PER WEEK.
2. THE TIME CLOCK CONTROLLING THE DOMESTIC HOT WATER RECIRCULATION PUMP MUST HAVE BACK-UP CAPABILITIES THAT WILL RETAIN PROGRAM AND TIME SETTINGS FOR AT LEAST TEN (10) HOURS UPON A LOSS OF POWER.
3. ELECTRIC WATER HEATERS LOCATED IN UNCONDITIONED SPACES OR ON CONCRETE FLOORS SHALL BE SEPARATED FORM THE SUPPORTING SURFACE WITH R-10 INSULATION AS DESCRIBED IN SECTION C404.4 OF THE WSEC.

4 ELECTRIC WATER HEATER DETAIL

SCALE: NOT TO SCALE



SINGLE FIXTURE

	PDI SIZE	PIPE SIZE	FIXTURE UNIT LOAD
HA-	A	1/2"	1-11
HA-	B	3/4"	12-32
HA-	C	1"	33-60
HA-	D	1-1/4"	61-113
HA-	E	1-1/2"	114-154
HA-	F	2"	154-330

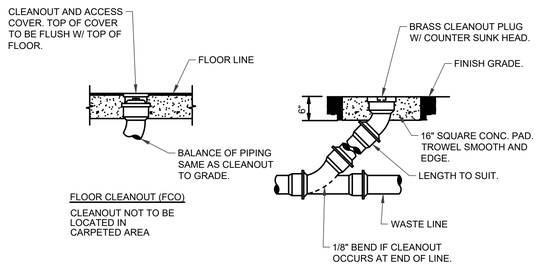
MULTIPLE FIXTURES

FIXTURE UNIT TABULATION		
FIXTURE	COLD	HOT
VALVE WATER CLOSET	10	--
TANK WATER CLOSET	5	--
URINAL	5	--
LAVATORY/SINK	1.5	1.5
JANITOR'S SINK	3	3
SHOWER/BATHTUB	2	2

PROVIDE WATER HAMMER ARRESTERS BY SIOUX CHIEF, PRECISION PLUMBING PRODUCTS, WATTS OR APPROVED EQUIVALENT WITH PISTON AND 0-RING CONSTRUCTION, HAVING PDI #WH- 201, ASSE #1010 AND ANSI #A112.26.1M CERTIFICATION. INSTALL IN HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDE DOWN. INSTALL IN LINE WITH WATER FLOW DIRECTION IF POSSIBLE. SIZE THE UNITS AS SHOWN ON THE DRAWINGS AND/OR PER THE TABLES SHOWN ABOVE. PROVIDE ACCESS PANEL FOR SERVICING OR REPLACEMENT, WHERE REQUIRED.

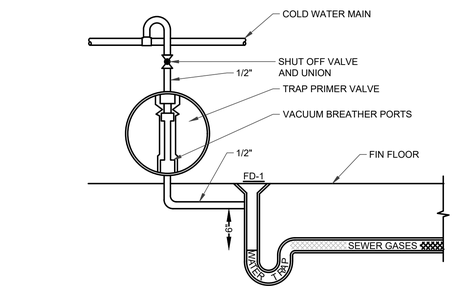
1 WATER HAMMER ARRESTOR DETAIL

SCALE: NOT TO SCALE



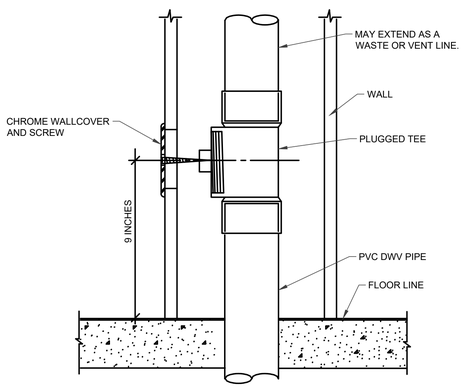
10 FLOOR CLEAN-OUT DETAIL

SCALE: NOT TO SCALE



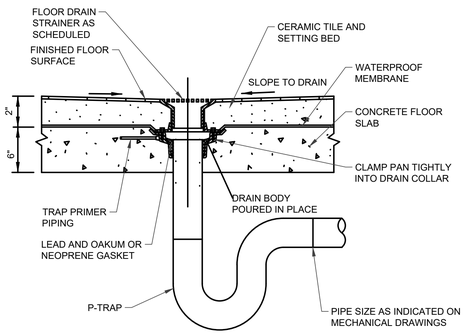
7 FLOOR DRAIN & TRAP PRIMER DETAIL

SCALE: NOT TO SCALE



11 WALL CLEAN-OUT DETAIL

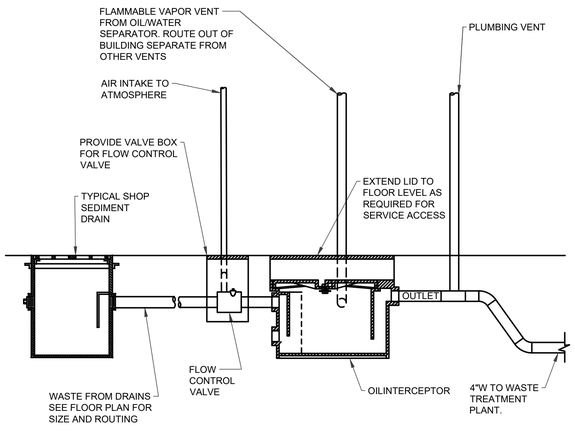
SCALE: NOT TO SCALE



NOTE:
IF INDICATED FLOOR FINISH DOES NOT APPLY, REFER TO ARCHITECTS DRAWING FOR FINISH TYPE.

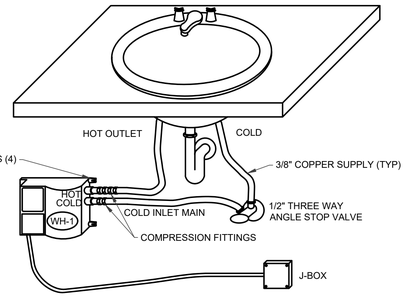
8 FLOOR DRAIN DETAIL

SCALE: NOT TO SCALE



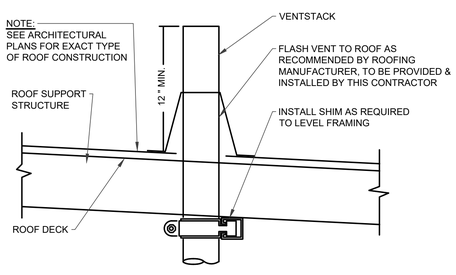
5 OIL INTERCEPTOR (BELOW GRADE)

SCALE: NOT TO SCALE



2 TANKLESS ELECTRICAL WATER HEATER DETAIL

SCALE: NOT TO SCALE



NOTE:
- SECURE 10" SQUARE 14 GAUGE FRAMING (UNISTRUT) ACROSS TWO OR MORE ROOF SUPPORT MEMBERS. INSTALL A CUSHIONED CLAMP AROUND THE VENT TO SECURE IT AGAINST LATERAL MOVEMENT ONLY.
- PROVIDE THIS INSTALLATION FOR ALL PIPE PENETRATIONS THRU ROOF OF GAS OR WATER PIPING TO HEAT RECOVERY UNITS.

3 VENT THROUGH ROOF DETAIL

SCALE: NOT TO SCALE

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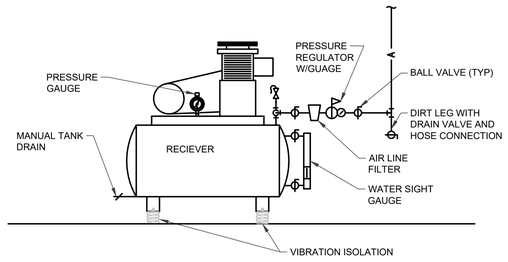
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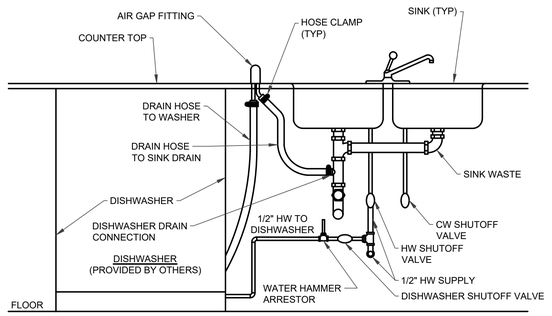
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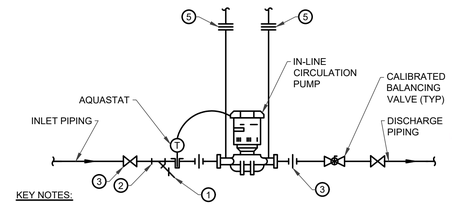
7 AIR COMPRESSOR DETAIL

SCALE: NOT TO SCALE



4 RESIDENTIAL DISHWASHER CONNECTION DETAIL

SCALE: NOT TO SCALE



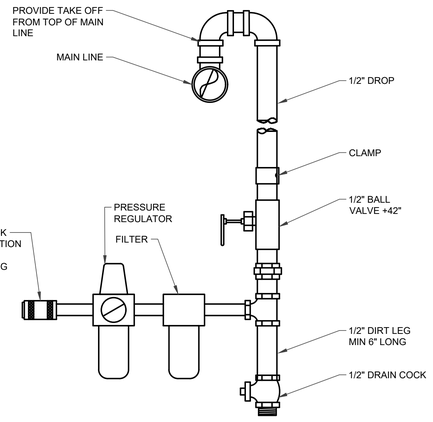
KEY NOTES:

1. DRAIN VALVE WITH 3/4" THREADED HOSE CONNECTION
2. STRAINER
3. 2" AND SMALLER - BALL VALVE; 2-1/2" AND LARGER - BUTTERFLY VALVE.
4. PROVIDE UNION ON EACH SIDE OF PUMP IF PUMP BODY NOT FLANGED STYLE PIPE CONNECTIONS.
5. PROVIDE SPRING ISOLATORS FOR SUPPORTS.

PUMP CONTROL:
- PUMP TO START WHEN WATER TEMPERATURE IS 104°F AND STOP WHEN WATER TEMPERATURE IS 120°F

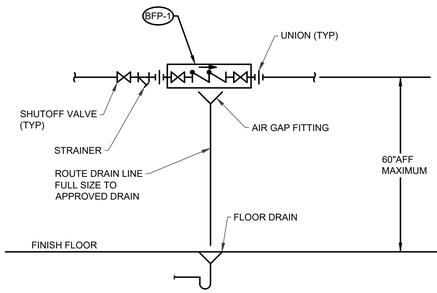
1 HOT WATER CIRCULATION PUMP DETAIL

SCALE: NOT TO SCALE



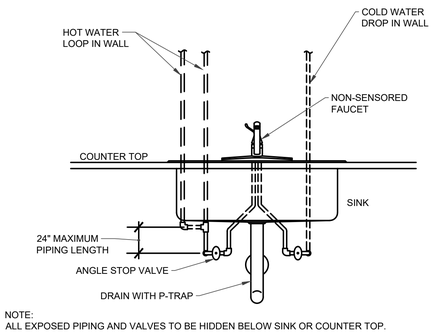
8 COMPRESSED AIR DROP DETAIL

SCALE: NOT TO SCALE



5 REDUCED PRESSURE BACK FLOW ASSEMBLY DETAIL

SCALE: NOT TO SCALE



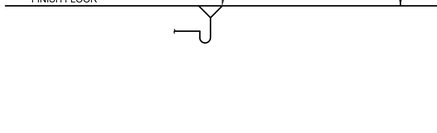
NOTE:
ALL EXPOSED PIPING AND VALVES TO BE HIDDEN BELOW SINK OR COUNTER TOP.

2 LAVATORY HOT WATER CIRCULATION LOOP DETAIL

SCALE: NOT TO SCALE

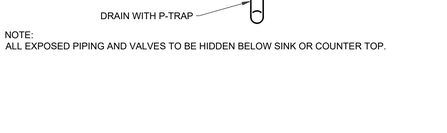
9 COMPRESSED AIR HOSE REEL DETAIL

SCALE: NOT TO SCALE



6 FROST PROOF YARD HYDRANT DETAIL

SCALE: NOT TO SCALE



3 EMERGENCY SHOWER/EYEWASH DETAIL

SCALE: NOT TO SCALE

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ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A	AIR OR COMPRESSED AIR	F	FAHRENHEIT
A/C	AIR CONDITIONING	FA	FREE AREA
AD	ACCESS DOOR	FC	FLEXIBLE CONNECTION
ADA	AMERICAN DISABILITIES ACT	FCU	FAN COIL UNIT
ADJ	ADJUST, ADJUSTABLE, ADJACENT	FD	FIRE DAMPER OR FIRE DEPARTMENT
AF	AIR FOIL	FLA	FULL LOAD AMPS
AFF	ABOVE FINISHED FLOOR	FPM	FEET PER MINUTE
AGA	AMERICAN GAS ASSOCIATION	FS	FLOW SWITCH
AHU	AIR HANDLING UNIT	FT	FEET
AMB	AMBIENT	FTR	FIN TUBE RADIATION
AMP	AMPERE, AMPACITY	G	GAS
ANCH	ANCHOR	GA	GAUGE
AP	ACCESS PANEL	GAL	GALLONS
APD	AIR PRESSURE DROP	GPH	GALLONS PER HOUR
APPD	APPROVED	GPM	GALLONS PER MINUTE
ARCH	ARCHITECT, ARCHITECTURAL	HB	HOSE BIB
AS	AIR STREAM	HD	HEAD
ATC	AUTOMATIC TEMPERATURE CONTROL	HP	HORSEPOWER
ATM	ATMOSPHERE	HR	HOUR
AVG	AVERAGE	HRU	HEAT RECOVERY UNIT
BDD	BACK DRAFT DAMPER	HTG	HEATING
BHP	BREAK HORSE POWER	HZ	HERTZ (CYCLES PER MINUTE)
BI	BACKWARD INCLINED	ID	INSIDE DIAMETER
BOD	BOTTOM OF DUCT	IN	INCHES
BTTM	BOTTOM	KW	KILOWATT
BTU	BRITISH THERMAL UNIT	LAT	LEAVING AIR TEMPERATURE
BTUH	BRITISH THERMAL UNITS PER HOUR	LD	LINEAR DIFFUSER
BV	BUTTERFLY VALVE	LF	LINEAR FEET
CAP	CAPACITY	LRA	LOCKED ROTOR AMPS
CENT	CENTER OR CENTRIFUGAL	LVR	LOUVER
CF	CUBIC FEET	LWT	LEAVING WATER TEMPERATURE
CFM	CUBIC FEET PER MINUTE	MAX	MAXIMUM
CHR	CHILLED WATER RETURN	MBH	1000 BTU
CHS	CHILLED WATER SUPPLY	MCA	MINIMUM CIRCUIT AMPS
CI	CAST IRON	MOCP	MAXIMUM OVER CURRENT PROTECTION
CLG	CEILING	MUA	MAKE UP AIR
CLR	CLEAR	NC	NOISE CRITERIA
CMU	CONCRETE MASONRY UNIT	NO	NORMALLY OPEN
CNDS	CONDENSATE	NOM	NOMINAL
CO	CARBON MONOXIDE	OA	OUTSIDE AIR
CO2	CARBON DIOXIDE	OAI	OUTSIDE AIR INTAKE
COMB	COMBINATION, COMBUSTION	OC	ON CENTER
CONN	CONNECTION OR CONNECT	OD	OUTSIDE DIAMETER
CT	COOLING TOWER	ODP	OPEN DRIP PROOF
CTBD	COOLING TOWER BLOW DOWN	OV	OUTLET VELOCITY
CUH	CABINET UNIT HEATER	PCF	POUNDS PER CUBIC FEET
CV	CHECK VALVE	PD	PRESSURE DROP
CWR	CONDENSER WATER RETURN	PH	PHASE
CWS	CONDENSER WATER SUPPLY	PRV	PRESSURE REDUCING VALVE
D	DRAIN	PSI	POUNDS PER SQUARE INCH
DB	DRY BULB	PSIA	POUND PER SQUARE INCH - ABSOLUTE
DDC	DIRECT DIGITAL CONTROL	PSID	POUND PER SQUARE INCH - DIFFERENTIAL
DEG	DEGREE	PSIG	POUND PER SQUARE INCH - GAUGE
DEMO	DEMOLITION	PVC	POLYVINYL CHLORIDE
DET	DETAIL	R	RADIUS
DF	DRINKING FOUNTAIN	RA	RETURN AIR
DIA	DIAMETER	RET	RETURN
DIFF	DIFFUSER	RH	RELATIVE HUMIDITY
DIM	DIMENSION	RLF	RELIEF
DIV	DIVISION	RPM	REVOLUTIONS PER MINUTE
DN	DOWN	RTU	ROOFTOP UNIT
DP	DIFFERENTIAL PRESSURE	SA	SUPPLY AIR
DPR	DAMPER	SD	SMOKE DETECTOR
DPS	DIFFERENTIAL PRESSURE SWITCH	SE	SMOKE EXHAUST
DS	DOWNSPOUT, DISCONNECT SWITCH, DOOR SWITCH	SEN	SENSIBLE
DWG	DRAWING	SF	SQUARE FEET
DX	DIRECT EXPANSION	SFD	COMBINATION SMOKE/FIRE DAMPER
EA	EACH OR EXHAUST AIR	SHC	SENSIBLE HEAT CAPACITY
EAHU	EXHAUST AIR HANDLING UNIT	SP	STATIC PRESSURE
EAT	ENTERING AIR TEMPERATURE	SS	STAINLESS STEEL
EF	EXHAUST FAN	SUP	SUPPLY
ELEC	ELECTRICAL	T	TEMPERATURE OR THERMOSTAT
ELEV	ELEVATOR, ELEVATION	TEFC	TOTALLY CLOSED FAN COOLED
EMER	EMERGENCY	TEMP	TEMPERATURE
EMS	ENERGY MANAGEMENT SYSTEM	TSP	TOTAL STATIC PRESSURE
ENCL	ENCLOSURE	TSTAT	THERMOSTAT
ENG	ENGINEER	TYP	TYPICAL
EPDM	ETHYLENE PROPYLENE DIENE MONOMER	UC	UNDERCUT DOOR
EQ	EQUAL	V	VOLTS
EQUIP	EQUIPMENT	VAV	VARIABLE AIR VOLUME
ESP	EXTERNAL STATIC PRESSURE	VEL	VELOCITY
ET	EXPANSION TANK	VFD	VARIABLE FREQUENCY DRIVE
EUH	ELECTRIC UNIT HEATER	WB	WET BULB TEMPERATURE
EWH	ELECTRIC WALL HEATER	WC	WATER COLUMN
EWT	ENTERING WATER TEMPERATURE	WG	WATER GAUGE
EXH	EXHAUST	WPD	WATER PRESSURE DROP
EXIST	EXISTING	WTD	WATER TEMPERATURE DIFFERENCE

PIPING LEGEND

- GATE VALVE
- BALL VALVE
- BALL VALVE WITH MEMORY STOP (BALANCING VALVE)
- BALL VALVE WITH HOSE BIBB, CAP & CHAIN
- BUTTERFLY VALVE
- BUTTERFLY VALVE WITH MEMORY STOP (BALANCING VALVE)
- GLOBE VALVE
- PLUG VALVE
- PRESSURE REDUCING VALVE
- CHECK VALVE
- STRAINER W/BALL VALVE, HOSE BIBB & CAP (GATE VALVE FOR STEAM)
- STRAINER, DUPLEX
- ANGLE VALVE (SECTION VIEW)
- ANGLE VALVE (PLAN VIEW)
- AUTOMATIC CONTROL VALVE, MODULATING ACTUATOR
- AUTOMATIC CONTROL VALVE, TWO POSITION ACTUATOR
- THREE WAY AUTOMATIC CONTROL VALVE, MODULATING ACTUATOR
- THREE WAY AUTOMATIC CONTROL VALVE, TWO POSITION ACTUATOR
- AUTOMATIC FLOW CONTROL VALVE (PRESSURE INDEPENDENT)
- COMBINATION FLOWMETER/SHUT OFF/BALANCING VALVE (CIRCUIT SETTER)
- SAFETY RELIEF VALVE
- UNION OR FLANGE (AS INDICATED BY PIPE SIZE - SEE SPEC.)
- BLIND FLANGE
- END CAP
- CWR — CONDENSER WATER RETURN
- CWS — CONDENSER WATER SUPPLY
- CHR — CHILLED WATER RETURN
- CHS — CHILLED WATER SUPPLY
- D — CONDENSATE DRAIN
- G — NATURAL GAS (1/2 PSI OR LESS)
- HWR — HEATING HOT WATER RETURN
- HWS — HEATING HOT WATER SUPPLY
- PC — PUMPED CONDENSATE
- X — X — EXISTING PIPE TO BE REMOVED
- RISE (SINGLE LINE - PLAN VIEW)
- DROP (SINGLE LINE - PLAN VIEW)
- TOP TAKEOFF
- BOTTOM TAKEOFF
- PIPE BREAK (SINGLE LINE)

HVAC BASIC OF DESIGN

STATE: WASHINGTON 89°F Db SUMMER 65°F Wb SUMMER 10°F Wb WINTER	COUNTY: CHELAN		CLIMATE ZONE: 5B	
	DESIGN ALTITUDE 778 FT ABOVE SEA LEVEL			
INDOOR AREA DESIGN CONDITIONS	SUMMER		WINTER	
GENERAL SPACE DESIGNATION	Db (°F)	% HUMIDITY	Db (°F)	% HUMIDITY
OFFICE, ETC.	75	50	72	50

AIR OUTLET CALLOUT

XxX [X] XXX,XxX,XX°

1 2 3 4 5

1. NECK SIZE (IN)
2. AIR OUTLET TYPE
3. AIRFLOW (CFM)
4. SIZE (IN) OF CONNECTING BRANCH DUCT
5. ANGLE OF THROW, DOWN FROM HORIZONTAL (°)

WSEC COMPLIANCE

1. HVAC EQUIPMENT SHALL HAVE MINIMUM PERFORMANCE AT SPECIFIED RATING CONDITIONS NOT LESS THAN THE VALUES INDICATED IN THE TABLE C403.2.3 OF THE WSEC AND AS INDICATED ON THE CONTRACT DOCUMENTS.
2. THERMOSTATS:
   - 2.1. PROVIDE THERMOSTAT WITH 7-DAY PROGRAMMABLE THERMOSTAT CAPABLE OF BEING SET FOR 7-DIFFERENT DAY TYPES PER WEEK (5+2 AND 5+1+1 THERMOSTATS ARE NOT ACCEPTABLE.
   - 2.2. THERMOSTAT SHALL HAVE PROGRAMMING BACK UP CAPABLE OF RETAINING THE PROGRAMMING FOR A MINIMUM OF TEN HOURS UPON LOSS OF POWER.
   - 2.3. THE THERMOSTAT SHALL BE CAPABLE OF MANUAL OVERRIDE.
   - 2.4. THERMOSTAT SHALL BE CAPABLE OF BEING SET FOR A 5 DEGREE DEADBAND (WHEN CONTROLLING EQUIPMENT CAPABLE OF BOTH HEATING AND COOLING)
   - 2.5. FOR THERMOSTATS CONTROLLING HEATING AND COOLING EQUIPMENT, THE THERMOSTAT SHALL BE PROVIDED WITH "OPTIMUM START" CAPABILITIES.
   - 2.6. HVAC SYSTEMS SHALL BE EQUIPPED WITH AUTOMATIC CONTROLS CAPABLE OF ACCOMPLISHING SETBACK OR SHUTDOWN DURING UNOCCUPIED PERIODS AS REQUIRED BY SECTION C403.2.4.2.1. THERMOSTATIC SETBACK CONTROLS SHALL BE CONFIGURED TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55°F (13°C) OR UP TO 85°F (29°C).
   - 2.7. PROVIDE DEAD BAND BETWEEN HEATING/COOLING SPACE SENSOR SETPOINTS OF 5 DEGREES AS REQUIRED BY THE WSEC OR AS DESCRIBED IN THE TEMPERATURE CONTROL SEQUENCES
3. PROVIDE BALANCING DEVICES IN ALL BRANCH DUCTS AND PIPE RUNS TO TERMINAL DEVICES AS REQUIRED BY SECTION C408.2.2 OF THE WSEC AND AS INDICATED ON THE CONTRACT DOCUMENTS.
4. SEALANTS FOR GALVANIZED DUCTWORK: SEAL AIR DUCT JOINTS AND JOINTS BETWEEN FITTINGS AND DUCTS WITH HARDCAST SEALANT OR APPROVED EQUAL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
5. ALL DUCTWORK SHALL COMPLY WITH SMACNA STANDARDS FOR CONSTRUCTION OF GALVANIZED DUCTWORK. ALL DUCTWORK SHALL BE SEALED AS REQUIRED BY SECTION C403.2.8.2 OF THE WSEC.
6. DUCTWORK STATIC PRESSURE AND SEAL CLASS:

DUCT CONSTRUCTION CLASS	STATIC PRESSUR RATING	PRESSURE	SMACNA SEAL CLASS	SMACN LEAKAG CLASS	VELOCITY	
4"	ABOVE 3"	POS OR NEG	A	6	4000 FPM OR LESS	SEAL TRANSVERSE JOINTS, LONGITUDINAL SEAMS AND DUCT WALL PENETRATIONS
2"	2" TO 3"	POS OR NEG	B	12	2500 FPM OR LESS	SEAL TRANSVERSE JOINTS AND LONGITUDINAL SEAMS
1"	1/2" TO 2"	POS OR NEG	B	12	2500 FPM OR LESS	SEAL TRANSVERSE JOINTS

7. ALL DUCTWORK SHALL BE INSULATED AS REQUIRED BY SECTION C403.2.8.2 OF THE WSEC.

DUCT TYPE	LOCATION	R-VALUE
SUPPLY / RETURN	EXTERIOR DUCTWORK, OR DUCTWORK IN UNINSULATED ATTIC, OR CRAWL SPACE	R-12 (INCLUDE APPROVED WEATHERPROOF BARRIER)
OUTSIDE AIR	WITHIN CONDITIONED SPACE (NOT CONSIDERED PART OF THE BUILDING ENVELOPE)	R-8 (DAMPER AT ENVELOPE PENETRATION)
SUPPLY	PLENUM WITHIN INSULATED BUILDING ENVELOPE	R-3.3
RETURN	PLENUM WITHIN INSULATED BUILDING ENVELOPE	NO INSULATION REQUIRED
ERV HEATED SUPPLY AND EXHAUST AIR	PLENUM WITHIN INSULATED BUILDING ENVELOPE	NO INSULATION REQUIRED

8. ALL AIR SYSTEMS SHALL BE PROVIDED WITH A 100% CAPABLE AIR ECONOMIZER CAPABILITY AS REQUIRED BY THE SECTION C403.3 OF THE WSEC AND AS DESCRIBED IN THE TEMPERATURE CONTROL SEQUENCES.
9. AIR ECONOMIZERS SHALL BE CAPABLE OF PROVIDING PARTIAL COOLING EVEN WHEN ADDITIONAL MECHANICAL COOLING IS REQUIRED TO MEET THE REMAINDER OF THE COOLING LOAD.
10. C403.2.4.7 ECONOMIZER FAULT DETECTION AND DIAGNOSTICS (FDD). AIR-COOLED UNITARY DIRECT-EXPANSION UNITS WITH A COOLING CAPACITY OF 54,000 BTU/H OR GREATER LISTED IN TABLES C403.2.3(1) THROUGH C403.2.3(3) THAT ARE EQUIPPED WITH AN ECONOMIZER IN ACCORDANCE WITH SECTION C403.3 SHALL INCLUDE A FAULT DETECTION AND DIAGNOSTICS (FDD) SYSTEM COMPLYING WITH THE FOLLOWING:
    - 10.1. THE FOLLOWING TEMPERATURE SENSORS SHALL BE PERMANENTLY INSTALLED TO MONITOR SYSTEM OPERATION OF OUTSIDE AIR, SUPPLY AIR, AND RETURN AIR.
    - 10.2. THE UNIT CONTROLLER SHALL BE CONFIGURED TO PROVIDE SYSTEM STATUS BY INDICATING THE FOLLOWING: FREE COOLING AVAILABLE. ECONOMIZER ENABLED. COMPRESSOR ENABLED. HEATING ENABLED. MIXED AIR LOW LIMIT CYCLE ACTIVE. THE CURRENT VALUE OF EACH SENSOR.
    - 10.3. THE FDD SYSTEM SHALL BE CONFIGURED TO DETECT THE FOLLOWING FAULTS:
      - 10.3.1. AIR TEMPERATURE SENSOR FAILURE/FAULT.
      - 10.3.2. NOT ECONOMIZING WHEN THE UNIT SHOULD BE ECONOMIZING.
      - 10.3.3. ECONOMIZING WHEN THE UNIT SHOULD NOT BE ECONOMIZING.
      - 10.3.4. DAMPER NOT MODULATING.
11. SIMULTANEOUS HEATING AND COOLING TO INDIVIDUAL ZONES SHALL BE PROHIBITED AS DESCRIBED IN THE THERMOSTATIC CONTROLS C403.2.1 EXCEPT WHERE PERMITTED IN, EXCEPTIONS 1 THROUGH 2 OF THE WSEC.
12. PER C405.8 FRACTIONAL HP FAN MOTORS THAT ARE 1/12 HP OR GREATER AND LESS THAN 1 HP WHICH ARE NOT COVERED BY TABLES C405.8(3) AND C405.8(4) SHALL BE ELECTRONICALLY COMMUTATED MOTORS OR SHALL HAVE A MINIMUM MOTOR EFFICIENCY OF 70 PERCENT.
13. MOTOR EFFICIENCY SHALL NOT BE LESS THAN THE MINIMUM CALLOUTS PER TABLE C405.8(1) THROUGH C405.8(4) OF THE WSEC FOR FULL LOAD EFFICIENCIES.
14. DEMAND CONTROL VENTILATION: PROVIDE DEMAND CONTROL VENTILATION ON ALL SPACES GREATER THAN 500 SF, AND WITH OCCUPANT LOADS GREATER THAN 25 PEOPLE/1,000 SF. C403.2.6.2 WSEC.
15. C403.7.8.1 SHUTOFF DAMPERS FOR BUILDING ISOLATION. OUTDOOR AIR SUPPLY, EXHAUST OPENINGS AND RELIEF OUTLETS AND STAIRWAY AND ELEVATOR HOISTWAY SHAFT VENTS SHALL BE PROVIDED WITH CLASS I MOTORIZED DAMPERS. SEE SECTIONS C403.10.1 AND C403.10.2 FOR DUCTWORK INSULATION REQUIREMENTS UPSTREAM AND DOWNSTREAM OF THE SHUTOFF DAMPER.
    EXCEPTIONS:
    1. GRAVITY (NONMOTORIZED) DAMPERS SHALL BE PERMITTED IN LIEU OF MOTORIZED DAMPERS AS FOLLOWS:
       - 1.1 RELIEF DAMPERS SERVING SYSTEMS LESS THAN 5,000 CFM TOTAL SUPPLY SHALL BE PERMITTED IN BUILDINGS LESS THAN THREE STORIES IN HEIGHT.
       - 1.2 GRAVITY (NONMOTORIZED) DAMPERS WHERE THE DESIGN OUTDOOR AIR INTAKE OR EXHAUST CAPACITY DOES NOT EXCEED 400 CFM (189 L/S).
       - 1.3 SYSTEMS SERVING AREAS WHICH REQUIRE CONTINUOUS OPERATION FOR 24/7 OCCUPANCY SCHEDULES.
    2. SHUTOFF DAMPERS ARE NOT REQUIRED IN:
       - 2.1 COMBUSTION AIR INTAKES.
       - 2.2 SYSTEMS SERVING AREAS WHICH REQUIRE CONTINUOUS OPERATION IN ANIMAL HOSPITALS, KENNELS AND POUNDS, LABORATORIES, AND GROUP H, I AND R OCCUPANCIES.
       - 2.3 SUBDUCT EXHAUST SYSTEMS OR OTHER SYSTEMS THAT ARE REQUIRED TO OPERATE CONTINUOUSLY BY THE *INTERNATIONAL MECHANICAL CODE*.
       - 2.4 TYPE I GREASE EXHAUST SYSTEMS OR OTHER SYSTEMS WHERE DAMPERS ARE PROHIBITED BY THE *INTERNATIONAL MECHANICAL CODE* TO BE IN THE AIRSTREAM.
       - 2.5 UNCONDITIONED STAIRWELLS OR UNCONDITIONED ELEVATOR HOISTWAY SHAFTS THAT ARE ONLY CONNECTED TO UNCONDITIONED SPACES.
17. COMMISSIONING: FOR ALL COOLING SYSTEMS LARGER THAN 240,000 BTUH, OR HEATING SYSTEMS LARGER THAN 300,000 BTUH MECHANICAL SYSTEM MUST BE COMMISSIONED IN ACCORDANCE WITH SECTION C408.2 INCLUDING BUT NOT LIMITED TO; A COMMISSIONING PLAN, A PRELIMINARY COMMISSIONING REPORT, FINAL COMMISSIONING REPORT AND COMPLETION OF COMMISSIONING COMPLIANCE CHECKLIST. A COPY OF THE COMMISSIONING COMPLIANCE CHECKLIST IS REQUIRED TO BE GIVEN TO THE LOCAL BUILDING OFFICIAL
18. PROVIDE RECORD DRAWINGS, OPERATING AND MAINTENANCE MANUALS, ENERGY CODE COMPLIANCE FORMS, AND SYSTEMS OPERATION TRAINING DOCUMENTS AS DESCRIBED IN SECTION C103.6.1 THROUGH C103.6.4 TO THE OWNER WITHIN 180 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE AS REQUIRED BY SECTION C103.6 OF THE WSEC. THE DRAWINGS SHALL INDICATE THE LOCATION AND PERFORMANCE DATA OF EQUIPMENT, GENERAL CONFIGURATION OF DUCTWORK AND PIPING DISTRIBUTION SYSTEMS, INCLUDING FLOW RATES AS A MINIMUM.
19. C402.5.1.2 BUILDING AIR LEAKAGE TESTING
    - A. PROVIDE AIR LEAKAGE TESTING PER SECTION C402.5.1.2 TO ENSURE THE LEAKAGE RATE IS LESS THAN 0.40 CFM/SF AT PRESSURE DIFFERENTIAL OF 0.3 INCHES WATER GAUGE.

