

CAMPBELL POINTE TOWNHOMES OFFICE & GYM FACILITY

BUIES CREEK, NORTH CAROLINA

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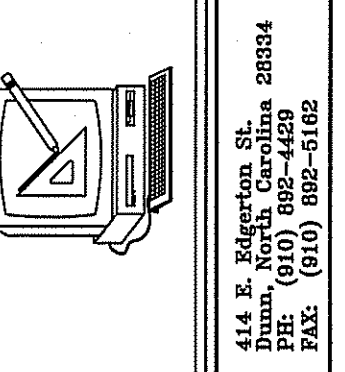
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AND, NOTES

PLANS FOR:
CAMPBELL POINTE TOWNHOMES
OFFICE & GYM FACILITY
BUIES CREEK, NORTH CAROLINA

| REVISIONS | |
|-----------|--|
| NO. | |
| | |
| | |



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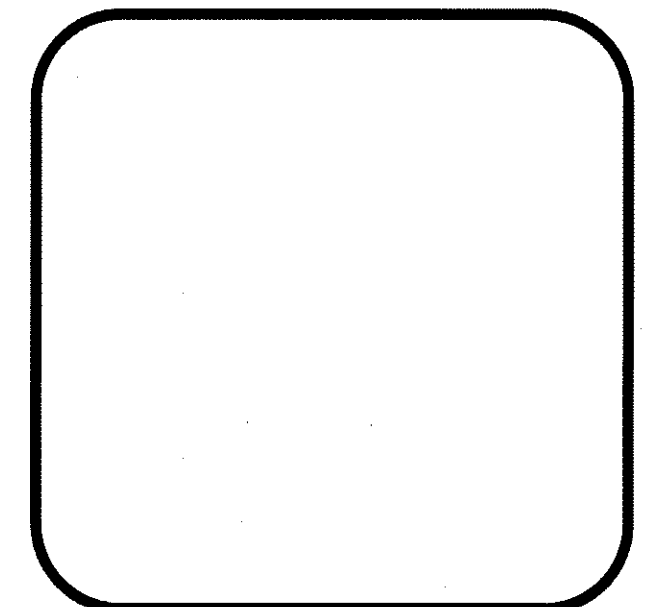
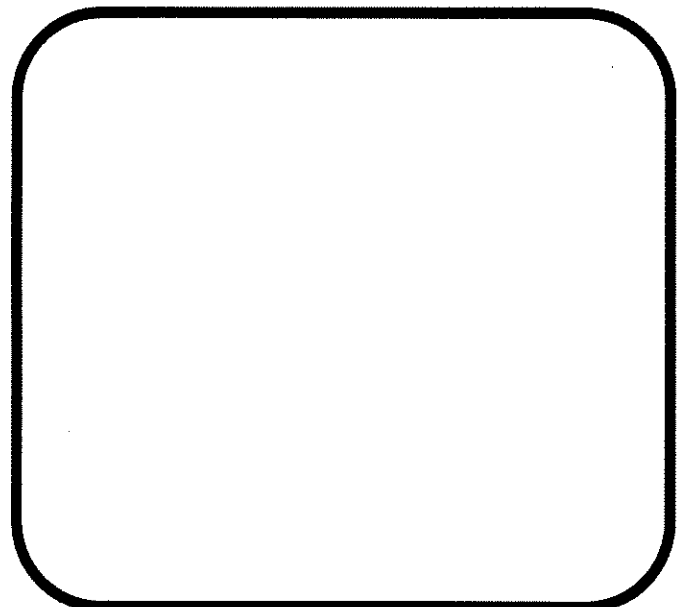
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DATE 07-23-18
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SHEET NO.
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2012 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2 FAMILY DWELLINGS AND TOWNHOUSES)

NAME OF PROJECT: CAMPBELL POINTE TOWNHOMES
ADDRESS: BUJES CREEK, NORTH CAROLINA
PROPOSED USE: BUSINESS
OWNER OR AUTHORIZED AGENT: JASON PRICE PHONE # (910) 814-4236 EMAIL: JPRICECONSTRUCTION@YAHOO.COM
OWNED BY: CITY/COUNTY PRIVATE STATE
CODE ENFORCEMENT JURISDICTION: CITY COUNTY HARNETT STATE

LEAD DESIGN PROFESSIONAL: CRUSE & ASSOCIATES, P.A.

| DESIGNER | FIRM | NAME | LICENSE # | TELEPHONE NO. | E-MAIL |
|--------------------------|----------------------------|-----------------|-----------|----------------|----------------------------|
| CIVIL | DRAPER ADEN ASSOCIATES, PA | ANDREW MERICLE | 041595 | (919) 827-0864 | AMERICLE@DAA.COM |
| ARCHITECTURAL | CRUSE & ASSOCIATES, P.A. | RANDY CRUSE, PE | 18909 | (910) 892-4429 | RCRUSE@CRUSEASSOCIATES.COM |
| BUILDING | CRUSE & ASSOCIATES, P.A. | RANDY CRUSE, PE | 18909 | (910) 892-4429 | RCRUSE@CRUSEASSOCIATES.COM |
| ELECTRICAL | CRUSE & ASSOCIATES, P.A. | RANDY CRUSE, PE | 18909 | (910) 892-4429 | RCRUSE@CRUSEASSOCIATES.COM |
| PLUMBING | CRUSE & ASSOCIATES, P.A. | RANDY CRUSE, PE | 18909 | (910) 892-4429 | RCRUSE@CRUSEASSOCIATES.COM |
| MECHANICAL | CRUSE & ASSOCIATES, P.A. | RANDY CRUSE, PE | 18909 | (910) 892-4429 | RCRUSE@CRUSEASSOCIATES.COM |
| STRUCTURAL (FOUNDATION) | CRUSE & ASSOCIATES, P.A. | RANDY CRUSE, PE | 18909 | (910) 892-4429 | RCRUSE@CRUSEASSOCIATES.COM |
| SPRINKLER-STANDPIPE | | | | | |
| FIRE ALARM | | | | | |
| RETAINING WALLS >5' HIGH | | | | | |
| OTHER | | | | | |

2012 EDITION OF NC CODE FOR: NEW CONSTRUCTION ADDITION UPFIT
EXISTING: RECONSTRUCTION ALTERATION REPAIR RENOVATION
CONSTRUCTED: _____ ORIGINAL USE(S): _____ PROPOSED USE(S): _____
RENOVATED: _____ CURRENT USE(S): _____

BASIC BUILDING DATA:
CONSTRUCTION TYPE: I-A II-A III-A IV V-A
 I-B II-B III-B V-B

SPRINKLERS: NO PARTIAL YES NFPA 13 NFPA 13R NFPA 13D
STANDPIPES: NO YES CLASS I II III WET DRY
FIRE DISTRICT: NO YES (PRIMARY) FLOOD HAZARD AREA: NO YES
BUILDING HEIGHT: 32'-0" FEET

GROSS BUILDING AREA:

| FLOOR | EXISTING (SQ FT) | NEW (SQ FT) | SUB-TOTAL |
|-------------------|------------------|-------------|-----------|
| 6TH FLOOR | N/A | | |
| 5TH FLOOR | N/A | | |
| 4TH FLOOR | N/A | | |
| 3RD FLOOR | N/A | | |
| 2ND FLOOR | N/A | | |
| MEZZANINE | N/A | | |
| 1ST FLOOR | N/A | 4,105 | 4,105 |
| BASEMENT | N/A | | |
| TOTAL GROSS AREA: | | | 4,105 |

PRIMARY OCCUPANCY: ASSEMBLY A-1 A-2 A-3 A-4 A-5
 EDUCATIONAL FACTORY F-1 MODERATE F-2 LOW
HAZARDOUS H-1 DETONATE H-2 DEFLAGRATE H-3 COMBUST H-4 HEALTH H-5 HPM
INSTITUTIONAL I-1 I-2 I-3 I-4
 I-3 CONDITION 1 2 3 4 5
MERCANTILE RESIDENTIAL R-1 R-2 R-3 R-4
STORAGE S-1 MODERATE S-2 LOW HIGH-PILED
 UTILITY AND MISCELLANEOUS PARKING GARAGE OPEN ENCLOSED REPAIR GARAGE

ACCESSORY OCCUPANCIES: ASSEMBLY A-1 A-2 A-3 A-4 A-5
 EDUCATIONAL FACTORY F-1 MODERATE F-2 LOW
HAZARDOUS H-1 DETONATE H-2 DEFLAGRATE H-3 COMBUST H-4 HEALTH H-5 HPM
INSTITUTIONAL I-1 I-2 I-3 I-4
 I-3 CONDITION 1 2 3 4 5
MERCANTILE RESIDENTIAL R-1 R-2 R-3 R-4
STORAGE S-1 MODERATE S-2 LOW HIGH-PILED
 UTILITY AND MISCELLANEOUS PARKING GARAGE OPEN ENCLOSED REPAIR GARAGE

INCIDENTAL USES (TABLE 508.2.5):
 FURNACE ROOM WHERE ANY PIECE OF EQUIPMENT IS OVER 400,000 BTU PER HOUR INPUT
 ROOMS WITH BOILERS WHERE THE LARGEST PIECE OF EQUIPMENT IS OVER 15 PSI AND 10 HORSEPOWER
 REFRIGERANT MACHINE ROOM
 HYDROGEN CUTOFF ROOMS, NOT CLASSIFIED AS GROUP H
 INCINERATOR ROOMS
 PAINT SHOPS NOT CLASSIFIED AS GROUP H, LOCATED IN OTHER THAN GROUP F
 LABORATORIES AND VOCATIONAL SHOPS, NOT CLASSIFIED AS GROUP H LOCATED IN A GROUP E OR I-2 OCCUPANCY
 LAUNDRY ROOMS OVER 100 SQUARE FEET
 GROUP I-3 CELLS EQUIPPED WITH PADDED SURFACES
 GROUP I-2 WASTE AND LINEN COLLECTION ROOMS
 WASTE AND LINEN COLLECTION ROOMS OVER 100 SQUARE FEET
 STATIONARY STORAGE BATTERY SYSTEMS HAVING A LIQUID ELECTROLYTE CAPACITY OF MORE THAN 50 GALLONS, OR A LITHIUM-ION CAPACITY OF 1,000 POUNDS USED FOR FACILITY STANDBY POWER, EMERGENCY POWER OR UNINTERRUPTED POWER SUPPLIES
 ROOMS CONTAINING FIRE PUMPS
 GROUP I-2 STORAGE ROOMS OVER 100 SQUARE FEET
 GROUP I-2 COMMERCIAL KITCHENS
 GROUP I-2 LAUNDRIES EQUAL TO OR LESS THAN 100 SQUARE FEET
 GROUP I-2 ROOMS OR SPACES THAT CONTAIN FUEL-FIRED HEATING EQUIPMENT

SPECIAL USES: 402 403 404 405 406 407 408 409 410 411 412
 413 414 415 416 417 418 419 420 421 422 423
 424 425 426 427

SPECIAL PROVISIONS: 509.2 509.3 509.4 509.5 509.6 509.7 509.8 509.9

MIXED OCCUPANCY: NO YES SEPARATION: _____ HR. EXCEPTION: _____

| TYPE OF CONSTRUCTION | ALLOWABLE HEIGHT | | SHOWN ON PLANS | CODE REFERENCE |
|----------------------------|-----------------------|-------------------------|-----------------|----------------|
| | ALLOWABLE (TABLE 503) | INCREASE FOR SPRINKLERS | | |
| BUILDING HEIGHT IN FEET | TYPE <u>V-B</u> | FEET = H + 20' = _____ | TYPE <u>V-B</u> | |
| BUILDING HEIGHT IN FEET | FEET <u>40</u> | FEET = H + 20' = _____ | 24'-3" | |
| BUILDING HEIGHT IN STORIES | STORIES <u>2</u> | STORIES + 1 = _____ | STORIES 1 | |

INCIDENTAL USE SEPARATION (508.2.5)
THIS SEPARATION IS NOT EXEMPT AS A NON-SEPARATED USE (SEE EXCEPTIONS).
 NON-SEPARATED USE (508.3)
THE REQUIRED TYPE OF CONSTRUCTION FOR THE BUILDING SHALL BE DETERMINED BY APPLYING THE HEIGHT AND AREA LIMITATIONS FOR EACH OF THE APPLICABLE OCCUPANCIES TO THE ENTIRE BUILDING. THE MOST RESTRICTIVE TYPE OF CONSTRUCTION, SO DETERMINED, SHALL APPLY TO THE ENTIRE BUILDING.
 SEPARATED USE (508.4) -SEE BELOW FOR AREA CALCULATIONS
FOR EACH STORY, THE AREA OF THE OCCUPANCY SHALL BE SUCH THAT THE SUM OF THE RATIOS OF THE ACTUAL FLOOR AREA OF EACH USE DIVIDED BY THE ALLOWABLE FLOOR AREA FOR EACH USE SHALL NOT EXCEED 1.
ACTUAL AREA OF OCCUPANCY A + ACTUAL AREA OF OCCUPANCY B
ALLOWABLE AREA OF OCCUPANCY A + ALLOWABLE AREA OF OCCUPANCY B ≤ 1
+ = ≤ 1.00

| STORY NO. | DESCRIPTION AND USE | (A) BLDG AREA PER STORY (ACTUAL) | (B) TABLE 503 ² AREA | (C) AREA FOR OPEN SPACE INCREASE ¹ | (D) AREA FOR SPRINKLER INCREASE ² | (E) ALLOWABLE AREA OR UNLIMITED ³ | (F) MAXIMUM BUILDING AREA ⁴ |
|-----------|---------------------|----------------------------------|---------------------------------|---|--|--|--|
| 1 | A-3 | 4,108 | 6000 | - | - | - | 6000 |

- ¹ OPEN SPACE AREA INCREASES FROM SECTION 506.2 ARE COMPUTED THIS:
A. PERIMETER WHICH FRONTS A PUBLIC WAY OR OPEN SPACE HAVING 20 FEET MINIMUM WIDTH = _____ (F)
B. TOTAL BUILDING PERIMETER = _____ (P)
C. RATIO (F/P) = _____ (F/P)
D. W = MINIMUM WIDTH OF PUBLIC WAY = _____ (W)
E. PERCENT OF FRONTAGE INCREASE I_f = 100 [F/P - 0.25] x W/30 = _____ (%)
- ² THE SPRINKLER INCREASE PER SECTION 506.3 IS AS FOLLOWS:
A. MULTI-STORY BUILDING I_s = 200 PERCENT
B. SINGLE STORY BUILDING I_s = 300 PERCENT
- ³ UNLIMITED AREA APPLICABLE UNDER CONDITIONS OF SECTIONS 507.
- ⁴ MAXIMUM BUILDING AREA = TOTAL NUMBER OF STORIES IN THE BUILDING x E (506.4).
- ⁵ THE MAXIMUM AREA OF PARKING GARAGES MUST COMPLY WITH 406.3.5. THE MAXIMUM AREA OF AIR TRAFFIC CONTROL TOWERS MUST COMPLY WITH 412.1.2.