DUCTWORK SYMBOLS

SINGLE LINE	DOUBLE LINE
ROUND DUCT UP	ROUND DUCT UP
ROUND DUCT DOWN	ROUND DUCT DOWN
SUPPLY DUCT UP	SUPPLY DUCT UP
SUPPLY DUCT DOWN	SUPPLY DUCT DOWN
OR — STANDARD RADIUS ELBOW (R = W)	STANDARD RADIUS ELBOW (R = W) SUPPLY/RETURN /EXHAUST
TURNING VANES	TURNING VANES
OR — BULLHEAD SPLIT SUPPLY	BULLHEAD SPLIT SUPPLY
CEILING DUCT MTD. DIFF/GRILLE	CEILING DUCT MTD. DIFF/GRILLE
TAKEOFF TO DIFF/GRILLE	TAKEOFF TO DIFF/GRILLE
HARD ELBOW	HARD ELBOW
CEILING DUCT MTD. DIFF/GRILLE	CEILING DUCT MTD. DIFF/GRILLE
ACOUSTICALLY LINED DUCT	ACOUSTICALLY LINED DUCT
DUCTWORK OR EQUIPMENT TO BE REMOVED	DUCTWORK OR EQUIPMENT TO BE REMOVED
OPEN END DUCT W/ 1/4"x1/4" WMS	OPEN END DUCT W/ 1/4"x1/4" WMS
FLEXIBLE DUCT	FLEXIBLE DUCT

SINGLE LINE	DOUBLE LINE
RETURN DUCT UP	RETURN DUCT UP
EXHAUST DUCT UP	EXHAUST DUCT UP
RETURN DUCT DOWN	RETURN DUCT DOWN
EXHAUST DUCT DOWN	EXHAUST DUCT DOWN
	HORIZONTAL OFFSET SUPPLY/RETURN /EXHAUST
RISE/DROP	RISE OR DROP SUPPLY/RETURN/ EXHAUST — RISE UP, DROP DN
	45°F TAP TAKE-OFF
	RECT. TAP, ROUND DUCT, ROUND TAP, RECT TAP
	90°F TAP TAKE-OFF
RECTANGULAR MAIN DUCT	
	ROUND TAKEOFF
	90°F TAP TAKE-OFF
ROUND MAIN DUCT	
	BULLHEAD CONVERGE RETURN/EXHAUST
	SIDEWALL DUCT MTD. REG./GRILLE
	SUPPLY SIDEWALL LINEAR DIFFUSER (W/SHEET METAL PLENUM W/1" LINING & BRANCH CONN FOR EVERY 4' OF LENGTH) — VD, VD
	SUPPLY CEILING LINEAR DIFFUSER (W/SHEET METAL PLENUM W/1" LINING & BRANCH CONN FOR EVERY 4' OF LENGTH) — VD, VD, BOOT BY LD MF'R

ADDITIONAL SYMBOLS

- AVS — AIR VOLUME TRAVERSE STATION
- ACD — AUTOMATIC CONTROL DAMPER W/ACCESS DOOR
- SGD — SLIDE GATE DAMPER
- VD — MANUAL VOLUME DAMPER
- FD — SELF-CLOSING FIRE DAMPER W/ACCESS DOOR
- SD — AUTOMATIC SMOKE DAMPER W/ACCESS DOOR
- SFD — COMBINATION SMOKE/FIRE DAMPER W/ACCESS DOOR
- BD — BACKDRAFT DAMPER
- M — MOTORIZED DAMPER
- STANDARD 4-WAY BLOW SUPPLY DIFFUSER
- BLANKED FOR 3-WAY BLOW SUPPLY DIFFUSER
- OR — BLANKED FOR 2-WAY BLOW SUPPLY DIFFUSER
- BLANKED FOR 1-WAY BLOW SUPPLY DIFFUSER

- ROOF EXHAUST FAN SHOWN ON ROOF
- ROOF EXHAUST FAN SHOWN ON FLOOR PLAN
- UC 1/2" — UNDERCUT DOOR
- LVDR 1.5 SF — LOUVERED DOOR
- RETURN OR EXHAUST AIR FLOW DIRECTION
- SUPPLY AIR FLOW
- CONNECT NEW TO EXISTING
- POINT OF DEMOLITION
- # / # — SECTION DESIGNATION / SHEET NUMBER
- T — TEMPERATURE SENSOR OR THERMOSTAT
- F — FIRE DAMPER

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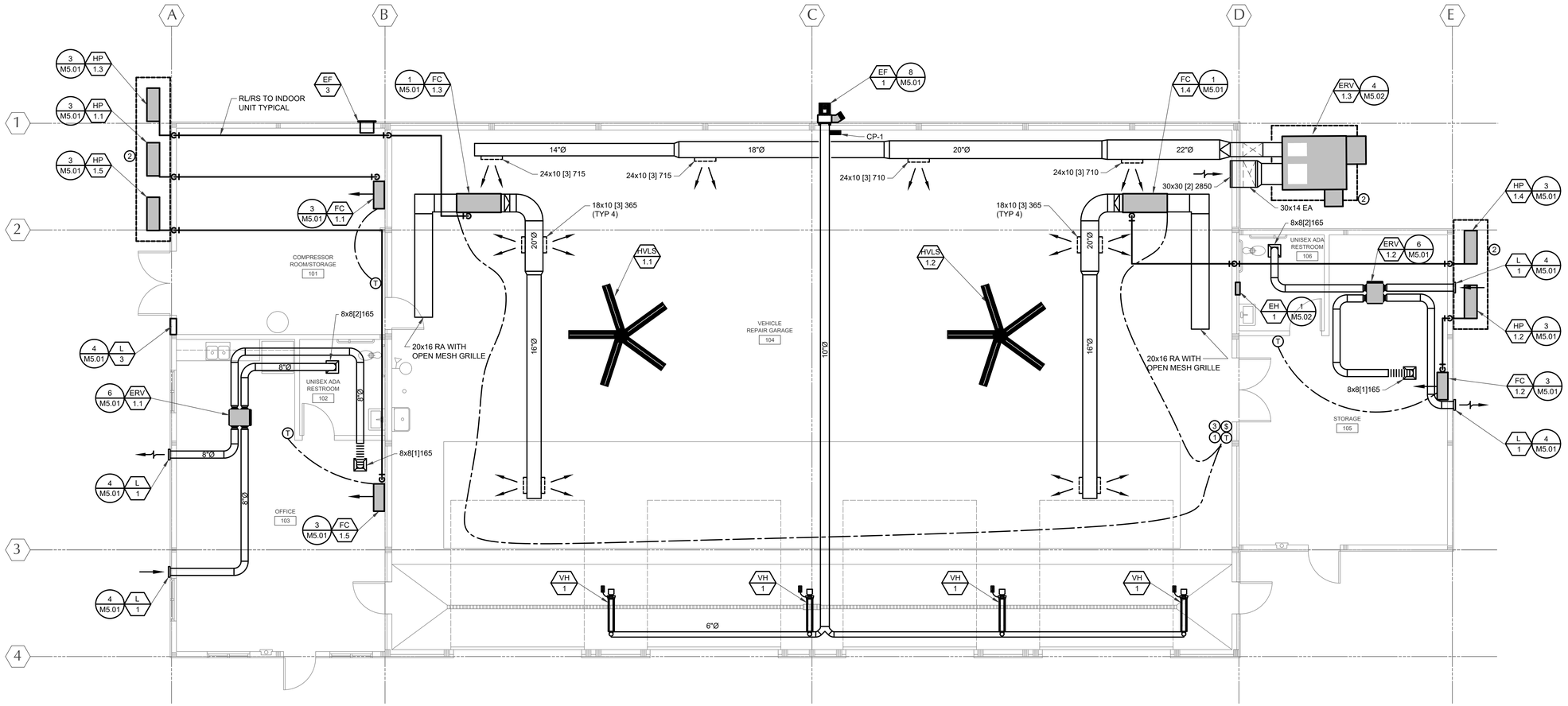
ADDITIONAL MECHANICAL EFFICIENCY PACKAGE OPTIONS USED PER WSEC 406 - BUILDING 1			
OCCUPANCY GROUP	EFFICIENCY PACKAGE	POINTS	DOCUMENTATION
B	HIGH PERFORMANCE DEDICATED OUTDOOR AIR SYSTEM IN ACCORDANCE WITH SECTION C406.7	4	ERV SCHEDULE SHEET M6.01
B	REDUCED LIGHTING POWER: OPTION 2 IN ACCORDANCE WITH SECTION C406.3.2	4	SEE SCHEDULE SHEET M6.01
TOTAL		8	

KEYED NOTES

1. 7 DAY PROGRAMMABLE T-STAT W/ AUTO CHANGEOVER. MOUNT MAX 4' ABOVE FINISHED FLOOR TO MEET ADA REQUIREMENTS.
2. EXTEND EQUIPMENT PAD 12" FROM EQUIPMENT ON ALL SIDES. SLOPE AWAY FROM BUILDING AT 1/8" PER FOOT SLOPE.
3. WALL MOUNTED HVLS FAN SPEED CONTROLLER TIED TO BOTH FANS IN SPACE.

GENERAL NOTES

1. FOR THE PURPOSES OF CLEARNESS AND LEGIBILITY, DRAWINGS ARE DIAGRAMMATIC AND FOR DESIGN INTENT ONLY. CONTRACTOR MUST VERIFY ALL DIMENSIONS BY FIELD MEASUREMENT BEFORE BEGINNING ANY FABRICATION OR CONSTRUCTION.
2. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL CODES IN ACCORDANCE WITH THE CURRENT INTERNATIONAL MECHANICAL CODE.
3. ALL NEW MATERIAL, METHODS, AND EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE BUILDING STANDARDS AS APPROVED BY THE OWNER.
4. CONTRACTOR SHALL INSTALL ALL EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
5. COORDINATE EXACT LOCATION OF DUCTWORK WITH EQUIPMENT, LIGHTING, PIPING, ETC..
6. BALANCE AIR SYSTEMS WITHIN 10% OF CAPACITIES LISTED. BALANCING DAMPER NOT SHOWN AT ALL LOCATIONS FOR OVERALL DRAWING CLARITY. CONTRACTOR SHALL PROVIDE BALANCING DAMPERS ON ALL BRANCH TAKEOFFS AND WHERE SHOWN ON DRAWINGS. SEE DETAIL 1/M5.01.
7. CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR OR OWNER PRIOR TO ANY CUTTING OF ROOF.
8. SOUND LINING IN DUCT IS INDICATED ON DRAWING WITH DASHED LINE INSIDE DUCT. DUCT SIZE SHOWN IS THE INSIDE OF THE DUCT AND DOES NOT ACCOUNT FOR 1" OF ADDITIONAL INTERNAL SOUND DUCT INSULATION



NORTH

1 BUILDING 1 - MAIN FLOOR PLAN - MECHANICAL

SCALE: 3/16" = 1'-0"

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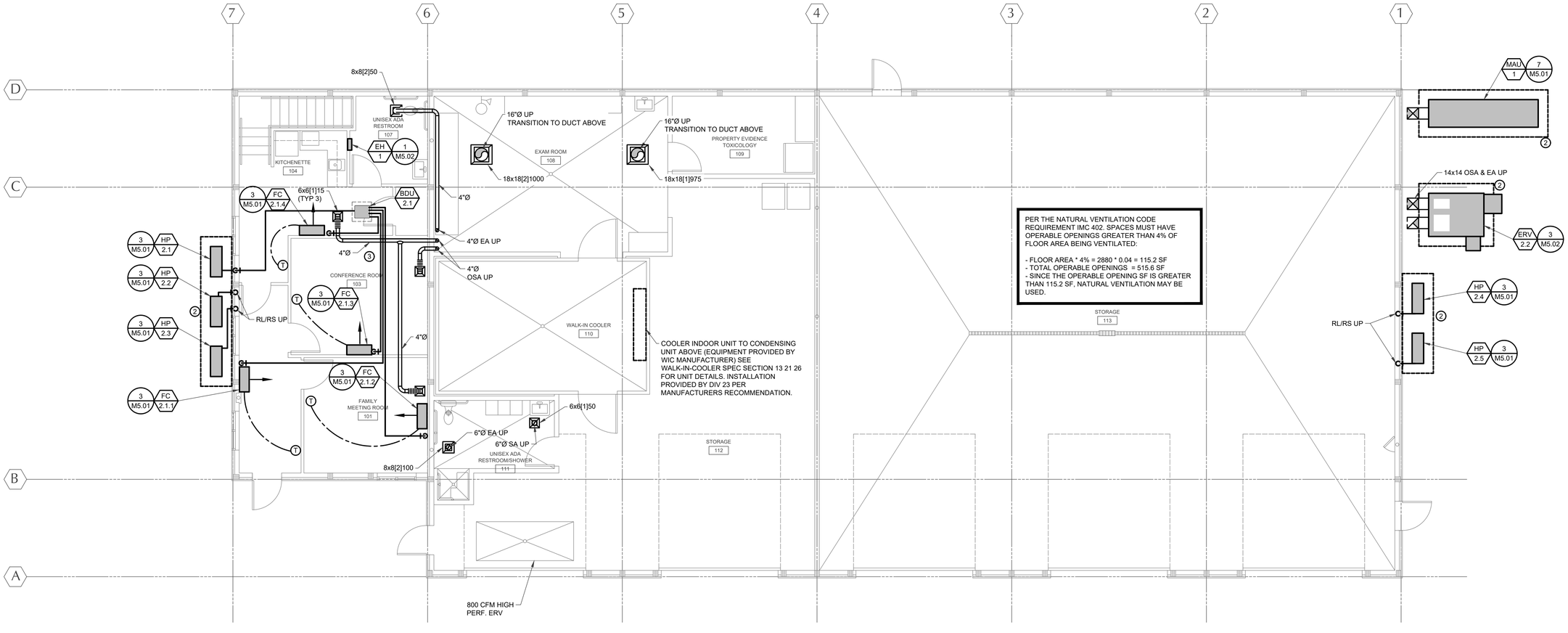
ADDITIONAL MECHANICAL EFFICIENCY PACKAGE OPTIONS USED PER WSEC 406 - BUILDING 2			
OCCUPANCY GROUP	EFFICIENCY PACKAGE	POINTS	DOCUMENTATION
B	HIGH PERFORMANCE DEDICATED OUTDOOR AIR SYSTEM IN ACCORDANCE WITH SECTION C406.7	4	ERV SCHEDULE SHEET M6.01
B	REDUCED LIGHTING POWER: OPTION 2 IN ACCORDANCE WITH SECTION C406.3.2	4	SEE SCHEDULE SHEET M6.01
TOTAL		8	

KEYED NOTES

1. 7 DAY PROGRAMMABLE T-STAT W/ AUTO CHANGEOVER. MOUNT MAX 4' ABOVE FINISHED FLOOR TO MEET ADA REQUIREMENTS.
2. EXTEND EQUIPMENT PAD 12" FROM EDGE OF EQUIPMENT ON ALL SIDES. SLOPE AWAY FROM BUILDING AT 1/8" PER FOOT SLOPE. COORDINATE WITH GENERATOR PAD TO THE NORTH.
3. PROVIDE ACCESS PANEL AND GYPSUM BOARD BOX OUT TO BRANCH BOX. PROTECT BRANCH BOX FROM INSULATION ABOVE.

GENERAL NOTES

1. FOR THE PURPOSES OF CLEARNESS AND LEGIBILITY, DRAWINGS ARE DIAGRAMMATIC AND FOR DESIGN INTENT ONLY. CONTRACTOR MUST VERIFY ALL DIMENSIONS BY FIELD MEASUREMENT BEFORE BEGINNING ANY FABRICATION OR CONSTRUCTION.
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4. CONTRACTOR SHALL INSTALL ALL EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
5. COORDINATE EXACT LOCATION OF DUCTWORK WITH EQUIPMENT, LIGHTING, PIPING, ETC..
6. BALANCE AIR SYSTEMS WITHIN 10% OF CAPACITIES LISTED. BALANCING DAMPER NOT SHOWN AT ALL LOCATIONS FOR OVERALL DRAWING CLARITY. CONTRACTOR SHALL PROVIDE BALANCING DAMPERS ON ALL BRANCH TAKEOFFS AND WHERE SHOWN ON DRAWINGS. SEE DETAIL 1/M5.01.
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8. SOUND LINING IN DUCT IS INDICATED ON DRAWING WITH DASHED LINE INSIDE DUCT. DUCT SIZE SHOWN IS THE INSIDE OF THE DUCT AND DOES NOT ACCOUNT FOR 1" OF ADDITIONAL INTERNAL SOUND DUCT INSULATION



NORTH

1 BUILDING 2 - MAIN FLOOR PLAN - MECHANICAL

SCALE: 3/16" = 1'-0"

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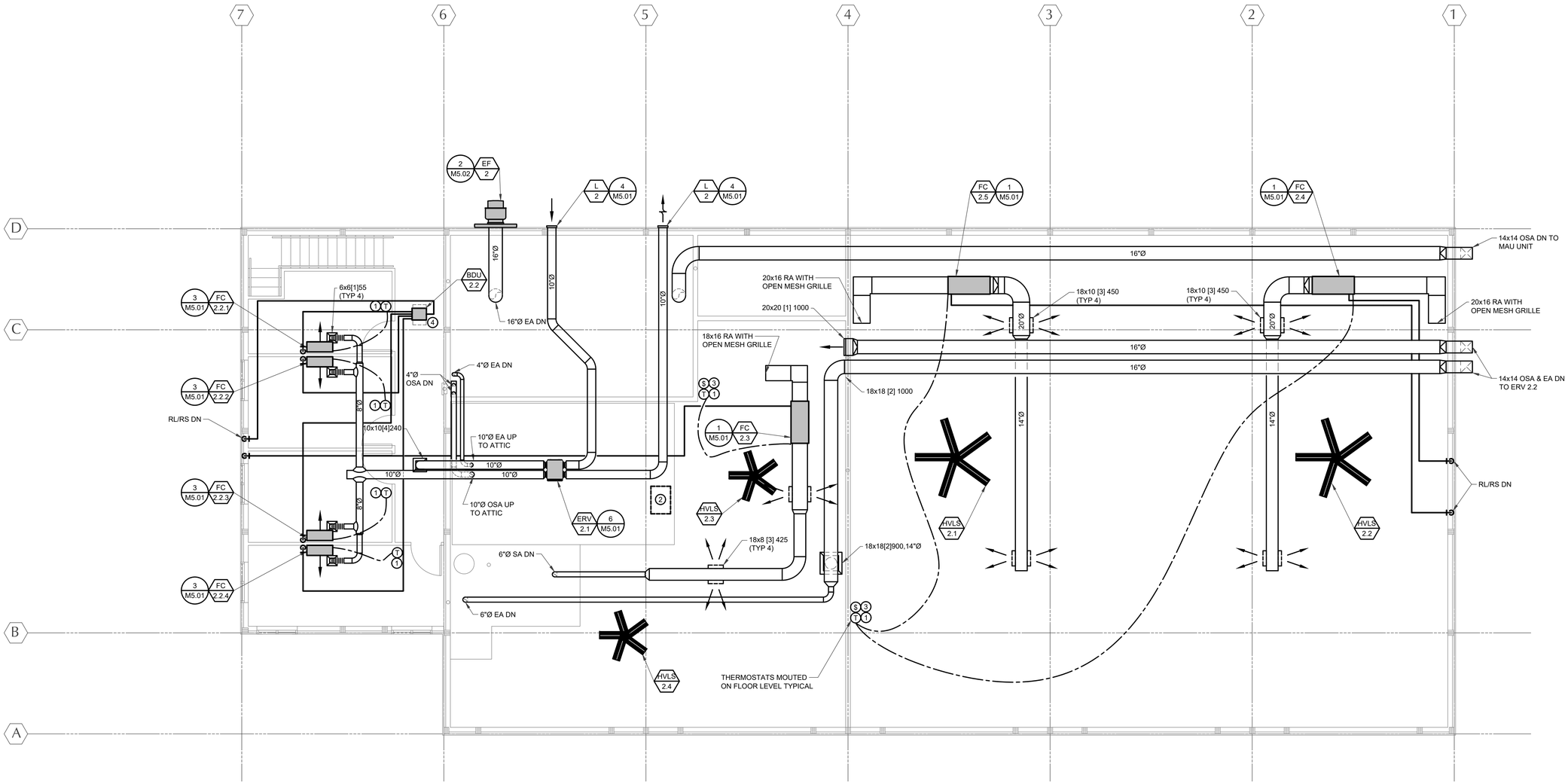
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KEYED NOTES

1. 7 DAY PROGRAMMABLE T-STAT W/ AUTO CHANGEOVER. MOUNT MAX 4' ABOVE FINISHED FLOOR TO MEET ADA REQUIREMENTS.
2. COOLER CONDENSING UNIT PROVIDED WALK-IN-COOLER MANUFACTURER. SEE SPEC SECTION 13 21 26 FOR UNIT DEETAILS. INSTALLATION BY DIV 23 IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATION.
3. WALL MOUNTED HVLS FAN SPEED CONTROLLER TIED TO BOTH FANS IN SPACE.
4. PROVIDE ACCESS PANEL AND GYPSUM BOARD BOX OUT ABOVE BOTTOME CORD OF TRUSS TO BRANCH BOX. PROTECT BRANCH BOX FROM INSULATION ABOVE.

GENERAL NOTES

1. FOR THE PURPOSES OF CLEARNESS AND LEGIBILITY, DRAWINGS ARE DIAGRAMMATIC AND FOR DESIGN INTENT ONLY. CONTRACTOR MUST VERIFY ALL DIMENSIONS BY FIELD MEASUREMENT BEFORE BEGINNING ANY FABRICATION OR CONSTRUCTION.
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4. CONTRACTOR SHALL INSTALL ALL EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
5. COORDINATE EXACT LOCATION OF DUCTWORK WITH EQUIPMENT, LIGHTING, PIPING, ETC..
6. BALANCE AIR SYSTEMS WITHIN 10% OF CAPACITIES LISTED. BALANCING DAMPER NOT SHOWN AT ALL LOCATIONS FOR OVERALL DRAWING CLARITY. CONTRACTOR SHALL PROVIDE BALANCING DAMPERS ON ALL BRANCH TAKEOFFS AND WHERE SHOWN ON DRAWINGS. SEE DETAIL 1/M5.01.
7. CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR OR OWNER PRIOR TO ANY CUTTING OF ROOF.
8. SOUND LINING IN DUCT IS INDICATED ON DRAWING WITH DASHED LINE INSIDE DUCT. DUCT SIZE SHOWN IS THE INSIDE OF THE DUCT AND DOES NOT ACCOUNT FOR 1" OF ADDITIONAL INTERNAL SOUND DUCT INSULATION



NORTH

1 BUILDING 2 - SECOND FLOOR PLAN - MECHANICAL

SCALE: 3/16" = 1'-0"

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Table C406.1 Energy Measure Credit Requirements - BUILDING 3								
Required Credits for Projects	Sections	Occupancy Group						POINTS MET
		Group R-1	Group R-2	Group B	Group E	Group M	All Other	
New building energy efficiency credit requirement	C406.2			42				0 PER Table C406.2

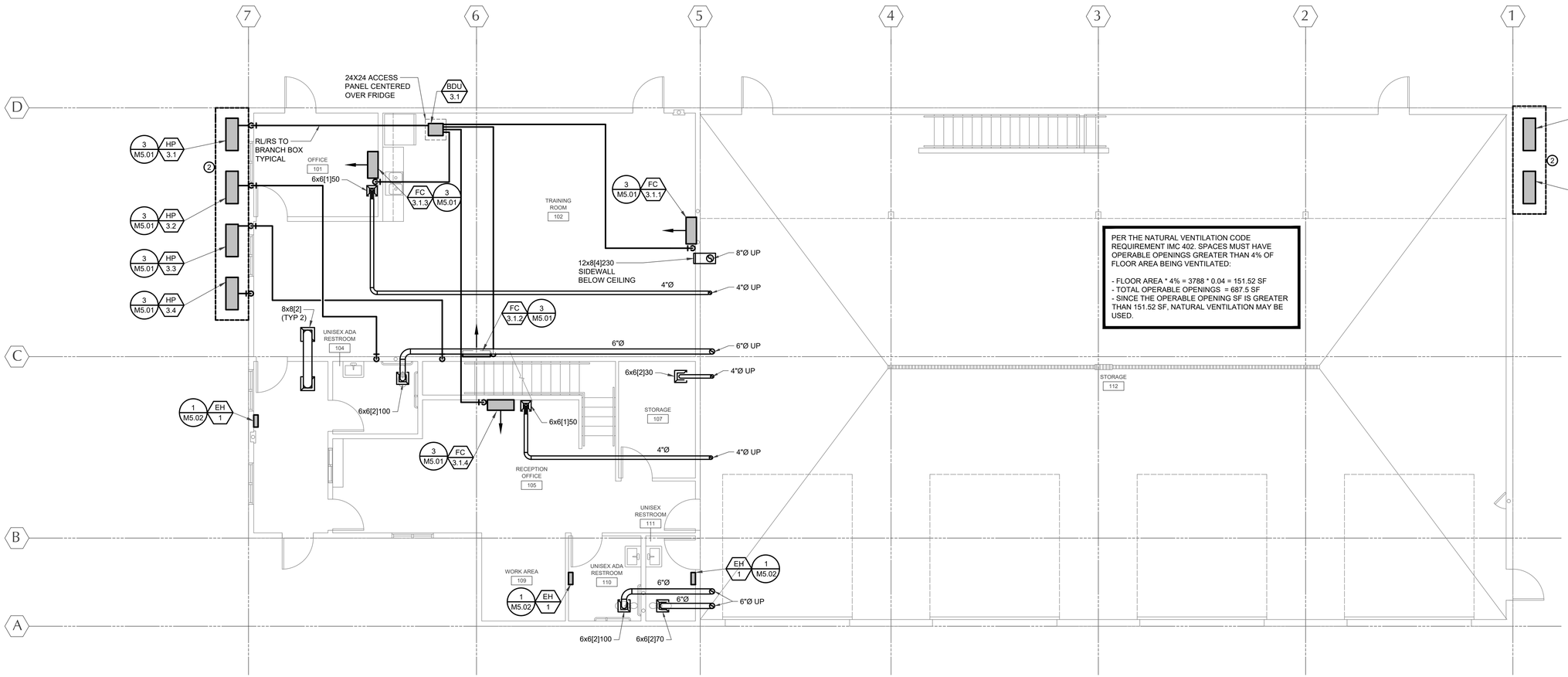
Table C406.2 Efficiency Measure Credits - ACHIEVED								
Measure Title	Applicable Section	PRORATING FLAG	Occupancy Group					
			Group R-1	Group R-2	Group B	Group E	Group M	All Other
HIGH PERFORMANCE DOAS	C406.2.2.6				21			
20% REDUCED LIGHTING POWER	C406.2.3.2				36			
TOTAL					57			

KEYED NOTES

1. 7 DAY PROGRAMMABLE T-STAT W/ AUTO CHANGEOVER. MOUNT MAX 4' ABOVE FINISHED FLOOR TO MEET ADA REQUIREMENTS.
2. EXTEND EQUIPMENT PAD 12" FROM EQUIPMENT ON ALL SIDES. SLOPE AWAY FROM BUILDING AT 1/8" PER FOOT SLOPE.

GENERAL NOTES

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NORTH

1 BUILDING 3 - MAIN FLOOR PLAN - MECHANICAL

SCALE: 3/16" = 1'-0"

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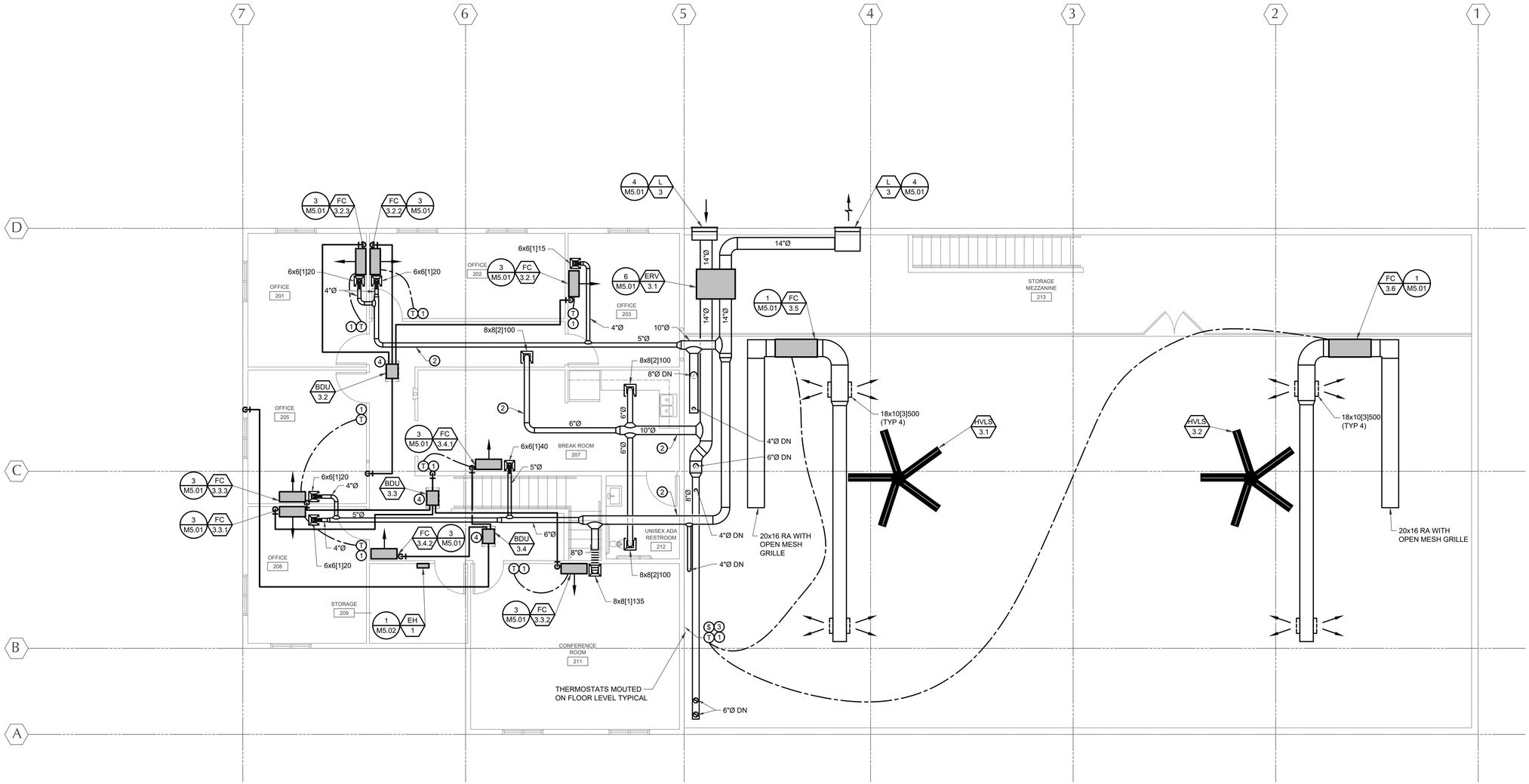
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KEYED NOTES

1. 7 DAY PROGRAMMABLE T-STAT W/ AUTO CHANGEOVER. MOUNT MAX 4' ABOVE FINISHED FLOOR TO MEET ADA REQUIREMENTS.
2. ROUTE DUCTING IN ATTIC SPACE AND DROP TO DIFFUSER AS SHOWN. DUCTING IN UNCONDITIONED ATTIC SPACE SHALL BE INSULATED WITH MINIMUM R-6 INSULATION.
3. WALL MOUNTED HVLS FAN SPEED CONTROLLER TIED TO BOTH FANS.
4. PROVIDE ACCESS PANEL AND GYPSUM BOARD BOX OUT TO BRANCH BOX. PROTECT BRANCH BOX FROM INSULATION ABOVE.

GENERAL NOTES

1. FOR THE PURPOSES OF CLEARNESS AND LEGIBILITY, DRAWINGS ARE DIAGRAMMATIC AND FOR DESIGN INTENT ONLY. CONTRACTOR MUST VERIFY ALL DIMENSIONS BY FIELD MEASUREMENT BEFORE BEGINNING ANY FABRICATION OR CONSTRUCTION.
2. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL CODES IN ACCORDANCE WITH THE CURRENT INTERNATIONAL MECHANICAL CODE.
3. ALL NEW MATERIAL, METHODS, AND EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE BUILDING STANDARDS AS APPROVED BY THE OWNER.
4. CONTRACTOR SHALL INSTALL ALL EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
5. COORDINATE EXACT LOCATION OF DUCTWORK WITH EQUIPMENT, LIGHTING, PIPING, ETC..
6. BALANCE AIR SYSTEMS WITHIN 10% OF CAPACITIES LISTED. BALANCING DAMPER NOT SHOWN AT ALL LOCATIONS FOR OVERALL DRAWING CLARITY. CONTRACTOR SHALL PROVIDE BALANCING DAMPERS ON ALL BRANCH TAKEOFFS AND WHERE SHOWN ON DRAWINGS. SEE DETAIL 1/M5.01.
7. CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR OR OWNER PRIOR TO ANY CUTTING OF ROOF.
8. SOUND LINING IN DUCT IS INDICATED ON DRAWING WITH DASHED LINE INSIDE DUCT. DUCT SIZE SHOWN IS THE INSIDE OF THE DUCT AND DOES NOT ACCOUNT FOR 1" OF ADDITIONAL INTERNAL SOUND DUCT INSULATION



NORTH

1 BUILDING 3 - SECOND FLOOR PLAN - MECHANICAL

SCALE: 3/16" = 1'-0"

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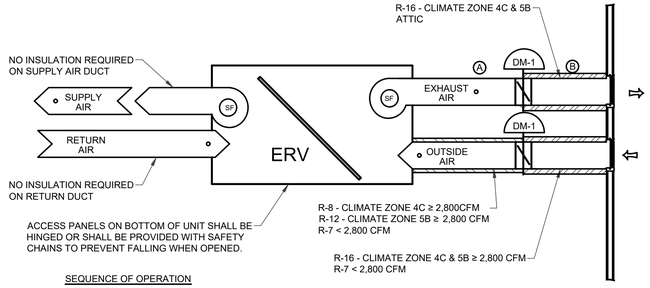
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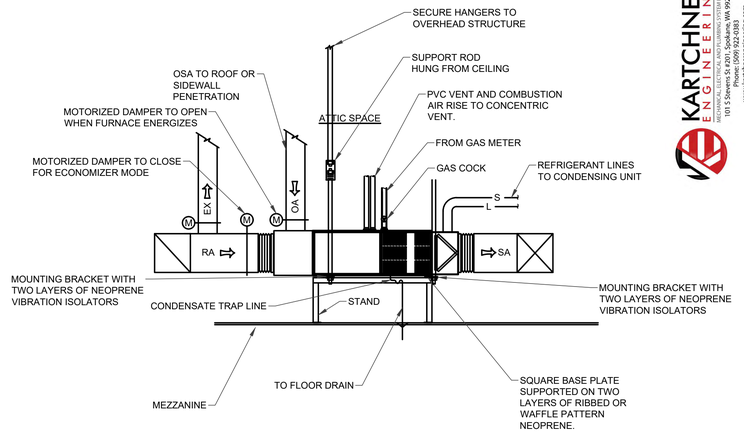
SEQUENCE OF OPERATION

OCCUPIED MODE:
ENERGY RECOVERY VENTILATOR FAN SHALL RUN CONTINUOUSLY. INTEGRATED MOTORIZED DAMPER SHALL OPEN.

UNOCCUPIED MODE:
ENERGY RECOVERY VENTILATOR FAN SHALL BE DEENERGIZED. INTEGRATED MOTORIZED DAMPER SHALL CLOSE.