FIRE PROTECTION REQUIREMENTS

| BUILDING ELEMENT | FIRE SEPARATION DISTANCE (FEET) | RATING PROVIDED (W/REDUCTION) | DETAIL AND SHEET # | DESIGN # FOR RATED ASSEMBLY | DESIGN # FOR RATED PENETRATION | DESIGN # FOR RATED JOINTS |
|--|---------------------------------|-------------------------------|--------------------|-----------------------------|--------------------------------|---------------------------|
| STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS, TRUSSES | - | 0 | - | - | - | - |
| BEARING WALLS | - | - | - | - | - | - |
| EXTERIOR | - | - | - | - | - | - |
| NORTH | 0 | - | - | - | - | - |
| EAST | 0 | - | - | - | - | - |
| WEST | 0 | - | - | - | - | - |
| SOUTH | 0 | - | - | - | - | - |
| INTERIOR | 0 | - | - | - | - | - |
| NONBEARING WALLS & PARTITIONS | - | - | - | - | - | - |
| EXTERIOR | - | - | - | - | - | - |
| NORTH | 0 | - | - | - | - | - |
| EAST | 0 | - | - | - | - | - |
| WEST | 0 | - | - | - | - | - |
| SOUTH | 0 | - | - | - | - | - |
| INTERIOR | 0 | - | - | - | - | - |
| FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS | - | 0 | - | - | - | - |
| ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS | - | 0 | - | - | - | - |
| SHAFT ENCLOSURES-EXIT | - | - | - | - | - | - |
| SHAFT ENCLOSURES-OTHER | - | - | - | - | - | - |
| CORRIDOR SEPARATION | - | 0 | - | - | - | - |
| OCCUPANCY SEPARATION | - | - | - | - | - | - |
| PARTY/FIRE WALL SEPARATION | - | - | - | - | - | - |
| SMOKE BARRIER SEPARATION | - | - | - | - | - | - |
| TENANT SEPARATION | - | - | - | - | - | - |
| INCIDENTAL USE SEPARATION | - | - | - | - | - | - |

*INDICATE SECTION NUMBER PERMITTING REDUCTION

LIFE SAFETY SYSTEM REQUIREMENTS:
EMERGENCY LIGHTING: NO YES
EXIT SIGNS: NO YES
FIRE ALARM: NO YES
SMOKE DETECTION SYSTEMS: NO YES
PANIC HARDWARE: NO YES

LIFE SAFETY PLAN REQUIREMENTS:
LIFE SAFETY PLAN SHEET #, IF PROVIDED JSP-1 OF 1

ACCESSIBLE DWELLING UNITS N/A (SECTION 1107)

| TOTAL UNITS | ACCESSIBLE UNITS REQUIRED | ACCESSIBLE UNITS PROVIDED | TYPE A UNITS REQUIRED | TYPE A UNITS PROVIDED | TYPE B UNITS REQUIRED | TYPE B UNITS PROVIDED | TOTAL ACCESSIBLE UNITS PROVIDED |
|-------------|---------------------------|---------------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------------------|
| | | | | | | | |

ACCESSIBLE PARKING-SEE SITE PLAN (SECTION 1106)

| LOT OR PARKING AREA | TOTAL # OF PARKING SPACES | | # OF ACCESSIBLE SPACES PROVIDED | | | TOTAL # ACCESSIBLE PROVIDED |
|---------------------|---------------------------|----------|---------------------------------|-----------------------------------|-----------------|-----------------------------|
| | REQUIRED | PROVIDED | REGULAR WITH 5' ACCESS AISLE | VAN SPACES WITH 132" ACCESS AISLE | 8' ACCESS AISLE | |
| PROPOSED BUILDING | 13 | 13 | 1 | | 1 | 2 |
| TOTAL | 13 | 13 | 1 | | 1 | 2 |

DESIGN LOADS: STRUCTURAL DESIGN
IMPORTANCE FACTORS: WIND (I_w) 1.0
SNOW (I_s) 1.0
SEISMIC (I_e) 1.0
LIVE LOADS: ROOF 20 PSF
MEZZANINE N/A PSF
FLOOR 100 PSF
GROUND SNOW LOAD: 15 PSF
WIND LOAD: BASIC WIND SPEED 100 MPH (ASCE-7)
EXPOSURE CATEGORY C
WIND BASE SHEARS (FOR MWFRS) V_x = _____ V_y = _____

SEISMIC DESIGN CATEGORY A B C D
CONFORM TO SECTION 2308
PROVIDE THE FOLLOWING SEISMIC DESIGN PARAMETERS:
OCCUPANCY CATEGORY (TABLE 1604.5) I II III IV
SPECTRAL RESPONSE ACCELERATION S_s 11.4 %g S₁ 5.1 %g
SITE CLASSIFICATION (TABLE 1613.6.2) A B C D E
DATA SOURCE: FIELD TEST PRESUMPTIVE HISTORICAL DATA
BASIC STRUCTURAL SYSTEM (CHECK ONE)
 BEARING WALL DUAL W/SPECIAL MOMENT FRAME
 BUILDING FRAME DUAL W/INTERMEDIATE R/C OR SPECIAL STEEL
 MOMENT FRAME INVERTED PENDULUM
SEISMIC BASE SHEAR: NOT APPLICABLE - COMPLIANCE WITH SECTION 2308 OF THE NCSBC.
ANALYSIS PROCEDURE SIMPLIFIED EQUIVALENT LATERAL FORCE DYNAMIC
ARCHITECTURAL, MECHANICAL, COMPONENTS ANCHORED? NOT APPLICABLE - COMPLIANCE WITH SECTION 2308 OF THE NCSBC.

LATERAL DESIGN CONTROL: EARTHQUAKE WIND
SOIL BEARING CAPACITIES:
FIELD TEST (PROVIDE COPY OF TEST REPORT) _____ PSF
PRESUMPTIVE BEARING CAPACITY 2,000 PSF
PILE SIZE, TYPE, AND CAPACITY _____

SPECIAL INSPECTIONS REQUIRED: YES NO

PLUMBING FIXTURE REQUIREMENTS

| USE | WATERCLOSETS | URINALS | | LAVATORIES | | SHOWERS/TUBS | DRINKING FOUNTAINS | |
|----------------|--------------|---------|--------|------------|--------|--------------|--------------------|------------|
| | | MALE | FEMALE | MALE | FEMALE | | REGULAR | ACCESSIBLE |
| SPACE REQUIRED | 1 | 2 | 1 | 1 | 1 | 0 | 1 | 1 |
| PROVIDED | 1 | 2 | 1 | 2 | 2 | 0 | 1 | 1 |
| UNISEX | 1 | | | 1 | | 0 | | |

SPECIAL APPROVALS
SPECIAL APPROVAL: (LOCAL JURISDICTION, DEPARTMENT OF INSURANCE, OSC, DPI, DHHS, ICC, ETC., DESCRIBE BELOW)

ENERGY REQUIREMENTS:
THE FOLLOWING DATA SHALL BE CONSIDERED MINIMUM AND ANY SPECIAL ATTRIBUTE REQUIRED TO MEET THE ENERGY CODE SHALL ALSO BE PROVIDED. EACH DESIGNER SHALL FURNISH THE REQUIRED PORTIONS OF THE PROJECT INFORMATION FOR THE PLAN DATA SHEET. IF PERFORMANCE METHOD, STATE THE ANNUAL ENERGY COST FOR THE STANDARD REFERENCE DESIGN VS ANNUAL ENERGY COST FOR THE PROPOSED DESIGN.

CLIMATE ZONE: 3 3A 4A 5
THERMAL ENVELOPE
METHOD OF COMPLIANCE: PRESCRIPTIVE % GLAZED WALL AREA
 PERFORMANCE, 2010 ASHRAE 90.1 ENERGY COST BUDGET

ROOF/CEILING ASSEMBLY (EACH ASSEMBLY):
DESCRIPTION OF ASSEMBLY WOOD TRUSS/ASPHALT SHINGLE
U-VALUE OF TOTAL ASSEMBLY 0.022 R-VALUE OF INSULATION R-46
SKYLIGHTS IN EACH ASSEMBLY N/A U-VALUE OF SKYLIGHT: N/A
TOTAL SQUARE FOOTAGE OF SKYLIGHTS IN EACH ASSEMBLY N/A

EXTERIOR WALLS (EACH ASSEMBLY):
DESCRIPTION OF ASSEMBLY WOOD FRAME WALL, BATT INSULATION, BRICK VENEER
U-VALUE OF TOTAL ASSEMBLY 0.038 R-VALUE OF INSULATION R19+R7 CONTINUOUS INS.
OPENINGS (WINDOWS OR DOORS WITH GLAZING) DOUBLE PANE, VINYL FRAME
U-VALUE OF ASSEMBLY 0.30 SHADING COEFFICIENT N/A
PROJECTION FACTOR N/A LOW E REQUIRED, IF APPLICABLE YES
DOOR R-VALUES R-2.5

WALLS ADJACENT TO UNCONDITIONED SPACES (EACH ASSEMBLY):
DESCRIPTION OF ASSEMBLY N/A
U-VALUE OF TOTAL ASSEMBLY N/A R-VALUE OF INSULATION N/A
OPENINGS (WINDOWS OR DOORS WITH GLAZING) N/A U-VALUE OF ASSEMBLY N/A
DOOR R-VALUES N/A LOW E REQUIRED, IF APPLICABLE N/A

WALLS BELOW GRADE (EACH ASSEMBLY):
DESCRIPTION OF ASSEMBLY N/A
U-VALUE OF TOTAL ASSEMBLY N/A R-VALUE OF INSULATION N/A

FLOORS OVER UNCONDITIONED SPACE (EACH ASSEMBLY):
DESCRIPTION OF ASSEMBLY N/A
U-VALUE OF TOTAL ASSEMBLY N/A R-VALUE OF INSULATION N/A

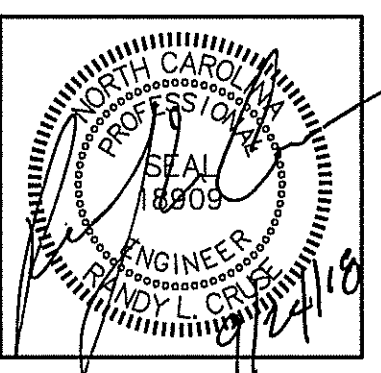
FLOOR SLABS ON GRADE:
DESCRIPTION OF ASSEMBLY SLAB-ON-GRADE
U-VALUE OF TOTAL ASSEMBLY - R-VALUE OF INSULATION -
HORIZONTAL / VERTICAL REQUIREMENT - SLAB HEATED? NO

Summary:

ENERGY CODE: 2012 NORTH CAROLINA STATE BUILDING CODE: ENERGY CONSERVATION CODE
BUILDING CODE: 2012 NORTH CAROLINA STATE BUILDING CODE: BUILDING CODE
MECHANICAL CODE: 2012 NORTH CAROLINA STATE BUILDING CODE: MECHANICAL CODE
PLUMBING CODE: 2012 NORTH CAROLINA STATE BUILDING CODE: PLUMBING CODE
ELECTRICAL CODE: 2017 NATIONAL ELECTRIC CODE
ACCESSIBILITY CODE: ICC/ANSI 117.1-2003 AMERICAN NATIONAL STANDARD ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES
CONSTRUCTION: V-B
OCCUPANCY: A-3

ELECTRICAL SUMMARY - SEE E SHEETS
MECHANICAL SUMMARY - SEE M SHEETS

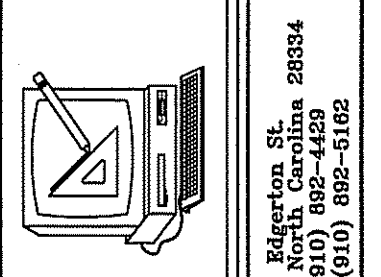
REVISION 1:
WE CHANGED THE BUILDING OCCUPANCY FROM BUSINESS TO ASSEMBLY.