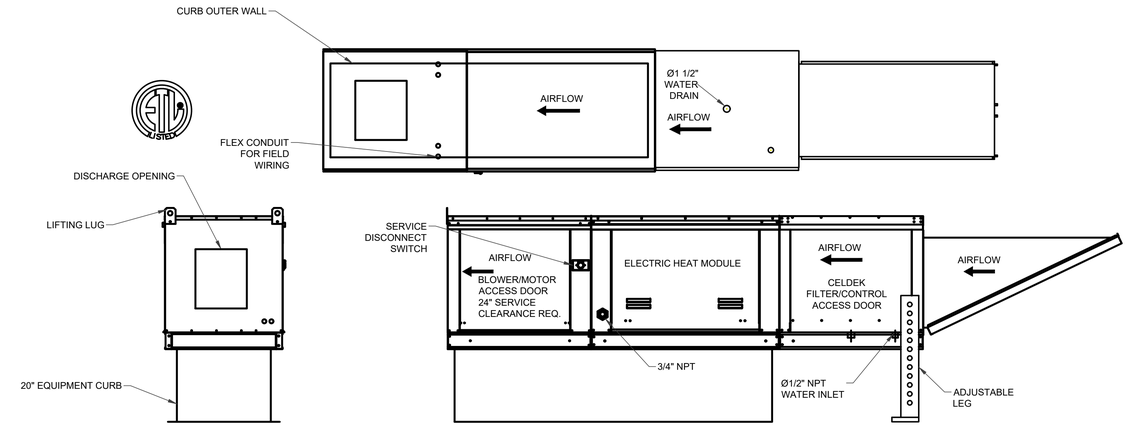
5 ERV DUCT INSULATION DIAGRAM

SCALE: NOT TO SCALE



1 MULTI POSITION INDOOR UNIT DETAIL

SCALE: NOT TO SCALE



6 MAKE UP AIR UNIT DETAIL & CONTROL DIAGRAM

SCALE: NOT TO SCALE

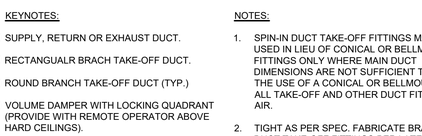


NOTE:

1. WHEN "D" IS OVER 24" PROVIDE 3/4" DRAIN AT 5'-0" CENTERS (IF DEPTH INTO PAPER IS GREATER THAN 5'-0"), 6" FROM LOUVER WITH TRAP

4 LOUVER CONNECTION DETAIL

SCALE: NOT TO SCALE



KEYNOTES:

1. SUPPLY, RETURN OR EXHAUST DUCT.
2. RECTANGUALR BRACH TAKE-OFF DUCT.
3. ROUND BRANCH TAKE-OFF DUCT (TYP.)
4. VOLUME DAMPER WITH LOCKING QUADRANT (PROVIDE WITH REMOTE OPERATOR ABOVE HARD CEILINGS).
5. 45 DEGREE ENTRY FITTING.
6. CONICAL DUCT TAKE-OFF FITTING.
7. L = (1/4) x (W); 4 INCHES MINIMUM DISTANCE.

NOTES:

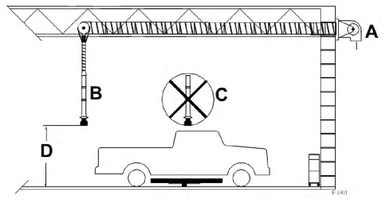
1. SPIN-IN DUCT TAKE-OFF FITTINGS MAY BE USED IN LIEU OF CONICAL OR BELLMOUTH FITTINGS ONLY WHERE MAIN DUCT DIMENSIONS ARE NOT SUFFICIENT TO ALLOW THE USE OF A CONICAL OR BELLMOUTH. SEAL ALL TAKE-OFF AND OTHER DUCT FITTINGS AIR.
2. TIGHT AS PER SPEC. FABRICATE BRANCH DUCT TAKE-OFF FITTINGS PER LATEST.
3. EDITION OF SMACNA DUCT CONSTRUCTION MANUAL, AS INDICATED ON PLANS, OR AS DESCRIBED IN SPECIFICATION.

2 BRANCH TAKE-OFF FITTINGS

SCALE: NOT TO SCALE

GUIDELINES FOR LOCATION OF 4" VACUUM HOLSTERS™, SIDE VIEW

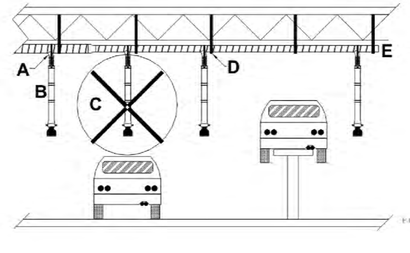
Ascent Systems strongly encourages the system designer to consider the location of the vehicle hoists when designing the spiral duct manifold.
Determine what the probable longest vehicle will be, and estimate where its bumper will be located when the vehicle is positioned on the hoist. To ensure the exhaust hose does not have to wrap around a vehicle, locate the duct manifold 1 or 2 feet behind the bumper of the longest vehicle.



NOTE	COMMENT
A	Outdoor fan placement is strongly recommended.
B	CORRECT LOCATION: The Vacuum Holsters™ hang 1-2' behind the bum-per of the largest vehicle on the hoist.
C	WRONG LOCATION: Here, the Vacuum Hol-ster™ is too far forward, potentially creating a cover-age issue.
D	Bottom rim of tailpipe adapter recommended to be 6'6" AFF. Please confirm with owner rep before installing.

GUIDELINES FOR LOCATION OF 4" VACUUM HOLSTERS™, END VIEW

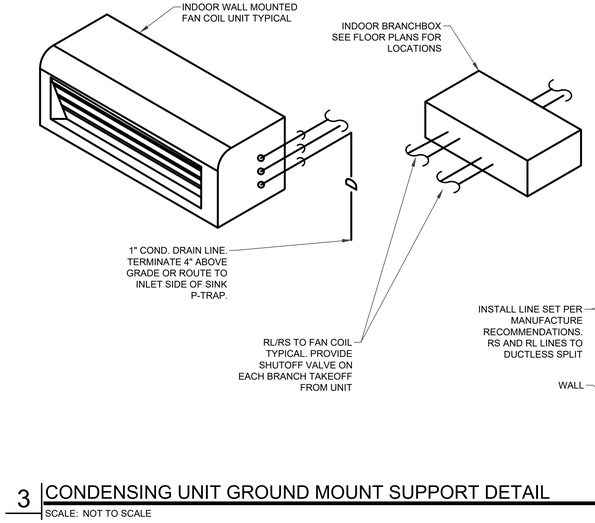
Ascent Systems strongly encourages the system designer to locate the Vacuum Holsters™ between the service bays.

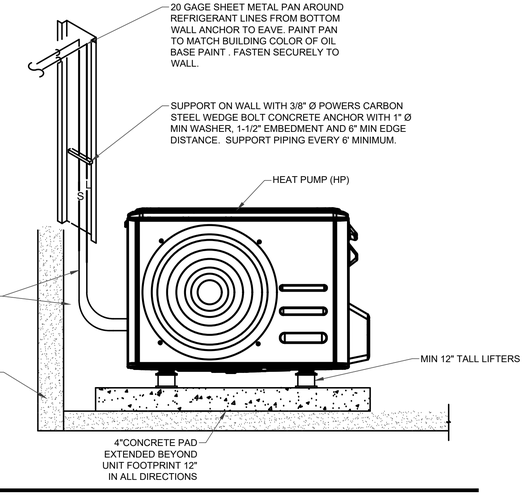


NOTE	COMMENT
A	Use a take-off fitting with 4" diameter.
B	CORRECT LOCATION: The Vacuum Holsters™ hang between the service bays.
C	WRONG LOCATION: Avoid placing Vacuum Holsters™ in the middle of the service bay.
D	Place a duct support strap near each Vacuum Holster.
E	Do not use elbows at the end of a run of spiral duct. Extend the duct manifold past the Vacuum Holster, and terminate the run with a plug. The suspension strap cannot loop over an elbow.

8 VEHICLE EXHAUST DETAIL

SCALE: NOT TO SCALE





3 CONDENSING UNIT GROUND MOUNT SUPPORT DETAIL

SCALE: NOT TO SCALE

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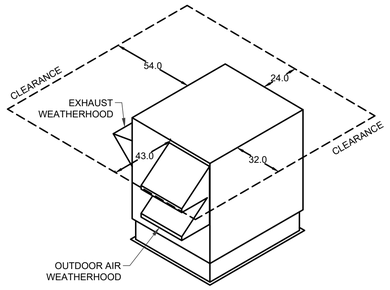
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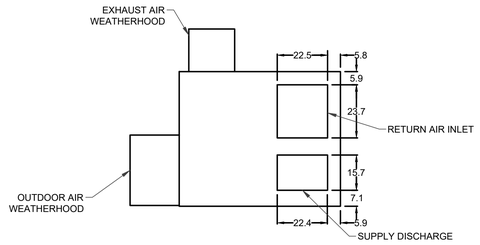
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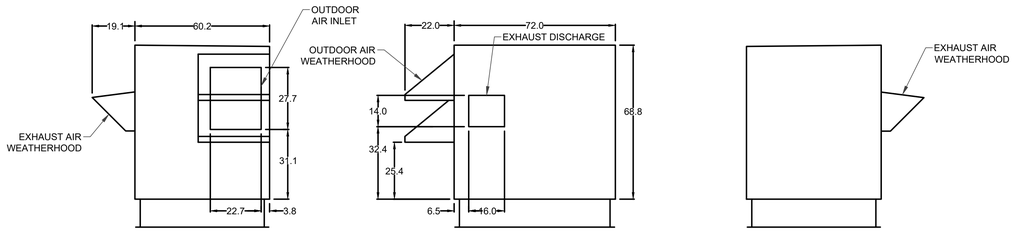
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FRONT LEFT ISOMETRIC



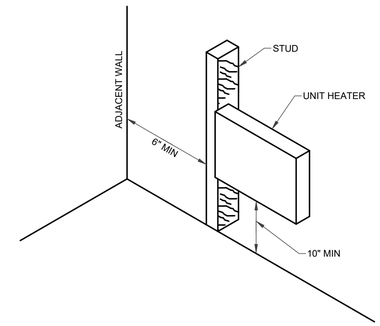
PLAN



LEFT END **ELEVATION** **RIGHT END**

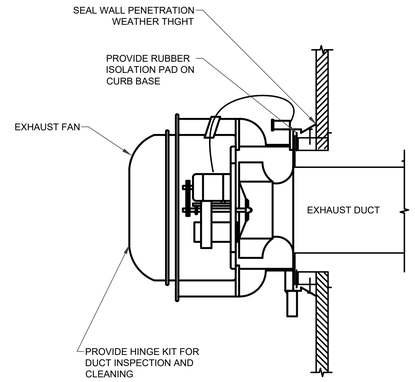
4 OUTOOR ERV UNIT DETAIL

SCALE: NOT TO SCALE



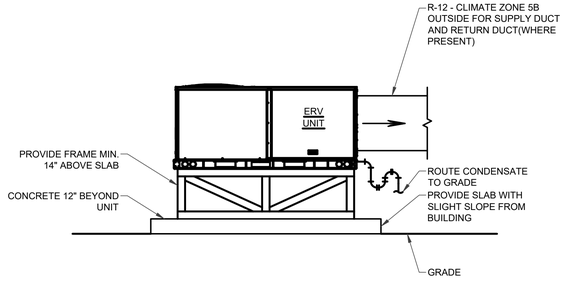
1 ELECTRIC WALL HEATER DETAIL

SCALE: NOT TO SCALE



2 TYPE 1 HOOD EXHAUST FAN DETAIL

SCALE: NOT TO SCALE



3 GROUND MOUNT AHU ERV

SCALE: NOT TO SCALE

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MAKEUP AIR UNIT SCHEDULE

#	SERVICE	MANUF.	MODEL NO.	CFM	OSA (CFM)	ESP (")	EVAPORATIVE COOLING				ELECTRICAL			WEIGHT (LBS)	NOTES
							OUPUT (KW)	EAT (DB)	EAT (WB)	LAT (DB)	LAT (WB)	VOLT/PH	MOTOR HP	MCA/MOP		
MAU 1	BUILDING 2	GREENHECK	MSX-P109-H12-MF	975	975	.5	25	96	64	66.1	64	230/ 1	1/4	81.6/90	1107	1, 2, 3, 4, 5

NOTES:
1. PROVIDE FACTORY DISCONNECT.
2. PROVIDE FACTORY CURB FOR HORIZONTAL DISCHARGE
3. PROVIDE MODULATING SCR ELECTRIC HEAT
4. PROVIDE CONTROL PANEL
5. PROVIDE FREEZE PROTECTION DRAIN KIT

EXHAUST FAN SCHEDULE

TAG	SERVICE	LOCATION	MANUF.	MODEL NO.	FAN TYPE	AIR FLOW (CFM)	ESP (")	DRIVE	RPM	SOUND	ELECTRICAL				WEIGHT (LBS)	CONTROL	NOTES
										SONES INLET	VOLT/PH	MOTOR HP	BHP	FLA			
EF 1	MAINT. BAY VEHICLE EXHAUST	MAINTENANCE BAY	ASCENT SYSTEMS	RD-121-30	SIDE WALL CENTRIFUGAL	1200	5.8	DIRECT	1280	-	230/1	3	2.45	9.6	145	INTERLOCK WITH HOSE REEL CONTROL	1, 2, 3, 4
EF 2	CORONER EXHAUST	CORONER'S	GREENHECK	CUE-090	SIDE WALL CENTRIFUGAL	975	0.5	DIRECT	1280	16.1	230/1	1.5	1.27	-	145	INTERLOCK WITH MAU-1	1
EF 3	COMPRESSOR ROOM	COMPRESSOR ROOM	GREENHECK	SE1-14-440-V G	SIDEWALL PROP FAN	950	0.5	DIRECT	1426	11.2	115/1	1/2	0.26	6.6	43	INTERLOCK WITH L-2	1

NOTES:
1. PROVIDE UNIT MOUNTED DIAL SPEED CONTROL
2. ARRANGEMENT 4 CONFIGURATION
3. PROVIDE RIS VIBRATION ISOLATION AND BIRD SCREEN ON DISCHARGE
4. PROVIDE WITH CP-1 ASCENT SYSTEMS REMOTE START

ELECTRIC HEATER SCHEDULE

TAG	MANUF.	MODEL NO.	SERVICE	AIR FLOW (CFM)	ELECTRICAL				WEIGHT (LBS)	NOTES
					KW	STEPS	VOLT / PH	AMPS		
EH 1	INDEECO	WRI	RESTROOM	40	0.5	1	120 / 1	4.6	9	1, 2

NOTES:
1. PROVIDE WALL MOUNTING BRACKET KIT FOR SEMI-RECESSED INSTALATION.
2. PROVIDE UNIT MOUNTED THERMOSTAT

VEHICLE EXHAUST HOSE REEL SCHEDULE

TAG	MNUFACTURER	MODEL NO.	SERVICE	AIR FLOW (CFM)	HOSE DIAMETER (INCH)	HOSE LENGTH (FEET)	MOUNTING	WEIGHT (LBS)	NOTES
VH 1	ASCENT SYSTEMS	VH-420BC	VEHICLE EXHAUST	300	4	20	FROM STRUCTURE ABOVE	710	1, 2

NOTES:
1. PROVIDE A4STA ADAPTER WITH NEOPRENE BOOT.
2. PROVIDE ADJUSTABLE CONNECTOR AND SS DAMPER

ENERGY RECOVERY UNIT SCHEDULE

TAG	MANUF.	MODEL NO.	SERVICE	DRIVE TYPE	WATT / CMF	SUPPLY					EXHAUST					SUMMER PERFORMANCE					WINTER PERFORMANCE					ELECTRICAL			WEIGHT (LBS)	NOTES
						AIR FLOW (CFM)	ESP (INCH)	WATTS	HP	FAN SPEED (RPM)	AIR FLOW (CFM)	ESP (INCH)	WATTS	HP	FAN SPEED (RPM)	OSA EAT DB/WB (°F)	SUPPLY DB/WB (°F)	RETURN DB/WB (°F)	EXH EAT DB/WB (°F)	SENS EFF (%)	OSA EAT DB/WB (°F)	SUPPLY DB/WB (°F)	RETURN DB/WB (°F)	EXH EAT DB/WB (°F)	SENS EFF (%)	VOLT / PH	MCA	MOCP		
ERV 1.1	GREENHECK	MINIVENT-450-VG	BUILDING 1 LEFT OFFICE	DIRECT	0.56800	165	0.5	93.7	1/4	1262	165	0.5	93.7	1/4	1280	95 / 68	79 / 63	75 / 62	92 / 67	81.9	6 / 4	59/ 48	72 / 55	18 / 17	82.4	230/1	4.1	15	160	1, 2, 3, 4, 5, 6, 7
ERV 1.2	GREENHECK	MINIVENT-450-VG	BUILDING 1 LEFT OFFICE	DIRECT	0.56800	165	0.5	93.7	1/4	1262	165	0.5	93.7	1/4	1280	95 / 68	79 / 63	75 / 62	92 / 67	81.9	6 / 4	59/ 48	72 / 55	18 / 17	82.4	230/1	4.1	15	160	1, 2, 3, 4, 5, 6, 7
ERV 1.3	GREENHECK	ERVE-45-30L	BUILDING 1 GARAGE	BELT	0.59500	2880	0.5	1713	1-1/2	975	2880	0.5	1713	1-1/2	950	95 / 68	79 / 63	75 / 62	92 / 67	91	6 / 4	59/ 48	72 / 55	17.8 / 17.0	81.9	230/1	24.5	30	1195	1, 2, 3, 4, 5, 6, 7
ERV 2.1	GREENHECK	MINIVENT-450-VG	BUILDING 2 OFFICES	DIRECT	0.51200	290	0.5	148.5	1/4	1450	215	0.5	148.5	1/4	1347	95 / 68	82 / 64	75 / 62	92 / 67	84.7	6 / 4	45 / 37	72 / 55	16 / 16	85.6	230/1	4.1	15	160	1, 2, 3, 4, 5, 6, 7
ERV 2.2	GREENHECK	ERV-20-15L	BUILDING 2 CORONER'S WAREHOUSE	BELT	0.68800	1000	0.8	688	3/4	1260	1000	0.8	688	3/4	1217	95 / 68	79 / 63	75 / 62	92 / 67	82.5	6 / 4	59/ 48	72 / 55	17 / 16	83	230/1	17.5	20	708	1, 2, 3, 4, 5, 6, 7
ERV 3.1	GREENHECK	MINIVENT-750-VG	BUILDING 3 OFFICES	DIRECT	0.53400	630	0.5	336	3/4	1060	500	0.5	336	3/4	1066	95 / 68	81 / 64	75 / 62	92 / 67	85.1	6 / 4	50 / 41	72 / 55	15 / 15	85.6	230/1	12.5	15	240	1, 2, 3, 4, 5, 6, 7

NOTES:
1. PROVIDE BACKDRAFT DAMPER ON EXHAUST AND INTAKE
2. PROVIDE MERV 8 FILTER
3. PROVIDE ECM SPEED CONTROL
4. PROVIDE CEILING MOUNTING HARDWARE
5. PROVIDE HARDWIRED POWER CONNECTION
6. PROVIDE PROGRAMMABLE TIMER TO OPERATE CONTINUOUSLY DURING BUSINESS HOURS
7. PROVIDE CEILING SERVICE ACCESS PER MANUFACTURERS REQUIREMENTS

NOTES:
1. ENERGY RECOVERY UNIT EFFICIENCIES SHALL MEET THE CURRENT WSEC REQUIREMENTS.
2. PROVIDE FACE & BYPASS FOR ECONOMIZER OPERATION.
3. PROVIDE BYPASS DEFROST SYSTEM

BC CONTROLLER SCHEDULE

#	LOCATION	FAN COIL SERVED	MANUF / MODEL NO.	ELECTRICAL				# OF PORTS	NOTES
				VOLT	PH	MCA	MOCP		
BDU 2.1	CORRIDOR CR-5	FC 2.1.1, FC 2.1.2, FC 2.1.3, FC 2.1.4	LG PMBD3640	208 / 230	1	1	15	4	1
BDU 2.2	CORRIDOR CR-8	FC 2.2.1, FC 2.2.2, FC 2.2.3, FC 2.2.4	LG PMBD3640	208 / 230	1	1	15	4	1
BDU 3.1	CORRIDOR CR-8	FC 3.1.1, FC 3.1.2, FC 3.1.3, FC 3.1.4	LG PMBD3640	208 / 230	1	1	15	4	1
BDU 3.2	CORRIDOR CR-5	FC 3.2.1, FC 3.2.2, FC 3.2.3	LG PMBD3630	208 / 230	1	1	15	3	1
BDU 3.3	CORRIDOR CR-5	FC 3.3.1, FC 3.3.2, FC 3.3.3	LG PMBD3630	208 / 230	1	1	15	3	1
BDU 3.4	CORRIDOR CR-5	FC 3.4.1, FC 3.4.2	LG PMBD3620	208 / 230	1	1	15	2	1

NOTES:
1. PROVIDE SHUTOFF VALVE FOR EACH BRANCH LINE AND CAP ANY UNUSED PORTS.

LOUVER SCHEDULE

TAG	MANUF.	MODEL NO.	SERVICE	TYPE	MATERIAL	AIR FLOW (CFM)	VELOCITY (FPM)	PRESS. DROP ("WC)	SIZE			MIN. FREE AREA (SF)	DAMPER		NOTES
									WIDTH (INCH)	HEIGHT (INCH)	DEPTH (INCH)		ACTUATOR	POWER	
L 1	GREENHECK	ESD-403	INTAKE/RELIEF	DRAINABLE BLADE	ALUMINUM	165	545	0.1	12	12	4	0.3	OPEN/CLOSE	24V	1, 2, 3
L 2	GREENHECK	ESD-403	INTAKE/RELIEF	DRAINABLE BLADE	ALUMINUM	290	426	0.05	24	12	4	0.7	OPEN/CLOSE	24V	1, 2, 3
L 3	GREENHECK	ESD-403	INTAKE/RELIEF	DRAINABLE BLADE	ALUMINUM	630	426	0.05	30	18	4	1.5	OPEN/CLOSE	24V	1, 2, 3

NOTES:
1. PROVIDE 1/2"x1/2" 19 GAUGE ALUMINUM BIRD SCREEN ON INSIDE OF LOUVER
2. PROVIDE BAKED ENAMEL FINISH OF COLOR SELECTED BY ARCHITECT FROM MANUFACTURERS STANDARD COLORS.
3. PROVIDE MOTORIZED BACKDRAFT DAMPER WITH ACTUATOR. DAMPER SHALL BE LOW LEAKAGE TYPE NOT TO EXCEED 4 CFM/SF LEAKAGE WHEN TESTED IN ACCORDANCE WITH AMCA 5000 @ 1.0" WC.

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FAN COIL HEAT PUMP - INDOOR UNIT

INTERLOCK WITH FAN COIL	SERVED BY	MODEL#	FAN		COOLING @ 96.2°F			TOTAL HEATING	HEATING HSPF2 @47°F	ELECTRICAL CONNECTION				BACKUP ELECTRIC HEAT	WEIGHT	O.A. (CFM)	NOTES
			CFM	TYPE	EAT (DB)	EAT (WB)	T.C. (MBH)	MBH	MBH	VOLT	PHASE	RATED AMPS	MOCP	(KW)			
FC 1.1	HP 1.1	LG LMN249HVT	597	DIRECT	95	75	24	25.6	-	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6
FC 1.2	HP 1.2	LG LSN090HSV5	268	DIRECT	95	75	9	10.9	-	208/230	1	0.4	15	N/A	18.3	0	1, 2, 3, 4, 5, 6
FC 1.3	HP 1.3	LG LVN600HV	597	DIRECT	95	75	52.5	56.5	9.2	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6
FC 1.4	HP 1.4	LG LVN600HV	1400	DIRECT	95	75	52.5	56.5	9.2	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6
FC 1.5	HP 1.5	LG LMN249HVT	558	DIRECT	95	75	18	21.6	-	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6
FC 2.1.1	HP 2.1	LG LSN181HSV5	558	DIRECT	95	75	18	21.6	-	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6
FC 2.1.2			558	DIRECT	95	75	18	21.6	-	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6
FC 2.1.3		LG LSN120HSV5	282	DIRECT	95	75	12	13.6	-	208/230	1	0.4	15	N/A	18.3	0	1, 2, 3, 4, 5, 6
FC 2.1.4		LG LSN181HSV5	558	DIRECT	95	75	18	21.6	-	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6
FC 2.2.1	HP 2.2	LG LSN181HSV5	558	DIRECT	95	75	18	21.6	-	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6
FC 2.2.2		LG LMN079HVT	254	DIRECT	95	75	7	8.1	-	208/230	1	0.4	15	N/A	18.3	0	1, 2, 3, 4, 5, 6
FC 2.2.3			254	DIRECT	95	75	7	8.1	-	208/230	1	0.4	15	N/A	18.3	0	1, 2, 3, 4, 5, 6
FC 2.2.4			254	DIRECT	95	75	7	8.1	-	208/230	1	0.4	15	N/A	18.3	0	1, 2, 3, 4, 5, 6
FC 2.3	HP 2.3	LG LVN600HV	597	DIRECT	95	75	52.5	56.5	9.2	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6
FC 2.4	HP 2.4	LG LVN600HV	1400	DIRECT	95	75	52.5	56.5	9.2	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6
FC 2.5	HP 2.5	LG LVN600HV	1400	DIRECT	95	75	52.5	56.5	9.2	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6
FC 3.1.1	HP 3.1	LG LMN249HVT	597	DIRECT	95	75	24	25.6	-	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6
FC 3.1.2			597	DIRECT	95	75	24	25.6	-	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6
FC 3.1.3		LG LSN090HSV5	268	DIRECT	95	75	9	10.9	-	208/230	1	0.4	15	N/A	18.3	0	1, 2, 3, 4, 5, 6
FC 3.1.4		LG LSN120HSV5	282	DIRECT	95	75	12	13.6	-	208/230	1	0.4	15	N/A	18.3	0	1, 2, 3, 4, 5, 6
FC 3.2.1	HP 3.2	LG LSN090HSV5	268	DIRECT	95	75	9	10.9	-	208/230	1	0.4	15	N/A	18.3	0	1, 2, 3, 4, 5, 6
FC 3.2.2		LG LSN120HSV5	282	DIRECT	95	75	12	13.6	-	208/230	1	0.4	15	N/A	18.3	0	1, 2, 3, 4, 5, 6
FC 3.2.3			282	DIRECT	95	75	12	13.6	-	208/230	1	0.4	15	N/A	18.3	0	1, 2, 3, 4, 5, 6
FC 3.3.1	HP 3.3	LG LSN090HSV5	268	DIRECT	95	75	9	10.9	-	208/230	1	0.4	15	N/A	18.3	0	1, 2, 3, 4, 5, 6
FC 3.3.2		LG LMN249HVT	597	DIRECT	95	75	24	25.6	-	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6
FC 3.3.3		LG LSN120HSV5	282	DIRECT	95	75	12	13.6	-	208/230	1	0.4	15	N/A	18.3	0	1, 2, 3, 4, 5, 6
FC 3.4.1	HP 3.4	LG LSN120HSV5	282	DIRECT	95	75	12	13.6	-	208/230	1	0.4	15	N/A	18.3	0	1, 2, 3, 4, 5, 6
FC 3.4.2			282	DIRECT	95	75	12	13.6	-	208/230	1	0.4	15	N/A	18.3	0	1, 2, 3, 4, 5, 6
FC 3.5	HP 3.5	LG LVN600HV	597	DIRECT	95	75	52.5	56.5	9.2	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6
FC 3.6	HP 3.6	LG LVN600HV	1400	DIRECT	95	75	52.5	56.5	9.2	208/230	1	0.4	15	N/A	25.6	0	1, 2, 3, 4, 5, 6

NOTES:

1. PROVIDE INTEGRATED COOLING COIL.
2. PROVIDE STANDALONE PROGRAMMABLE THERMOSTAT.
3. PROVIDE FILTER.
4. INTERLOCK EF-1 & EF-2
5. INTERLOCK FURNACE W/ ASSOCIATED MOTORIZED DAMPER ON O.A. DAMPER.

HIGH VELOCITY LOW SPEED FAN SCHEDULE

TAG	SERVICE	LOCATION	MANUF.	MODEL NO.	FAN TYPE	AIR FLOW (CFM)	ESP (")	DRIVE	RPM	SOUND	ELECTRICAL				WEIGHT (LBS)	CONTROL	NOTES
										SONES INLET	VOLT/PH	MOTOR HP	BHP	FLA			
HVLS 1.1	BUILDING 1	MAINTENANCE BAY	GREENHECK	DC-5-10-13LV	CEILING	13,170	-	-	-	-	115/1	-	-	5.0	144	-	-
HVLS 1.2	BUILDING 1	MAINTENANCE BAY	GREENHECK	DC-5-10-13LV	CEILING	13,170	-	-	-	-	115/1	-	-	5.0	144	-	-
HVLS 2.1	BUILDING 2	MAINTENANCE BAY	GREENHECK	DC-5-8-13LV	CEILING	9,900	-	-	-	-	115/1	-	-	5.0	105	-	-
HVLS 2.2	BUILDING 2	MAINTENANCE BAY	GREENHECK	DC-5-8-13LV	CEILING	9,900	-	-	-	-	115/1	-	-	5.0	105	-	-
HVLS 2.3	BUILDING 2	MAINTENANCE BAY	GREENHECK	DC-5-5-13MV	CEILING	3312	-	-	-	-	115/1	-	-	1.6	35	-	-
HVLS 2.4	BUILDING 2	MAINTENANCE BAY	GREENHECK	DC-5-5-13MV	CEILING	3312	-	-	-	-	115/1	-	-	1.6	35	-	-
HVLS 3.1	BUILDING 3	MAINTENANCE BAY	GREENHECK	DC-5-10-13LV	CEILING	13,170	-	-	-	-	115/1	-	-	5.0	144	-	-
HVLS 3.2	BUILDING 3	MAINTENANCE BAY	GREENHECK	DC-5-10-13LV	CEILING	13,170	-	-	-	-	115/1	-	-	5.0	144	-	-

NOTES:
1. PROVIDE UNIT MOUNTED DIAL SPEED CONTROL
2. PROVIDE WALL CAP
3. PROVIDE EATON VFD (DC1-327D0NN-A20CE1) FOR FAN SPEED

CONTROL. SEE DETAIL 10 ON SHEET M501 FOR CONTROL SEQUENCE.

HEAT PUMP - OUTDOOR UNIT

TAG	LOCATION	INTERLOCK WITH FURNACE	CU MFR MODEL#	NOMINAL TONS	WEIGHT	COP @ 95	COP @ 47	ELECTRICAL				NOTES
								VOLT	PHASE	MCA	MOP	
HP 1.1	GROUND	FC 1.1	LMU361HHV	3	218	4.25	4.00	208/230	1	32.7	40	1
HP 1.2	GROUND	FC 1.2	LAU180HYV3	1.5	135	—	4.10	208/230	1	19	30	1
HP 1.3	GROUND	FC 1.3	LUU601HV	5	218	3.31	3.45	208/230	1	32.7	40	1
HP 1.4	GROUND	FC 1.4	LUU601HV	5	218	3.31	3.45	208/230	1	32.7	40	1
HP 1.5	GROUND	FC 1.5	LAU180HYV3	1.5	135	—	4.10	208/230	1	19	30	1
HP 2.1	GROUND	FC 2.1.1, FC 2.1.2, FC 2.1.3, FC 2.1.4	LMU361HHV	3	218	4.25	4.00	208/230	1	32.7	40	1
HP 2.2	GROUND	FC 2.2.1, FC 2.2.2, FC 2.2.3, FC 2.2.4	LMU361HHV	3	218	4.25	4.00	208/230	1	32.7	40	1
HP 2.3	GROUND	FC 2.3	LUU601HV	5	218	3.31	3.45	208/230	1	32.7	40	1
HP 2.4	GROUND	FC 2.4	LUU601HV	5	218	3.31	3.45	208/230	1	32.7	40	1
HP 2.5	GROUND	FC 2.5	LUU601HV	5	218	3.31	3.45	208/230	1	32.7	40	1
HP 3.1	GROUND	FC 3.1.1, FC 3.1.2, FC 3.1.3, FC 3.1.4	LMU601HV	5	218	3.31	3.45	208/230	1	32.7	40	1
HP 3.2	GROUND	FC 3.2.1, FC 3.2.2, FC 3.2.3	LMU361HHV	3	218	4.25	4.00	208/230	1	32.7	40	1
HP 3.3	GROUND	FC 3.3.1, FC 3.3.2, FC 3.3.3	LMU361HHV	3	218	4.25	4.00	208/230	1	32.7	40	1
HP 3.4	GROUND	FC 3.4.1, FC 3.4.2	LMU361HHV	3	218	4.25	4.00	208/230	1	32.7	40	1
HP 3.5	GROUND	FC 3.5	LUU601HV	5	218	3.31	3.45	208/230	1	32.7	40	1
HP 3.6	GROUND	FC 3.6	LUU601HV	5	218	3.31	3.45	208/230	1	32.7	40	1

NOTES:
1. PROVIDE STAND OR PLATFORM FOR CONDENSING UNIT.

AIR OUTLET SCHEDULE

TAG	MNUFACTURER	MODEL NO.	SERVICE	TYPE	MATERIAL	MOUNTING	BORDER	PATTERN	BLADE SPACING (INCH)	BLADE POSITION	BLADE DEFLECTION	NOTES
[1]	PRICE	SMCD	SUPPLY	DIFFUSER	STEEL	SURFACE/ LAY-IN	SEE ARCH CEILING PLAN	4-WAY ADJUSTABLE	N/A	N/A	N/A	1, 2, 3, 4
[2]	PRICE	530 RL	RETURN	GRILLE	STEEL	SURFACE/ LAY-IN	SEE ARCH CEILING PLAN	FIXED	3/4"	FRONT HORIZONTAL	45°	1, 2, 3, 5
[3]	PRICE	SDG	SUPPLY	GRILLE	STEEL	DUCT MOUNT	-	DOUBLE DEFLECTION	3/4"	-	ADJUSTABLE	1, 2, 3, 6
[4]	PRICE	520 RS	SUPPLY	GRILLE	STEEL	SURFACE	F	DOUBLE DEFLECTION	3/4"	-	ADJUSTABLE	1, 2, 3, 6

NOTES:
1. COLOR TO BE MANUFACTURER STANDARD WHITE
2. PROVIDE BALANCING DAMPER IN BRANCH DUCT SERVING AIR OUTLET AT TAKEOFF FROM TRUNK DUCT. (ADDITIONAL DAMPERS FOR SYSTEM BALANCING ARE SHOWN ON DRAWINGS)
3. PROVIDE SQUARE TO ROUND ADAPTER AS REQUIRED
4. PROVIDE 24"X24" PAN FOR LAY-IN CEILING INSTALLATION AS REQUIRED (SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATION)
5. PROVIDE RETURN GRILLE WITHOUT SCREW HOLES FOR LAY-IN CEILING APPLICATION (SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATION)
6. PROVIDE OPPOSED BLADE DAMPER.