PLANS FOR:
CAMPBELL POINTE TOWNHOMES
OFFICE & GYM FACILITY
BUJES CREEK, NORTH CAROLINA

REVISIONS

| NO. | DATE |
|-----|------------|
| 1. | 09/24/2018 |



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SHEET NO.
APP-B

LIFE SAFETY PLAN REQUIREMENTS:

- ☑ FIRE AND/OR SMOKE RATED WALL LOCATIONS (CHAPTER 7) (SEE NOTE 1)
- ☑ ASSUMED AND REAL PROPERTY LINE LOCATIONS - SEE NOTE 2
- ☑ EXTERIOR WALL OPENING AREA WITH RESPECT TO DISTANCE TO ASSUMED PROPERTY LINES (705.8) - SEE NOTE 3
- ☑ EXISTING STRUCTURES WITHIN 30' OF THE PROPOSED BUILDING - SEE NOTE 4
- ☑ OCCUPANCY TYPES FOR EACH AREA AS IT RELATES TO OCCUPANT LOAD CALCULATION (TABLE 1004.1.1)
- ☑ OCCUPANT LOADS FOR EACH AREA
- ☑ EXIT ACCESS TRAVEL DISTANCES (1016)
- ☑ COMMON PATH OF TRAVEL DISTANCES (1014.3 & 1028.8)
- ☑ DEAD END LENGTHS (1018.4) - SEE NOTE 5
- ☑ CLEAR EXIT WIDTHS FOR EACH EXIT DOOR
- ☑ MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.1)
- ☑ ACTUAL OCCUPANT LOAD FOR EACH EXIT DOOR
- ☑ A SEPARATE SCHEMATIC PLAN INDICATING WHERE FIRE RATED FLOOR/CEILING AND/OR ROOF STRUCTURE IS PROVIDED FOR PURPOSES OF OCCUPANCY SEPARATION. SEE NOTE 6
- ☑ LOCATION OF DOORS WITH PANIC HARDWARE (1008.1.10) - SEE NOTE 7
- ☑ LOCATION OF DOORS WITH DELAYED EGRESS LOCKS AND THE AMOUNT OF DELAY (1008.1.9.7) - SEE NOTE 8
- ☑ LOCATION OF DOORS WITH ELECTROMAGNETIC EGRESS LOCKS (1008.1.9.8) - SEE NOTE 8
- ☑ LOCATION OF DOORS EQUIPPED WITH HOLD-OPEN DEVICES - SEE NOTE 8
- ☑ LOCATION OF EMERGENCY ESCAPE WINDOWS (1029) - SEE NOTE 8
- ☑ THE SQUARE FOOTAGE OF EACH FIRE AREA (902) - SEE NOTE 9
- ☑ THE SQUARE FOOTAGE OF EACH SMOKE COMPARTMENT (407.4) - SEE NOTE 10
- ☐ NOTE ANY CODE EXCEPTIONS OR TABLE NOTES THAT MAY HAVE BEEN UTILIZED REGARDING THE ITEMS ABOVE

LIFE SAFETY PLAN NOTES:

1. NO RATED WALLS.
2. ALL ASSUMED AND REAL PROPERTY LINES >30'.
3. NO REQUIREMENT, SEPARATION DISTANCES ARE GREATER THAN 30' FOR ALL WALLS CONTAINING OPENINGS.
4. NO STRUCTURES WITHIN 20', SEE SITE PLAN.
5. NO DEAD ENDS.
6. NO RATING REQUIRED THIS STRUCTURE.
7. PANIC HARDWARE NOT REQUIRED.
8. NO DELAYED EGRESS LOCKS, ELECTROMAGNETIC LOCKS, HOLD OPEN DEVICES, OR EMERGENCY ESCAPE WINDOWS.
9. FIRE AREA PER FLOOR DOES NOT EXCEED ALLOWED MAXIMUM.
10. SMOKE COMPARTMENTS NOT REQUIRED.

If bolts are used instead of panic hardware, doors must have signs posted per NCBC 1008.1.9.3

**EXIT REQUIREMENTS:
NUMBER AND ARRANGEMENTS OF EXITS**

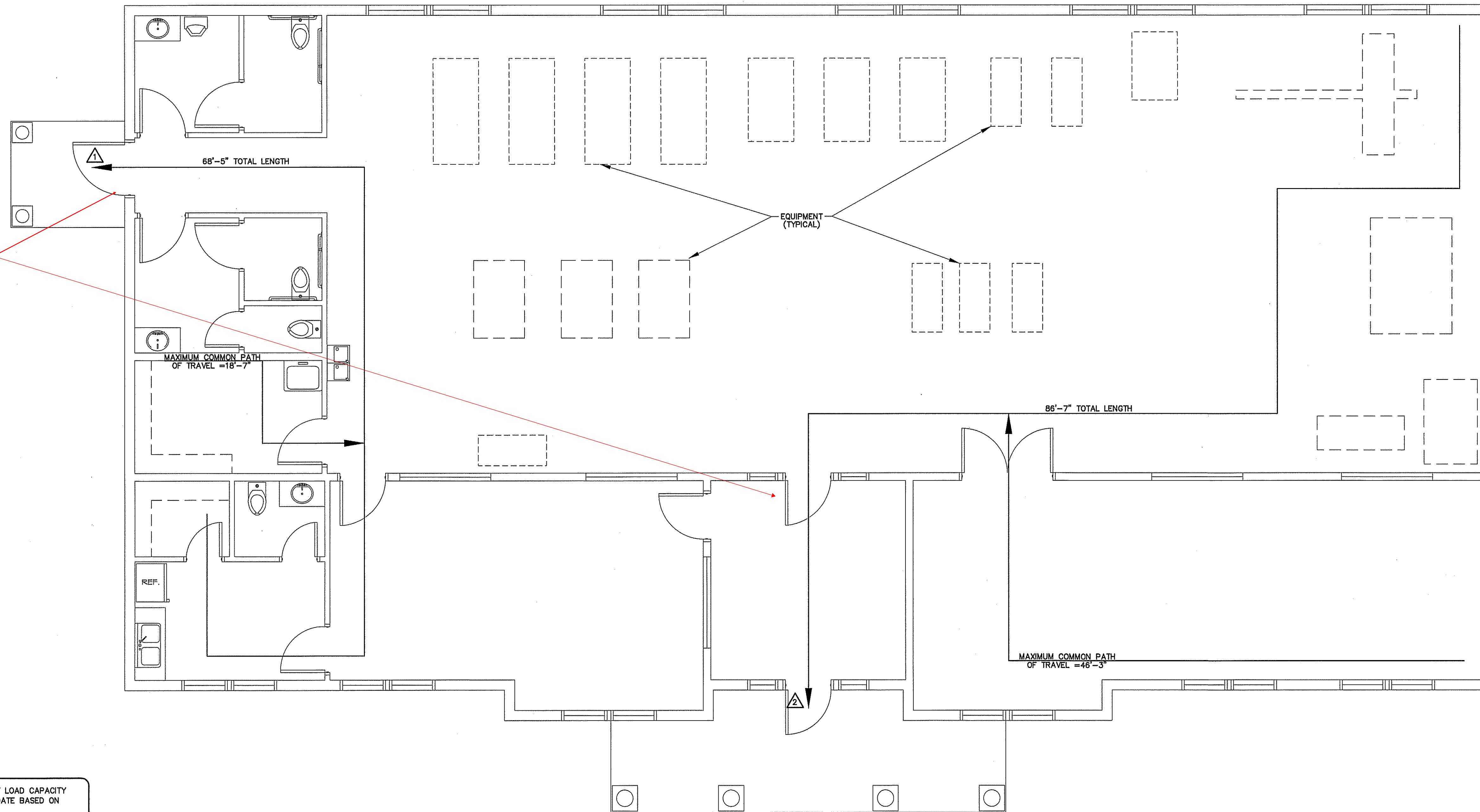
| FLOOR, ROOM OR SPACE DESIGNATION | MINIMUM ² NO. OF EXITS | | TRAVEL DISTANCE | | ARRANGEMENT MEANS OF EGRESS ³ (SECTION 1015.2.1) | |
|----------------------------------|-----------------------------------|----------------|--|---------------------------------------|---|--------------------------------|
| | REQ'D. | SHOWN ON PLANS | ALLOWABLE TRAVEL DISTANCE (TABLE 1016.1) | ACTUAL TRAVEL DISTANCE SHOWN ON PLANS | REQUIRED DISTANCE BETWEEN EXIT DOORS | ACTUAL DISTANCE SHOWN ON PLANS |
| ASSEMBLY | 2 | 2 | 200' | 86'-7" | 50'-4" | 56'-5" |
| | | | | | | |
| | | | | | | |

1. CORRIDOR DEAD ENDS (SECTION 1017.3)
2. BUILDINGS WITH SINGLE EXITS (TABLE 1021.2), SPACES WITH ONE MEANS OF EGRESS (TABLE 1015.1)
3. COMMON PATH OF TRAVEL (SECTION 1014.3)

EXIT WIDTH

| USE GROUP OR SPACE DESCRIPTION | (a) AREA ¹ SQ. FT. | (b) AREA ¹ PER OCCUPANT (TABLE 1004.1.1) | (c) CALCULATED OCCUPANT LOAD (a/b) | EXIT WIDTH (n) | | | | | |
|--------------------------------|-------------------------------------|--|--|--|-------|---|-------|-----------------------------|-------|
| | | | | EGRESS WIDTH PER OCCUPANT (TABLE 1005.1) | | REQUIRED WIDTH (SECTION 1005.1) (a/b) x c | | ACTUAL WIDTH SHOWN ON PLANS | |
| | | | | STAIR | LEVEL | STAIR | LEVEL | STAIR | LEVEL |
| BUSINESS | 1089 | 100 GROSS | 11 | N/A | .2 | N/A | 2.2" | N/A | 35" |
| EXERCISE ROOM | 3016 | 50 GROSS | 61 | N/A | .2 | N/A | 12.2" | N/A | 35" |

1. SEE TABLE 1004.1.1 TO DETERMINE WHETHER NET OR GROSS AREA IS APPLICABLE. SEE DEFINITION "AREA, GROSS" AND "AREA, NET" (SECTION 1002)
2. MINIMUM STAIRWAY WIDTH (SECTION 1009.1); MIN. CORRIDOR WIDTH (SECTION 1018.2); MIN. DOOR WIDTH (SECTION 1008.1)
3. MINIMUM WIDTH OF EXIT PASSAGEWAY (SECTION 1023.2)
4. SEE SECTION 1004.5 FOR CONVERGING EXITS.
5. THE LOSS OF ONE MEANS OF EGRESS SHALL NOT REDUCE THE AVAILABLE CAPACITY TO LESS THAN 50% OF THE TOTAL REQUIRED (SECTION 1005.5)
6. ASSEMBLY OCCUPANCIES (SECTION 1028)

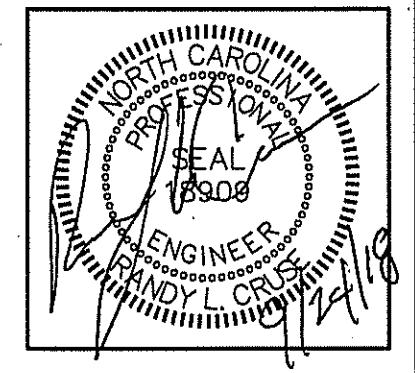


LIFE SAFETY PLAN
SCALE: 1/4" = 1'-0"

MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.1)

▲ 41" CLEAR WIDTH DIVIDED BY .2" = 205 OCCUPANTS
CALCULATED OCCUPANCY PER EXIT = 36 PEOPLE
CALCULATED OCCUPANCY DOES NOT EXCEED MAXIMUM CAPACITY OF EXIT.

▲ 35" CLEAR WIDTH DIVIDED BY .2" = 175 OCCUPANTS
CALCULATED OCCUPANCY PER EXIT = 36 PEOPLE
CALCULATED OCCUPANCY DOES NOT EXCEED MAXIMUM CAPACITY OF EXIT.



PLANS FOR:
CAMPBELL PONTE TOWNHOMES
OFFICE & GYM FACILITY
BUJES CREEK, NORTH CAROLINA

REVISIONS

| NO. | DATE |
|-----|------------|
| 1. | 09/24/2018 |

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SHEET NO.
LS-1 OF 1

REVISION 1:
WE CHANGED THE BUILDING OCCUPANCY FROM BUSINESS TO ASSEMBLY & BUSINESS.

| ROOM NO. | ROOM NAME | FLOOR | | | | BASE | | | WALLS | | | CEIL. HT. | CL.G. | REMARKS |
|----------|-------------------|----------|---------|------|--------|------|--------------|-------------|-------|--------------|--------------|--------------|-------|---------|
| | | CONCRETE | CARPET* | TILE | RUBBER | WOOD | CERAMIC TILE | RUBBER BASE | BRICK | 5/8" DRYWALL | 5/8" DRYWALL | 5/8" DRYWALL | | |
| 100 | MEN'S RESTROOM | X | X | X | X | X | X | X | X | X | X | 10'-0" | X | ** |
| 101 | WOMEN'S RESTROOM | X | X | X | X | X | X | X | X | X | X | 10'-0" | X | ** |
| 102 | HOUSEKEEPING | X | X | X | X | X | X | X | X | X | X | 10'-0" | X | |
| 103 | BREAK ROOM | X | X | X | X | X | X | X | X | X | X | 12'-0" | X | |
| 104 | BUSINESS OFFICE | X | X | X | X | X | X | X | X | X | X | 12'-0" | X | |
| 105 | FOYER | X | X | X | X | X | X | X | X | X | X | 12'-0" | X | |
| 106 | YOGA ROOM | X | X | X | X | X | X | X | X | X | X | 14'-0" | X | |
| 107 | GYM/EXERCISE AREA | X | X | X | X | X | X | X | X | X | X | 14'-0" | X | |
| 108 | STORAGE | X | X | X | X | X | X | X | X | X | X | 12'-0" | X | |
| 109 | PRIVATE RESTROOM | X | X | X | X | X | X | X | X | X | X | 12'-0" | X | ** |

| MARK | WINDOW SIZE | | | | REMARKS | HEADERS |
|------|-------------|-------|-------|-------|--|--|
| | WIDE | | HIGH | | | |
| | WIDE | HIGH | WIDE | HIGH | | |
| (A) | 4'-0" | 6'-0" | 4'-0" | 2'-0" | DOUBLE PANE WINDOW W/TEMPERED GLASS | (4) 2 X 12 HEADER WITH (2) 2X8 JACK AND KING STUDS AT EA. END AND (2) 2X8 STUDS IN CENTER. |
| (B) | 3'-0" | 4'-0" | 3'-0" | 2'-0" | DOUBLE PANE WINDOW W/TEMPERED GLASS | (4) 2 X 12 HEADER WITH (2) 2X8 JACK AND KING STUDS AT EA. END AND (2) 2X8 STUDS IN CENTER. |
| (C) | 6'-0" | 4'-0" | - | - | SINGLE PANE WINDOW WITH TEMPERED GLASS | |

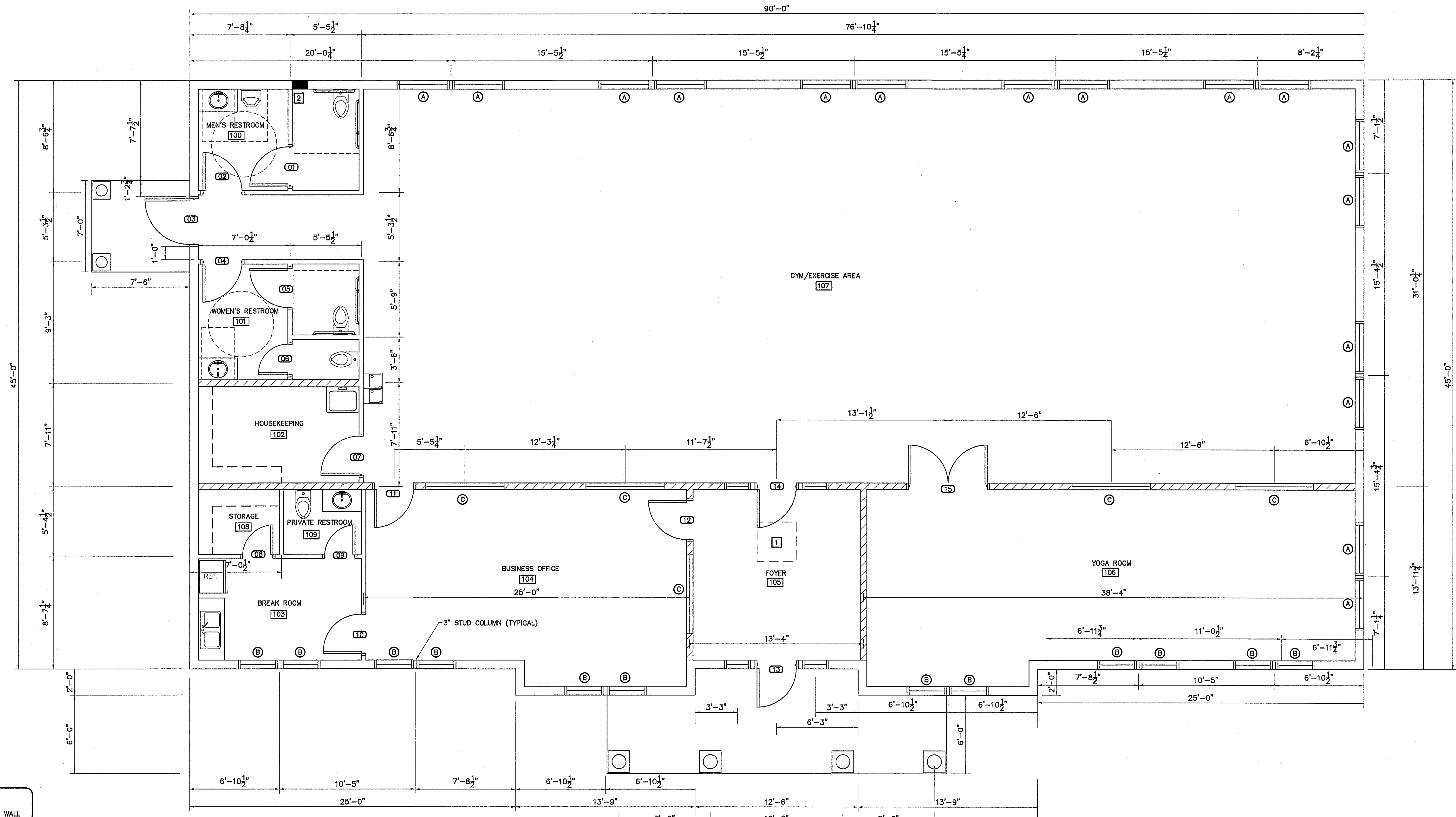
| DOOR NO. | DOOR SIZE | | | REMARKS |
|----------|-----------|-------|--------|--|
| | WIDE | HIGH | THICK. | |
| | (01) | 3'-0" | 7'-0" | |
| (02) | 3'-0" | 7'-0" | 1 3/4" | INTERIOR WOOD DOOR, HM FRAME |
| (03) | 3'-6" | 7'-0" | 1 3/4" | EXTERIOR STOREFRONT GLASS DOOR |
| (04) | 3'-0" | 7'-0" | 1 3/4" | INTERIOR WOOD DOOR, HM FRAME |
| (05) | 3'-0" | 7'-0" | 1 3/4" | INTERIOR WOOD DOOR, HM FRAME |
| (06) | 2'-4" | 7'-0" | 1 3/4" | INTERIOR WOOD DOOR, HM FRAME |
| (07) | 3'-0" | 7'-0" | 1 3/4" | INTERIOR WOOD DOOR, HM FRAME |
| (08) | 2'-4" | 7'-0" | 1 3/4" | INTERIOR WOOD DOOR, HM FRAME |
| (09) | 2'-4" | 7'-0" | 1 3/4" | INTERIOR WOOD DOOR, HM FRAME |
| (10) | 3'-0" | 7'-0" | 1 3/4" | INTERIOR WOOD DOOR, HM FRAME |
| (11) | 3'-0" | 7'-0" | 1 3/4" | INTERIOR WOOD DOOR, HM FRAME |
| (12) | 3'-0" | 7'-0" | 1 3/4" | INTERIOR WOOD DOOR, HM FRAME |
| (13) | 3'-0" | 7'-0" | 1 3/4" | DOUBLE PANE STOREFRONT EXT. GLASS DOOR W/24" SIDELIGHTS & 2'-6" TRANSOME |
| (14) | 3'-0" | 7'-0" | 1 3/4" | EXTERIOR STOREFRONT DOUBLE PANE GLASS DOOR W/24" SIDELIGHTS |
| (15) | 6'-0" | 7'-0" | 1 3/4" | STOREFRONT GLASS DOUBLE DOORS (TO BE TEMPERED) |

* 26 OZ. NYLON OR EQUIVALENT, GLUE DOWN TYPE PREFERRED
 ** ALL RESTROOMS TO HAVE CERAMIC TILE ON THE FLOOR AND TO 4" A.F.F. ON ALL WALLS.
 OWNER TO VERIFY ALL FINISHES AND COLORS BEFORE PLACING ORDER.

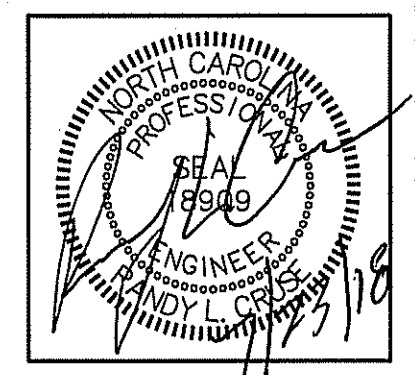
KEYNOTE:
 1 3'X3' ATTIC ACCESS; GENERAL CONTRACTOR TO COORDINATE LOCATION WITH ALL TRADES.
 2 INSTALL (4) STUD COL. @ GIRDER TRUSS LOCATION. VERIFY LOCATION WITH TRUSS MANUFACTURER. INSTALL (4) SIMPSON H2.5A HURRICANE CLIPS AT EACH END OF GIRDER TRUSS.

NOTES:
 1. EXTERIOR DIMENSIONS ARE TO WALL FRAMING.

VERIFY TYPES AND SIZES WITH OWNER BEFORE ORDERING.
 PROVIDE ALL HARDWARE AS REQUIRED. ALL HARDWARE TO BE A.D.A. COMPLIANT.
 VERIFY HARDWARE FINISHES & STYLES WITH OWNER BEFORE ORDERING.
 GLASS TO BE TEMPERED AS REQUIRED BY CODE



PROPOSED FLOOR PLAN
 SCALE: 1/4" = 1'-0"



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OFFICE & GYM FACILITY
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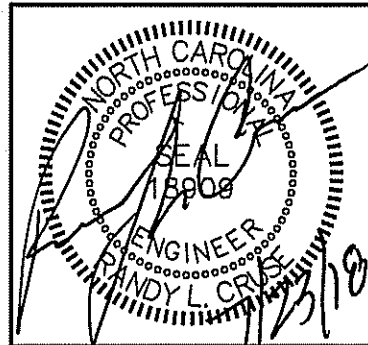
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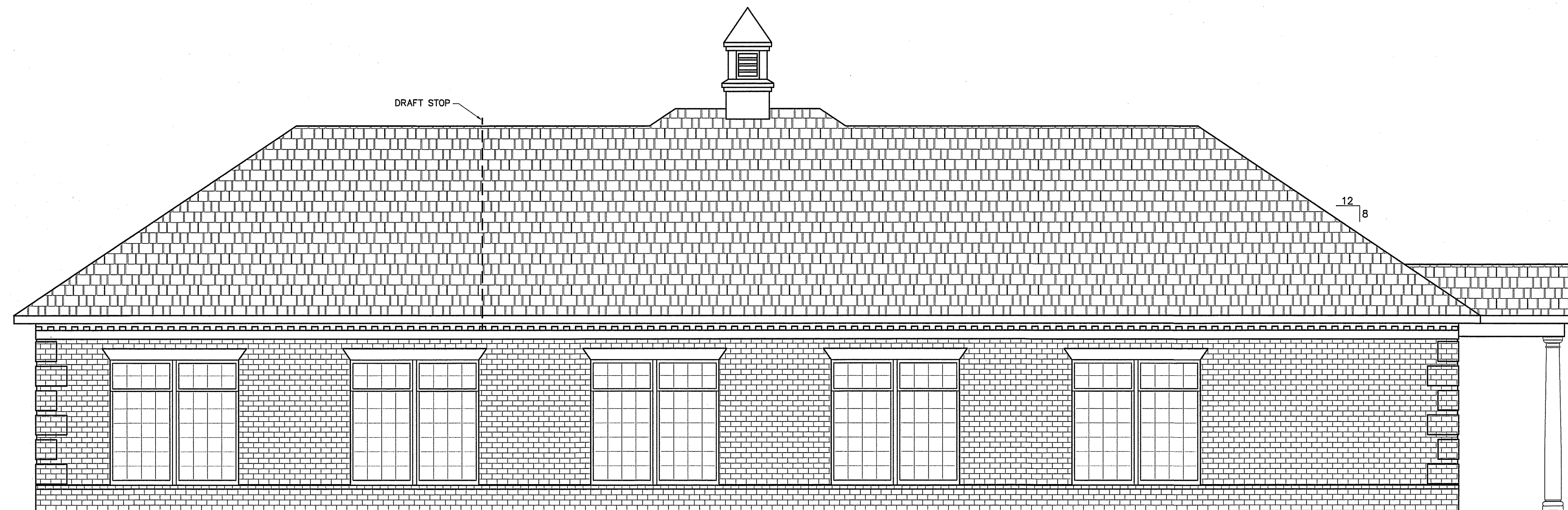
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F-1 OF 5



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



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

PLANS FOR:
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OFFICE & GYM FACILITY
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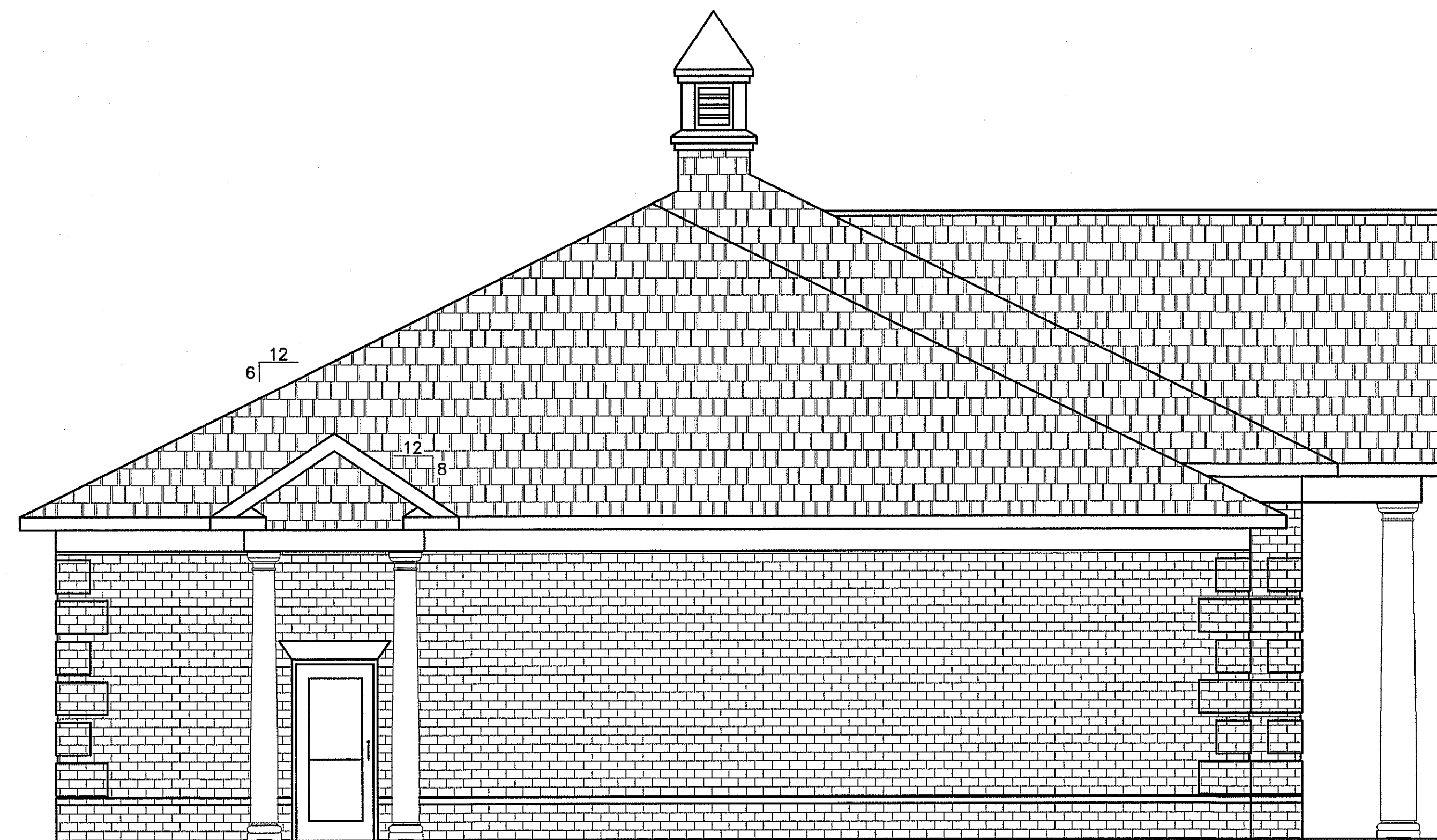
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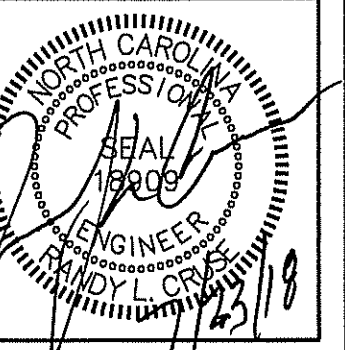
SHEET NO.
F-2 OF 5