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EXPIRES 2/20/25

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BID SET: 01/06/2025
Job: 2344 Date: 01/06/2025
DWG ID –

M6.02

ELECTRICAL LEGEND

LUMINAIRES (DIMENSIONS OF SYMBOL WILL VARY DEPENDING ON LUMINAIRE)

LUMINAIRE TYPE IDENTIFICATION: LUMINAIRES INDICATED BY THE FOLLOWING NOTATIONS:
L# = NEW LUMINAIRE UON, REFER TO LUMINAIRE SCHEDULE FOR DETAILS
S# = NEW LUMINAIRE UON, EXTERIOR SITE, REFER TO LUMINAIRE SCHEDULE FOR DETAILS
= EXISTING LUMINAIRE. UNLESS OTHERWISE NOTED
EL# = EXISTING LUMINAIRE TO BE RELOCATED
EN# = NEW LOCATION OF EXISTING LUMINAIRE

- LUMINAIRE, DOWNLIGHT - SEE LUMINAIRE SCHEDULE FOR MOUNTING
- LUMINAIRE, WALLWASH - SEE LUMINAIRE SCHEDULE FOR MOUNTING
- LUMINAIRE, SURFACE
- LUMINAIRE, RECESSED
- STRIP, SURFACE
- LUMINAIRE, WALL MOUNT
- LIGHTED EXIT SIGN, ARROW INDICATES DIRECTION
- EMERGENCY WALL PACK
- LUMINAIRE, POLE MOUNTED
- LUMINAIRE, PENDANT MOUNTED
- HALF SHADED FIXTURE DENOTES: EMERGENCY LUMINAIRE
- TAPE OR COVE LIGHTING

POWER

- $x — IF SYMBOL SHOWN ON LIGHTING PLAN: MANUAL LINE VOLTAGE TOGGLE SWITCH.
  - 3 = THREE WAY SWITCH
  - 4 = FOUR WAY SWITCH
  - K = KEY OPERATED SWITCH
  - T = SWITCH WITH TIMER
- PE — PHOTO ELECTRIC SENSOR
- R — NEW LUMINAIRE CONTROL. SEE LIGHTING CONTROL LEGEND LOCATED ON LIGHTING SHEETS.
- OS — CEILING MOUNTED OCCUPANCY SENSOR(S). PROVIDE SHOP DRAWINGS OF OCCUPANCY SENSOR SYSTEM AS PER PROJECT SPECIFICATION AS PART OF THE SUBMITTAL PROCESS PRIOR TO COMMENCEMENT OF LABOR. SEE LIGHTING CONTROL LEGEND LOCATED ON LIGHTING SHEETS.
- VFD — VARIABLE FREQUENCY DRIVE
- DRAW OUT SWITCH/PLUG-RECEPTACLE CONNECTION
- NORMALLY OPEN CONTACT (WHEN DE-ENERGIZED)
- NORMALLY CLOSED CONTACT (WHEN DE-ENERGIZED)
- HARDWIRED CONNECTION
- J — JUNCTION BOX
- ST — SHUNT TRIP PUSHBUTTON OR KEY-SWITCH
- T — THERMOSTAT
- PANELBOARD, SWITCHBOARD, OR SWITCHGEAR. DASHED BOX INDICATES CODE REQUIRED WORKING CLEARANCE
- CONDUIT OR EQUIPMENT TO BE REMOVED
- CONDUIT CONCEALED IN WALL, CEILING, UNDER FLOOR, IN FLOOR SLAB, OR ROUTED UNDERGROUND
- CONDUIT EXPOSED
- EXISTING CONDUIT EXPOSED, EXISTING TO REMAIN UNLESS OTHERWISE NOTED
- EXISTING CONDUIT ROUTED UNDERGROUND, EXISTING TO REMAIN UNLESS OTHERWISE NOTED
- OH — OVERHEAD ELECTRICAL
- EXTRA-HARD USAGE FLEXIBLE CORD
- FLEXIBLE CONDUIT
- CONDUIT TURNED UP OR TOWARD
- CONDUIT TURNED DOWN OR AWAY
- CONDUIT CAPPED
- L1-2 — CONDUIT HOME RUN 3/4"C, 2#12 & 1#12 GND. UNLESS SHOWN OTHERWISE. (EXAMPLE SHOWN: TO PANEL L1, CIRCUIT 2)
- ##NG — CONDUIT HOME RUN - SEE FEEDER SCHEDULE
- HH — HANDHOLE
- PB — PULL BOX
- MANUAL OR AUTOMATIC TRANSFER SWITCH.
- 100/3 CB — CIRCUIT BREAKER, RATING/NO. OF POLES WITH THERMAL MAGNETIC CIRCUIT BREAKER TRIP, UNLESS OTHERWISE NOTED
- ROD SYMBOLS — GROUND ROD IN GROUND ROD BOX
- BATTERY
- T — TRANSFORMER

POWER (CONTINUED)

- 3 — CURRENT TRANSFORMER, NUMBER INDICATES NUMBER OF C.T.'S
- MOTOR
- 00 — MAGNETIC MOTOR STARTER
  - FVNR = FULL VOLTAGE NON-REVERSING
  - FVR = FULL VOLTAGE
  - 00 = NEMA SIZE
- MAGNETIC MOTOR STARTER W/DISCONNECT
- ST 60A — DISCONNECT SWITCH, NON FUSED (60A) INDICATES AMPERAGE RATING, ST = SHUNT TRIP
- 100AF 200AS — DISCONNECT SWITCH, FUSED 200=SWITCH RATING, 100=FUSE RATING
- ST 60A — CIRCUIT BREAKER DISCONNECT (60A) INDICATES AMPERAGE RATING, ST = SHUNT TRIP
- $M — MOTOR RATED SWITCH, UON. WHERE "M" INDICATED, PROVIDE A MANUAL MOTOR STARTER W/OVERLOAD
- M — UTILITY WATT HOUR METER
- SPECIAL PURPOSE RECEPTACLE, RATING AS INDICATED
- STANDARD RECEPTACLES: 125V, 20A 18" AFF, UON. TYPES: SIMPLEX /DUPLEX /QUADRUPLEX /FLOOR DUPLEX /FLOOR QUADRUPLEX
- X — GFCI RECEPTACLES: 125V, 20A 18" AFF, UON. TYPES: SIMPLEX /DUPLEX /QUADRUPLEX
  - C = CEILING MOUNTED
  - S = HALF SWITCHED
  - I = ISOLATED GROUND
  - TR = TAMPER RESISTANT
  - a = LOWER CASE LETTER INDICATES SWITCH CONTROL
  - 2" = MEASUREMENT INDICATES HEIGHT ABOVE BACKSPLASH/MILLWORK
  - A = INDICATES MOUNT ABOVE BACKSPLASH/MILLWORK. COORDINATE HEIGHT WITH TRADES.
  - USB = INDICATES 20A 120V DUPLEX RECEPTACLE WITH USB CHARGER.
  - CT = SWITCHED RECEP, INDICATES FULL CONTROLLED DEDICATED 20A 125V DUPLEX
  - CH = SWITCHED RECEP, INDICATES HALF CONTROLLED DEDICATED 20A 125V DUPLEX

  PROVIDE GFCI AND AFCI PROTECTED RECEPTACLES AND OUTLETS PER NEC
  DAISY-CHAINED GFCI RECEPTACLES NOT ALLOWED, UON.
- RECEPTACLE ON EMERGENCY POWER: 125V, 20A 18"AFF, UON. TYPES: DUPLEX / QUADRAPLEX
- 2-GANG COMPARTMENT BOX IN FLOOR FOR DATA, AND RECEPTACLE
- DROP CORD, SINGLE CONVENIENCE OUTLET: 125V, 20A, COORDINATE WITH OWNER FOR MOUNTING HEIGHT
- ELECTRICAL PLUGMOLD

COMMUNICATION OUTLETS
FOR ALL TELECOMMUNICATION OUTLETS, ROUTE 3/4" CONDUIT (UNDERGROUND IF NECESSARY) AND STUB TO ACCESSIBLE CEILING SPACE WITH CABLING AS DESCRIBED IN ELECTRICAL SPECIFICATIONS, UNLESS OTHERWISE NOTED.
- INDICATES QUANTITY OF VOICE AND DATA JACKS

- FLOOR MOUNTED TELECOMMUNICATIONS OUTLET. # = INDICATES QUANTITY OF VOICE AND DATA JACKS
- WALL MOUNTED TELECOMMUNICATIONS OUTLET. 18" AFF UON. # = INDICATES QUANTITY OF VOICE AND DATA JACKS
- OUTLET; LETTER INDICATES AS FOLLOWS: A = AUDIO V = VIDEO I = INTERCOM
- M — OUTLET, TELEVISION
  - BLANK = 4 11/16" MASTER ANTENNA OUTLET BOX W/BLANK COVER, MTD. 18" AFF UNLESS OTHERWISE NOTED.
  - C = CAMERA (CCTV SYSTEM), MTD 18" AFF
  - M = MONITOR (CTTV SYSTEM).

COMMUNICATION
FOR ALL COMMUNICATION DEVICES, ROUTE 3/4" CONDUIT (UNDERGROUND IF NECESSARY) AND STUB TO ACCESSIBLE CEILING SPACE WITH CABLING AS DESCRIBED IN ELECTRICAL SPECIFICATIONS, UNLESS OTHERWISE NOTED.

- FO — FIBEROPTICS LINE = FO
- T — TELEPHONE LINE = T
- S — SPEAKER, CEILING MOUNTED
- S — SPEAKER, WALL MOUNTED, MTD. 7'-6" AFF UON.
- R M — RADIO CHANNEL SELECTOR FACILITIES, MTD. 4'-6" AFF UON. M = SPEAKER PROGRAM SELECTOR SWITCH & VOLUME CONTROL
- R M — 3-POLE TWIST-LOCK RECEPTACLE FOR MICROPHONE, MTD. 4'-6" AFF.
- REMOTE DICTATING OUTLET MTD 1'-6" AFF. UON.
- S — INTERCOM STATION (REFER TO SPECS. FOR FUNCTIONAL OPERATION OF INSTRUMENT & TYPE REQUIRED). S = STAFF STATION
- WAP — WIRELESS ACCESS PORT
- S C — WALL MOUNTED SPEAKER/CLOCK COMBINATION
- C — WALL CLOCK
- CABLE TRAY
- A/V — RECESSED AUDIO FLOOR BACK BOX, OUTLET AND CONDUIT
- TGB — TELECOMMUNICATIONS SYSTEMS BONDING BUSBAR

FIRE ALARM
SEE FIRE ALARM SPECIFICATION AND DETAIL SHEETS IF APPLICABLE FOR REQUIREMENTS OF FIRE ALARM SYSTEM.

- FAC — ALARM, FIRE, COMMUNICATOR
- FACP — ALARM, FIRE, PANEL; LETTERS INDICATE AS FOLLOWS: FACC = CENTRAL CONSOLE FACP = CONTROL PANEL MFACP= MASTER CONTROL PANEL FAAP = ANNUNCIATOR PANEL
- BATT — ALARM, FIRE; LETTERS INDICATE AS FOLLOWS: BATT = BATTERIES CHR = CHARGER FAR = RECORDER
- FATC — ALARM, FIRE, TERMINAL CABINET.
- FTR — ALARM, TRANSPONDER OR TRANSMITTER
- FS C — ALARM, FIRE, MANUAL PULL STATION C = WITH CLEAR PLASTIC COVER
- C — ALARM, HORN/LIGHT, ONE ASSEMBLY C = WITH CHIME
- ALARM, HORN/LIGHT, SEPARATE ASSEMBLY
- ALARM, LAMP LIGHT, SIGNAL LIGHT, STROBE
- M — ALARM, MINI HORN
- TS — ALARM, TAMPER SWITCH
- C — DETECTION, GAS C = CARBON DIOXIDE TRANSMITTER
- DETECTOR, FLOW SWITCH
- HD — DETECTOR, HEAT
- DETECTOR, SMOKE
- DETECTOR, SMOKE, FOR DUCT
- DH — ELECTROMAGNETIC TYPE DOOR HOLDER OUTLET
- CITY FIRE ALARM MASTER STATION MTD 5'-6" AFF UNLESS NOTED.
- FAT 2-4-6 — FIRE ALARM TRANSMITTER (BASE LOOP) NUMERALS DENOTE CODE.
- FTT 2-4-6 — FIRE ALARM TROUBLE TRANSMITTER (BASE LOOP) NUMERALS DENOTE CODE.
- F — FIRE SPRINKLER WATER FLOW SWITCH
- K — KITCHEN HOOD FIRE SUPPRESSION SYSTEM
- A — REMOTE ANNUNCIATOR
- R — ADDRESSABLE RELAY

SAFETY AND SECURITY
C-CEILING

FOR ALL SAFETY AND SECURITY DEVICES, ROUTE 3/4" CONDUIT (UNDERGROUND IF NECESSARY) AND STUB TO ACCESSIBLE CEILING SPACE WITH CABLING AND DEVICES PROVIDED BY OWNER'S PREFERRED PROVIDER, UNLESS OTHERWISE NOTED.

- M T — AUDIO DEVICE; LETTER INDICATES AS FOLLOWS: T=TECHNOLOGY/TYPE
  - B-BELL C-CHIME H-HORN K-KLAXON
  - L-LISTEN-IN M-MICROPHONE S-SOUNDER S-SPEAKER Z-BUZZER
- M — KEYPAD DEVICE
- M — CARD READER WITH KEYPAD
- M T — CARD ACCESS READER; LETTER INDICATES AS FOLLOWS: T=TECHNOLOGY/TYPE
  - B-BARCODE F-ELEVATOR FLOOR CALL H-ELEVATOR HALL CALL
  - M-MAG STRIP P-PROXIMITY S-SMART CARD T-TOKEN
- D — DOOR CONTACT
- M T — INTERCOM; LETTER INDICATES AS FOLLOWS: T=TECHNOLOGY/TYPE
  - M-MASTER S-SUBSTATION
- MOTION DETECTOR; LETTER INDICATES AS FOLLOWS: T=TECHNOLOGY/TYPE
  - D-DUAL TECHNOLOGY IR-INFRARED M-MICROWAVE U-ULTRASONIC
- M T — PUSH BUTTON
- AP — SECURITY ACCESS, ANNUNCIATOR PANEL
- SECURITY ACCESS, VIDEO CAMERA WITH LENS
- SECURITY ACCESS, DOME CAMERA

NURSE CALL

- NCS — NURSE'S CALL MASTER STATION MTD ON NURSE'S COUNTER TOP UNLESS OTHERWISE NOTED.
- NCT — NURSE CALL TERMINAL CABINET.
- N — NURSE CALL STATION.
  - 1 = SINGLE PATIENT STATION. MTD 4'-0" AFF UNLESS OTHERWISE NOTED
  - 2 = DUPLICATE PATIENT STATIONS (SEPARATE INDICATORS AT MASTER STATION) MTD 5'-0" AFF UNLESS OTHERWISE NOTED
  - D = DUTY STATION. MTD 5'-0" AFF UNLESS OTHERWISE NOTED
  - E = STATION MTD 6'-0" AFF FOR SHOWER LOCATION, MTD 4'-6" AFF FOR TUB LOCATION, & MTD 3'-0" AFF FOR TOILET LOCATION, UON
  - P = PSYCHIATRIC CORRIDOR STATION WITH KEY SWITCH
  - S = AUDIO VISUAL WALL STATION (STAFF) MTD 5'-0" AFF UNLESS OTHERWISE NOTED
  - U = UTILITY CALL STATION, MTD 5'-0" AFF UNLESS OTHERWISE NOTED
  - EM = EMERGENCY STATION, MTD 5'-0" AFF UNLESS OTHERWISE NOTED
  - J = JACK STATION. MTD 4'-0" AFF UNLESS OTHERWISE NOTED
- N 2 — NURSE CALL STATION.
  - 2 = NURSE'S CALL DOME LIGHT (SUFFIX INDICATES No OF LAMP) MTD 6" ABOVE DOOR.
  - D = CORRIDOR DOME LIGHT.
  - I = AUXILIARY INTERSECTIONAL DOME LIGHT.
- NIGHT LIGHT
- PATIENT BED OUTLET
- PS — POWER SUPPLY WITH BATTERY BACKUP

CIRCUIT DESIGNATION

LUMINAIRE, TYPICAL:

- "#" — INDICATES TYPE PER LUMINAIRE SCHEDULE. (SEE "LUMINAIRES" LEGEND ON THIS SHEET FOR MORE INFORMATION)
- "NL" — INDICATES NIGHT LIGHT LUMINAIRE.
- X-X — INDICATES PANELBOARD AND CIRCUIT PROVIDING POWER TO LUMINAIRES IN SAME ROOM/AREA, UON.
- "a" — INDICATES CONTROL PER SWITCH IN SAME ROOM/AREA, UON.
- "E" — INDICATES POWER TO EMERGENCY LIGHTING CONTAINED IN SAME ROOM/AREA.

#ENLa

- a X-X
- E X-X
- a/E X-X

RECEPTACLE, TYPICAL:

- "PNL" — INDICATES POWER SOURCE.
- "2" — INDICATES CIRCUIT NUMBER.

PNL-2

GENERAL LEGEND

- SECTION LETTER / SECTION / SCALE / SHEET WHERE SECTION IS TAKEN FROM — X / XXX
- XXXNG — CONDUIT & WIRE TAG (REFER TO CONDUIT AND WIRE SCHEDULE)
- XX — FAULT CURRENT TAG (3 PH, SYM AMPS)
- 1 — KEY NOTE
- SECTION LETTER / SHEET ON WHICH SECTION APPEARS — X / XXX
- IF PHOTO, ARROW DENOTES DIRECTION TAKEN
- 2 / XXX — FIGURE OR PHOTO DETAIL NUMBER
- SHEET WHERE DETAIL IS TAKEN FROM
- DETAIL NUMBER / SHEET ON WHICH DETAIL APPEARS / DETAIL AREA — 1 / XXX
- DETAIL/PLAN NUMBER — 1 / DETAIL/PLAN
- NO CONNECTION
- CONNECTION

GENERAL NOTES

1. "GENERAL NOTES" APPLY TO ALL ELECTRICAL DRAWINGS. "SHEET NOTES" APPLY TO ONLY THE SHEETS ON WHICH THEY OCCUR. "KEYNOTES" APPLY ONLY WHERE CALLED OUT.
2. ALL EQUIPMENT SHOWN IN BOLD IS TO BE PROVIDED, OR MODIFIED BY CONTRACTOR UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL PROVIDE CONDUIT AND WIRE FROM ALL CONTROL DEVICES TO LUMINAIRES FOR CONTROL OF LUMINAIRES SHOWN.
4. LUMINAIRES SHOWN ON DRAWINGS FOR QUANTITY AND CIRCUITING ONLY. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.
5. ALL FEEDERS AND BRANCH CIRCUITS SHALL CONTAIN AN EQUIPMENT GROUND CONDUCTOR SIZED PER NEC TABLE 250.122. ALL WIRING IS BASED ON CU COPPER PER NEC TABLE 310.15(B)(16), USING 75°C AMPACITIES FOR FEEDERS. IF ALUMINUM IS ALLOWED, CONTRACTOR IS RESPONSIBLE TO RE-SIZE CONDUCTORS AND CONDUIT ACCORDING TO NEC AMPACITIES FOR LOADS SHOWN ON DRAWINGS.
6. BRANCH CIRCUIT CONDUCTORS, NOT OTHERWISE IDENTIFIED SHALL BE A MINIMUM 12 AWG FOR RUNS 70 FEET OR LESS AND A MINIMUM 10 AWG FOR RUNS GREATER THAN 70 FEET. QUANTITY AND SIZE SHALL BE "AS REQUIRED" TO SERVE AND CONTROL DEVICE(S) OR EQUIPMENT WITH A MAXIMUM VOLTAGE DROP OF THREE PERCENT. WHERE CONTRACTOR CHOOSES TO RUN MORE THAN THREE CURRENT CARRYING CONDUCTORS WITHIN ONE RACEWAY OR CABLE, CONDUCTORS SHALL BE INCREASED IN SIZE TO COMPENSATE FOR THE DERATING REQUIRED PER NEC SECTION 310.15. CONDUCTOR AMPACITIES SHALL BE TAKEN FROM THE 75°C COLUMN.
7. MINIMUM CONDUIT IN EXTERIOR AND UNDERGROUND LOCATIONS TO BE 1" UNLESS NOTED OTHERWISE ON PLANS. CONDUITS FROM LUMINAIRES TO LOCAL USER CONTROL DEVICES (SWITCHES, OCCUPANCY SENSORS, ETC.) MAY BE 1/2" OR AS INDICATED IN SPECIFICATIONS. PROVIDE ADDITIONAL CONDUCTOR FOR UNSWITCHED "HOT" TO LIGHTING LUMINAIRES WITH EMERGENCY POWER BATTERIES OR GENERATOR TRANSFER DEVICES.
8. WIRING FOR EMERGENCY LIGHTING CIRCUITS OR OTHER EMERGENCY EQUIPMENT SHALL BE KEPT ENTIRELY INDEPENDENT OF ALL OTHER WIRING AND EQUIPMENT AND SHALL MEET ALL REQUIREMENTS OF NEC SECTION 700.10.
9. CONTRACTOR SHALL PROVIDE CONDUIT AND WIRE FOR ALL CIRCUITS SHOWN ON DRAWINGS.
10. WHERE EQUIPMENT PART NUMBERS ARE SHOWN ON THESE PLANS THEY SHALL SUPERCEDE THE REQUIREMENTS OF THE SPECIFICATIONS.
11. ALL CONDUITS SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
12. COORDINATE EXACT LOCATION OF ALL OUTLETS, COMBINATION CLOCK/SPEAKERS, SPEAKER, FA DEVICES, ETC., WITH THE ARCHITECTURAL ELEVATIONS PRIOR TO COMMENCING WORK.
13. COORDINATE USE OF CEILING SPACE WITH ALL TRADES PRIOR TO COMMENCING WORK. MANY AREAS ARE VERY CONGESTED AND REQUIRE CLOSE COORDINATION.
14. COORDINATE INSTALLATION REQUIREMENTS FOR OCCUPANCY SENSOR LIGHTING CONTROL WITH THE MANUFACTURER. PROVIDE ALL APPURTENANCES AS REQUIRED BY THE MANUFACTURER. PROVIDE ADDITIONAL SENSORS WHERE NECESSARY TO PROVIDE COMPLETE COVERAGE IN EACH ROOM CONTROLLED BY OCCUPANCY SENSORS.
15. COORDINATE THE INSTALLATION OF ALL EXTERIOR OUTLET BOXES WITH THE TYPE OF MASONRY IN EACH AREA. CUT ALL FLUTED BLOCKS SO THAT THE BOX IS INSTALLED FLUSH. SEE ARCHITECTURAL DETAILS FOR MOUNTING REQUIREMENTS.
16. SEAL ALL CONDUIT PENETRATIONS OF FLOORS & FIRE RATED ASSEMBLIES WITH U.L. APPROVED MATERIALS AND METHODS TO MAINTAIN FIRE RATING. PROTECT ALL OPENINGS FOR STEEL ELECTRICAL BOXES IN FIRE RATED WALLS WITH U.L. APPROVED MATERIALS AND METHODS TO MAINTAIN THE FIRE INTEGRITY.
17. PROVIDE ADDITIONAL CONDUIT SLEEVES THROUGH WALLS WHERE REQUIRED FOR ROUTING OF SIGNAL SYSTEM WIRING NOT REQUIRED TO BE RUN IN CONDUIT. EACH SLEEVE SHALL BE DEDICATED TO EACH SIGNAL SYSTEM. SLEEVES ROUTED THROUGH RATED WALLS SHALL BE SEALED WITH U.L. MATERIALS AND METHODS TO MAINTAIN FIRE RATING OF WALL.
18. SEE MECHANICAL/PLUMBING DRAWINGS AND SUBMITTALS FOR EXACT LOCATIONS AND ADDITIONAL ELECTRICAL REQUIREMENTS PRIOR TO INSTALLATION.
19. ALL LOW VOLTAGE SYSTEMS NOT RUN IN CONDUIT SHALL HAVE MINIMUM 3/4"C. ROUTED FROM THE DEVICE THROUGH WALLS INTO THE ACCESSIBLE CEILING SPACE. NO CABLING SHALL BE ROUTED IN THE WALLS OR INACCESSIBLE LOCATION WITHOUT CONDUIT.
20. UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBER SHALL BE CUT, NEITHER DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT.

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ABBREVIATIONS

AFC	AVAILABLE FAULT CURRENT
AFG	ABOVE FINISHED GRADE
AF	AMP FRAME
AFCI	ARC FLASH CIRCUIT INTERRUPTER
AFF	ABOVE FINISHED FLOOR
AI	ANALOG INPUT
AIC	AMPERE INTERRUPTING CAPACITY
AHJ	AUTHORITY HAVING JURISDICTION
AO	ANALOG OUTPUT
ATS	AUTOMATIC TRANSFER SWITCH
C	CONDUIT OR CEILING
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CL	CONNECTOR LIGHTING
CO	CONDUIT ONLY
DDC	DIRECT DIGITAL CONTROLS
DI	DISCRETE INPUT
DO	DISCRETE OUTPUT
DP	DISTRIBUTION PANELBOARD
EC	ELECTRICAL CONTRACTOR
EL	EXISTING TO BE RELOCATED
EM	EMERGENCY
EN	EXISTING IN NEW LOCATION
EMT	ELECTRICAL METALLIC TUBING
ER	EXISTING TO REMAIN
EX	EXISTING
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FCIO	FURNISHED BY CONTRACTOR, INSTALLED BY OWNER
FOIC	FURNISHED BY OWNER, INSTALLED BY CONTRACTOR
FOIO	FURNISHED BY OWNER, INSTALLED BY OWNER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFP	GROUND FAULT PROTECTION
GND	GROUND
HTR	HEATER
IG	ISOLATED GROUND
IMC	INTERMEDIATE METALLIC CONDUIT
JBOX	JUNCTION BOX
LCP	LIGHTING CONTROL PANEL
LV	LOW VOLTAGE
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDP	MAIN DISTRIBUTION PANEL
MLO	MAIN LUGS ONLY
MS	MOTOR STARTER
MTD	MOUNTED
MTS	MANUAL TRANSFER SWITCH
NAC	NOTIFICATION APPLIANCE CABINET
NEC	NATIONAL ELECTRICAL CODE
NFC	NOT FOR CONSTRUCTION
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NMC	NONMETALLIC-SHEATHED CABLE
NTS	NOT TO SCALE
OC	ON CENTER
OH	OVERHEAD
OS	OCCUPANCY SENSOR
PNL	PANEL
PS	POWER SUPPLY
PVC	POLYVINYL CHLORIDE
PRI	PRIMARY
R	EXISTING TO BE REMOVED
RMC	RIGID METAL CONDUIT
SAC	SMALL APPLIANCE CIRCUIT
SEC	SECONDARY
SB	SWITCHBOARD
SG	SWITCHGEAR
SPD	SURGE PROTECTIVE DEVICE
SYM	SYMMETRICAL
TBD	TO BE DETERMINED
TEL	TELEPHONE
TR	TAMPER RESISTANT
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
UL	UNDERWRITERS LABORATORIES
UG	UNDERGROUND
VD	VOLTAGE DROP
VFD	VARIABLE FREQUENCY DRIVE
W	WEATHERPROOF (WHILE IN USE)
WP	WEATHERPROOF
XFMR	TRANSFORMER

THIS SHEET IS FOR REFERENCE ONLY AND ALL SYMBOLS, NOTES AND ABBREVIATIONS MAY NOT APPLY TO THIS PROJECT

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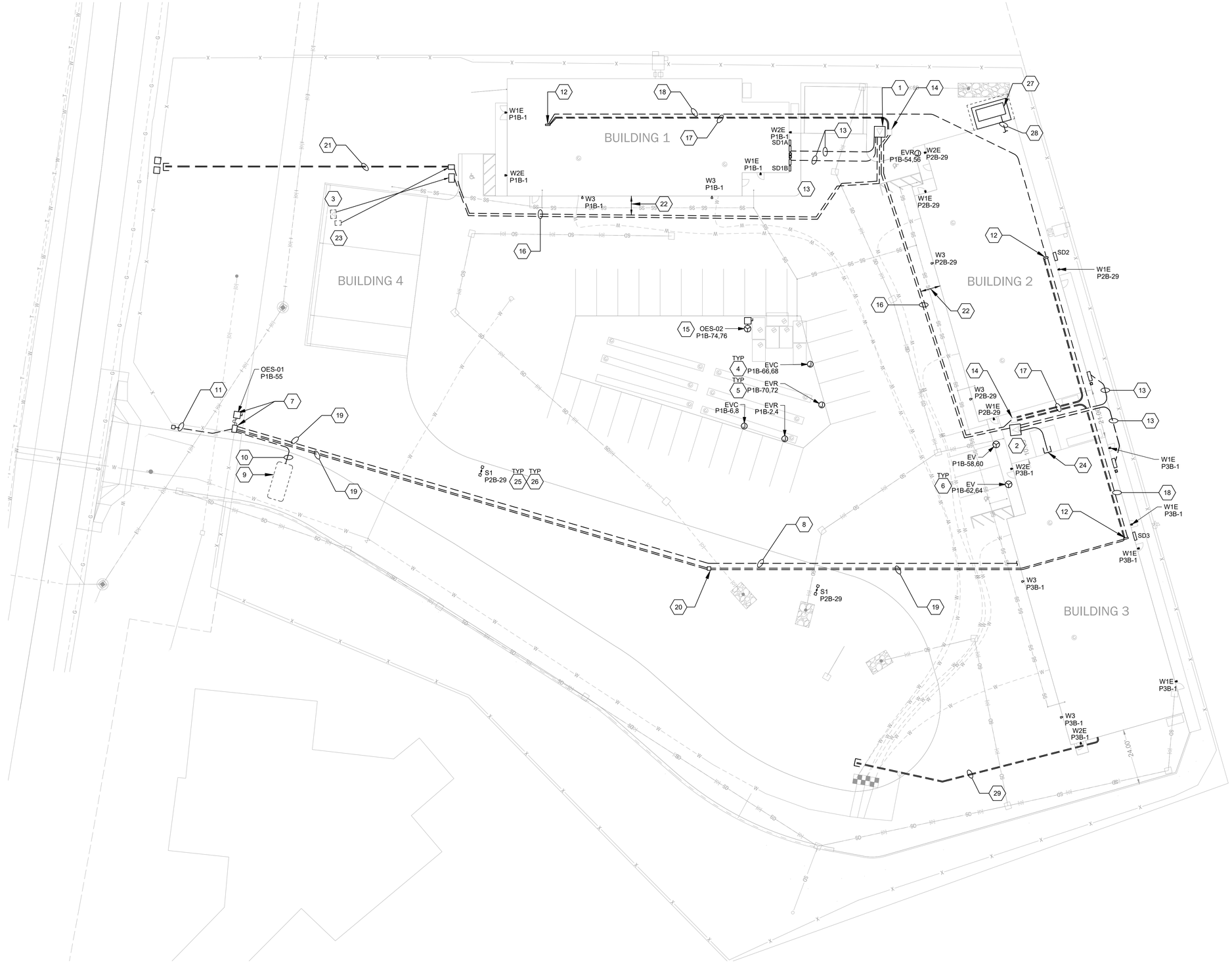
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E0.1



NORTH

1 SITE: ELECTRICAL PLAN

SCALE: 1" = 20'-0"

KEY NOTES

1. EXISTING TRANSFORMER 'T1'.
2. EXISTING TRANSFORMER 'T2'.
3. EXISTING TRANSFORMER 'T3' TO BE RELOCATED AS SHOWN. COORDINATE ALL REQUIREMENTS WITH UTILITY.
4. EV CAPABLE CHARGING PROVISION. PROVIDE CONDUIT, PROVIDE METAL ENCLOSURE WITH LOCKABLE COVER. COORDINATE FINAL LOCATION WITH ARCHITECTURAL AND CIVIL.
5. EV READY CHARGING PROVISION. PROVIDE CONDUIT, CONDUCTORS AND PROVIDE METAL ENCLOSURE WITH LOCKABLE COVER. COORDINATE FINAL LOCATION WITH ARCHITECTURAL AND CIVIL.
6. EV CHARGING STATION. COORDINATE FINAL LOCATION WITH ARCHITECTURAL AND CIVIL.
7. MOTORIZED ENTRY GATE CONTROLLER. COORDINATE EXACT INSTALLATION REQUIREMENTS WITH GATE MANUFACTURER AND LV CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT, INSTALL POWER CONDUCTORS, AND COORDINATE FOR LV REQUIREMENTS. PROVIDE LOCAL NEMA 3R DISCONNECT IF NOT INTERNALLY INCLUDED WITH GATE OPERATOR; DISCONNECT SHALL BE MOUNTED VIA HOT-DIPPED GALVANIZED UNISTRUT UTILIZING SS FASTENING HARDWARE AND CONCRETE BASES (12" DIA X 30" H).
8. FEEDER FOR MOTORIZED GATE OPERATOR FROM PANELBOARD P3A. REFERENCE OWNER EQUIPMENT SCHEDULE ON SHEET E-602 FOR MORE INFORMATION.
9. INDUCTION LOOP SENSOR FOR GATE.
10. PROVIDE (1) 1-1/2"C. COORDINATE WITH VENDOR AND LV CONTRACTOR FOR ALL REQUIREMENTS.
11. PROVIDE (1) 1" EMPTY CONDUIT FOR LV CONTRACTOR FOR GATE ACCESS PEDESTAL. COORDINATE WITH VENDOR AND LV CONTRACTOR FOR ALL REQUIREMENTS.
12. BUILDING TELECOM DEMARC CABINET. SEE POWER PLANS FOR MORE INFORMATION.
13. BUILDING SERVICE FEEDERS. PROVIDE CONDUIT, WIRE, TRENCHING, AND BACKFILL. REFERENCE ONE-LINE DIAGRAM ON SHEET E-601 AND DETAIL 4 ON SHEET E-501 FOR ADDITIONAL INFORMATION. COORDINATE ALL REQUIREMENTS WITH UTILITY.
14. EXISTING TELECOM UTILITY FIBER PEDESTAL.
15. SEPTIC PUMP POWER PROVISION. COORDINATE ALL REQUIREMENTS AND FINAL LOCATION WITH CIVIL AND SEPTIC SYSTEM DESIGN.
16. NEW LOCATION OF ELECTRICAL UTILITY SERVICE FEEDER AND COMMUNICATIONS UTILITY CONDUITS. COORDINATE ALL REQUIREMENTS WITH UTILITIES.
17. PROVIDE (2) 2"CO FOR SYSTEMS CABLE FROM TELECOM UTILITY PEDESTALS TO SYSTEM DEMARC IN EACH BUILDING. CONFIRM FINAL LOCATION AND SYSTEMS UTILITY REQUIREMENTS.
18. PROVIDE 2"CO FOR FIBER BUILDING INTERCONNECTION.
19. PROVIDE (2)1"CO, FOR LV CONTRACTOR TO UTILIZE FOR INSTALLING LV CABLING TO ENTRY GATE.
20. PROVIDE WEATHERPROOF TELECOM PULL BOX. STUB-UP TELECOM CONDUITS INSIDE PULL BOX FOR LV CABLING EXTENSION.
21. PROVIDE (2)2"CO FOR FIBER FROM TELECOM UTILITY SERVICE PEDESTALS. COORDINATE FINAL LOCATIONS AND ALL REQUIREMENTS WITH UTILITY.
22. COMPLY WITH ALL UTILITY REQUIREMENTS AND PROVIDE MINIMUM 3'-0" DISTANCE FROM ALL BUILDING FOOTINGS AND FOUNDATIONS. PRIOR TO EXCAVATION, COORDINATE WITH CIVIL AND UTILITY FOR LOCATIONS.
23. EXISTING TELECOM FIBER UTILITY FIBER PEDESTAL TO BE RELOCATED AS SHOWN. COORDINATE ALL REQUIREMENTS WITH UTILTY.
24. STUB-UP AND CAP 1-1/2"CO FOR FUTURE EM ANTENNA. COORDINATE LOCATION AND REQUIREMENTS WITH TOWER DESIGNER AND UTILITY.
25. ALL SITE LIGHTING TO BE CONTROLLED VIA DIGITAL TIME SWITCH LOCATED ADJACENT TO PANELBOARD P1B IN BUILDING 2. CONTROLS TO COMPLY WITH ALL ASSOCIATED REQUIREMENTS OF CURRENT EDITION OF WSEC CODE SECTION 'C405.2.9'.
26. PROVIDE EXTERIOR LUMINAIRES WITH HSS OPTION (HOUSE SIDE SHIELD). FIXTURE IS TO COMPLY WITH ALL KOOTENAI COUNTY AND LOCAL MUNICIPAL CODES. TYPICAL FOR ALL WITH LIGHT SOURCES AT BOUNDING PROPERTY LINES. SEE EL101 FOR BUILDING MOUNTED LOCATIONS.
27. 150kW DIESEL GENERATOR "GEN1". GENERAC INDUSTRIAL #SD150 WITH SOUND ATTENUATED ENCLOSURE AND 24+ HOURS OF RUNTIME OR OWNER APPROVED EQUAL. TO BE PAD MOUNTED ON PAD WITH HEAT PUMP UNITS. COORDINATE FINAL LOCATION AND SIZE WITH ARCHITECTURAL AND MANUFACTURER RECOMMENDATIONS. DASHED LINE INDICATES REQUIRED CLEARANCE AROUND GENERATOR.
28. PROVIDE (1)FEEDER FROM 400A/3P CIRCUIT BREAKER IN GENERATOR "GEN1" TO "ATS1". REFERENCE ONE-LINE DIAGRAM ON SHEET E-601. PROVIDE (1) BRANCH CIRCUIT FROM PANELBOARD "P2A" TO "GEN1" IN (1)1"C. REFERENCE PANEL SCHEDULE FOR CIRCUIT. UPSIZE CONDUCTORS TO ACCOUNT FOR VOLTAGE DROP. PROVIDE (1)1"CO FOR CONTROLS FROM "GEN1" TO "ATS1".
29. PROVIDE (2)1"CO OUT TO VALVE BOXES IN LANDSCAPE BED FOR IRRIGATION SYSTEM. COORDINATE WITH ARCHITECT FOR FINAL LOCATIONS AND REQUIREMENTS.