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

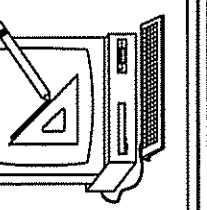


LEFT SIDE ELEVATION
SCALE: 1/4" = 1'-0"



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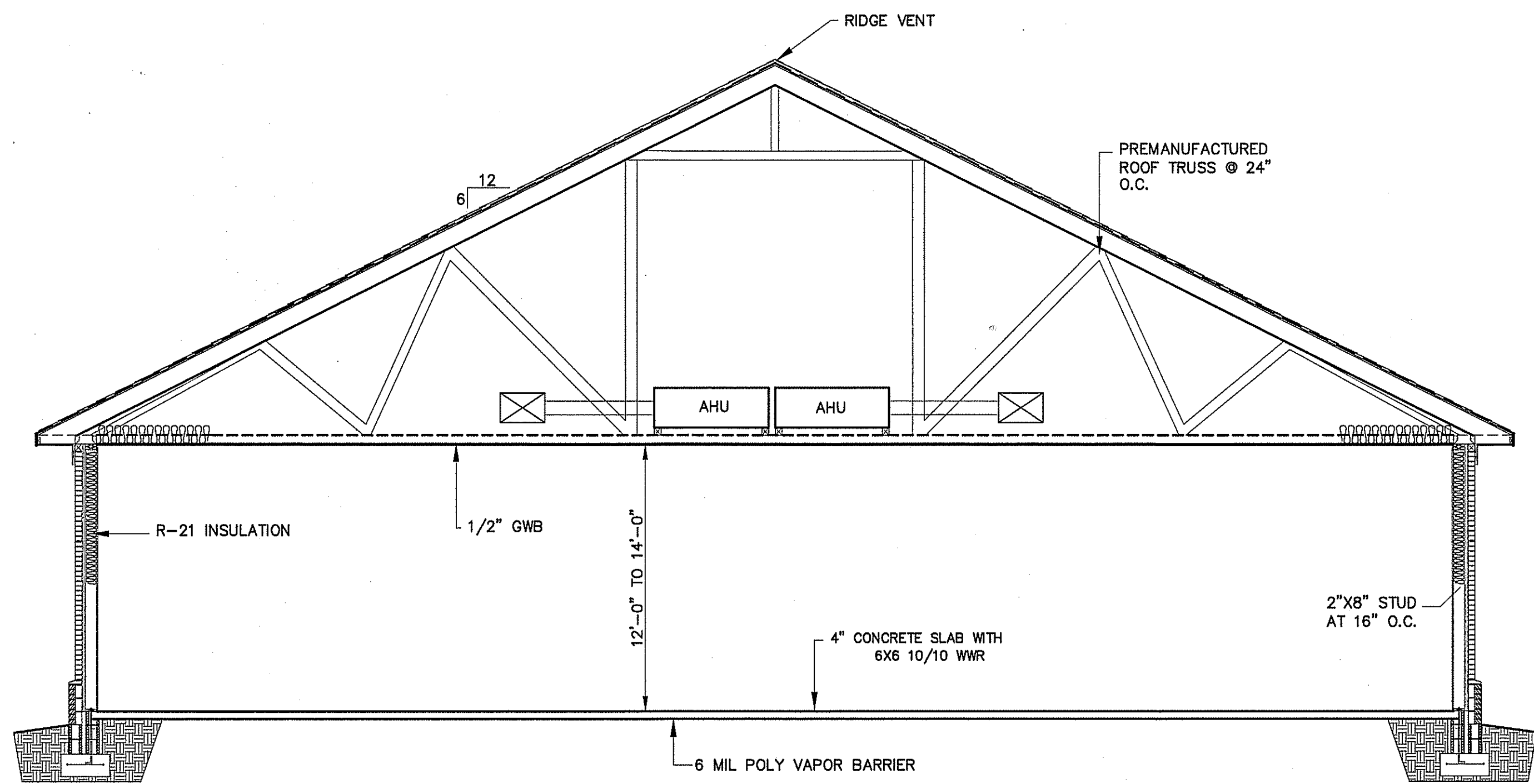
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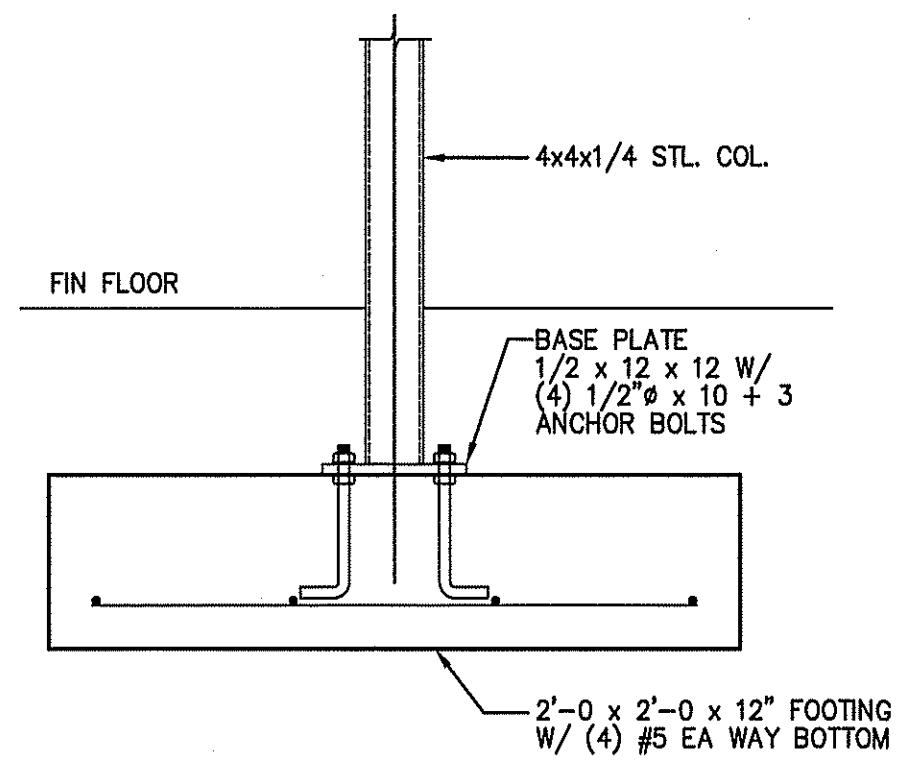
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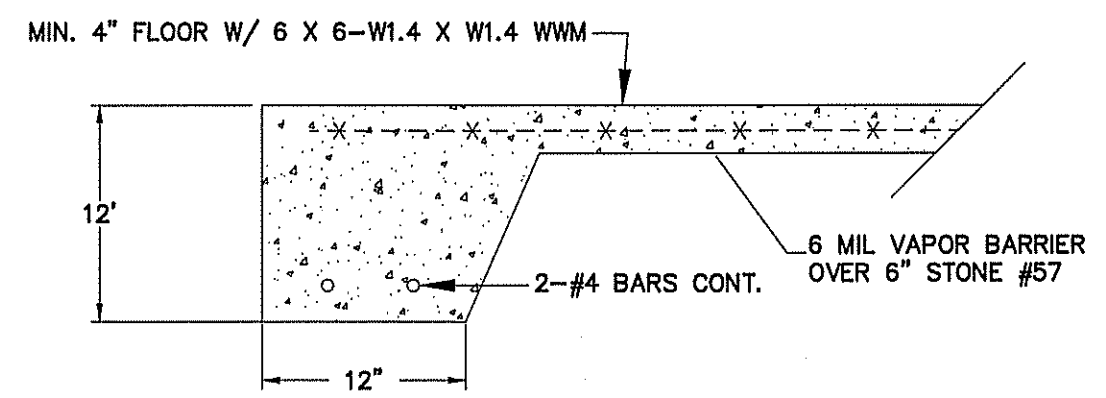
SHEET NO.
F-3 OF 5