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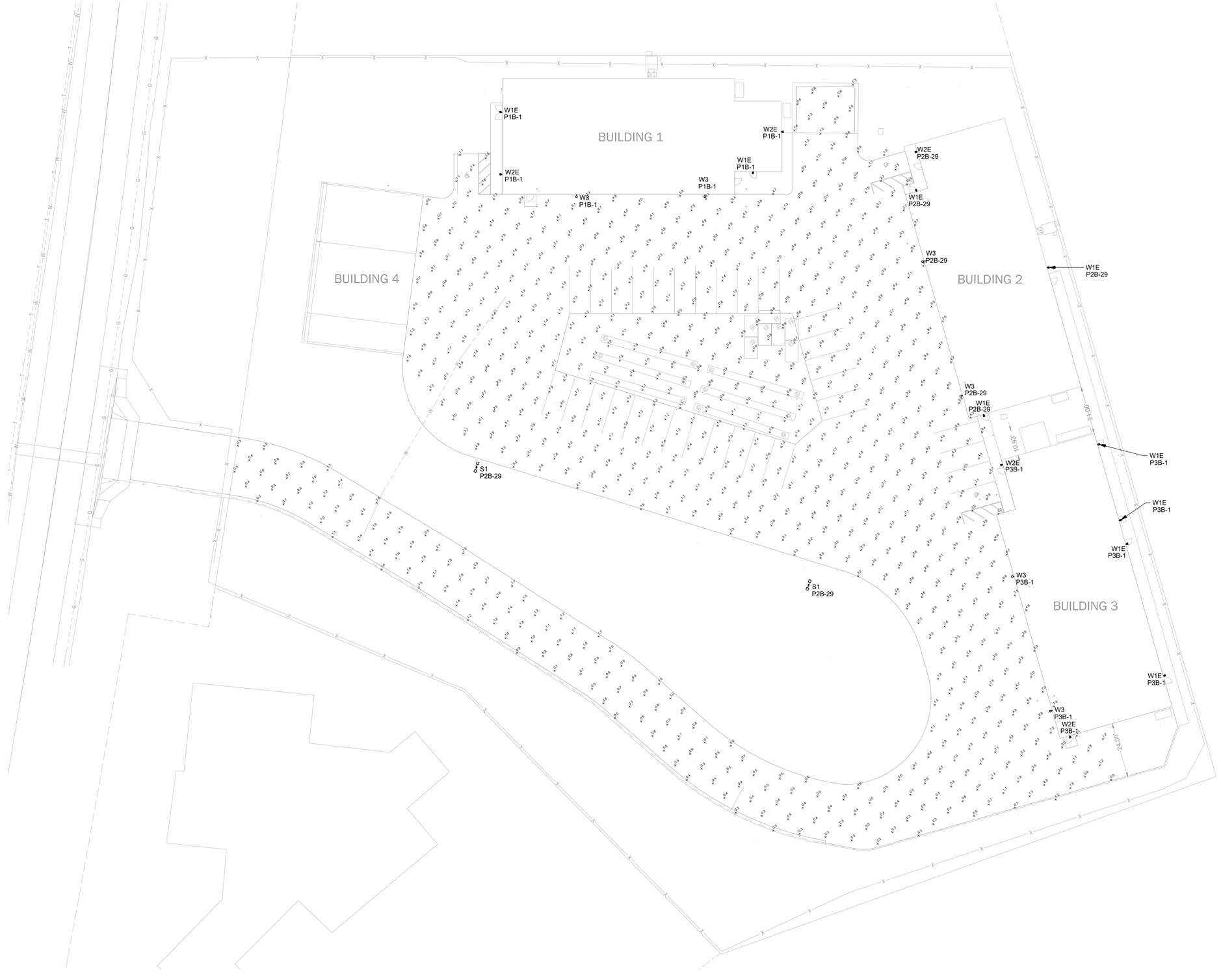
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E1.0



NORTH

1 SITE: PHOTOMETRICS PLAN

SCALE: 1" = 20'-0"

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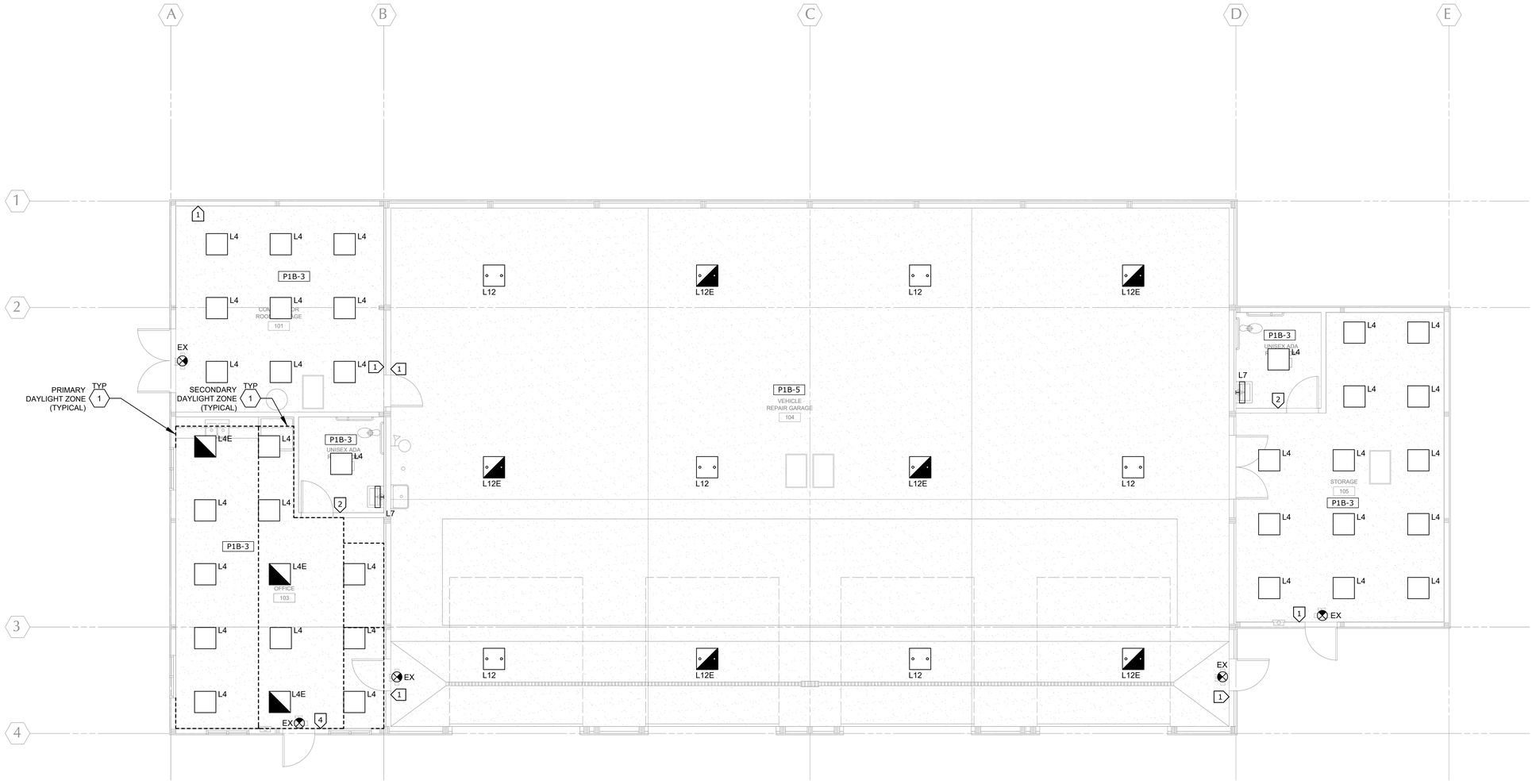
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E1.1



NORTH

1 MAIN FLOOR - LIGHTING PLAN - BUILDING 1

SCALE: 3/16" = 1'-0"

SHEET NOTES

1. SEE SITE ELECTRICAL PLAN FOR EXTERIOR BUILDING MOUNTING LIGHTING.

KEY NOTES

(1) DAYLIGHT HARVEST AREAS WITH AUTOMATIC DAYLIGHT RESPONSIVE DIMMING. PROVIDE PRIMARY AND SECONDARY ZONES WITH DIMMABLE DRIVER AND ASSOCIATED PHOTOCELL FOR FIXTURES IN EACH AREA.

LIGHTING CONTROL SCHEDULE

a (1) LOW VOLTAGE SWITCH. NUMBER OF BUTTONS PER SWITCHING ZONES SHOWN. AUTO-OFF VIA OCCUPANCY SENSOR (SEE OCCUPANCY SENSOR 'OS' DESCRIPTION BELOW FOR CONTROL INTENT). PROVIDE POWER PACK(S) IN ACCESSIBLE CEILING SPACE AS NECESSARY.
a = DENOTES SWITCHING ZONE

(2) DUAL TECHNOLOGY WALL OCCUPANCY SENSOR. OCCUPANCY SENSORS TO BE CONFIGURED TO TURN OFF LIGHTS WITHIN 10 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE.

# a (3) LINE VOLTAGE MANUAL TOGGLE SWITCH.
# = DENOTES 3 OR 4 WAY SWITCHING CONDITION
a = DENOTES SWITCHING ZONE

a (4) LOW VOLTAGE DIMMER SWITCH. NUMBER OF DIMMER SWITCHES PER SWITCHING ZONES SHOWN. AUTO-OFF VIA OCCUPANCY SENSOR. PROVIDE POWER PACK(S) IN ACCESSIBLE CEILING SPACE AS NECESSARY.
a = DENOTES SWITCHING ZONE

a (OS) ALL INTERIOR AREAS TO HAVE MANUAL ON/AUTO OFF LIGHTING CONTROL WITH THE USE OF DUAL TECHNOLOGY OCCUPANCY SENSORS. OCCUPANCY SENSORS TO BE CONFIGURED TO TURN 100% OF THE CONTROLLED LIGHTS OFF WITHIN 10 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE.

SENSORS TO BE CEILING MOUNTED. VERIFY LAYOUT WITH VENDOR SHOP DRAWINGS PRIOR TO PLACEMENT. ADDITIONAL POWER PACK(S) SHALL BE PROVIDED FOR ROOMS WITH CONTROLLED RECEPTACLES.
a = DENOTES SWITCHING ZONE

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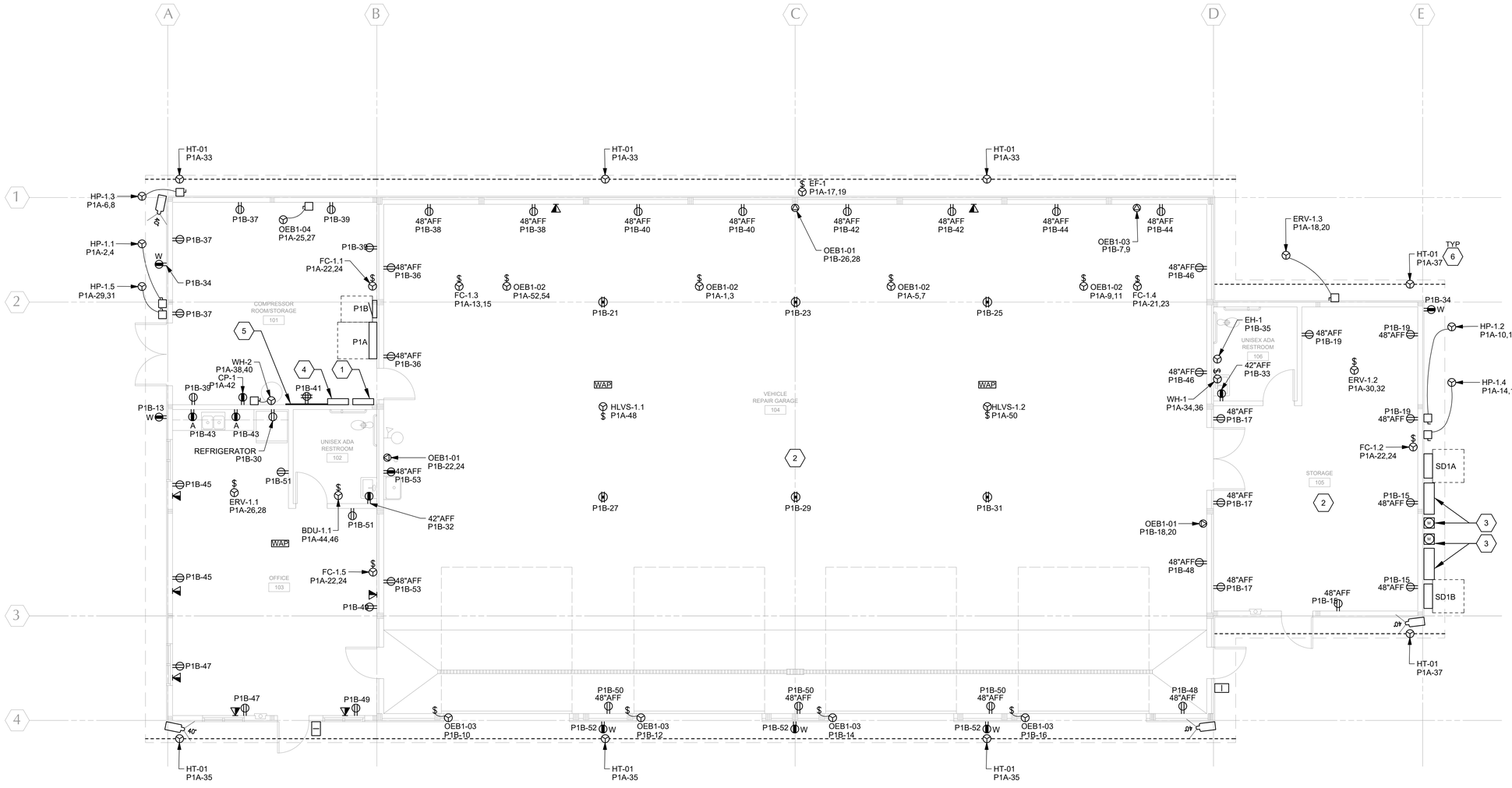
E2.1B1

SHEET NOTES

1. COORDINATE ALL MOUNTING, LOCATIONS AND ELECTRICAL REQUIREMENTS OF ALL MECHANICAL AND PLUMBING EQUIPMENT WITH MECHANICAL AND PLUMBING DRAWINGS.
2. COORDINATE ALL MOUNTING OF RECEPTACLES WITH ARCHITECTURAL AND CASEWORK.
3. ALL DROP CORD RECEPTACLES TO BE SUSPENDED 72"AFF UNLESS OTHERWISE NOTED.

KEY NOTES

1. TELECOMMUNICATIONS DEMARC LDF WALL CABINET, TECHRACK SYSTEMS PRODUCT ID: TR4448 OR OWNER APPROVED EQUAL. COORDINATE REQUIRED SIZE WITH OWNER'S IT REPRESENTATIVE PRIOR TO CONSTRUCTION. PROVIDE 3/4"CO HOMERUN FROM CABINET TO EACH DATA OUTLET.
2. ALL DEVICES IN THIS AREA BELOW 18"AFF WILL BE REQUIRED TO BE CLASS 1 DIVISION 2 HAZARDOUS LOCATION RATED. ALL DEVICES FED FROM THE SLAB AND ABOVE 18" SHALL HAVE CLASS 1 DIVISION 2 CONDUIT SEAL AND FITTING AT 18"AFF INSTALLED IN THE CONDUIT. ALL EXPOSED CONDUIT 12' AND BELOW SHALL BE RIGID GALVANIZED STEEL.
3. UTILITY METER AND CT CABINET FOR SERVICE 1 AND METER AND CT CABINET FOR SERVCE 2 PER UTILITY REQUIREMENTS. REFERENCE ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
4. SECURITY PANEL WITH POWER SUPPLY FOR DOORS. COORDINATE REQUIREMENTS WITH OWNER'S IT REPRESENTATIVE PRIOR TO CONSTRUCTION. REFERENCE TYPICAL SECURITY DOOR DETAIL ON SHEET E5.2.
5. TELECOMMUNICATIONS BACKBOARD "TB-1", PLYWOOD, FIRE RATED 4'WIDE x 4'HIGH x 3/4"THICK at 4'-0"AFF. SEE DETAIL 2 ON SHEET E-502 FOR MORE INFORMATION.
6. SELF REGULATING HEAT TAPE IN ALL GUTTERS AND DOWNSPOUTS. VERIFY CIRCUIT SIZES REQUIRED AND PROVIDE ADDITIONAL POINTS OF CONNECTION AS NEEDED.



NORTH

1 MAIN FLOOR - POWER PLAN & SPECIAL SYSTEMS PLAN - BUILDING 1

SCALE: 3/16" = 1'-0"

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Telephone (509) 662-4781 Facsimile (509) 663-3253

BID SET: X/X/XXXX
Job: 2344 Date: 01/06/2024
.DWG ID –

E2.2B1

SHEET NOTES

1. SEE SITE ELECTRICAL PLAN FOR EXTERIOR BUILDING MOUNTING LIGHTING.

KEY NOTES

1 DAYLIGHT HARVEST AREAS WITH AUTOMATIC DAYLIGHT RESPONSIVE DIMMING. PROVIDE PRIMARY AND SECONDARY ZONES WITH DIMMABLE DRIVER AND ASSOCIATED PHOTOCELL FOR FIXTURES IN EACH AREA.

LIGHTING CONTROL SCHEDULE

a 1 LOW VOLTAGE SWITCH. NUMBER OF BUTTONS PER SWITCHING ZONES SHOWN. AUTO-OFF VIA OCCUPANCY SENSOR (SEE OCCUPANCY SENSOR 'OS' DESCRIPTION BELOW FOR CONTROL INTENT). PROVIDE POWER PACK(S) IN ACCESSIBLE CEILING SPACE AS NECESSARY.
a = DENOTES SWITCHING ZONE

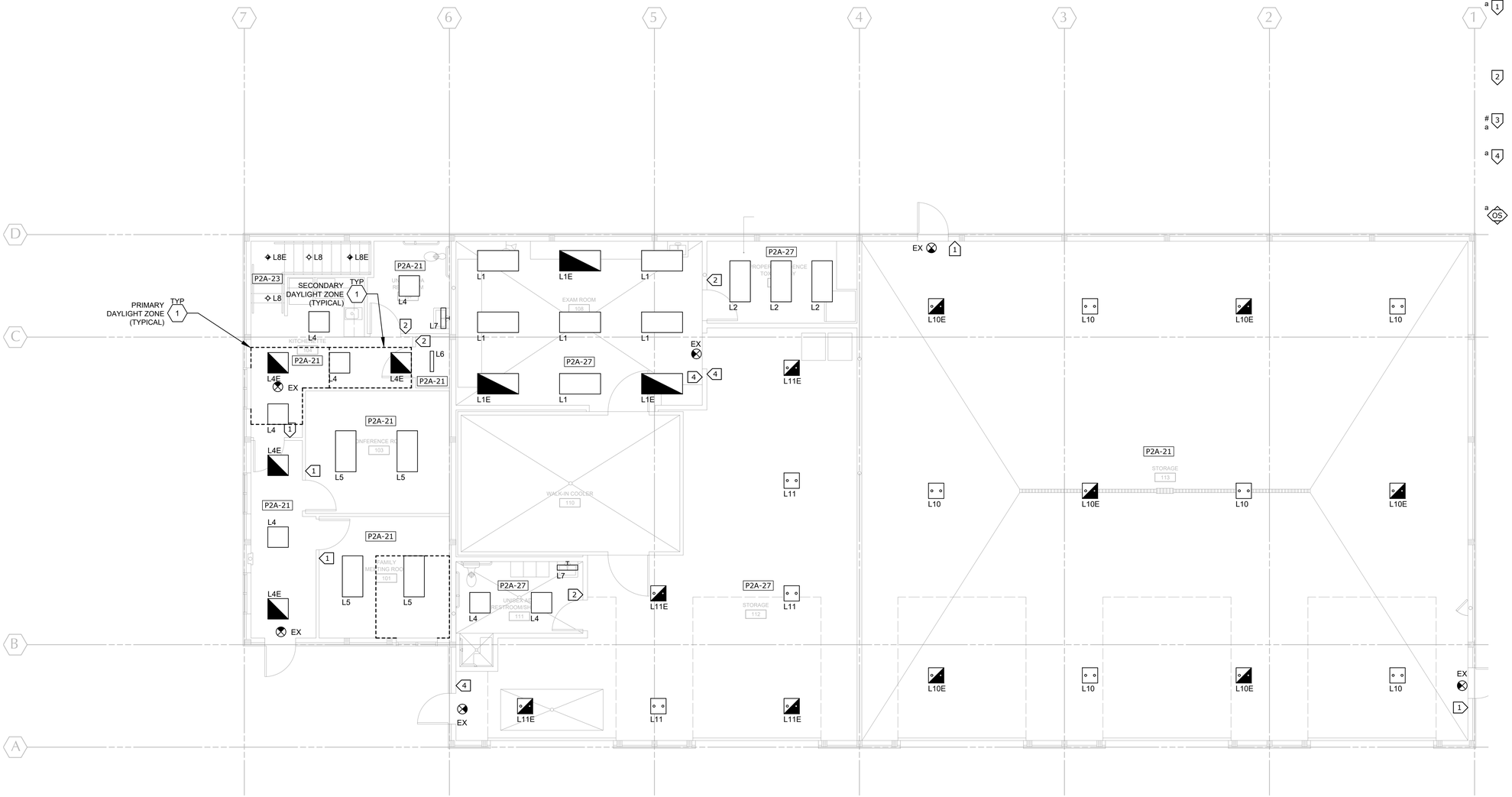
2 DUAL TECHNOLOGY WALL OCCUPANCY SENSOR. OCCUPANCY SENSORS TO BE CONFIGURED TO TURN OFF LIGHTS WITHIN 10 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE.

# a 3 LINE VOLTAGE MANUAL TOGGLE SWITCH.
# = DENOTES 3 OR 4 WAY SWITCHING CONDITION
a = DENOTES SWITCHING ZONE

a 4 LOW VOLTAGE DIMMER SWITCH. NUMBER OF DIMMER SWITCHES PER SWITCHING ZONES SHOWN. AUTO-OFF VIA OCCUPANCY SENSOR. PROVIDE POWER PACK(S) IN ACCESSIBLE CEILING SPACE AS NECESSARY.
a = DENOTES SWITCHING ZONE

a OS ALL INTERIOR AREAS TO HAVE MANUAL ON/AUTO OFF LIGHTING CONTROL WITH THE USE OF DUAL TECHNOLOGY OCCUPANCY SENSORS. OCCUPANCY SENSORS TO BE CONFIGURED TO TURN 100% OF THE CONTROLLED LIGHTS OFF WITHIN 10 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE.

SENSORS TO BE CEILING MOUNTED. VERIFY LAYOUT WITH VENDOR SHOP DRAWINGS PRIOR TO PLACEMENT. ADDITIONAL POWER PACK(S) SHALL BE PROVIDED FOR ROOMS WITH CONTROLLED RECEPTACLES.
a = DENOTES SWITCHING ZONE



1 MAIN FLOOR - LIGHTING PLAN - BUILDING 2
SCALE: 3/16" = 1'-0"

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1/6/2025

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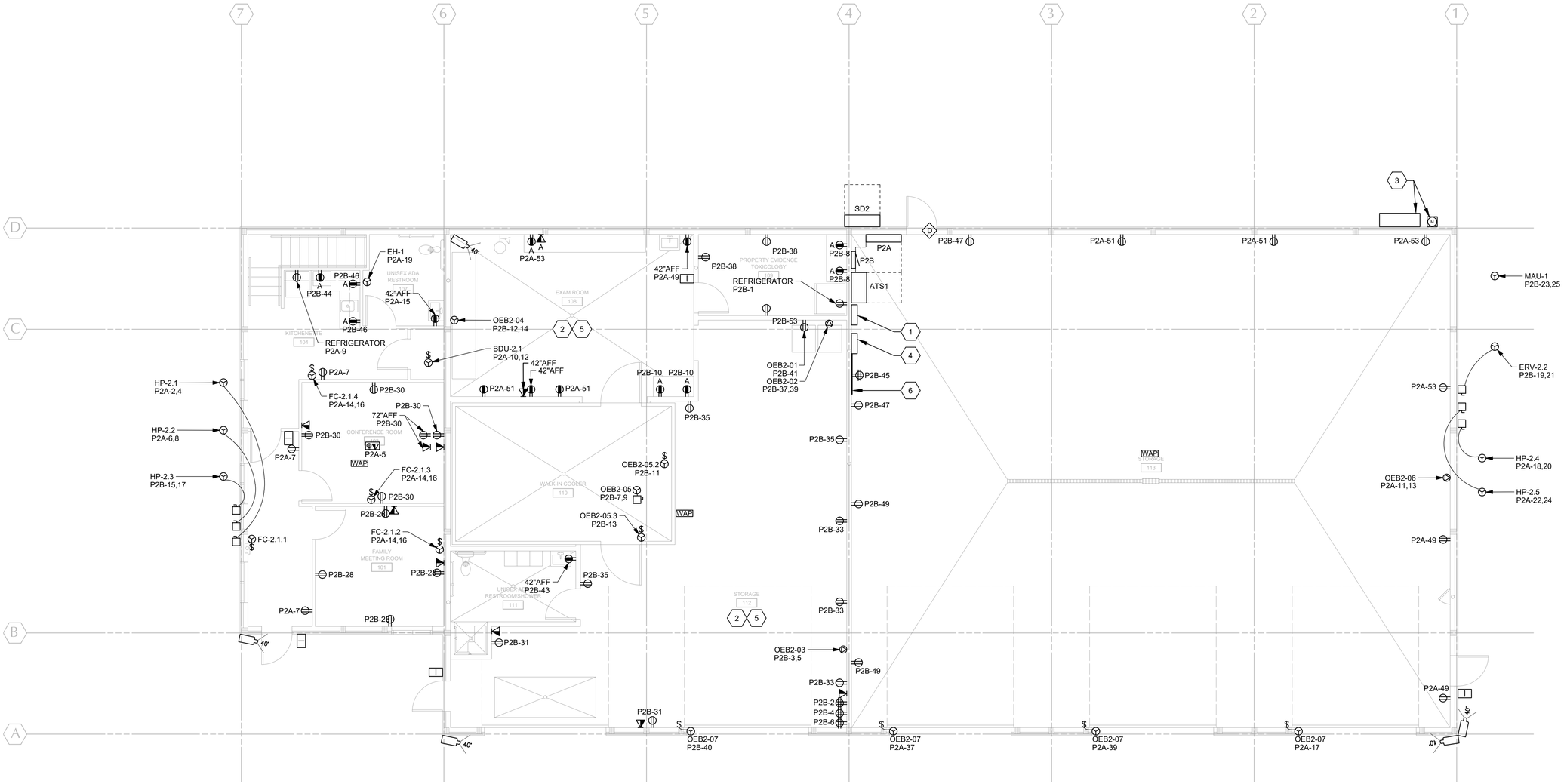
E2.1B2

KEY NOTES

1. TELECOMMUNICATIONS DEMARC LDF WALL CABINET, TECHRACK SYSTEMS PRODUCT ID: TR4448 OR OWNER APPROVED EQUAL. COORDINATE REQUIRED SIZE WITH OWNER'S IT REPRESENTATIVE PRIOR TO CONSTRUCTION. PROVIDE 3/4"CO HOMERUN FROM CABINET TO EACH DATA OUTLET. PROVIDE 2"CO TO BUILDING 1 AND BUILDING 3 TELECOMMUNICATIONS CABINET FOR INTERCONNECTION.
2. ALL DEVICES IN THIS AREA BELOW 18"AFF WILL BE REQUIRED TO BE CLASS 1 DIVISION 2 HAZARDOUS LOCATION RATED. ALL DEVICES FED FROM THE SLAB AND ABOVE 18" SHALL HAVE CLASS 1 DIVISION 2 CONDUIT SEAL AND FITTING AT 18"AFF INSTALLED IN THE CONDUIT. ALL EXPOSED CONDUIT 12' AND BELOW SHALL BE RIGID GALVANIZED STEEL.
3. UTILITY METER AND CT CABINET PER UTILITY REQUIREMENTS. REFERENCE ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
4. SECURITY PANEL WITH POWER SUPPLY FOR DOORS. COORDINATE REQUIREMENTS WITH OWNER'S IT REPRESENTATIVE PRIOR TO CONSTRUCTION. REFERENCE TYPICAL SECURITY DOOR DETAIL ON SHEET E5.2.
5. RECEPTACLES IN THIS SPACE TO BE AT 42"AFF.
6. TELECOMMUNICATIONS BACKBOARD "TB-1", PLYWOOD, FIRE RATED 4'WIDE x 4'HIGH x 3/4"THICK at 4'-0"AFF.

SHEET NOTES

1. COORDINATE ALL MOUNTING, LOCATIONS AND ELECTRICAL REQUIREMENTS OF ALL MECHANICAL AND PLUMBING EQUIPMENT WITH MECHANICAL AND PLUMBING DRAWINGS.
2. COORDINATE ALL MOUNTING OF RECEPTACLES WITH ARCHITECTURAL AND CASEWORK.
3. ALL DROP CORD RECEPTACLES TO BE SUSPENDED 72"AFF UNLESS OTHERWISE NOTED.



1 MAIN FLOOR - POWER PLAN & SPECIAL SYSTEMS PLAN - BUILDING 2

SCALE: 3/16" = 1'-0"

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E2.2B2

SHEET NOTES

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KEY NOTES

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LIGHTING CONTROL SCHEDULE

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1 SECOND FLOOR - LIGHTING PLAN - BUILDING 2

SCALE: 3/16" = 1'-0"

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E2.3B2

KEY NOTES

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SHEET NOTES

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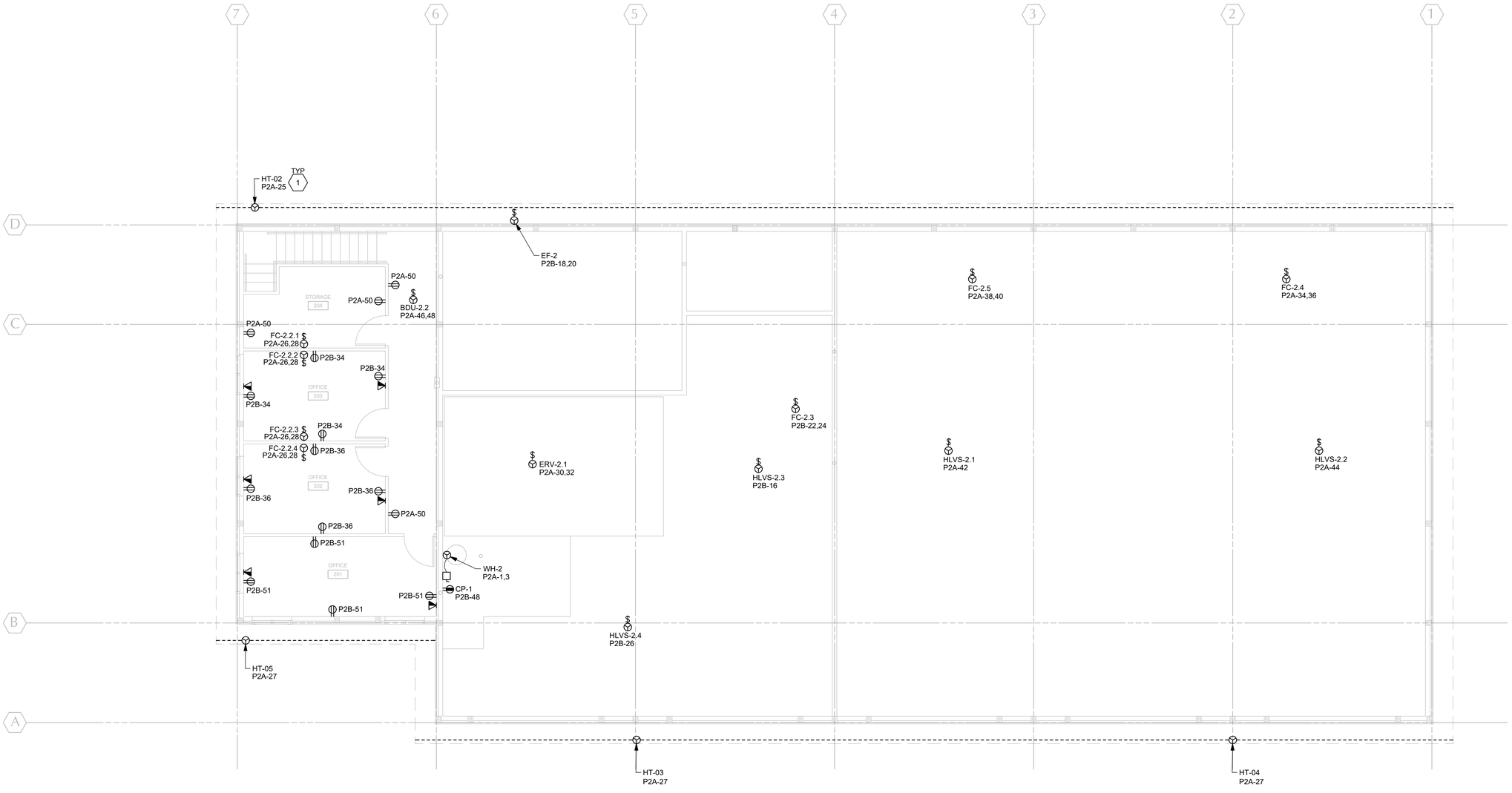
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1 SECOND FLOOR - POWER PLAN & SPECIAL SYSTEMS PLAN - BUILDING 2

SCALE: 3/16" = 1'-0"

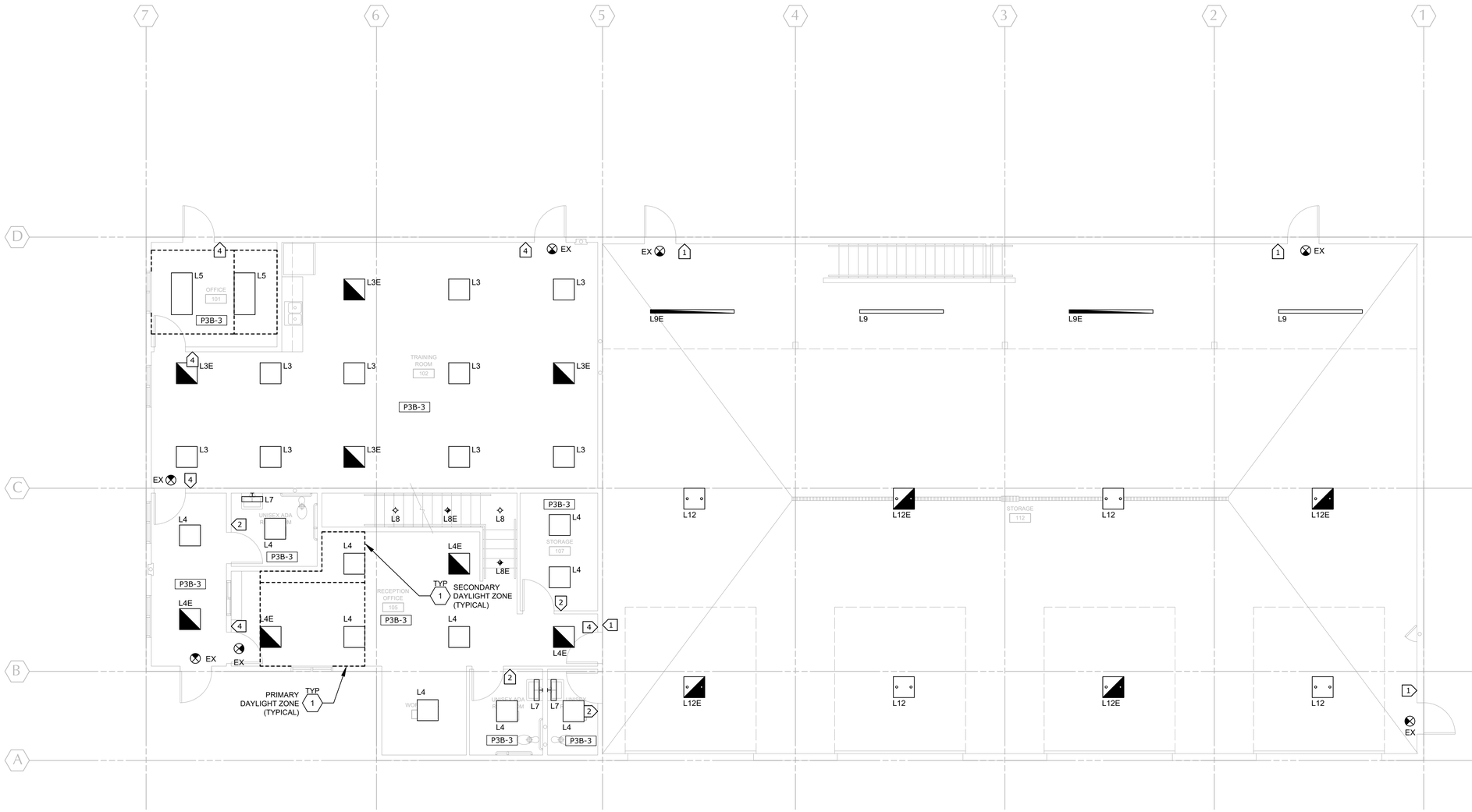
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E2.4B2



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NORTH

1 MAIN FLOOR - LIGHTING PLAN - BUILDING 3
SCALE: 3/16" = 1'-0"

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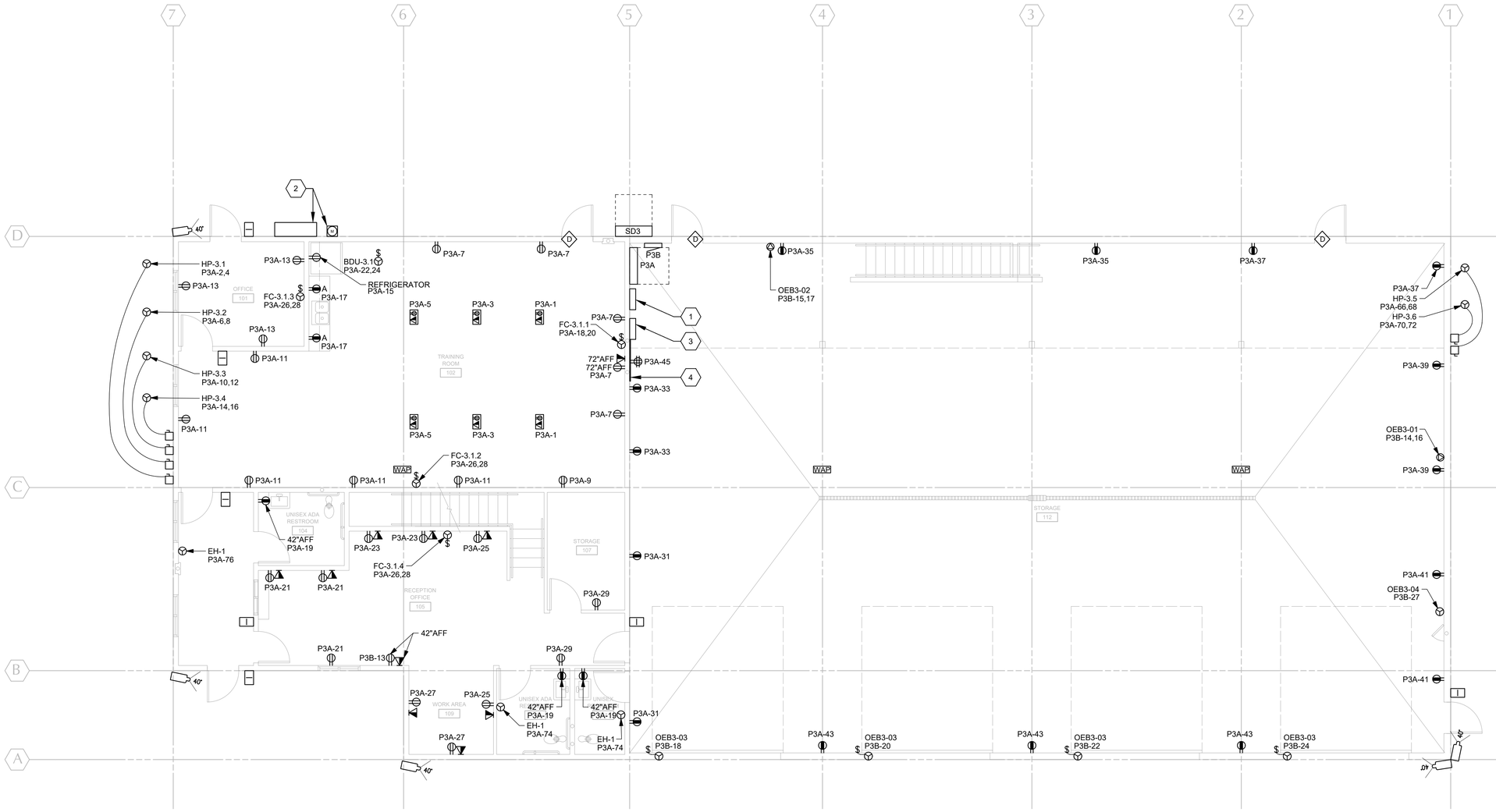
E2.1B3

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1 MAIN FLOOR - POWER PLAN & SPECIAL SYSTEMS PLAN - BUILDING 3

NORTH

SCALE: 3/16" = 1'-0"

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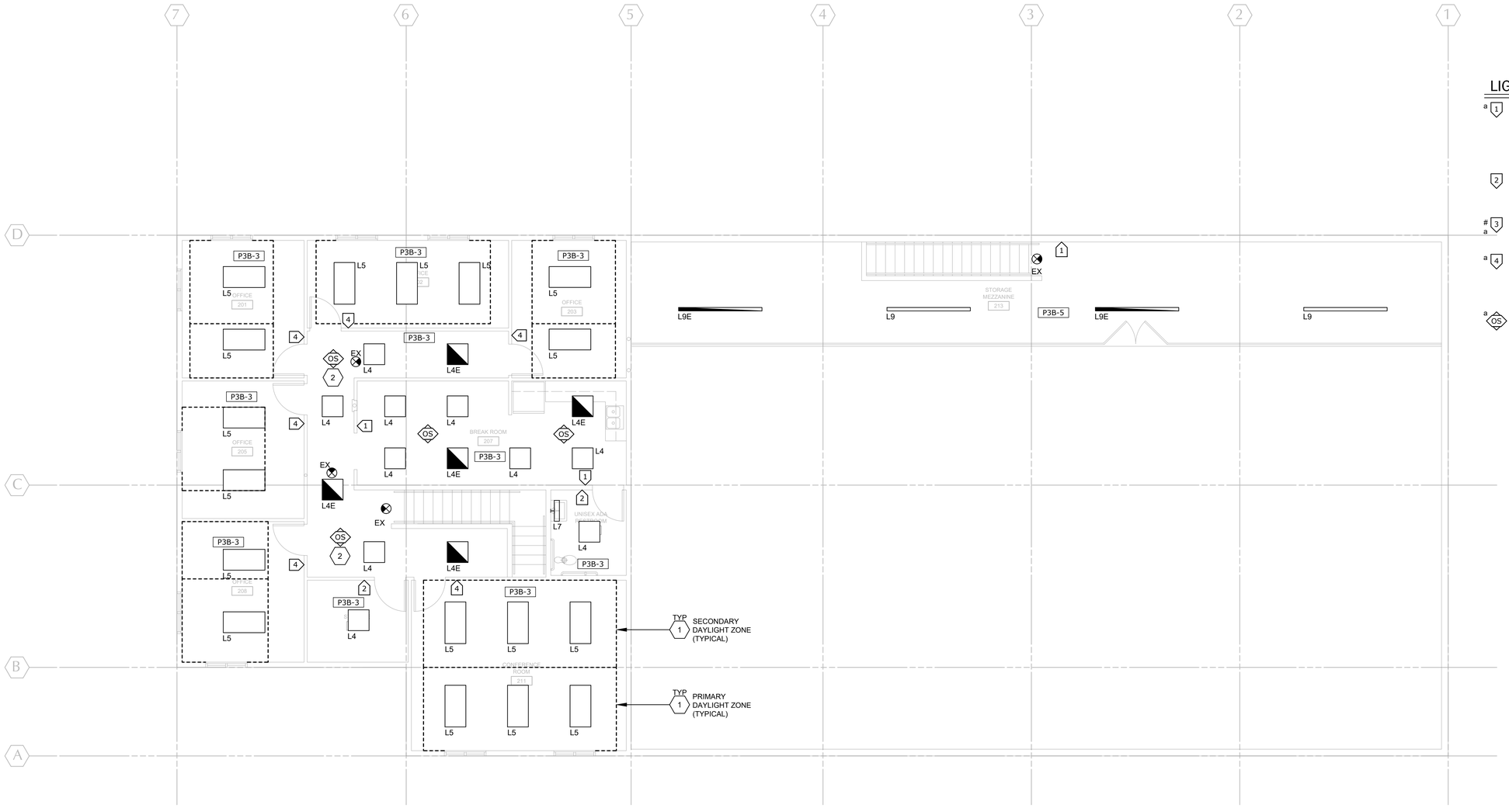
E2.2B3

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LIGHTING CONTROL SCHEDULE

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3 LINE VOLTAGE MANUAL TOGGLE SWITCH.
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NORTH

1 SECOND FLOOR - LIGHTING PLAN - BUILDING 2

SCALE: 3/16" = 1'-0"

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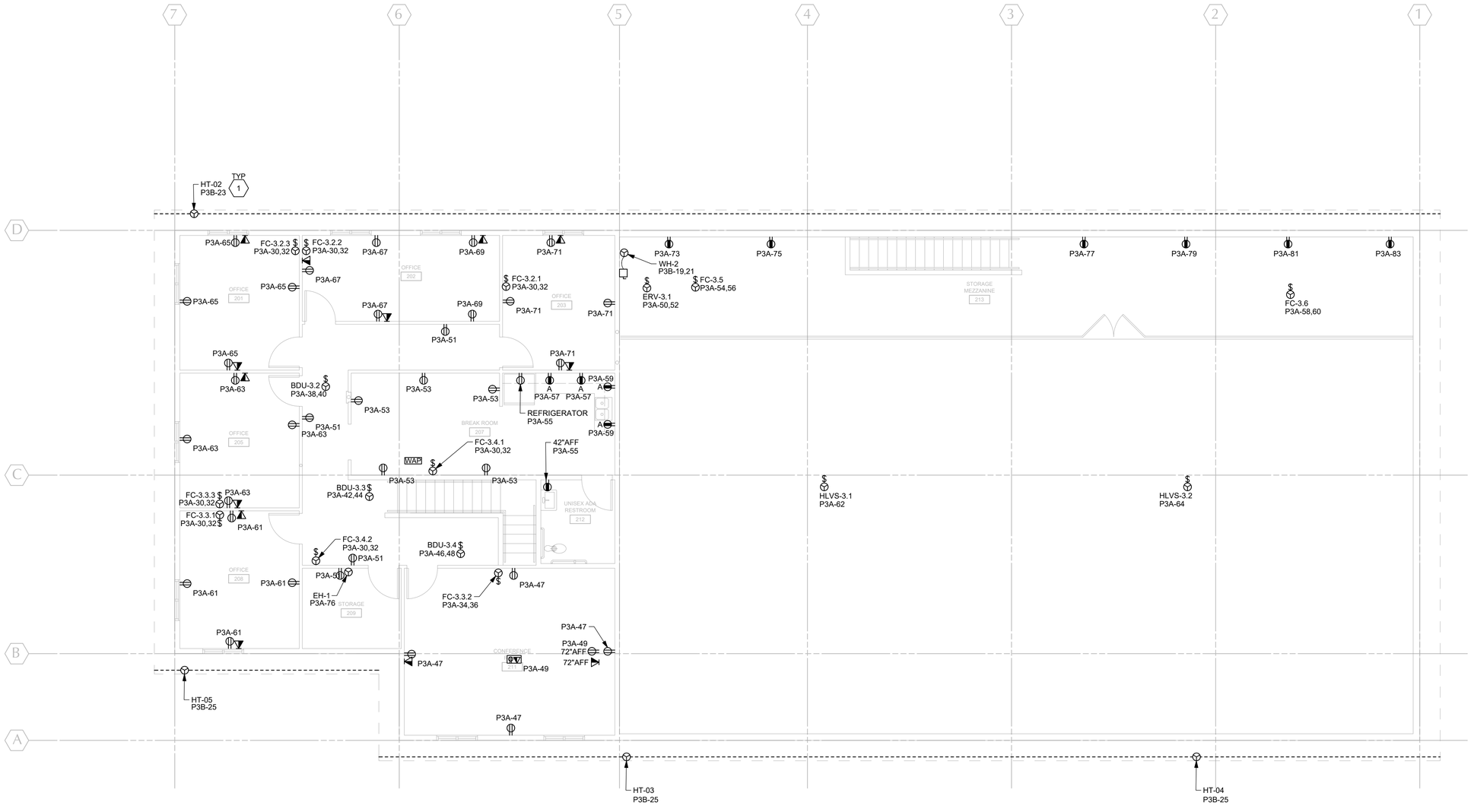
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3. ALL DROP CORD RECEPTACLES TO BE SUSPENDED 72"AFF UNLESS OTHERWISE NOTED.

KEY NOTES

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1 SECOND FLOOR - POWER PLAN & SPECIAL SYSTEMS PLAN - BUILDING 3

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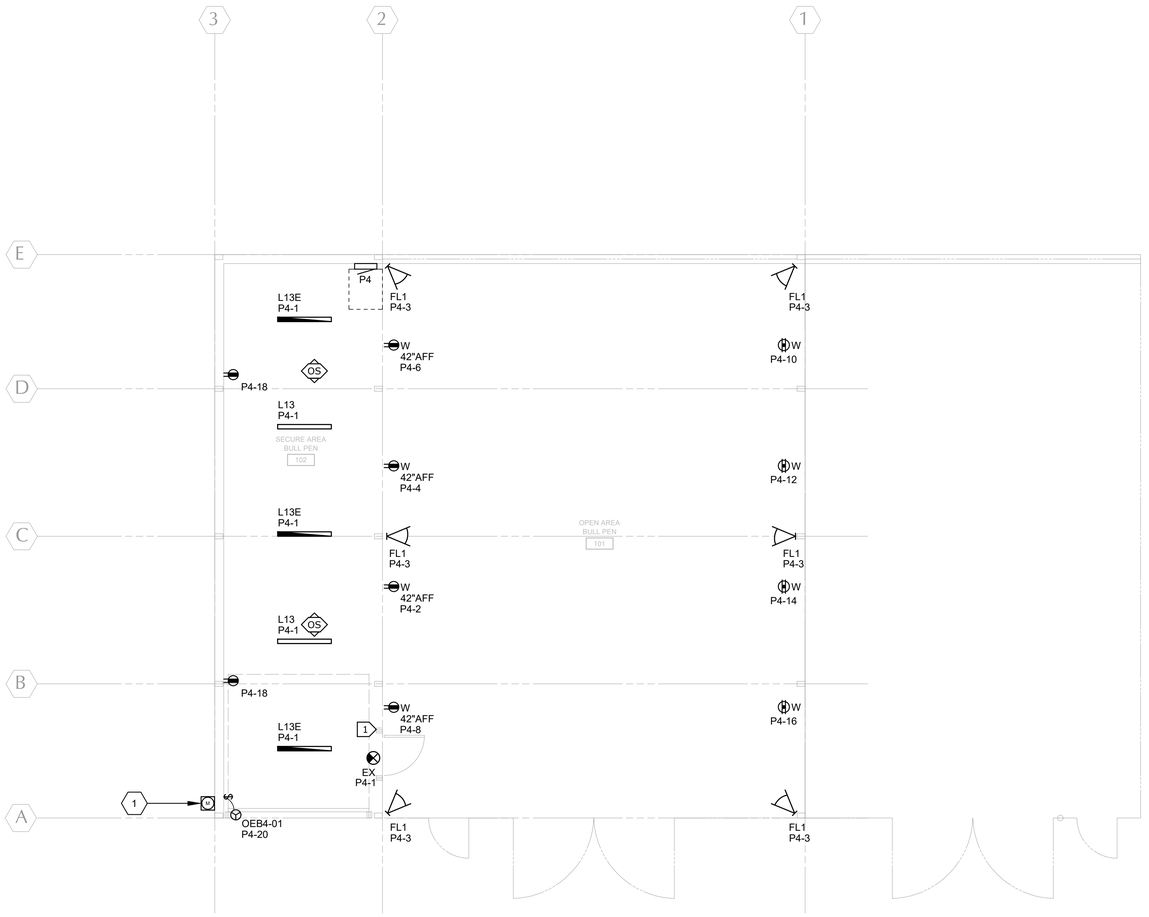
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E2.4B3



NORTH

1 MAIN FLOOR - ELECTRICAL PLAN - BUILDING 4

SCALE: 3/16" = 1'-0"

SHEET NOTES

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KEY NOTES

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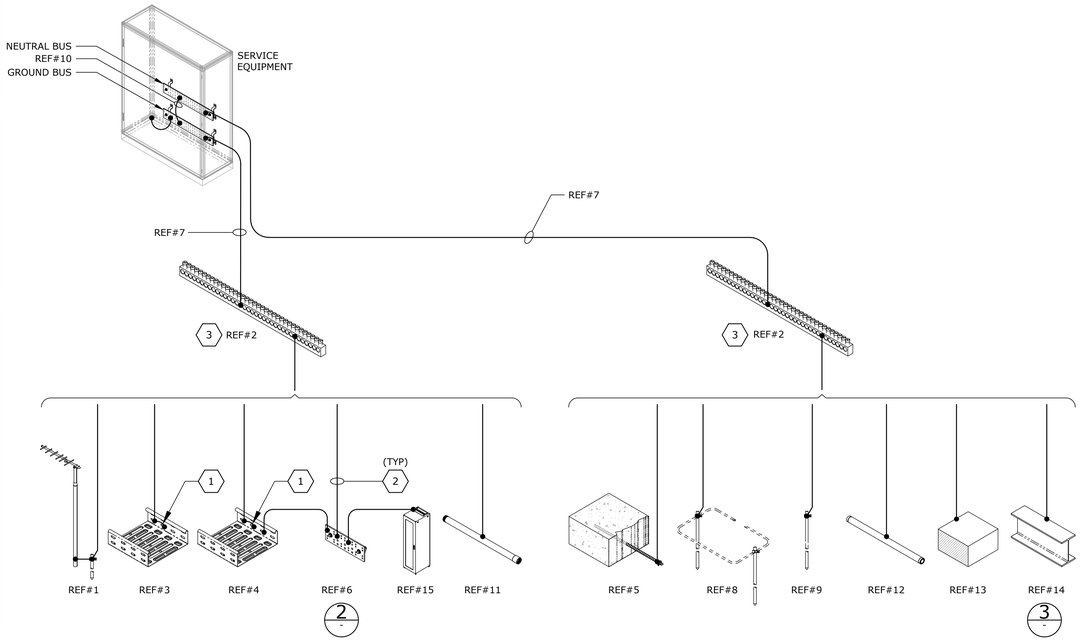
DETAIL KEYNOTES	
1	BOND AS REQUIRED TO MAINTAIN CONTINUITY.
2	SIZE PER GROUNDING ELECTRODE AND BONDING CONDUCTOR SCHEDULE.
3	PROVIDE BUS BAR WHERE MORE THAN (2) ELECTRODES OR GROUND POINTS ARE REQUIRED

DETAIL NOTES

1. DETAIL IS SCHEMATIC, ALL ELECTRODES SHOWN MAY NOT EXIST. MAKE CONNECTION TO ALL AVAILABLE ELECTRODES.
2. GROUND RODS WITH INSPECTION HOUSING ARE TO BE INSTALLED OUTSIDE OF DRIP LINE OF BUILDING ROOF. REFERENCE TYPICAL GROUND ROD WITH INSPECTION HOUSING DETAIL.
3. GROUNDING AND BONDING TO BE IN FULL ACCORDANCE WITH THE CURRENT VERSION OF THE NEC THAT HAS BEEN ACCEPTED FOR USE IN EACH JURISDICTION AND AS AMENDED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
4. MAIN BONDING JUMPER TO BE BY EQUIPMENT MANUFACTURER PER NEC SECTION 250.66.

GROUNDING ELECTRODE AND BONDING CONDUCTOR SCHEDULE

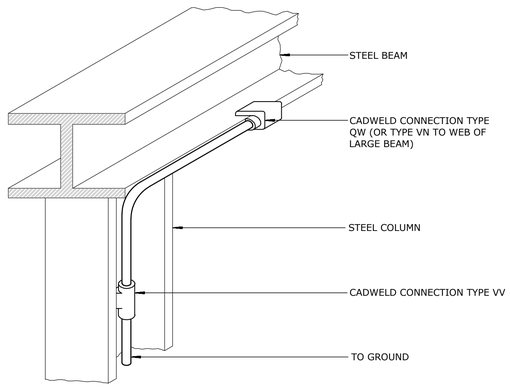
REFERENCE # (REF#)	DESCRIPTION	SIZE
1	ANTENNA MASTS	#6
2	BONDING BUS BAR - INTERSYSTEM AND SERVICE	#3/0
3	CABLE TRAYS - POWER	#2
4	CABLE TRAYS - SPECIAL SYSTEMS	#2
5	CONCRETE ENCASED REBAR	#3/0
6	GROUNDING BUS BARS - SPECIAL SYSTEMS	#3/0
7	GROUNDING ELECTRODE CONDUCTOR	#3/0
8	GROUND RINGS	#2
9	GROUND RODS	#6
10	MAIN BONDING JUMPER	NOTE 4
11	PIPES, METAL - GAS	#6
12	PIPES, METAL - WATER	#3/0
13	OTHER CONNECTIONS CALLED OUT ON PLANS	#6
14	STRUCTURAL STEEL	#3/0
15	TELECOM RACKS	#2



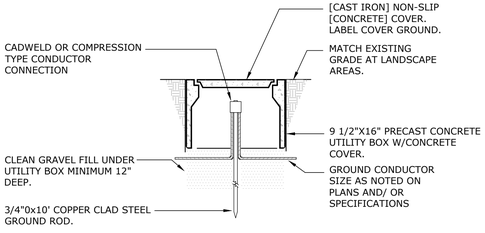
1 GROUNDING ELECTRODE AND BONDING SYSTEM
SCALE: NTS

DETAIL NOTES

1. (DETAIL ONLY APPLIES TO BUILDINGS WITH STRUCTURAL STEEL)

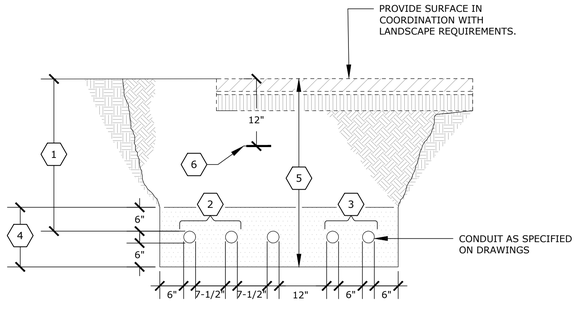


3 BUILDING STEEL GROUND
SCALE: NTS

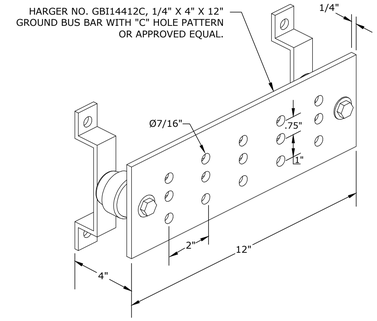


4 TYPICAL GROUND ROD WITH INSPECTION HOUSING
SCALE: NTS

DETAIL KEYNOTES	
1	DEPTH OF BURIAL FOR UTILITIES PER UTILITY GUIDELINES. 24" MINIMUM DEPTH OF BURIAL FOR SITE POWER AND SITE LIGHTING.
2	TYPICAL POWER SEPARATION. COMPLY WITH UTILITY REQUIREMENTS.
3	TYPICAL TELEPHONE AND CATV SEPARATION. COMPLY WITH UTILITY REQUIREMENTS.
4	FILL WITH CLEAN SAND OR OTHER APPROVED MATERIAL
5	BACKFILL TO MATCH EXISTING GRADE. SELECTED BACKFILL FREE OF LARGE DEBRIS AND COMPACTED TO 95% RELATIVE DENSITY
6	CONTINUOUS WARNING TAPE WITH METALLIC TRACER WIRE AND DANGER LABEL



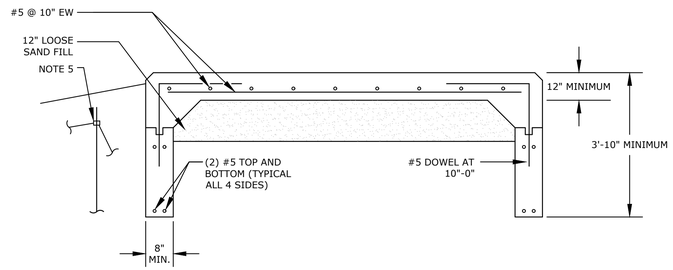
5 TYPICAL SHARED TRENCH DETAIL
SCALE: NTS



2 TYPICAL GROUND BUS BAR FOR INTERSYSTEM AND SERVICE GROUNDING
SCALE: NTS

DETAIL NOTES

1. IF SUITABLE SOILS ARE NOT FOUND AT THE ELEVATIONS SHOWN, EXCAVATE AND REPLACE WITH ENGINEERED FILL AS DIRECTED BY THE ENGINEER. THE DESIGN IS BASED ON AN ALLOWABLE SOIL BEARING PRESSURE OF 2500PSF.
2. ENSURE AND PROVIDE OPENINGS FOR GENERATOR PRIMARY AND SECONDARY CIRCUITS AS REQUIRED.
3. CONCRETE SHALL ACHIEVE 4000 PSI AT 28 DAYS AND SHALL BE AIR ENTRAINED. CHAMFER EXPOSED EDGES 3/4".
4. PAD SHALL BE MINIMUM 12 INCHES LONGER AND WIDER THAN EQUIPMENT SUPPLIED. ADJUST PAD DIMENSIONS FOR EQUIPMENT SUPPLIED.
5. VERIFY ALL REQUIREMENTS WITH GENERATOR MANUFACTURER. FURNISH AND INSTALL (4) 3/4"X10' GROUND RODS IN UNDISTURBED SOIL NEAR PAD CORNERS. INTERCONNECT WITH #4/0 BARE COPPER GROUND CABLE. CONNECT TO GENERATOR GROUND LUG AND TO EXISTING MAIN SWITCHBOARD GROUND BUS WITH #4/0 CABLE.
6. PROVIDE A MINIMUM OF (6) 1/2" DIAMETER THREADED J-HOOKS EXTENDING 10" INTO THE PAD FOR GENERATOR FRAME MOUNTING. VERIFY LOCATIONS AND EXACT INSTALLATION DETAILS WITH GENERATOR MANUFACTURER PRIOR TO COMMENCEMENT OF WORK.
7. GENERATOR FASTENERS SHOULD INCLUDE EARTHQUAKE RESTRAINTS DESIGNED FOR ZONE AND RECOMMENDED BY GENERATOR MANUFACTURER.
8. PROVIDE WORKING CLEARANCE TO MEET MANUFACTURERS CLEARANCE RECOMMENDATIONS AND SITE CONDITIONS.
9. MAINTAIN A MINIMUM FINAL WORKING CLEARANCE OF 3'-0" AT EACH END AND AT THE REAR OF THE GENERATOR AND 3'-0" CLEAR FRONTAL ACCESS FOR PREVENTATIVE MAINTENANCE AND REPAIR. VERIFY REQUIREMENTS WITH GENERATOR MANUFACTURER AND SITE CONDITIONS.



6 TYPICAL GENERATOR PAD DETAIL
SCALE: NTS

KARTCHNER ENGINEERING
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1/6/2025
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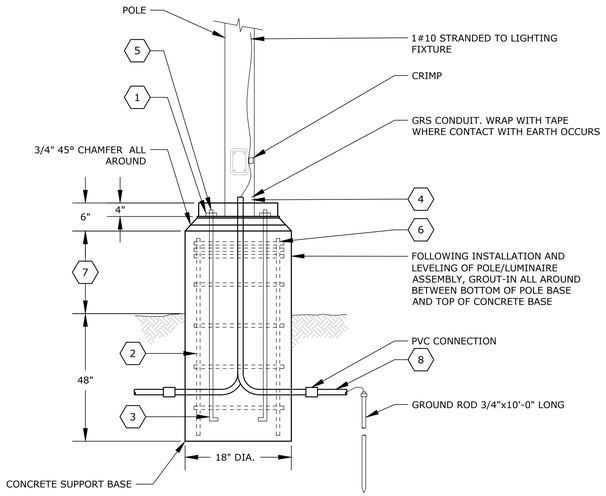
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Job: 2344 Date: 1/6/2025
.DWG ID –

E5.1

DETAIL KEYNOTES

1. POLE BUTT BASE OF STEEL PLATE, FINISHED SAME AS POLE, WITH 2-PIECE STEEL BASE CANOPY COVER FINISHED SAME AS POLE. CANOPY COVER SHALL BE SECURED WITH TAMPER-PROOF 316 STAINLESS STEEL BOLTS.
2. REINFORCED BASKET, FABRICATED FROM RE-BAR, 6-#5 VERTICAL AND #3 TIES AT 12" O.C.
3. ANCHOR BOLTS. QUANTITY, SIZE AND TENSILE STRENGTH DETERMINED BY MANUFACTURER.
4. STUB SERVICE CONDUIT UP INTO POLE BASE WIRING CAVITY AND BUSH.
5. PROVIDE SUPPORT AND LEVELING NUTS AT TOP AND BOTTOM OF POLE BASE PLATE. TWO NUTS PER ANCHOR BOLT. BOLT SPACING PER MOUNTING PLATE.
6. 3#3 TIES WITHIN TOP 8" OF BASE STRUCTURE.
7. POLE BASE TO EXTEND 24" ABOVE GRADE.
8. (1) SCHEDULE 40 PVC CONTROL CONDUIT AND (1) POWER CONDUIT UNLESS OTHERWISE NOTED MUST INCLUDE GROUND WIRE (INCLUDE ADDITIONAL CONTROL AND POWER CONDUITS AS REQUIRED)



1 TYPICAL POLE BASE - ABOVE GRADE

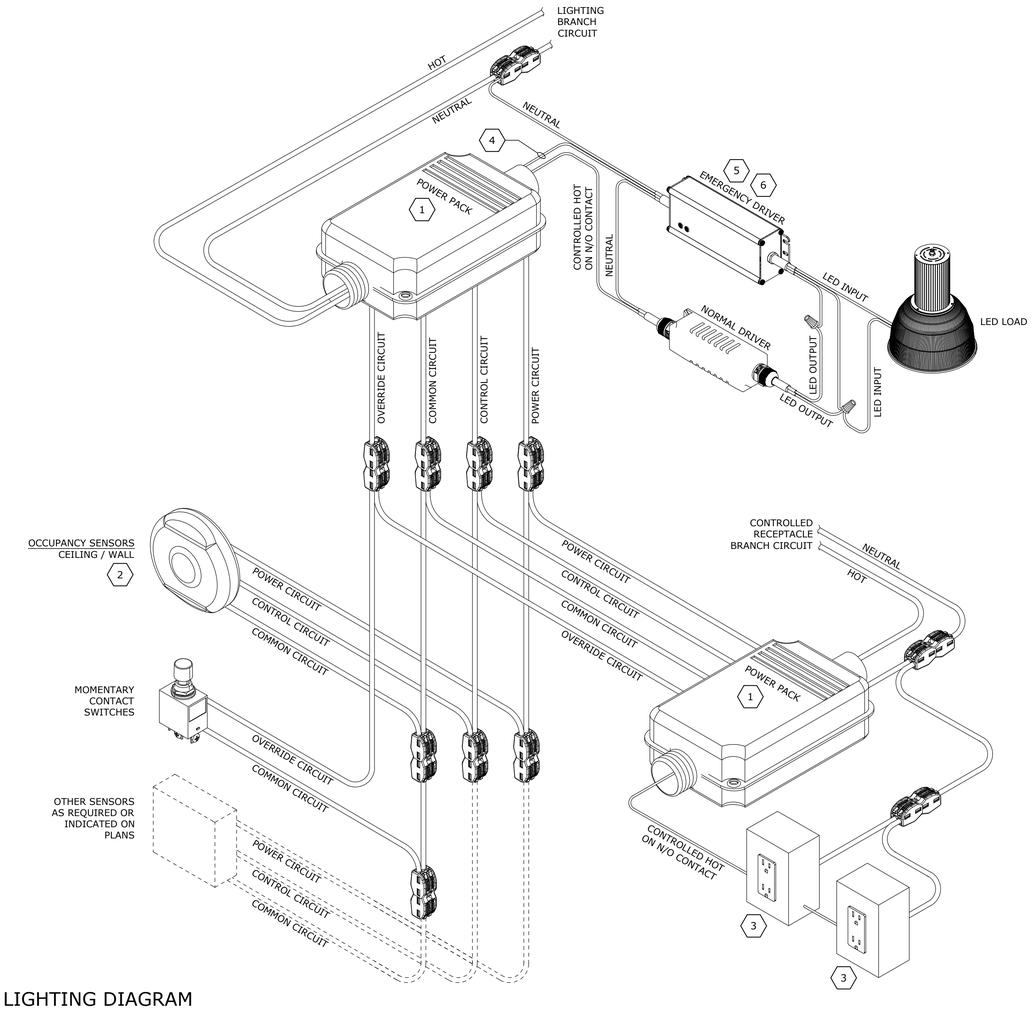
SCALE: NTS

DETAIL KEYNOTES

1. POWER PACKS TO BE MOUNTED IN ACCESSIBLE CEILING SPACE WITHIN 5 FEET OF DOOR FOR ROOM SERVED WHERE POSSIBLE.
2. OCCUPANCY SENSORS SHALL BE UL916 LISTED AND PROVIDED WITH AN AUXILIARY RELAY FOR CONNECTION TO HVAC CONTROL SYSTEM.
3. RECEPTACLE SHALL HAVE "CONTROLLED" ENGRAVED ON FACE. REFERENCE PLANS FOR CONTROLLED RECEPTACLE LOCATIONS.
4. UNSWITCHED 24/7 POWER.
5. DRIVER MAY BE EXTERNAL OR INTEGRAL TO LUMINAIRE.
6. EMERGENCY DRIVER TO POWER LUMINAIRE ON FAILURE OF NORMAL DRIVER POWER. COORDINATE ALL REQUIREMENTS WITH MANUFACTURER. EMERGENCY DRIVERS ONLY TO BE PROVIDED FOR FIXTURES NOTED ON PLANS AS EMERGENCY.