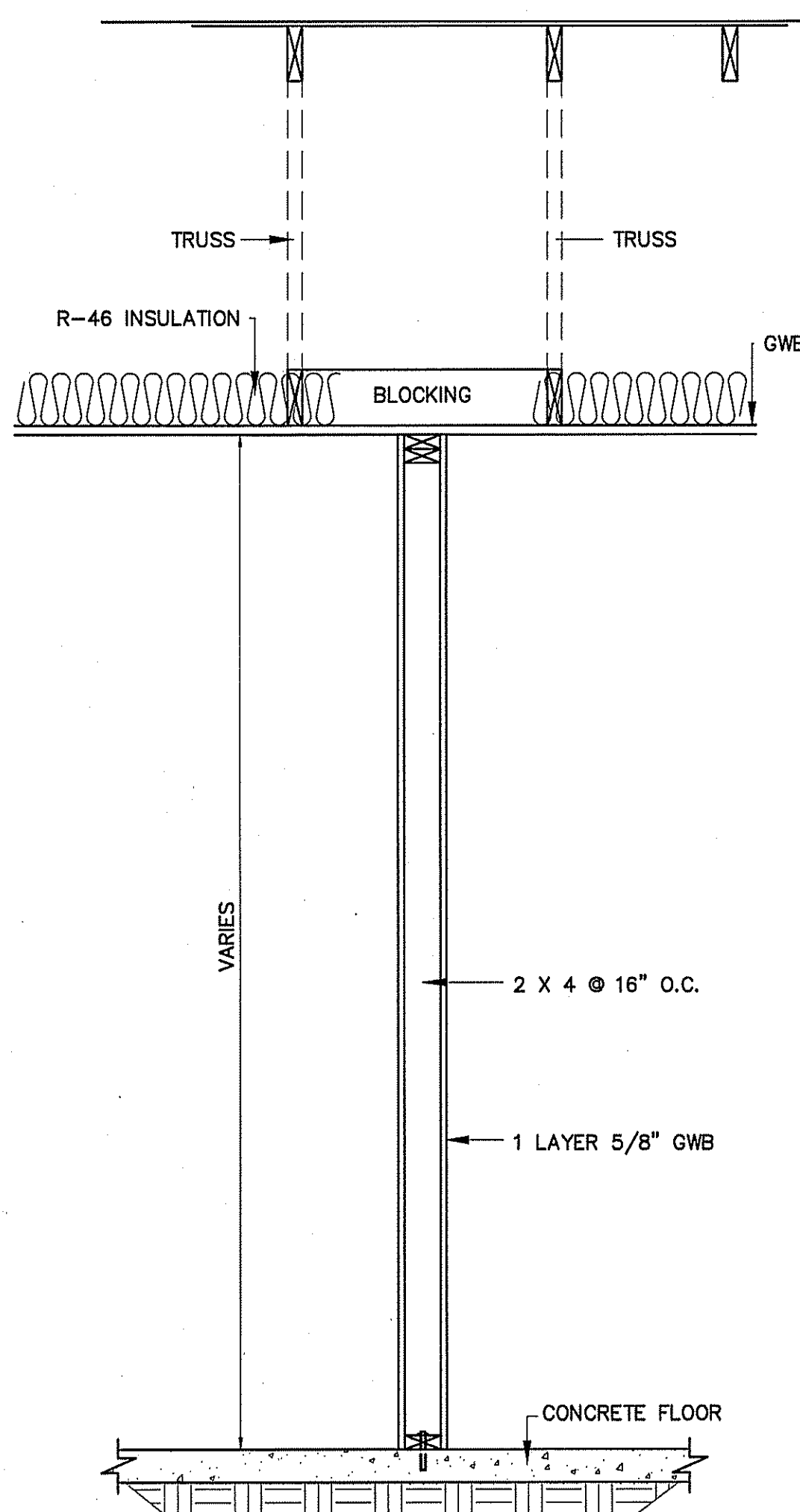
BUILDING SECTION
NOT TO SCALE



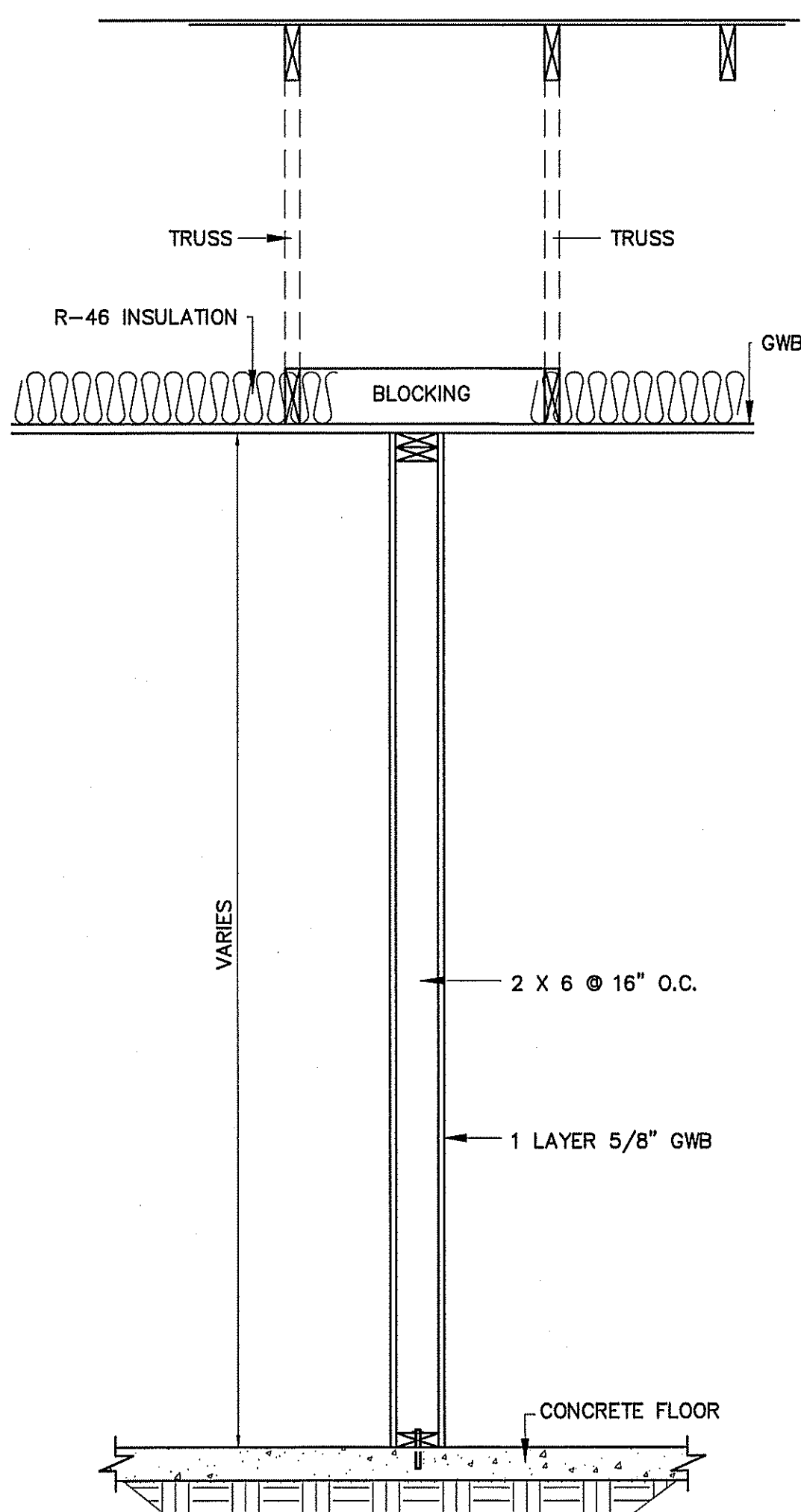
COLUMN FOOTING
NOT TO SCALE



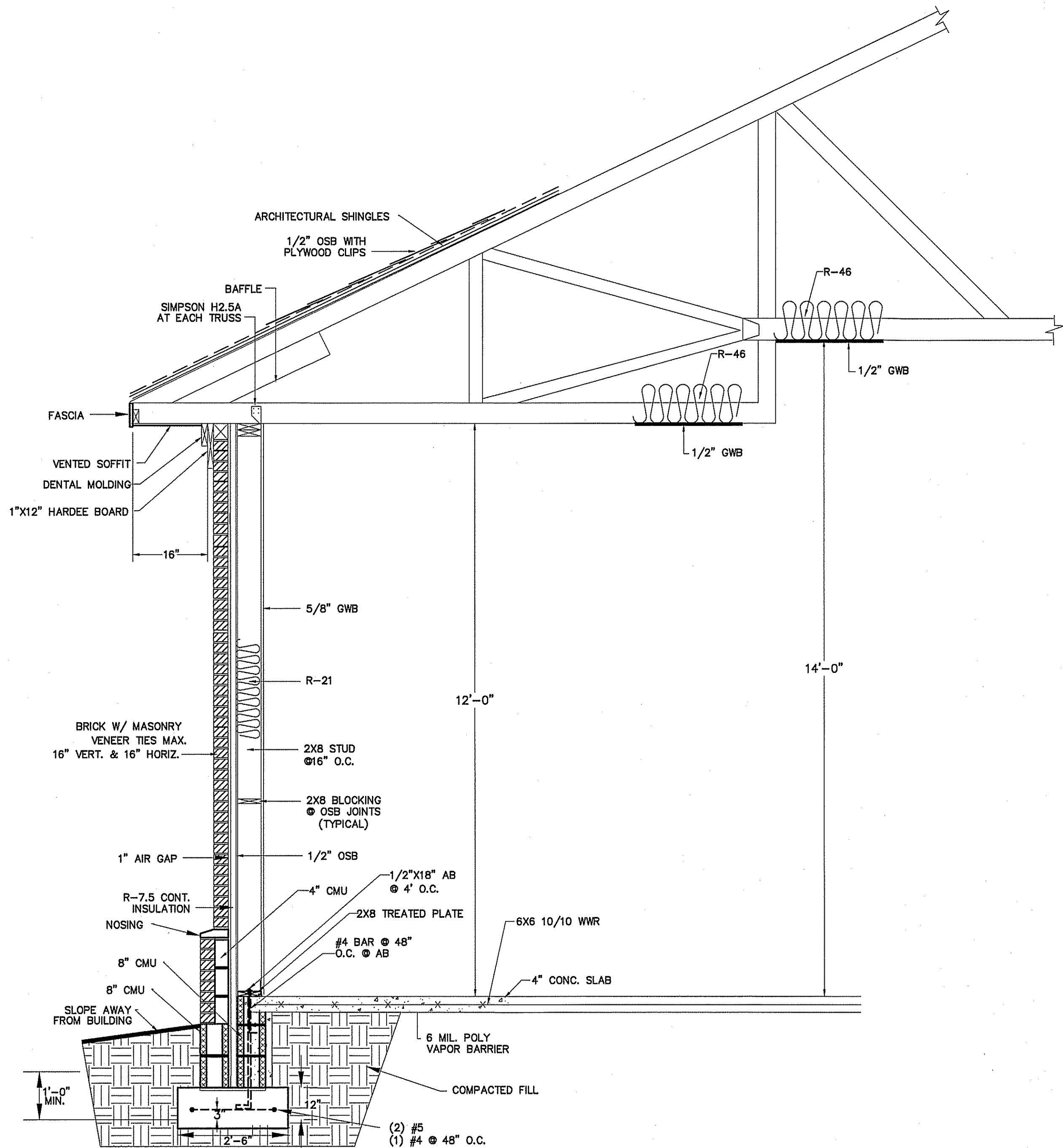
CROSS-SECTION
TYPICAL THICKENED SLAB EDGE
NOT TO SCALE



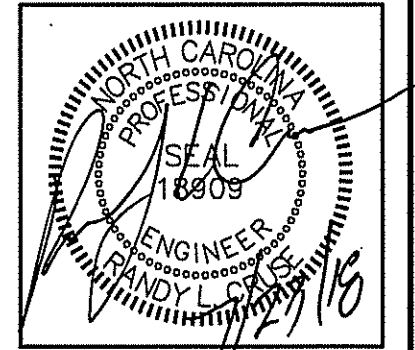
INTERIOR WALL SECTION
NOT TO SCALE



INTERIOR WALL SECTION
NOT TO SCALE

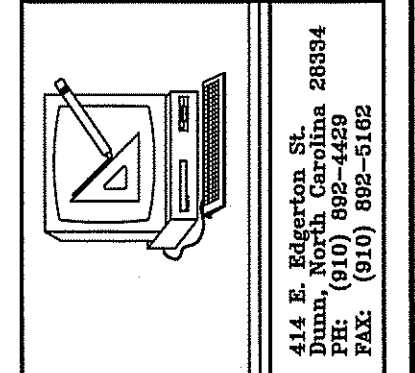


WALL SECTION
NOT TO SCALE



PLANS FOR:
CAMPBELL PONTE TOWNHOMES
OFFICE & GYM FACILITY
BUJES CREEK, NORTH CAROLINA

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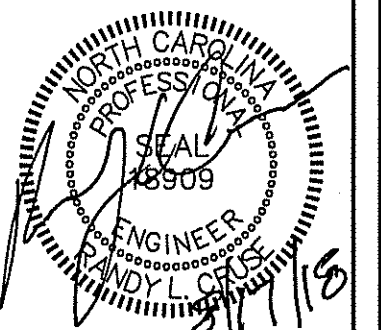
SHEET NO.
F-4 OF 5

NOTES:

1. ALLOWABLE SOIL BEARING CAPACITY OF 2000 PSF TO BE VERIFIED BY CONTRACTOR.
2. CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
3. CONTROL JOINTS TO BE PLACED AS SHOWN ON PLAN.

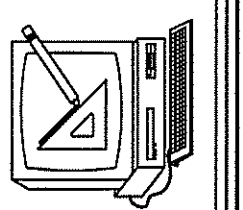
FOUNDATION NOTES:

1. FIELD VERIFY THE SIZE, LOCATIONS, ELEVATIONS, AND DETAILS OF ALL EXISTING CONSTRUCTION AND CONDITIONS THAT AFFECT THE WORK AND INFORM THE ENGINEER OF ANY DISCREPANCIES IN DIMENSION SIZES, LOCATIONS AND CONDITIONS BEFORE PROCEEDING WITH THE WORK.
2. PROVIDE ALL SHORING, SHEETING, UNDERPINNING, AND OTHER MEANS REQUIRED TO PROTECT AND MAINTAIN THE SAFETY, INTEGRITY, AND STABILITY OF ALL EXISTING AND NEW CONSTRUCTION THAT MAY BE AFFECTED BY THE WORK.
3. CONCRETE SHALL DEVELOP COMPRESSIVE STRENGTHS (F'c) AT 28 DAYS AS FOLLOWS: FOUNDATIONS, WALLS, FOOTING, ETC. 3000 PSI
SLABS ON GRADE 3000 PSI
4. ALL BUILDING FOOTINGS AND FOUNDATIONS ARE DESIGNED BASED UPON A MINIMUM ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF. IF SUITABLE SOIL CAPABLE OF SUSTAINING THIS CAPACITY IS NOT FOUND AT THE ELEVATIONS INDICATED, THE ENGINEER SHALL BE NOTIFIED AND THE FOUNDATIONS SHALL BE CHANGED IN ELEVATION AND/OR SIZE AS DETERMINED BY THE ENGINEER.
5. CONCRETE BAR REINFORCEMENT SHALL BE NEW BILLET STEEL CONFORMING TO THE STANDARD SPECIFICATION FOR DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT ASTM A-615, GRADE 60.
6. ALL STRUCTURAL FILL INSIDE THE BUILDING SHALL BE SELECTED FILL COMPACTED TO 98% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (ASTM D-898)
7. ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING STEEL SHALL CONFORM TO ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES " (ACI-315-80).
8. PROVIDE CORNER BARS AT ALL FOOTING CORNERS AND STEPS UNLESS OTHERWISE NOTED. BARS SHALL BE A MINIMUM OF 4'-0" LONG AND HAVE THE SAME SIZE AND SPACING AS HORIZONTAL REINFORCING.
9. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 AND A-82.
10. CONTINUOUS REINFORCING BARS SHALL BE LAPPED 48 BAR DIAMETERS AT ALL SPLICES UNLESS OTHERWISE NOTED.
11. STANDARD CONSTRUCTION JOINTS AND EXPANSION JOINTS SHALL BE LOCATED AS SHOWN ON THE PLANS.
12. ALL CONCRETE SHALL BE PROTECTED AGAINST FREEZING FOR SEVEN DAYS AFTER POURING.
13. FLOOR SLAB TO BE POURED ON 6 MIL POLYETHYLENE FILM OVER 4" THICK DRAINAGE FILL OR OVER EXISTING CONCRETE SLAB.
14. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND ARCHITECTURAL DRAWINGS AND CONSULT ALL AFFECTED SUBCONTRACTORS FOR LOCATIONS AND SIZES OF REQUIRED OPENINGS AND CAST-IN-ITEMS IN CONCRETE WORK. ALL OPENINGS ON THE STRUCTURAL DRAWINGS SHALL BE SHOWN ON SHOP DRAWINGS FOR APPROVAL.



PLANS FOR:
CAMPBELL POINTE TOWNHOMES
OFFICE & GYM FACILITY
BUIES CREEK, NORTH CAROLINA

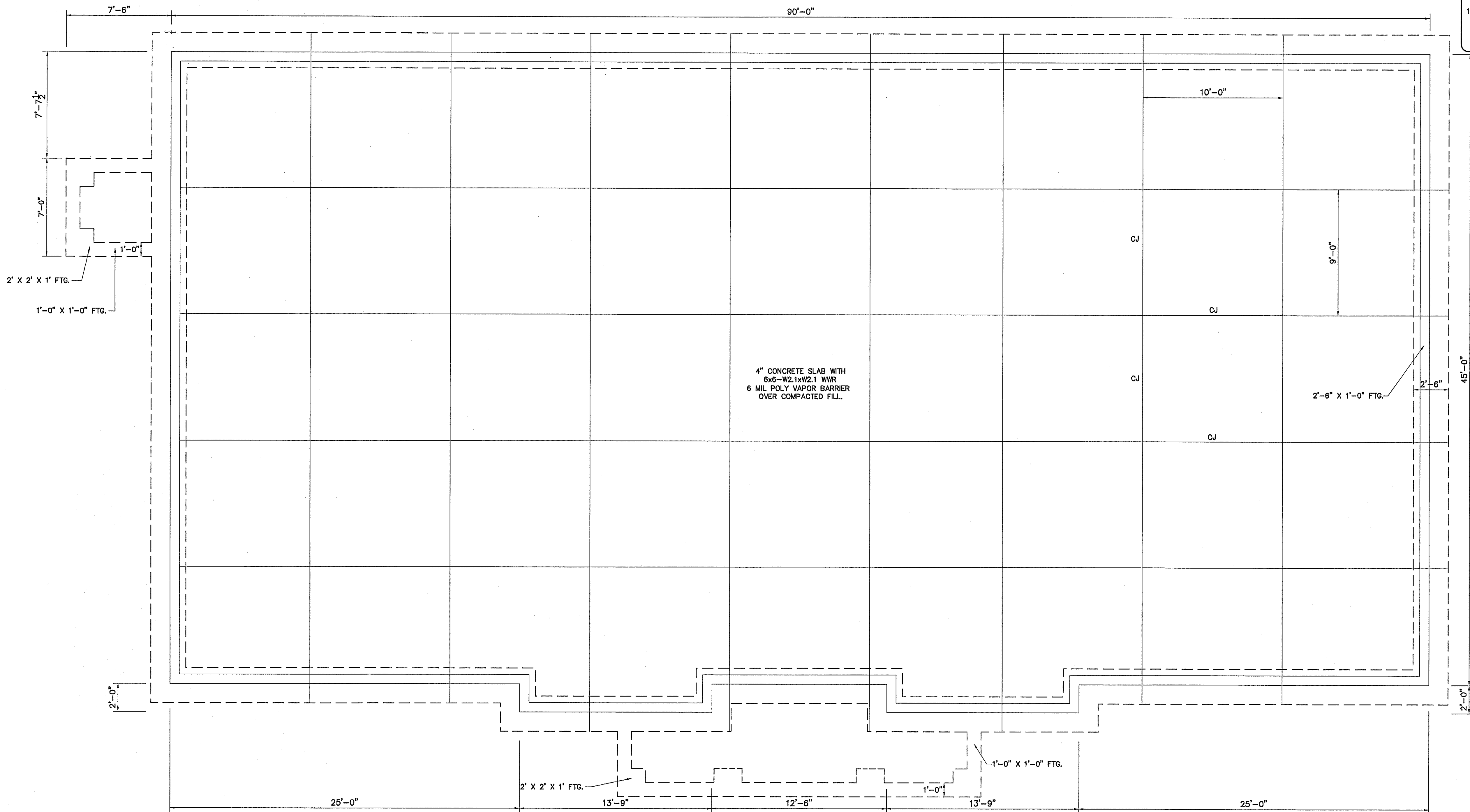
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SHEET NO.
F-5 OF 5



NOTES:
 ALL MEASUREMENTS ARE TO FRAMING, ALLOW FOR BRICK VENEER ON FOOTING, SEE WALL SECTION DETAIL SHEET F-4 OF 5.