DETAIL NOTES

1. COORDINATE WITH MANUFACTURER'S REQUIREMENTS. PROVIDE ALL ELECTRICAL APPURTENANCES AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. AN APPROVED DIGITAL EQUAL MAY BE USED IN LIEU OF THE SYSTEM SHOWN IN THIS DIAGRAM.
2. ASSOCIATED CONDUCTORS SHALL BE 600V RATED UNLESS OTHERWISE NOTED.
3. LOW VOLTAGE WIRING CONCEALED WITHIN WALLS OR ABOVE HARD-LID CEILING SHALL BE ROUTED WITHIN RACEWAY.



2 OCCPANCY/VACANCY SENSOR AND EMERGENCY LIGHTING DIAGRAM

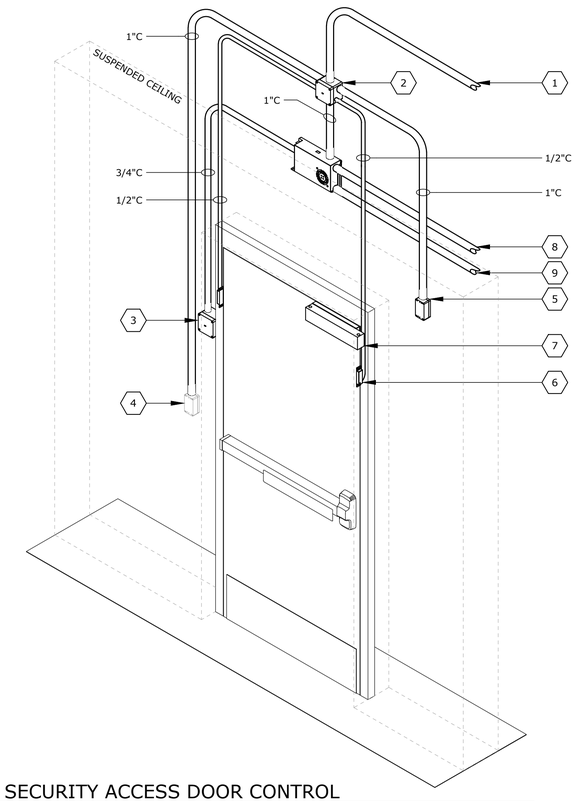
SCALE: NTS

DETAIL NOTES

1. ALL SYSTEM DEVICES PROVIDED BY EQUIPMENT VENDOR, INSTALLED BY EC, UNLESS OTHERWISE NOTED.
2. DETAIL IS SCHEMATIC, COORDINATE ALL NECESSARY DEVICES AND APPURTENANCES WITH OWNER'S IT INSTALLER OR PREFERRED VENDOR, AND ARCHITECTURAL DOOR SCHEDULE.
3. MAGNETIC LOCK CONFIGURATIONS:
   - 3.a. (1) MAGNETIC LOCK RATED AT .5 AMPS AT 24VDC. #16 CONDUCTORS INDICATED ARE FOR UP TO 500 FEET FROM DOOR CONTROLLER; FOR LONGER RUNS, UPSIZE CONDUCTORS AS REQUIRED.
   - 3.b. (2) MAGNETIC LOCKS RATED AT .5 AMPS EACH AT 24VDC. PROVIDE #14 CONDUCTORS UP TO 500 FEET FROM DOOR CONTROLLER; FOR LONGER RUNS, UPSIZE CONDUCTORS AS REQUIRED.
4. BUTTON FOR EXITING TO BE DOUBLE POLE WITH MOMENTARY ACTION. ONE POLE SHALL DIRECTLY BREAK THE CURRENT TO THE MAGNETIC LOCK. THE OTHER POLE SHALL BE USED AS AN INPUT TO THE DOOR CONTROLLER TO RELEASE THE MAGNETIC LOCK FOR PROGRAMMED TIME PERIOD ON ACTIVATION.
5. SEE SPECIAL SYSTEMS PLAN FOR SECURITY DOOR TYPES AND LOCATIONS. TYPES TO BE VERIFIED WITH ARCHITECT.

DETAIL KEYNOTES

1. PROVIDE 1"C TO SECURITY HEAD-END EQUIPMENT ENCLOSURE
2. PROVIDE 4" SQUARE JUNCTION BOX.
3. PROVIDE 4" SQUARE JUNCTION BOX PROVIDING PATHWAY FROM POWER SUPPLY/CONTROLLER TO DOOR VIA FRAME TRANSFER HARDWARE.
4. PROVIDE SINGLE-GANG JUNCTION BOX ON EXTERIOR SIDE OF DOOR FOR CARD READER.
5. PROVIDE SINGLE-GANG JUNCTION BOX ON INTERIOR SIDE OF DOOR FOR MOTION SENSOR REQUEST TO EXIT FUNCTION.
6. DOOR HINGE POSITION CONTACT (TYPICAL).
7. MAGNETIC LOCK. COORDINATE QUANTITY AND TYPE PER SYSTEM REQUIREMENTS.
8. PROVIDE 3/4" CONDUIT 120V POWER TO POWER SUPPLY/CONTROLLER.
9. PROVIDE 3/4" CONDUIT FOR FIRE ALARM OVERRIDE CONDUCTORS.



3 SECURITY ACCESS DOOR CONTROL

SCALE: NTS

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1/6/2025

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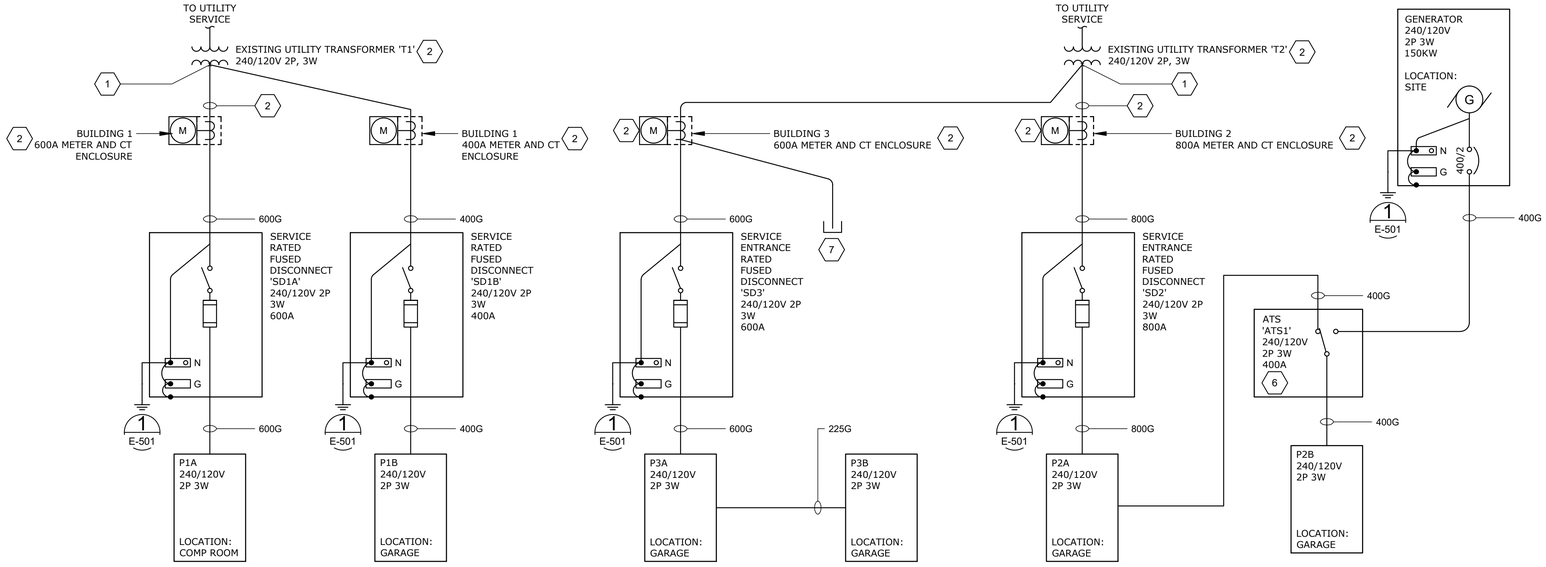
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ONE-LINE DIAGRAM BUILDING 1

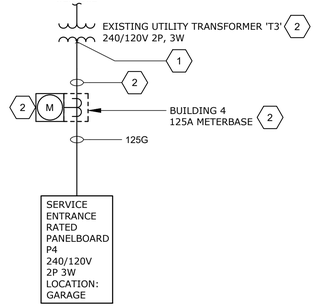
1 / -

SCALE : NTS

ONE-LINE DIAGRAM BUILDING 2 AND BUILDING 3

2 / -

SCALE : NTS



ONE-LINE DIAGRAM BUILDING 4

3 / -

SCALE : NTS

T1 - LOAD SUMMARY

3

CKT #	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B
1	BUILDING 1 SERVICE	96	96
	TOTAL CONNECTED KVA BY PHASE	96	96

	CONN. KVA	CALC. KVA	
LIGHTING	2.7	3.4	(125%)
LARGEST MOTOR	9.6	2.4	(125%)
OTHER MOTORS	52	52	(100%)
RECEPTACLES	86	48	(50%>10)
COMPUTER	0	0	(100%)
CONTINUOUS	11	13	(125%)
HEATING	24	24	(100%)
NONCONTINUOUS	16	16	(100%)
KITCHEN EQUIP	0	0	(N/A)
NONCOIN/DIVERSE	0	0	(N/A)
TOTAL KVA	190	160	

BALANCED PHASE AMPS 660

B2 - LOAD SUMMARY

4

CKT #	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B
1	PANEL P2A	75	75
	TOTAL CONNECTED KVA BY PHASE	75	75

	CONN. KVA	CALC. KVA	
LIGHTING	5.5	6.9	(125%)
LARGEST MOTOR	5.4	1.4	(125%)
OTHER MOTORS	45	45	(100%)
RECEPTACLES	34	22	(50%>10)
COMPUTER	0	0	(100%)
CONTINUOUS	6.1	7.6	(125%)
HEATING	59	59	(100%)
NONCONTINUOUS	0	0	(100%)
KITCHEN EQUIP	0	0	(N/A)
NONCOIN/DIVERSE	0	0	(N/A)
TOTAL KVA	150	140	

BALANCED PHASE AMPS 590

T3 - LOAD SUMMARY

CKT #	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B
1	BUILDING 4 SERVICE	2.9	3.6
	TOTAL CONNECTED KVA BY PHASE	2.9	3.6

	CONN. KVA	CALC. KVA	
LIGHTING	0.43	0.54	(125%)
LARGEST MOTOR	1	0.25	(125%)
OTHER MOTORS	1	1	(100%)
RECEPTACLES	5.1	5.1	(50%>10)
COMPUTER	0	0	(100%)
CONTINUOUS	0	0	(125%)
HEATING	0	0	(100%)
NONCONTINUOUS	0	0	(100%)
KITCHEN EQUIP	0	0	(N/A)
NONCOIN/DIVERSE	0	0	(N/A)
TOTAL KVA	6.5	6.9	

BALANCED PHASE AMPS 29

T2 - LOAD SUMMARY

CKT #	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B
1	BUILDING 2 SERVICE	75	75
2	BUILDING 3 SERVICE	62	64
	TOTAL CONNECTED KVA BY PHASE	140	140

	CONN. KVA	CALC. KVA	
LIGHTING	9.3	12	(125%)
LARGEST MOTOR	5.4	1.4	(125%)
OTHER MOTORS	86	86	(100%)
RECEPTACLES	64	37	(50%>10)
COMPUTER	0	0	(100%)
CONTINUOUS	13	16	(125%)
HEATING	100	100	(100%)
NONCONTINUOUS	0	0	(100%)
KITCHEN EQUIP	0	0	(N/A)
NONCOIN/DIVERSE	0	0	(N/A)
TOTAL KVA	280	260	

BALANCED PHASE AMPS 1070

B3 - LOAD SUMMARY

5

CKT #	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B
1	PANEL P3A	62	64
	TOTAL CONNECTED KVA BY PHASE	62	64

	CONN. KVA	CALC. KVA	
LIGHTING	3.9	4.8	(125%)
LARGEST MOTOR	5.4	1.4	(125%)
OTHER MOTORS	42	42	(100%)
RECEPTACLES	30	20	(50%>10)
COMPUTER	0	0	(100%)
CONTINUOUS	6.4	8	(125%)
HEATING	45	45	(100%)
NONCONTINUOUS	0	0	(100%)
KITCHEN EQUIP	0	0	(N/A)
NONCOIN/DIVERSE	0	0	(N/A)
TOTAL KVA	130	120	

BALANCED PHASE AMPS 480

KEY NOTES

1. VERIFY FAULT CURRENT WITH UTILITY AND ADJUST EQUIPMENT RATING IF REQUIRED. COORDINATE CHANGES WITH ENGINEER.
2. COORDINATE ALL WORK AND PROVIDE ALL REQUIREMENTS OF THE ELECTRICAL UTILITY.
3. 'T1' IS A LOAD SUMMARY FOR BOTH TRANSFORMER 'T1' AND THE ELECTRICAL SERVICE FOR BUILDING 1.
4. 'B2' IS A LOAD SUMMARY FOR THE ELECTRICAL SERVICE FOR BUILDING 2.
5. 'B3' IS A LOAD SUMMARY FOR THE ELECTRICAL SERVICE FOR BUILDING 3.
6. PROVIDED FOR SEPARATELY DERIVED SYSTEM.
7. SPARE CONDUIT FOR FUTURE EM ANTENNA TOWER FEED. REFERENCE SITE PLAN FOR ADDITIONAL INFORMATION.

COPPER FEEDER SCHEDULE

CIRCUIT SIZE AMPS	QTY SETS	CONDUIT TRADE SIZE (NOTE 2) NONE (NOTE 5)	N	G (NOTE 4)	NG	NGI	NNG	NNGI	GS (NOTE 6)	CONDUCTORS (NOTE 1) (NOTE 3) PHASE/ NEUTRAL	EGC/ IEGC (NOTE 9)	GEC/SSBJ (NOTE 8)	AMPACITY
		3 PH 3 W	3 PH 4W	3 PH or 1 PH 3W EGC	3 PH 4W EGC	3 PH 4W EGC/IEGC	3 PH 4W EGC	3 PH 4W EGC/IEGC	1 PH 2W EGC				
15	1	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	12	12	8	20
20	1	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	12	12	8	20
25	1	3/4	3/4	3/4	3/4	3/4	1	1	3/4	10	10	8	30
30	1	3/4	3/4	3/4	3/4	3/4	1	1	3/4	10	10	8	30
35	1	3/4	3/4	3/4	1	1	1	1-1/4	3/4	8	10	8	40
40	1	3/4	3/4	3/4	1	1	1	1-1/4	3/4	8	10	8	40
45	1	* 3/4	1	1	1	1	1-1/4	1-1/4	3/4	6	10	8	55
50	1	* 3/4	1	1	1	1	1-1/4	1-1/4	3/4	6	10	8	55
60	1	* 1	1-1/4	1	1-1/4	1-1/4	1-1/4	2	1	4	10	8	70
70	1	* 1	1-1/4	1-1/4	1-1/4	1-1/4	1-1/2	2	1	4	8	8	70
80	1	1	1-1/4	1-1/4	1-1/4	1-1/4	1-1/2	2	1	3	8	8	85
90	1	1-1/4	1-1/4	1-1/4	1-1/2	1-1/2	2	2	1	2	8	8	95
100	1	* 1-1/4	1-1/2	1-1/2	1-1/2	2	2	2-1/2	1-1/4	1	8	6	110
110	1	* 1-1/4	1-1/2	1-1/2	1-1/2	2	2	2-1/2	1-1/4	1	6	6	110
125	1	* 1-1/2	2	1-1/2	2	2	2	3	1-1/4	1/0	6	6	150
150	1	* 1-1/2	2	1-1/2	2	2	2	3	1-1/4	1/0	6	6	150
175	1	1-1/2	2	2	2	2	2-1/2	3	1-1/2	2/0	6	4	170
200	1	2	2	2	2	2-1/2	3	3-1/2	1-1/2	3/0	6	4	200
225	1	* 2	2-1/2	2	2-1/2	2-1/2	(NOTE 7)	(NOTE 7)	2	4/0	4	2	230
250	1	2	2-1/2	2-1/2	3	3	(NOTE 7)	(NOTE 7)	2	250	4	2	255
300	1	* 2-1/2	3	3	3	3	(NOTE 7)	(NOTE 7)	2	350	4	2	310
350	1	* 3	3-1/2	3	3-1/2	3-1/2	(NOTE 7)	(NOTE 7)	2-1/2	500	3	1/0	380
400	1	* 3	3-1/2	3-1/2	4	4	(NOTE 7)	(NOTE 7)	3	600	3	1/0	420
450	2	* 2	2-1/2	2	2-1/2	2-1/2	(NOTE 7)	(NOTE 7)	2	4/0	2	1/0	460
500	2	2	2-1/2	2-1/2	3	3	(NOTE 7)	(NOTE 7)	2	250	2	1/0	510
600	2	* 2-1/2	3	3	3	3	(NOTE 7)	(NOTE 7)	2-1/2	350	1	2/0	620
700	2	* 3	3-1/2	3	3-1/2	3-1/2	(NOTE 7)	(NOTE 7)	2-1/2	500	1/0	2/0	760
800	2	* 3	3-1/2	3-1/2	4	4	(NOTE 7)	(NOTE 7)	3	600	1/0	3/0	840

CIRCUIT SIZE AMPS	QTY SETS	CONDUIT TRADE SIZE (NOTE 2) NONE (NOTE 5)	N	G (NOTE 4)	NG	NGI	NNG	NNGI	GS (NOTE 6)	CONDUCTORS (NOTE 1) (NOTE 3) PHASE/ NEUTRAL	EGC/ IEGC (NOTE 9)	GEC/ SSBJ (NOTE 8)	AMPACITY
		3 PH 3 W	3 PH 4W	3 PH or 1 PH 3W EGC	3 PH 4W EGC	3 PH 4W EGC/IEGC	3 PH 4W EGC	3 PH 4W EGC/IEGC	1 PH 2W EGC				
1000	4	2	2-1/2	2-1/2	3	3	(NOTE 7)	(NOTE 7)	2	250	2/0	2/0	1020
1200	4	* 2-1/2	3	3	3	3-1/2	(NOTE 7)	(NOTE 7)	2-1/2	350	3/0	3/0	1240
1600	4	* 3	3-1/2	3-1/2	4	4	(NOTE 7)	(NOTE 7)	3	600	4/0	300	1680
2000	6	2-1/2	3	3	3-1/2	3-1/2	(NOTE 7)	(NOTE 7)	2-1/2	400	250	300	2010
2500	6	* 3	3-1/2	3-1/2	4	5	(NOTE 7)	(NOTE 7)	3	600	350	400	2520
3000	8	* 3	3-1/2	3-1/2	3-1/2	4	(NOTE 7)	(NOTE 7)	3	500	400	500	3040
4000	10	* 3	3-1/2	3-1/2	4	5	(NOTE 7)	(NOTE 7)	3	600	500	** 600	4200
5000	12	* 3	3-1/2	3-1/2	4	5	(NOTE 7)	(NOTE 7)	3	600	** 600	** 600	5040

NOTE 1 THE RACEWAY FILL CALCULATIONS HAVE BEEN PERFORMED USING INSULATION TYPE THHN DIMENSIONS ARE FROM NEC CH. 9, TABLES 4 AND 5. THE EGC/IEGC INSULATION IS THE SAME AS IT IS FOR THE PHASE/NEUTRAL CONDUCTORS

NOTE 2 CONDUIT SIZE IS BASED ON SCHEDULE 80 PVC.

NOTE 3 CONDUCTOR SIZES ARE LIMITED TO 1/0 AWG THROUGH 600 KCMIL, AND ARE BASED ON 60 DEG C TERMINALS FOR CIRCUITS RATED 100 AMPS OR LESS 75 DEG C TERMINALS FOR ALL OTHER SIZES.

NOTE 4 FOR THREE WIRE SINGLE PHASE FEEDERS AND BRANCH CIRCUITS, USE THIS COLUMN.

NOTE 5 FOR SINGLE PHASE SERVICES, USE THIS COLUMN

NOTE 6 FOR TWO WIRE SINGLE PHASE FEEDERS AND BRANCH CIRCUITS, USE THIS COLUMN.

NOTE 7 FOR LARGE FEEDERS REQUIRING 200% RATED NEUTRALS, SEE ONELINE DIAGRAM FOR SPECIFIC CONDUIT AND CONDUCTOR SIZES AND QUANTITIES

NOTE 8 USE THIS COLUMN FOR SIZING SEPERATELY DERIVED SYSTEMS GROUNDING CONDUCTORS, [NEC TABLE 250.66] AND FOR SIZING GROUNDING ELECTRODE CONDUCTORS [NEC TABLE 250.122]

NOTE 9 USE THIS COLUMN FOR SIZING EQUIPMENT GROUNDING CONDUCTORS (NEC TABLE 250.122, WHERE THIS COLUMN IS USED, VERIFY ADEQUATE CONDUIT SIZING FOR INCREASED GROUND CONDUCTOR SIZING

* CONSIDER INCREASING THE RACEWAY BY ONE TRADE SIZE TO PREVENT POSSIBLE JAMMING [NEC CHAPTER 9, TABLE 1, INFORMATIONAL NOTE 2

** THE EGC IS NOT REQUIRED TO BE LARGER IN SIZE THAN THE CIRCUIT CONDUCTORS [NEC 250.122(A)

SUBSCRIPT	CIRCUIT IDENTIFICATION KEY
NONE	(3) PHASE CONDUCTORS, (0) EGC OF THE WIRE TYPE.
N	(3) PHASE CONDUCTORS, (1) NEUTRAL CONDUCTOR, (0) EGC OF THE WIRE TYPE.
NN	(3) PHASE CONDUCTORS, (200% RATED) NEUTRAL CONDUCTOR, (0) EGC OF THE WIRE TYPE.
G	(3) PHASE CONDUCTORS, (1) EGC
NG	(3) PHASE CONDUCTORS, (1) NEUTRAL CONDUCTOR, (1) EGC
NNG	(3) PHASE CONDUCTORS, (200% RATED) NEUTRAL CONDUCTOR, (1) EGC
NGI	(3) PHASE CONDUCTORS, (1) NEUTRAL CONDUCTOR, (1) EGC, (1) ISOLATED EGC (IEGC)
NNGI	(3) PHASE CONDUCTORS, (200% RATED) NEUTRAL CONDUCTOR, (1) EGC, (1) ISOLATED EGC (IEGC)
GS	(1) PHASE CONDUCTORS, (1) NEUTRAL CONDUCTOR, (1) EGC
EGC/IEGC	(1) EQUIPMENT GROUNDING CONDUCTOR/ISOLATED EQUIPMENT GROUNDING CONDUCTOR
GEC/SSBJ	(1) GROUNDING ELECTRODE CONDUCTOR/ISOLATED EQUIPMENT GROUNDING CONDUCTOR

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1/6/2025

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BID SET: 1/6/2025
Job: 2344 Date: 1/6/2025
.DWG ID –

E6.1

P1A

MOUNTING SURFACE | VOLTS 240/120V 2P 3W | MAIN MLO
BUS AMPS 600 | LUGS STANDARD
NEUTRAL 100% | AIC 42,000

NOTE 1 LOCATED IN BUILDING 1
NOTE 2

CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B	CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B
1	20/2	OEB1-02	1.9		2	40/2	HP-1.1	2.7	
3	|			1.9	4	|		2.7
5	20/2	OEB1-02	1.9		6	40/2	HP-1.3	2.7	
7	|			1.9	8	|		2.7
9	20/2	OEB1-02	1.9		10	30/2	HP-1.2	1.6	
11	|			1.9	12	|		1.6
13	70/2	FC-1.3	5		14	40/2	HP-1.4	2.7	
15	|			5	16	|		2.7
17	30/2	EF-1	2		18	30/2	ERV-1.3	2.4	
19	|			2	20	|		2.4
21	70/2	FC-1.4	5		22	20/2	FC-1.1, FC-1.2, FC-1.5	0.14	
23	|			5	24	|		0.14
25	70/2	OEB1-04	4.8		26	15/2	ERV-1.1	0.39	
27	|			4.8	28	|		0.39
29	30/2	HP-1.5	2.3		30	15/2	ERV-1.2	0.39	
31	|			2.3	32	|		0.39
33	20/1	[GFCI BREAKER] HT-01	1.4		34	30/2	WH-1	2.4	
35	20/1	[GFCI BREAKER] HT-01		1.4	36	|			2.4
37	20/1	[GFCI BREAKER] HT-01	0.96		38	30/2	WH-2	2.9	
39	20/1	SPARE		0	40	|			2.9
41	20/1	SPARE	0		42	20/1	CP-1	0.04	
43	20/1	SPARE		0	44	15/2	BDU-1.1		0.08
45	20/1	SPARE	0		46	|		0.08	
47	20/1	SPARE		0	48	20/1	HLVS-1.1		0.6
49	20/1	SPARE	0		50	20/1	HLVS-1.2	0.6	
51	20/2	SPARE		0	52	20/2	OEB1-02		1.9
53	|		0		54	|		1.9	
							TOTAL CONNECTED KVA BY PHASE	48	47
							TOTAL CONNECTED AMPS BY PHASE	400	390

	CONN. KVA	CALC. KVA			CONN. KVA	CALC. KVA	
LIGHTING	0	0	(125%)	CONTINUOUS	11	13	(125%)
LARGEST MOTOR	9.6	2.4	(125%)	HEATING	24	24	(100%)
OTHER MOTORS	46	46	(100%)	NONCONTINUOUS	15	15	(100%)
RECEPTACLES	0.04	0.04	(50%>10)	KITCHEN EQUIP	0	0	(N/A)
COMPUTER	0	0	(100%)	NONCOIN/DIVERSE	0	0	(N/A)
				TOTAL KVA	96	100	

BALANCED PHASE AMPS 420

P1B

MOUNTING SURFACE | VOLTS 240/120V 2P 3W | MAIN MLO
BUS AMPS 400 | LUGS STANDARD
NEUTRAL 100% | AIC 42,000

NOTE 1 LOCATED IN BUILDING 1
NOTE 2

CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B	CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B
1	20/1	EXTERIOR LIGHTING	0.24		2	40/2	EVR	3.8	
3	20/1	LIGHTING		0.62	4	|			3.8
5	20/1	LIGHTING	1.9		6	40/2	EVC	3.8	
7	20/2	[GFCI BREAKER] OEB1-03		1.9	8	|			3.8
9	|		1.9		10	20/1	OEB1-03	1	
11	20/1	SPARE		0	12	20/1	OEB1-03		1
13	20/1	RECEP	0.18		14	20/1	OEB1-03	1	
15	20/1	RECEP		0.54	16	20/1	OEB1-03		1
17	20/1	RECEP	0.54		18	20/2	[GFCI BREAKER] [GFCI BREAKER] OEB1-01	1.9	
19	20/1	RECEP		0.54	20	|			1.9
21	20/1	DROP CORD	1		22	20/2	[GFCI BREAKER] OEB1-01	1.9	
23	20/1	DROP CORD		1	24	|			1.9
25	20/1	DROP CORD	1		26	20/2	[GFCI BREAKER] [GFCI BREAKER] OEB1-01	1.9	
27	20/1	DROP CORD		1	28	|			1.9
29	20/1	DROP CORD	1		30	20/1	[GFCI BREAKER] REFRIGERATOR	0.8	
31	20/1	DROP CORD		1	32	20/1	RECEP		0.18
33	20/1	RECEP	0.18		34	20/1	RECEP	0.36	
35	20/1	EH-1		0.55	36	20/1	RECEP		0.36
37	20/1	RECEP	0.54		38	20/1	RECEP	0.36	
39	20/1	RECEP		0.54	40	20/1	RECEP		0.36
41	20/1	RECEP	0.36		42	20/1	RECEP	0.36	
43	20/1	RECEP		0.36	44	20/1	RECEP		0.36
45	20/1	RECEP	0.36		46	20/1	RECEP	0.36	
47	20/1	RECEP		0.36	48	20/1	RECEP		0.36
49	20/1	RECEP	0.36		50	20/1	RECEP	0.54	
51	20/1	RECEP		0.36	52	20/1	RECEP		0.54
53	20/1	RECEP	0.36		54	40/2	EVR	3.8	
55	20/1	SITE - OES-01		1	56	|			3.8
57	20/1	SPARE	0		58	40/2	EV	3.8	
59	20/1	SPARE		0	60	|			3.8
61	20/1	SPARE	0		62	40/2	EV	3.8	
63	20/1	SPARE		0	64	|			3.8
65	-/1	SPACE	0		66	40/2	EVC	3.8	
67	-/1	SPACE		0	68	|			3.8
69	-/1	SPACE	0		70	40/2	EVR	3.8	
71	-/1	SPACE		0	72	|			3.8
73	-/1	SPACE	0		74	20/2	OES-02	1	
75	-/1	SPACE		0	76	|			1
77	-/1	SPACE	0		78	20/1	SPARE	0	
79	-/1	SPACE		0	80	20/1	SPARE		0
81	-/1	SPACE	0		82	20/1	SPARE	0	
83	-/1	SPACE		0	84	20/1	SPARE		0
							TOTAL CONNECTED KVA BY PHASE	48	48
							TOTAL CONNECTED AMPS BY PHASE	400	400

	CONN. KVA	CALC. KVA			CONN. KVA	CALC. KVA	
LIGHTING	2.7	3.4	(125%)	CONTINUOUS	0	0	(125%)
LARGEST MOTOR	2	0.51	(125%)	HEATING	0.55	0.55	(100%)
OTHER MOTORS	6	6	(100%)	NONCONTINUOUS	1	1	(100%)
RECEPTACLES	86	48	(50%>10)	KITCHEN EQUIP	0	0	(N/A)
COMPUTER	0	0	(100%)	NONCOIN/DIVERSE	0	0	(N/A)
				TOTAL KVA	96	59	

BALANCED PHASE AMPS 250

P2A

MOUNTING SURFACE | VOLTS 240/120V 2P 3W | MAIN MLO
BUS AMPS 800 | LUGS STANDARD
NEUTRAL 100% | AIC 42,000

NOTE 1 LOCATED IN BUILDING 2
NOTE 2

CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B	CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B
1	30/2	WH-2	2.9		2	40/2	HP-2.1	2.7	
3	|			2.9	4	|		2.7
5	20/1	RECEP	0.18		6	40/2	HP-2.2	2.7	
7	20/1	RECEP		0.54	8	|			2.7
9	20/1	[GFCI BREAKER] REFRIGERATOR	0.8		10	15/2	BDU-2.1	0.08	
11	20/2	[GFCI BREAKER] OEB2-06		1.9	12	|			0.08
13	|		1.9		14	20/2	FC-2.1.4, FC-2.1.3, FC-2.1.2	0.14	
15	20/1	RECEP		0.18	16	|			0.14
17	20/1	OEB2-07	1		18	40/2	HP-2.4	2.7	
19	20/1	EH-1		0.55	20	|			2.7
21	20/1	MAIN FLOOR STORAGE AND OFFICE AREA LIGHTING	1.6		22	40/2	HP-2.5	2.7	
23	20/1	UPPER FLOOR LIGHTING		0.44	24	|			2.7
25	20/1	[GFCI BREAKER] HT-02	1.2		26	20/2	FC-2.2.4, FC-2.2.3, FC-2.2.2, FC-2.2.1	0.19	
27	20/1	[GFCI BREAKER] HT-03, HT-04, HT-05		1.5	28	|			0.19
29	20/1	SPARE	0		30	15/2	ERV-2.1	0.39	
31	20/1	SPARE		0	32	|			0.39
33	20/1	SPARE	0		34	70/2	FC-2.4	5	
35	20/1	SPARE		0	36	|			5
37	20/1	OEB2-07	1		38	70/2	FC-2.5	5	
39	20/1	OEB2-07		1	40	|			5
41	20/2	SPARE	0		42	20/1	HLVS-2.1	0.6	
43	|			0	44	20/1	HLVS-2.2		0.6
45	20/2	SPARE	0		46	15/2	BDU-2.2	0.08	
47	|			0	48	|			0.08
49	20/1	RECEP	0.54		50	20/1	RECEP	0.72	
51	20/1	RECEP		0.72	52	400/2	TRANSFER SWITCH ATS1		42
53	20/1	RECEP	0.54		54	|		40	
							TOTAL CONNECTED KVA BY PHASE	75	75
							TOTAL CONNECTED AMPS BY PHASE	620	620

	CONN. KVA	CALC. KVA			CONN. KVA	CALC. KVA	
LIGHTING	5.5	6.9	(125%)	CONTINUOUS	6.1	7.6	(125%)
LARGEST MOTOR	5.4	1.4	(125%)	HEATING	59	59	(100%)
OTHER MOTORS	45	45	(100%)	NONCONTINUOUS	0	0	(100%)
RECEPTACLES	34	22	(50%>10)	KITCHEN EQUIP	0	0	(N/A)
COMPUTER	0	0	(100%)	NONCOIN/DIVERSE	0	0	(N/A)
				TOTAL KVA	150	140	

BALANCED PHASE AMPS 590

P2B

MOUNTING SURFACE | VOLTS 240/120V 2P 3W | MAIN MLO
BUS AMPS 400 | LUGS STANDARD
NEUTRAL 100% | AIC 42,000

NOTE 1 LOCATED IN BUILDING 2
NOTE 2

CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B	CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B
1	20/1	[GFCI BREAKER] REFRIGERATOR	0.8		2	20/1	[GFCI BREAKER] RECEP	0.36	
3	50/2	OEB2-03		4.8	4	20/1	[GFCI BREAKER] RECEP		0.36
5	|		4.8		6	20/1	[GFCI BREAKER] RECEP	0.36	
7	15/2	OEB2-05		1.4	8	20/1	[GFCI BREAKER] RECEP		0.36
9	|		1.4		10	20/1	[GFCI BREAKER] RECEP	0.36	
11	20/1	OEB2-05.2		0.3	12	20/2	[GFCI BREAKER] OEB2-04		0.05
13	20/1	OEB2-05.3	0.2		14	|		0.05	
15	40/2	HP-2.3		2.7	16	20/1	HLVS-2.3		0.19
17	|		2.7		18	20/2	EF-2	1.2	
19	20/2	ERV-2.2		1.7	20	|			1.2
21	|		1.7		22	70/2	FC-2.3	5	
23	200/2	MAU-1	14		24	|			5
25	|			14	26	20/1	HLVS-2.4	0.19	
27	20/1	CORONER SPACE LIGHTING		1.3	28	20/1	RECEP		0.72
29	20/1	EXTERIOR LIGHTING	1		30	20/1	RECEP	0.9	
31	20/1	[GFCI BREAKER] RECEP		0.36	32	20/1	SPARE		0
33	20/1	[GFCI BREAKER] RECEP	0.54		34	20/1	RECEP	0.72	
35	20/1	[GFCI BREAKER] RECEP		0.54	36	20/1	RECEP		0.72
37	20/2	[GFCI BREAKER] OEB2-02	2.3		38	20/1	RECEP	0.36	
39	|			2.3	40	20/1	OEB2-07		1
41	20/1	[GFCI BREAKER] OEB2-01	1.5		42	20/1	DIGITAL TIME SWITCH	1	
43	20/1	RECEP		0.18	44	20/1	RECEP		0.18
45	20/1	RECEP	0.36		46	20/1	RECEP	0.36	
47	20/1	RECEP		0.36	48	20/1	CP-1		0.04
49	20/1	RECEP	0.36		50	-/1	SPACE	0	
51	20/1	RECEP		0.72	52	-/1	SPACE		0
53	20/1	RECEP	0.18		54	-/1	SPACE	0	
							TOTAL CONNECTED KVA BY PHASE	42	40
							TOTAL CONNECTED AMPS BY PHASE	350	330

	CONN. KVA	CALC. KVA			CONN. KVA	CALC. KVA	
LIGHTING	3.5	4.3	(125%)	CONTINUOUS	0	0	(125%)
LARGEST MOTOR	5.4	1.4	(125%)	HEATING	36	36	(100%)
OTHER MOTORS	17	17	(100%)	NONCONTINUOUS	0	0	(100%)
RECEPTACLES	26	18	(50%>10)	KITCHEN EQUIP	0	0	(N/A)
COMPUTER	0	0	(100%)	NONCOIN/DIVERSE	0	0	(N/A)
				TOTAL KVA	82	77	

BALANCED PHASE AMPS 320

P3A

MOUNTING SURFACE | VOLTS 240/120V 2P 3W | MAIN MLO
BUS AMPS 600 | LUGS STANDARD
NEUTRAL 100% | AIC 42,000

NOTE 1 LOCATED IN BUILDING 3
NOTE 2

CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B	CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B
1	20/1	RECEP	0.36		2	40/2	HP-3.1	2.7	
3	20/1	RECEP		0.36	4	|			2.7
5	20/1	RECEP	0.36		6	40/2	HP-3.2	2.7	
7	20/1	RECEP		0.9	8	|			2.7
9	20/1	RECEP	0.18		10	40/2	HP-3.3	2.7	
11	20/1	RECEP		0.9	12	|			2.7
13	20/1	RECEP	0.54		14	40/2	HP-3.4	2.7	
15	20/1	[GFCI BREAKER] REFRIGERATOR		0.8	16	|			2.7
17	20/1	RECEP	0.36		18	70/2	FC-3.1.1	5	
19	20/1	RECEP		0.54	20	|			5
21	20/1	RECEP	0.54		22	15/2	BDU-3.1	0.08	
23	20/1	RECEP		0.36	24	|			0.08
25	20/1	RECEP	0.36		26	20/2	FC-3.1.4, FC-3.1.3, FC-3.1.2	0.14	
27	20/1	RECEP		0.36	28	|			0.14
29	20/1	RECEP	0.36		30	20/2	FC-3.2.3, FC-3.2.2, FC-3.2.1, FC-3.3.3, FC-3.3.1, FC-3.4.2, FC-3.4.1	0.34	
31	20/1	RECEP		0.36	32	|			0.34
33	20/1	RECEP	0.36		34	70/2	FC-3.3.2	5	
35	20/1	RECEP		0.36	36	|			5
37	20/1	RECEP	0.36		38	15/2	BDU-3.2	0.08	
39	20/1	RECEP		0.36	40	|			0.08
41	20/1	RECEP	0.36		42	15/2	BDU-3.3	0.08	
43	20/1	RECEP		0.54	44	|			0.08
45	20/1	RECEP	0.36		46	15/2	BDU-3.4	0.08	
47	20/1	RECEP		0.72	48	|			0.08
49	20/1	RECEP	0.36		50	15/2	ERV-3.1	1.2	
51	20/1	RECEP		0.72	52	|			1.2
53	20/1	RECEP	0.9		54	70/2	FC-3.5	5	
55	20/1	RECEP, [GFCI BREAKER] REFRIGERATOR		0.98	56	|			5
57	20/1	RECEP	0.36		58	70/2	FC-3.6	5	
59	20/1	RECEP		0.36	60	|			5
61	20/1	RECEP	0.72		62	20/1	HLVS-3.1	0.6	
63	20/1	RECEP		0.72	64	20/1	HLVS-3.2		0.6
65	20/1	RECEP	0.72		66	40/2	HP-3.5	2.7	
67	20/1	RECEP		0.54	68	|			2.7
69	20/1	RECEP	0.36		70	40/2	HP-3.6	2.7	
71	20/1	RECEP		0.72	72	|			2.7
73	20/1	RECEP	0.18		74	20/1	EH-1	1.1	
75	20/1	RECEP		0.18	76	20/1	EH-1		1.1
77	20/1	RECEP	0.18		78	20/1	SPARE	0	
79	20/1	RECEP		0.18	80	20/1	SPARE		0
81	20/1	RECEP	0.18		82	225/2	PANEL P3B	14	
83	20/1	RECEP		0.18	84	|			13
							TOTAL CONNECTED KVA BY PHASE	62	64
							TOTAL CONNECTED AMPS BY PHASE	520	540

	CONN. KVA	CALC. KVA			CONN. KVA	CALC. KVA	
LIGHTING	3.9	4.8	(125%)	CONTINUOUS	6.4	8	(125%)
LARGEST MOTOR	5.4	1.4	(125%)	HEATING	45	45	(100%)
OTHER MOTORS	42	42	(100%)	NONCONTINUOUS	0	0	(100%)
RECEPTACLES	30	20	(50%>10)	KITCHEN EQUIP	0	0	(N/A)
COMPUTER	0	0	(100%)	NONCOIN/DIVERSE	0	0	(N/A)
				TOTAL KVA	130	120	

BALANCED PHASE AMPS 480

P3B

MOUNTING SURFACE | VOLTS 240/120V 2P 3W | MAIN MLO
BUS AMPS 225 | LUGS STANDARD
NEUTRAL 100% | AIC 42,000

NOTE 1 LOCATED IN BUILDING 3
NOTE 2

CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B	CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B
1	20/1	EXTERIOR LIGHTING	0.27		2	20/1	SPARE	0	
3	20/1	LIGHTING		1.7	4	20/1	SPARE		0
5	20/1	LIGHTING	1.9		6	20/1	SPARE	0	
7	20/1	SPARE		0	8	20/1	SPARE		0
9	20/1	SPARE	0		10	20/1	SPARE	0	
11	20/1	SPARE		0	12	20/1	SPARE		0
13	20/1	RECEP	0.18		14	20/2	[GFCI BREAKER] OEB3-01	1.9	
15	30/2	[GFCI BREAKER] OEB3-02		2.9	16	|			1.9
17	|		2.9		18	20/1	OEB3-03	1	
19	30/2	WH-2		2.9	20	20/1	OEB3-03		1
21	|		2.9		22	20/1	OEB3-03	1	
23	20/1	[GFCI BREAKER] HT-02		1.2	24	20/1	OEB3-03		1
25	20/1	[GFCI BREAKER] HT-03, HT-04, HT-05	1.5		26	20/1	SPARE	0	
27	20/1	[GFCI BREAKER] OEB3-04		0.5	28	20/1	SPARE		0
29	20/1	SPARE	0		30	20/1	SPARE	0	
31	20/1	SPARE		0	32	20/1	SPARE		0
33	20/1	SPACE	0		34	-/1	SPACE	0	
35	-/1	SPACE		0	36	-/1	SPACE		0
37	-/1	SPACE	0		38	-/1	SPACE	0	
39	-/1	SPACE		0	40	-/1	SPACE		0
41	-/1	SPACE	0		42	-/1	SPACE	0	
							TOTAL CONNECTED KVA BY PHASE	14	13
							TOTAL CONNECTED AMPS BY PHASE	110	110

	CONN. KVA	CALC. KVA			CONN. KVA	CALC. KVA	
LIGHTING	3.9	4.8	(125%)	CONTINUOUS	5.8	7.2	(125%)
LARGEST MOTOR	1	0.25	(125%)	HEATING	2.7	2.7	(100%)
OTHER MOTORS	4	4	(100%)	NONCONTINUOUS	0	0	(100%)
RECEPTACLES	10	10	(50%>10)	KITCHEN EQUIP	0	0	(N/A)
COMPUTER	0	0	(100%)	NONCOIN/DIVERSE	0	0	(N/A)
				TOTAL KVA	27	29	

BALANCED PHASE AMPS 120

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01/09/2024

Drwn: CAL Chkd: JRL

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Job: 2344 Date: 01/06/2024
DWG ID --

E6.2

MECHANICAL EQUIPMENT SCHEDULE

DESCRIPTION	CALLOUT	VOLTS, PHASE	WIRE CALLOUT	KVA	AMPS	BREAKER SIZE	DISCONNECT DESCRIPTION
BC CONTROLLER	BDU-1.1	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	0.17	0.69	15/2	MOTOR RATED SWITCH
BC CONTROLLER	BDU-2.1	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	0.17	0.69	15/2	MOTOR RATED SWITCH
BC CONTROLLER	BDU-2.2	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.17	0.69	15/2	MOTOR RATED SWITCH
BC CONTROLLER	BDU-3.1	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	0.17	0.69	15/2	MOTOR RATED SWITCH
BC CONTROLLER	BDU-3.2	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.17	0.69	15/2	MOTOR RATED SWITCH
BC CONTROLLER	BDU-3.3	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.17	0.69	15/2	MOTOR RATED SWITCH
BC CONTROLLER	BDU-3.4	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.17	0.69	15/2	MOTOR RATED SWITCH
PLUMBING PUMP	CP-1	120V 1P 2W	3/4"C,1#12,#12N,#12G	0.04	0.37	20/1	RECEPTACLE
PLUMBING PUMP	CP-1	120V 1P 2W	3/4"C,1#10,#10N,#10G	0.04	0.37	20/1	RECEPTACLE
EXHAUST FAN	EF-1	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	4.08	17	30/2	MOTOR RATED SWITCH, NEMA 3R
EXHAUST FAN	EF-2	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	2.4	10	20/2	MOTOR RATED SWITCH, NEMA 3R
ELECTRIC HEATER	EH-1	120V 1P 2W	3/4"C,1#12,#12N,#12G	0.55	4.6	20/1	HARDWIRED
ELECTRIC HEATER	EH-1	120V 1P 2W	3/4"C,1#12,#12N,#12G	0.55	4.6	20/1	HARDWIRED
ELECTRIC HEATER	EH-1	120V 1P 2W	3/4"C,1#10,#10N,#10G	0.55	4.6	20/1	HARDWIRED
ELECTRIC HEATER	EH-1	120V 1P 2W	3/4"C,1#12,#12N,#12G	0.55	4.6	20/1	HARDWIRED
ELECTRIC HEATER	EH-1	120V 1P 2W	3/4"C,1#12,#12N,#12G	0.55	4.6	20/1	HARDWIRED
ELECTRIC HEATER	EH-1	120V 1P 2W	3/4"C,1#10,#10N,#10G	0.55	4.6	20/1	HARDWIRED
ENERGY RECOVERY UNIT	ERV-1.1	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	0.79	3.28	15/2	MOTOR RATED SWITCH
ENERGY RECOVERY UNIT	ERV-1.2	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	0.79	3.28	15/2	MOTOR RATED SWITCH
ENERGY RECOVERY UNIT	ERV-1.3	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	4.7	19.6	30/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
ENERGY RECOVERY UNIT	ERV-2.1	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.79	3.28	15/2	MOTOR RATED SWITCH
ENERGY RECOVERY UNIT	ERV-2.2	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	3.36	14	20/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
ENERGY RECOVERY UNIT	ERV-3.1	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	2.4	10	15/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-1.1	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-1.2	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-1.3	240/120V 2P 3W	1"C,2#4,#4N,#8G	10.1	42.07	70/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-1.4	240/120V 2P 3W	1"C,2#4,#4N,#8G	10.1	42.07	70/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-1.5	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-2.1.1	240/120V 2P 3W		0.1	0.4		MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-2.1.2	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-2.1.3	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-2.1.4	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-2.2.1	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-2.2.2	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-2.2.3	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-2.2.4	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-2.3	240/120V 2P 3W	1"C,2#4,#4N,#8G	10.1	42.07	70/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-2.4	240/120V 2P 3W	1"C,2#4,#4N,#8G	10.1	42.07	70/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-2.5	240/120V 2P 3W	1"C,2#4,#4N,#8G	10.1	42.07	70/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-3.1.1	240/120V 2P 3W	1"C,2#4,#4N,#8G	10.1	42.07	70/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-3.1.2	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-3.1.3	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-3.1.4	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-3.2.1	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-3.2.2	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-3.2.3	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-3.3.2	240/120V 2P 3W	1"C,2#4,#4N,#8G	10.1	42.07	70/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-3.3.1	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-3.3.3	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-3.4.1	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-3.4.2	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	0.1	0.4	20/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-3.5	240/120V 2P 3W	1"C,2#4,#4N,#8G	10.1	42.07	70/2	MOTOR RATED SWITCH
FAN COIL HEAT PUMP - INDOOR UNIT	FC-3.6	240/120V 2P 3W	1"C,2#4,#4N,#8G	10.1	42.07	70/2	MOTOR RATED SWITCH
HEAT PUMP - OUTDOOR UNIT	HLVS-1.1	120V 1P 2W	3/4"C,1#12,#12N,#12G	0.6	5	20/1	MOTOR RATED SWITCH
HEAT PUMP - OUTDOOR UNIT	HLVS-1.2	120V 1P 2W	3/4"C,1#12,#12N,#12G	0.6	5	20/1	MOTOR RATED SWITCH
HEAT PUMP - OUTDOOR UNIT	HLVS-2.1	120V 1P 2W	3/4"C,1#10,#10N,#10G	0.6	5	20/1	MOTOR RATED SWITCH
HEAT PUMP - OUTDOOR UNIT	HLVS-2.2	120V 1P 2W	3/4"C,1#10,#10N,#10G	0.6	5	20/1	MOTOR RATED SWITCH
HEAT PUMP - OUTDOOR UNIT	HLVS-2.3	120V 1P 2W	3/4"C,1#10,#10N,#10G	0.19	1.6	20/1	MOTOR RATED SWITCH
HEAT PUMP - OUTDOOR UNIT	HLVS-2.4	120V 1P 2W	3/4"C,1#10,#10N,#10G	0.19	1.6	20/1	MOTOR RATED SWITCH
HEAT PUMP - OUTDOOR UNIT	HLVS-3.1	120V 1P 2W	3/4"C,1#10,#10N,#10G	0.6	5	20/1	MOTOR RATED SWITCH
HEAT PUMP - OUTDOOR UNIT	HLVS-3.2	120V 1P 2W	3/4"C,1#10,#10N,#10G	0.6	5	20/1	MOTOR RATED SWITCH
HEAT PUMP - OUTDOOR UNIT	HP-1.1	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	5.44	22.67	40/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
HEAT PUMP - OUTDOOR UNIT	HP-1.2	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	3.16	13.17	30/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
HEAT PUMP - OUTDOOR UNIT	HP-1.3	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	5.44	22.67	40/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
HEAT PUMP - OUTDOOR UNIT	HP-1.4	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	5.44	22.67	40/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
HEAT PUMP - OUTDOOR UNIT	HP-1.5	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	4.56	19	30/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
HEAT PUMP - OUTDOOR UNIT	HP-2.1	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	5.44	22.67	40/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
HEAT PUMP - OUTDOOR UNIT	HP-2.2	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	5.44	22.67	40/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
HEAT PUMP - OUTDOOR UNIT	HP-2.3	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	5.44	22.67	40/2	NON-FUSED DISCONNECT, 30A, NEMA 3R

MECHANICAL EQUIPMENT SCHEDULE (CONT.)

DESCRIPTION	CALLOUT	VOLTS, PHASE	WIRE CALLOUT	KVA	AMPS	BREAKER SIZE	DISCONNECT DESCRIPTION
HEAT PUMP - OUTDOOR UNIT	HP-2.4	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	5.44	22.67	40/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
HEAT PUMP - OUTDOOR UNIT	HP-2.5	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	5.44	22.67	40/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
HEAT PUMP - OUTDOOR UNIT	HP-3.1	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	5.44	22.67	40/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
HEAT PUMP - OUTDOOR UNIT	HP-3.2	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	5.44	22.67	40/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
HEAT PUMP - OUTDOOR UNIT	HP-3.3	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	5.44	22.67	40/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
HEAT PUMP - OUTDOOR UNIT	HP-3.4	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	5.44	22.67	40/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
HEAT PUMP - OUTDOOR UNIT	HP-3.5	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	5.44	22.67	40/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
HEAT PUMP - OUTDOOR UNIT	HP-3.6	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	5.44	22.67	40/2	NON-FUSED DISCONNECT, 30A, NEMA 3R
MAKEUP AIR UNIT	MAU-1	240/120V 2P 3W	2"C,2#3/0,#3/0N,#6G	27.07	112.79	200/2	HARDWIRED. PROVIDED WITH FACTORY DISCONNECT. COORDINATE FINAL UNIT ELECTRICAL REQUIREMENTS WITH MECHANICAL.
ELECTRIC WATER HEATER	WH-1	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	4.8	20	30/2	MOTOR RATED SWITCH
ELECTRIC WATER HEATER	WH-2	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	5.76	24	30/2	MOTOR RATED SWITCH
ELECTRIC WATER HEATER	WH-2	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	5.76	24	30/2	MOTOR RATED SWITCH
ELECTRIC WATER HEATER	WH-2	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	5.76	24	30/2	MOTOR RATED SWITCH

OWNER EQUIPMENT SCHEDULE

DESCRIPTION	CALLOUT	VOLTS, PHASE	WIRE CALLOUT	KVA	AMPS	BREAKER SIZE	DISCONNECT DESCRIPTION
EV CHAGER	EV	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	7.68	32	40/2	HARDWIRED
EV CHAGER	EV	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	7.68	32	40/2	HARDWIRED
EV CAPABLE PROVISION	EVC	240/120V 2P 3W	1"CO	7.68	32	40/2	JUNCTION BOX, WEATHERPROOF
EV CAPABLE PROVISION	EVC	240/120V 2P 3W	1"CO	7.68	32	40/2	JUNCTION BOX, WEATHERPROOF
EV READY PROVISION	EVR	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	7.68	32	40/2	JUNCTION BOX, WEATHERPROOF
EV READY PROVISION	EVR	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	7.68	32	40/2	JUNCTION BOX, WEATHERPROOF
EV READY PROVISION	EVR	240/120V 2P 3W	3/4"C,2#8,#8N,#10G	7.68	32	40/2	JUNCTION BOX, WEATHERPROOF
HEAT TRACE	HT-01	120V 1P 2W	3/4"C,1#12,#12N,#12G	0.48	4	20/1	HARDWIRED
HEAT TRACE	HT-02	120V 1P 2W	3/4"C,1#10,#10N,#10G	1.16	9.67	20/1	HARDWIRED
HEAT TRACE	HT-03	120V 1P 2W	3/4"C,1#10,#10N,#10G	0.32	2.67	20/1	HARDWIRED
HEAT TRACE	HT-04	120V 1P 2W	3/4"C,1#10,#10N,#10G	0.8	6.67	20/1	HARDWIRED
HEAT TRACE	HT-05	120V 1P 2W	3/4"C,1#10,#10N,#10G	0.4	3.33	20/1	HARDWIRED
240V EQUIPMENT POWER PROVISION	OEB1-01	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	3.84	16	20/2	SPECIAL RECEPTACLE
240V EQUIPMENT POWER PROVISION	OEB1-01	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	3.84	16	20/2	SPECIAL RECEPTACLE
240V EQUIPMENT POWER PROVISION	OEB1-01	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	3.84	16	20/2	SPECIAL RECEPTACLE
VEHICLE LIFT	OEB1-02	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	3.84	16	20/2	HARDWIRED
VEHICLE LIFT	OEB1-02	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	3.84	16	20/2	HARDWIRED
VEHICLE LIFT	OEB1-02	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	3.84	16	20/2	HARDWIRED
VEHICLE LIFT	OEB1-02	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	3.84	16	20/2	HARDWIRED
TIRE MACHINE	OEB1-03	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	3.84	16	20/2	SPECIAL RECEPTACLE
OVERHEAD DOOR	OEB1-03	120V 1P 2W	3/4"C,1#12,#12N,#12G	1	8.33	20/1	TOGGLE SWITCH.
OVERHEAD DOOR	OEB1-03	120V 1P 2W	3/4"C,1#10,#10N,#10G	1	8.33	20/1	TOGGLE SWITCH.
OVERHEAD DOOR	OEB1-03	120V 1P 2W	3/4"C,1#12,#12N,#12G	1	8.33	20/1	TOGGLE SWITCH.
OVERHEAD DOOR	OEB1-03	120V 1P 2W	3/4"C,1#12,#12N,#12G	1	8.33	20/1	TOGGLE SWITCH.
AIR COMPRESSOR	OEB1-04	240/120V 2P 3W	1"C,2#4,#4N,#8G	9.6	40	70/2	NON-FUSED DISCONNECT. COORDINATE FINAL ELECTRICAL REQUIREMENTS WITH OWNER EQUIPMENT.
WASHER	OEB2-01	120V 1P 2W	3/4"C,1#12,#12N,#12G	1.5	12.5	20/1	RECEPTACLE
DRYER	OEB2-02	240V 2P 2W	3/4"C,2#12,#12G	4.5	18.75	20/2	SPECIAL RECEPTACLE
RV POWER	OEB2-03	240V 2P 2W	3/4"C,2#6,#10G	9.6	40	50/2	SPECIAL RECEPTACLE
AUTOPSY SINK CONNECTION	OEB2-04	240V 2P 2W	3/4"C,2#12,#12G	0.1	0.42	20/2	HARDWIRED
COOLER CONDENSING UNIT	OEB2-05	240V 2P 2W	3/4"C,2#12,#12G	2.88	12	15/2	HARDWIRED
COOLER EVAP COIL	OEB2-05.2	120V 1P 2W	3/4"C,1#12,#12N,#12G	0.3	2.52	20/1	HARDWIRED
COOLER LIGHTING	OEB2-05.3	120V 1P 2W	3/4"C,1#12,#12N,#12G	0.2	1.67	20/1	HARDWIRED
240V EQUIPMENT POWER PROVISION	OEB2-06	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	3.84	16	20/2	SPECIAL RECEPTACLE
OVERHEAD DOOR	OEB2-07	120V 1P 2W	3/4"C,1#12,#12N,#12G	1	8.33	20/1	TOGGLE SWITCH.
OVERHEAD DOOR	OEB2-07	120V 1P 2W	3/4"C,1#12,#12N,#12G	1	8.33	20/1	TOGGLE SWITCH.
OVERHEAD DOOR	OEB2-07	120V 1P 2W	3/4"C,1#12,#12N,#12G	1	8.33	20/1	TOGGLE SWITCH.
OVERHEAD DOOR	OEB2-07	120V 1P 2W	3/4"C,1#12,#12N,#12G	1	8.33	20/1	TOGGLE SWITCH.
240V EQUIPMENT POWER PROVISION	OEB3-01	240/120V 2P 3W	3/4"C,2#12,#12N,#12G	3.84	16	20/2	SPECIAL RECEPTACLE
SCUBA AIR COMPRESSOR	OEB3-02	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	5.76	24	30/2	SPECIAL RECEPTACLE
OVERHEAD DOOR	OEB3-03	120V 1P 2W	3/4"C,1#12,#12N,#12G	1	8.33	20/1	TOGGLE SWITCH.
OVERHEAD DOOR	OEB3-03	120V 1P 2W	3/4"C,1#12,#12N,#12G	1	8.33	20/1	TOGGLE SWITCH.
OVERHEAD DOOR	OEB3-03	120V 1P 2W	3/4"C,1#12,#12N,#12G	1	8.33	20/1	TOGGLE SWITCH.
OVERHEAD DOOR	OEB3-03	120V 1P 2W	3/4"C,1#10,#10N,#10G	1	8.33	20/1	TOGGLE SWITCH.
OVERHEAD DOOR	OEB4-01	120V 1P 2W	3/4"C,1#12,#12N,#12G	1	8.33	20/1	TOGGLE SWITCH.
MOTORIZED ENTRY GATE	OES-01	120V 1P 2W	3/4"C,1#10,#10N,#10G	1	8.33	20/1	NON-FUSED DISCONNECT. COORDINATE ALL ELECTRICAL REQUIREMENTS WITH MANUFACTURER PRIOR TO CONSTRUCTION.
SEPTIC PUMP	OES-02	240/120V 2P 3W	3/4"C,2#10,#10N,#10G	2.04	8.5	20/2	NON-FUSED DISCONNECT, NEMA 3R

NOTE: COORDINATE WITH MANUFACTURER AND VERIFY ALL ELECTRICAL REQUIREMENTS OF ALL OWNER EQUIPMENT PRIOR TO CONSTRUCTION.

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Job: 2344 Date: 1/6/2025
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E6.3

LUMINAIRE SCHEDULE

TYPE		DESCRIPTION	LUMENS	COLOR TEMP	DRIVER	WATTS	VOLTS	MFGR	MOUNTING HEIGHT	CEILING TYPE	FINISH	NOTES
	L1	CPXIP 2X4 7200LM 80 40K ASWM MVOLT	7200	40K	Integral	57	MVOLT	Acuity	CEILING	HARD LID	TBD	Suface mount 2x4
	L1E	CPXIP 2X4 7200LM 80 40K ASWM MVOLT	7200	40K	Integral	57	MVOLT	Acuity	CEILING	HARD LID	TBD	Suface mount 2x4 with emergency battery backup
	L2	CPXIP 2X4 3000LM 80 40K ASWM MVOLT	3000	40K	Integral	25	MVOLT	Acuity	CEILING	HARD LID	TBD	Suface mount 2x4
	L3	CPX 2X2 3200LM 80 40K SWL MVOLT	3200	40K	Integral	30	MVOLT	Acuity	CEILING	HARD LID	TBD	Suface mount 2x2
	L3E	CPX 2X2 3200LM 80 40K SWL MVOLT	3200	40K	Integral	30	MVOLT	Acuity	CEILING	HARD LID	TBD	Suface mount 2x2 with emergency battery backup
	L4	CPX 2X2 2000LM 80 40K SWL MVOLT	2000	40K	Integral	16	MVOLT	Acuity	CEILING	HARD LID	TBD	Suface mount 2x2
	L4E	CPX 2X2 2000LM 80 40K SWL MVOLT	2000	40K	Integral	16	MVOLT	Acuity	CEILING	HARD LID	TBD	Suface mount 2x2 with emergency battery backup
	L5	CPX 2X4 3000LM 80 40K SWL MVOLT	4000	40K	Integral	25	MVOLT	Acuity	CEILING	HARD LID	TBD	Suface mount 2x4
	L6	CSS L24 ALO15 (1500) UVOLT SWW3 (40) 80CRI	1500	40K	Integral	10	MVOLT	Acuity	CEILING	HARD LID	TBD	Surface mount linear strip
	L7	FMVCSLS 24IN MVOLT 30K35K40K	1740	40K	Integral	18	MVOLT	Acuity	WALL	HARD LID	TBD	24" Vanity
	L8	IVO4CYL SC D 20LM 40K 80CRI MD P AR LSS	2000	40K	Integral	22	MVOLT	Acuity	CEILING	HARD LID	TBD	4" Surface mount cylinder
	L8E	IVO4CYL SC D 20LM 40K 80CRI MD P AR LSS	2000	40K	Integral	22	MVOLT	Acuity	CEILING	HARD LID	TBD	4" Surface mount cylinder with emergency battery backup
	L9	FEM L48 10000LM LPPFL WD 80CRI 40K	12000	40K	Integral	62	MVOLT	Acuity	CEILING	HARD LID	TBD	8' Surface mount Vaportite
	L9E	FEM L48 10000LM LPPFL WD 80CRI 40K	12000	40K	Integral	62	MVOLT	Acuity	CEILING	HARD LID	TBD	8' Surface mount Vaportite with emergency battery backup
	L11	CPHB 12000LM SEF GCL WD 40K 80CRI	12000	40K	Integral	88	MVOLT	Acuity	16.5' AFF	HARD LID	TBD	Suspended highbay
	L11E	CPHB 12000LM SEF GCL WD 40K 80CRI	12000	40K	Integral	88	MVOLT	Acuity	16.5' AFF	HARD LID	TBD	Suspended highbay with emergency battery backup
	L12	XIB L24 18000LM AFMD? 40K 80CRI	24000	40K	Integral	113	MVOLT	Acuity	16.5' AFF	HARD LID	TBD	Suspended wet-rated highbay
	L12E	XIB L24 18000LM AFMD? 40K 80CRI	24000	40K	Integral	113	MVOLT	Acuity	16.5' AFF	HARD LID	TBD	Suspended wet-rated highbay with emergency battery backup
	L13	CSS L48 ALO3 (4000) MVOLT SWW3 (40) 80CRI	4000	40K	Integral	35	MVOLT	Acuity	CEILING	HARD LID	TBD	4' Surface mounted strip light
	L13E	CSS L48 ALO3 (4000) MVOLT SWW3 (40) 80CRI	4000	40K	Integral	35	MVOLT	Acuity	CEILING	HARD LID	TBD	4' Surface mounted strip light with emergency battery backup
	FL1	DSXF1 LED P2 40K WFL	24000	40K	Integral	42	MVOLT	Acuity	TBD	HARD LID	TBD	Flood light
	S1	RSX2 LED P4 40K R5	25669	40K	Integral	187	MVOLT	Acuity	25' W/ 3' BASE		TBD	Area light on 25' pole w/ 3' base
	W1E	WDGE1 LED P2 40K 80CRI VW	1982	40K	Integral	15	MVOLT	Acuity	8' AFF		TBD	Wall pack with emergency battery backup
	W2E	WDGE2 LED P2 40K 80CRI TFTM	2030	40K	Integral	19	MVOLT	Acuity	12' AFF		TBD	Wall pack with emergency battery backup
	W3	WDGE3 LED P4 70CRI RFT 40K	12277	40K	Integral	88	MVOLT	Acuity	16' AFF		TBD	Wall Pack
EXIT	EX	TL2 EM G U BA M*	-	-	Integral	3	120/277	Isolite	Varies	Varies	Brushed Aluminum	Exit- stems to be provided where necessary

1. ALL FIXTURES WITH AN "E" SUFFIX, SHALL BE PROVIDED WITH AN EMERGENCY DRIVER. PROVIDE UNSWITCHED HOT LEG TO EACH "E" FIXTURE

2. ALL FINISHES, MOUNTING HEIGHTS, COLOR TEMPS TO BE VERIFIED WITH OWNER/ARCHITECT PRIOR TO ORDERING. CONFIRM ALL MOUNTING TYPES BEFORE ORDERING

P4

MOUNTING SURFACE

VOLTS 240/120V 2P 3W

BUS AMPS 125

NEUTRAL 100%

MAIN 125

LUGS STANDARD

AIC 42,000

NOTE 1 LOCATED IN BUILDING 4

NOTE 2

CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B	CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD A	KVA LOAD B
1	20/1	LIGHTING	0.18		2	20/1	RECEP	0.18	
3	20/1	LIGHTING		0.25	4	20/1	RECEP		0.18
5	20/1	SPARE	0		6	20/1	RECEP	0.18	
7	20/1	SPARE		0	8	20/1	RECEP		0.18
9	20/1	SPARE	0		10	20/1	DROP CORD	1	
11	20/1	SPARE		0	12	20/1	DROP CORD		1
13	20/1	SPARE	0		14	20/1	DROP CORD	1	
15	-/1	SPACE		0	16	20/1	DROP CORD		1
17	-/1	SPACE	0		18	20/1	RECEP	0.36	
19	-/1	SPACE		0	20	20/1	OEB4-01		1
21	-/1	SPACE	0		22	20/1	SPARE	0	
23	-/1	SPACE		0	24	20/1	SPARE		0
25	-/1	SPACE	0		26	20/1	SPARE	0	
27	-/1	SPACE		0	28	20/1	SPARE		0
29	-/1	SPACE	0		30	20/1	SPARE	0	
							TOTAL CONNECTED KVA BY PHASE	2.9	3.6
							TOTAL CONNECTED AMPS BY PHASE	24	30

	CONN. KVA	CALC. KVA			CONN. KVA	CALC. KVA	
LIGHTING	0.43	0.54	(125%)	CONTINUOUS	0	0	(125%)
LARGEST MOTOR	1	0.25	(125%)	HEATING	0	0	(100%)
OTHER MOTORS	1	1	(100%)	NONCONTINUOUS	0	0	(100%)
RECEPTACLES	5.1	5.1	(50%>10)	KITCHEN EQUIP	0	0	(N/A)
COMPUTER	0	0	(100%)	NONCOIN/DIVERSE	0	0	(N/A)
				TOTAL KVA	6.5	6.9	
				BALANCED PHASE AMPS	29		

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