FOUNDATION PLAN
 SCALE: 1/4" = 1'-0"

PLUMBING FIXTURE SCHEDULE

| MARK | MAKE | MODEL | DESCRIPTION | NOTES |
|------|-------------------|-------------------------------|--|---|
| P-1 | AMERICAN STANDARD | MADERA 2854.016 | EL 1.6/PA 16.5" HC ELONGATED WATER CLOSET HC ACCESSIBLE, FLUSH VALVE FLOOR MOUNTED | WHITE 5901.100 SEAT, 6047.161 MANUAL VALVE |
| P-2 | AMERICAN STANDARD | MADERA 3451.660.020 | EL 1.6/PA 15.0" ELONGATED WATER CLOSET HC ACCESSIBLE, FLUSH VALVE FLOOR MOUNTED | WHITE 5901.100 SEAT, 6047.161 MANUAL VALVE |
| P-3 | AMERICAN STANDARD | AQUALYN 0476.028 | SELF-RIMMING COUNTERTOP LAVATORY | AMERICAN STANDARD 1340M.105 SINGLE CONTROL METERING FAUCET W/POP-UP DRAIN |
| P-4 | OASIS | PGBACSL | SPLIT LEVEL ELECTRIC WATER COOLER | BARRIER - FREE |
| P-5 | JUST | DL-2133-A-GR | 2 COMPARTMENT SINK | PROMIDE W/JPO-1000 PULLOUT ROSE SPRAY FAUCET; JDP-DROP POST DRAIN; J-1500 SOAP DISPENSER. |
| P-6 | REFRIGERATOR | SELECTED BY OWNER | | |
| P-7 | STATESMAN | PCE 50 20LSA | LOWBOY 50 GAL 4.5 KW WATER HEATER | HEATER IS 32-1/4" TALL; ALLOW FOR MINIMUM CLEARANCES DURING INSTALLATION |
| P-8 | MOP SINK BY OWNER | | | |
| P-9 | WOODFORD | MOD-65 | HOSE BIB FREEZE PROOF | ANTI-SIPHONING WITH VACUUM BREAKER, SELF DRAINING. |
| P-10 | AMERICAN STANDARD | WASHBROOK 1.0 URINAL 6501.010 | WALL HUNG URINAL RIM 17" A.F.F., HC ACCESSIBLE | SLOAN ROYAL 3/4" VALVE |

* VERIFY ALL FIXTURES WITH OWNER BEFORE PURCHASE OR INSTALLATION SEE CIVIL PLANS FOR BACKFLOW PREVENTOR

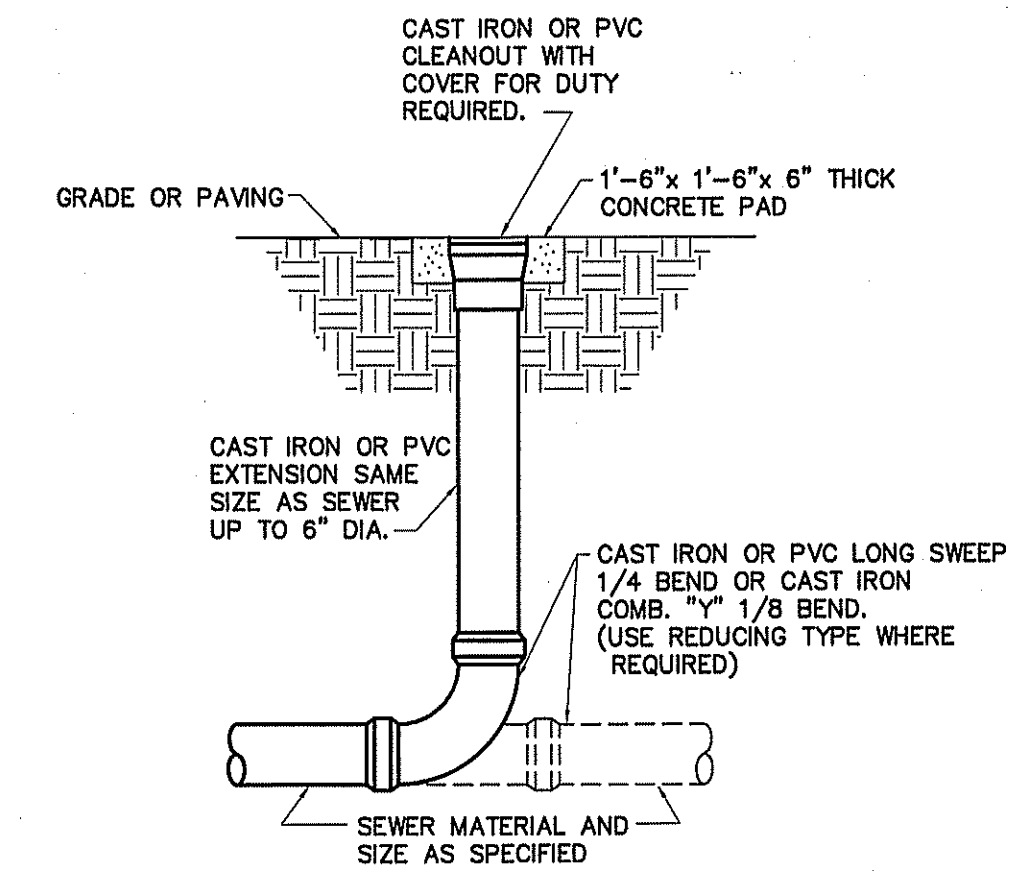
PLUMBING CONNECTION SCHEDULE

| FIXTURE | C.W. | H.W. | WASTE | VENT |
|-------------------------|------|------|-------|--------|
| FLUSH TANK WATER CLOSET | 1/2" | - | 3" | 2" |
| LAVATORY | 1/2" | 1/2" | 2" | 1 1/2" |
| ELEC. WATER COOLER | 1/2" | - | 2" | 1 1/2" |
| FLOOR DRAIN | | | 3" | 2" |
| KITCHEN SINKS | 1/2" | 1/2" | 3" | 2" |
| MOP SINK | 1/2" | 1/2" | 2" | 1 1/2" |
| URINAL-3/4"V | 3/4" | - | 3" | 2" |

PLUMBING CALCULATIONS

| ITEM | # OF | FIXTURE UNITS (EACH) | | | FIXTURE UNITS (TOTAL) | | | FIXTURE UNITS (WASTE) |
|-------------------------|------|----------------------|------|-------|-----------------------|-------------|-------------|-----------------------|
| | | COLD | HOT | TOTAL | COLD | HOT | TOTAL | |
| FLUSH TANK WATER CLOSET | 4 | 10.0 | - | 10.0 | 40.0 | - | 40.0 | 4/16 |
| LAVATORY | 3 | 1.5 | 1.5 | 2 | 4.5 | 4.5 | 6.0 | 1/3 |
| DRINKING FOUNTAIN | 2 | .25 | - | .25 | .50 | - | .50 | 0.5/1.0 |
| 2 COMP. SINK | 1 | 3.0 | 3.0 | 4.0 | 3.0 | 3.0 | 4.0 | 5/5 |
| HOSE BIBBS | 2 | 1.5 | - | 1.5 | 3.0 | - | 3.0 | 1/2 |
| MOP SINK | 1 | 2.25 | 2.25 | 3 | 2.25 | 2.25 | 3.0 | 1/1 |
| URINAL-3/4" | 1 | 5.0 | - | 5.0 | 5.0 | - | 5.0 | 4/4 |
| TOTAL | | | | | 58.25 | 9.75 | 61.5 | 32.0 |

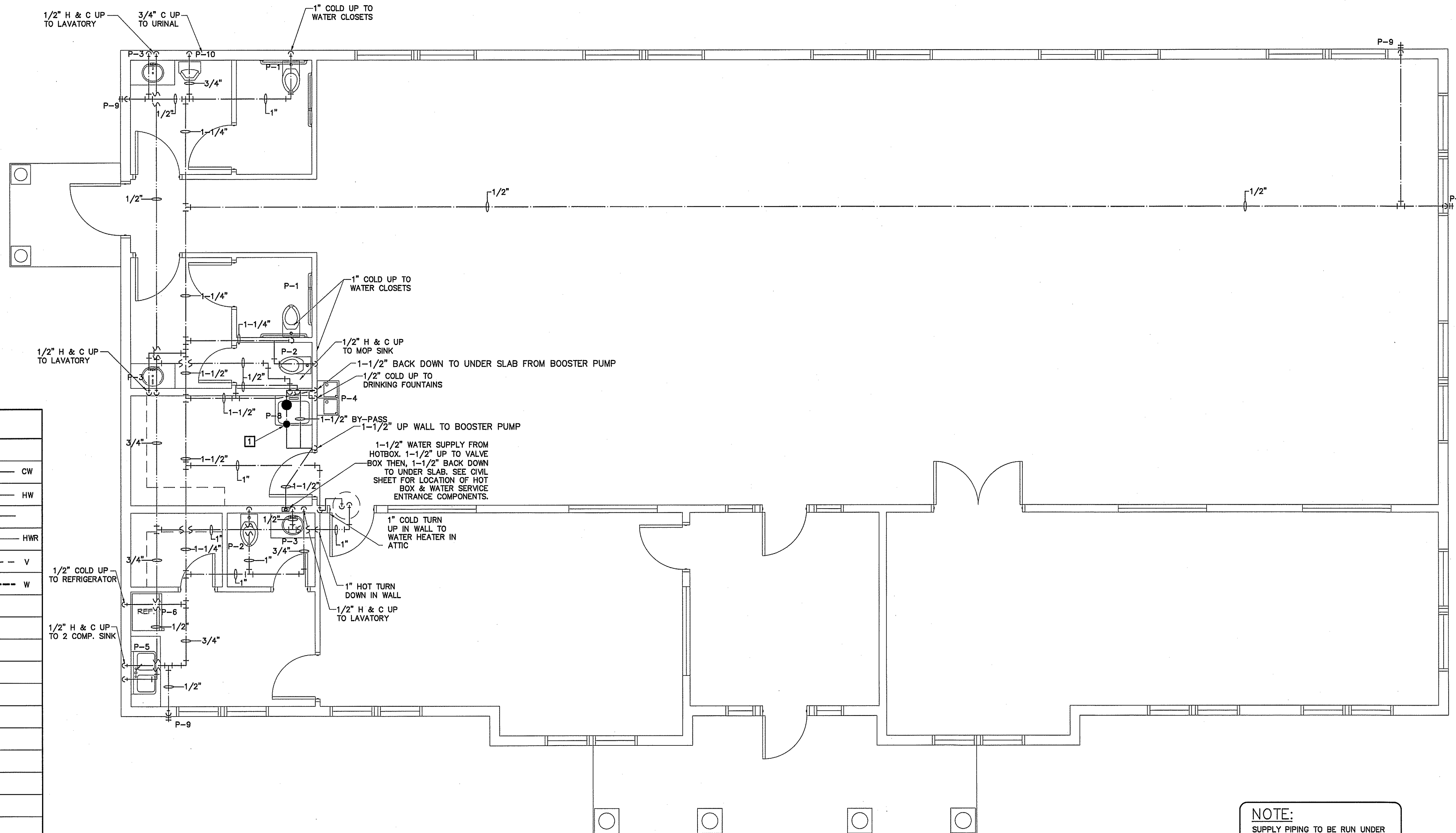
54.6 GPM
WATER SUPPLY PIPE SIZE: MINIMUM 1-1/2"



DETAIL-CLEAN OUT AT GRADE
NOT TO SCALE

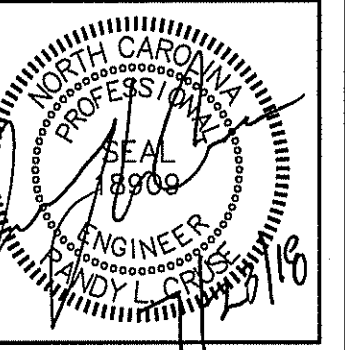
KEY NOTE:

1 LITTLE GIANT INLINE 400 MODEL PUMP SYSTEM
INSTALL PER MANUFACTURER'S RECOMMENDATIONS.



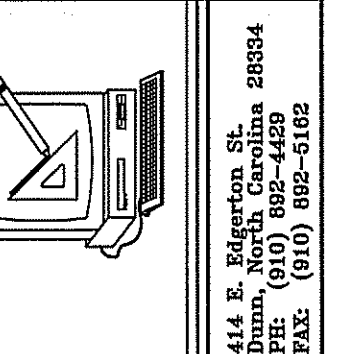
PLUMBING SUPPLY PIPING PLAN
SCALE: 1/4" = 1'-0"

| PLUMBING LEGEND | |
|--------------------------------------|--------------------------------------|
| DESCRIPTION | SYMBOL |
| COLD WATER | — CW |
| HOT WATER | — HW |
| COLD WATER (FILTERED) | — |
| RECIRCULATED WATER | — HWR |
| VENT PIPING | - - - V |
| WASTE PIPING | — NEW — EXISTING — W |
| CLEAN OUT IN GRADE | □ C.O.I.G. |
| FLOOR CLEAN OUT | ○ F.C.O. |
| NON FREEZE HOSE BIBB | — NFHB |
| FLOOR DRAIN | ○ F.D. |
| CHECK VALVE | ⊘ |
| BALL VALVE | ⊘ |
| GATE VALVE | ⊘ |
| SHUT-OFF VALVE | ⊘ |
| BACKFLOW PREVENTER | ⊘ |
| FIXTURE DESIGNATION | P-- |
| MOUNTING HEIGHT | MH |
| POINT OF CONNECTION NEW TO EXISTING | ⊕ |
| FLOOR SINK | ⊕ |
| SHOCK ABSORBER W/BALL VALVE SHUT-OFF | ⊕ SA SIZE PER MANUF. RECOMMENDATIONS |
| CHANGE IN PIPE SIZE | ↗ |



PLANS FOR:
CAMPBELL PONTE TOWNHOMES
OFFICE & GYM FACILITY
BUJES CREEK, NORTH CAROLINA

| REVISIONS | |
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| NO. | |
| | |



Cruse and Associates, P.A.

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P.O. Box 1000

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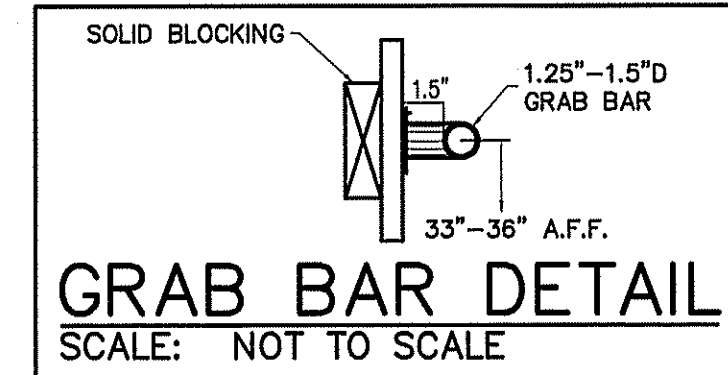
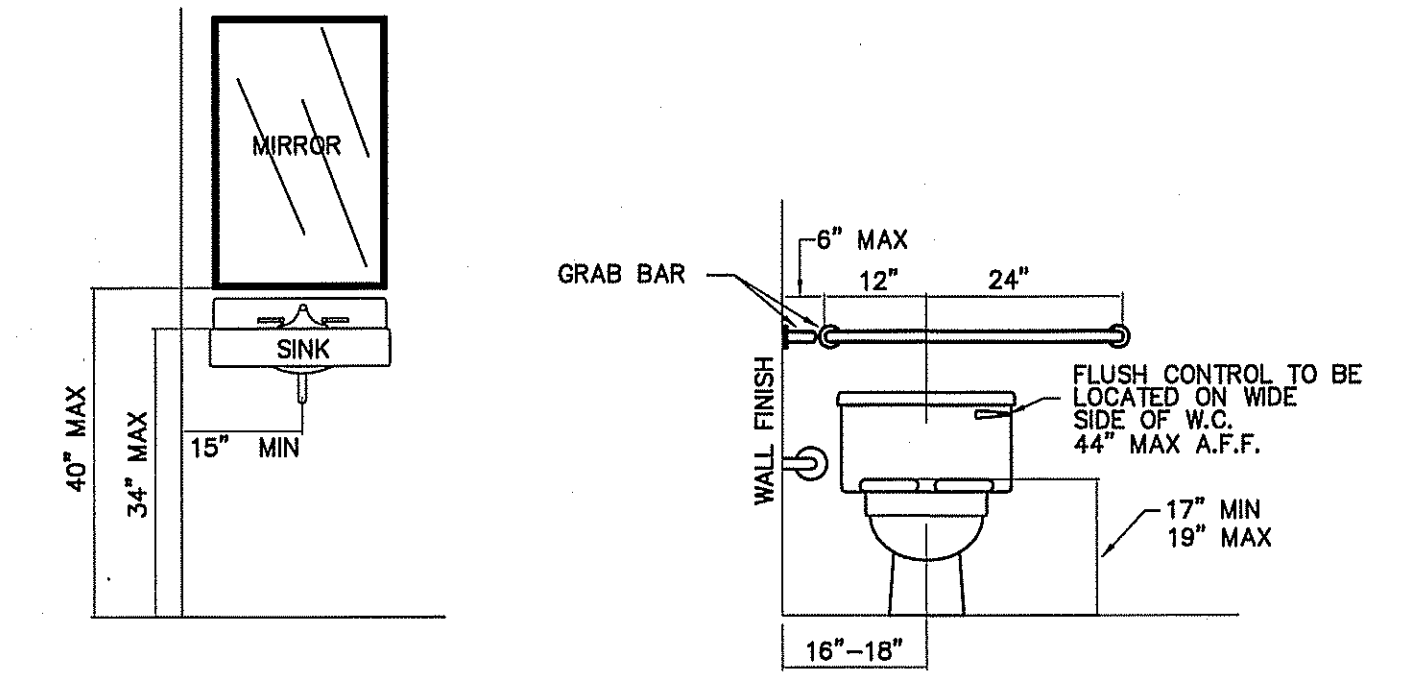
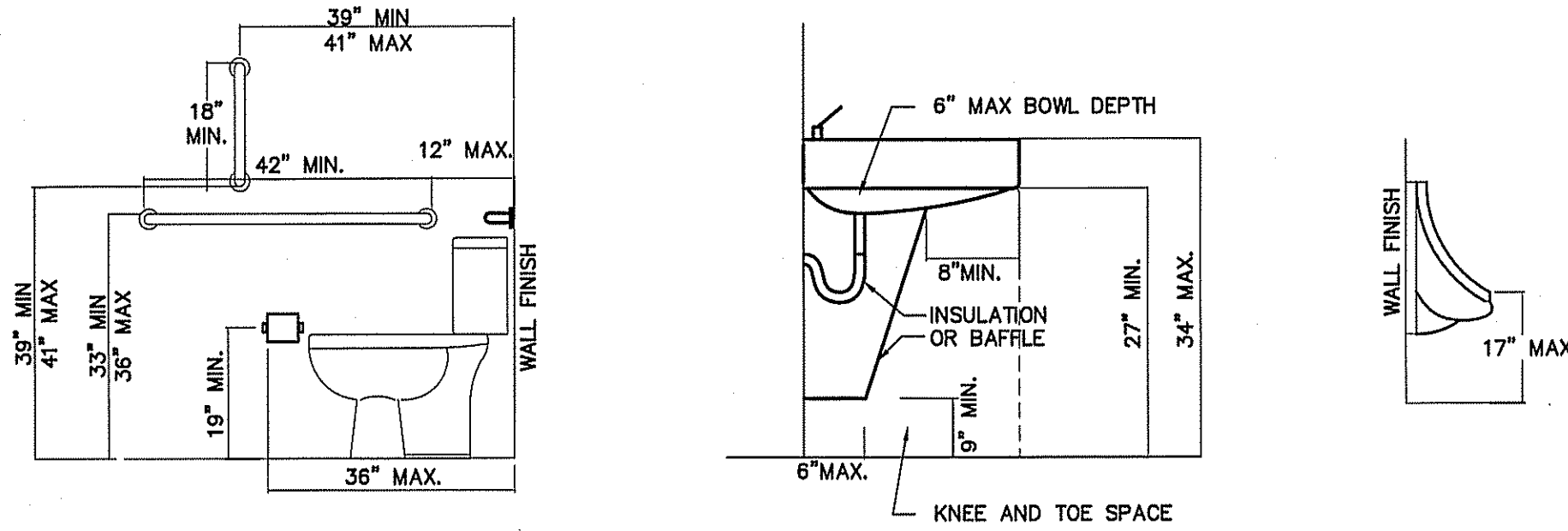
SHEET NO.
P-1 OF 3

| PLUMBING FIXTURE SCHEDULE | | | | |
|---------------------------|-------------------|-------------------------------|--|---|
| MARK | MAKE | MODEL | DESCRIPTION | NOTES |
| P-1 | AMERICAN STANDARD | MADERA 2854.016 | EL 1.6/PA 16.5" HC ELONGATED WATER CLOSET HC ACCESSIBLE, FLUSH VALVE FLOOR MOUNTED | WHITE 5901.100 SEAT, 6047.161 MANUAL VALVE |
| P-2 | AMERICAN STANDARD | MADERA 3451.660.020 | EL 1.6/PA 15.0" ELONGATED WATER CLOSET HC ACCESSIBLE, FLUSH VALVE FLOOR MOUNTED | WHITE 5901.100 SEAT, 6047.161 MANUAL VALVE |
| P-3 | AMERICAN STANDARD | AQUALYN 0476.028 | SELF-RIMMING COUNTERTOP LAVATORY | AMERICAN STANDARD 1340M.105 SINGLE CONTROL METERING FAUCET W/POP-UP DRAIN |
| P-4 | OASIS | PG8ACSL | SPLIT LEVEL ELECTRIC WATER COOLER | BARRIER - FREE |
| P-5 | JUST | DL-2133-A-GR | 2 COMPARTMENT SINK | PROVIDE W/JPO-1000 PULLOUT ROSE SPRAY FAUCET; JDP-DROP POST DRAIN; J-1500 SOAP DISPENSER. |
| P-6 | REFRIGERATOR | SELECTED BY OWNER | | |
| P-7 | STATESMAN | PCE 50 20LSA | LOWBOY 50 GAL 4.5 KW WATER HEATER | HEATER IS 32-1/4" TALL; ALLOW FOR MINIMUM CLEARANCES DURING INSTALLATION |
| P-8 | MOP SINK | BY OWNER | | |
| P-9 | WOODFORD | MOD-65 | HOSE BIB FREEZE PROOF | ANTI-SIPHONING WITH VACUUM BREAKER, SELF DRAINING. |
| P-10 | AMERICAN STANDARD | WASHBROOK 1.0 URINAL 6501.010 | WALL HUNG URINAL RIM 17" A.F.F., HC ACCESSIBLE | SLOAN ROYAL 3/4" VALVE |

* VERIFY ALL FIXTURES WITH OWNER BEFORE PURCHASE OR INSTALLATION
SEE CIVIL PLANS FOR BACKFLOW PREVENTOR

PLUMBING NOTES:

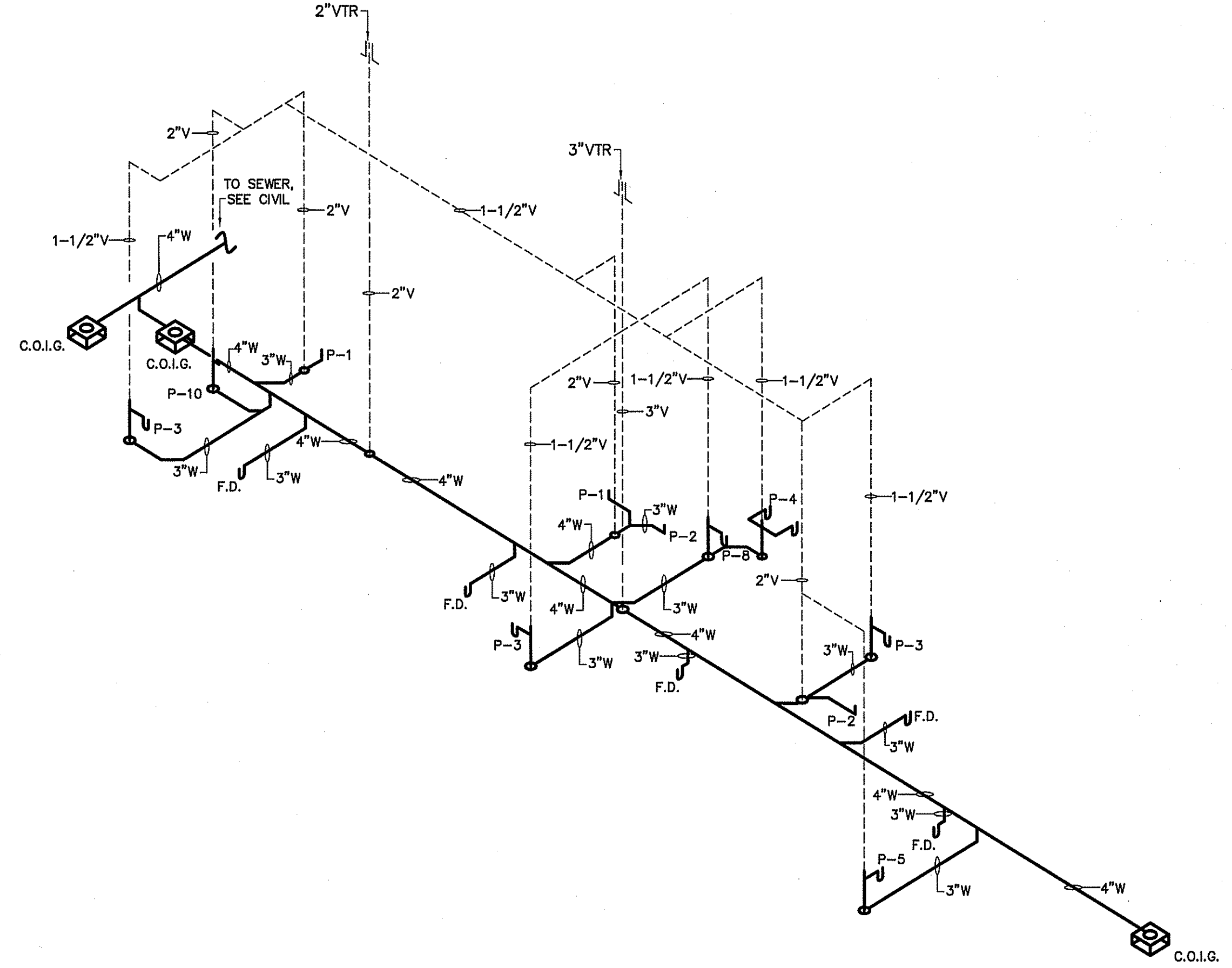
- ALL WORK SHALL BE IN COMPLIANCE WITH APPLICABLE LOCAL, STATE, AND NATIONAL CODES.
- CONTRACTORS SHALL COORDINATE PIPING WITH ALL OTHER TRADES.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL/STRUCTURAL DRAWINGS FOR DIMENSIONS.
- CONTRACTOR SHALL FURNISH AND INSTALL DIELECTRIC UNIONS AT ALL CONNECTIONS BETWEEN DISSIMILAR METALS.
- CONTRACTOR SHALL FURNISH AND INSTALL ESCUTCHEONS AND COVER PLATES AT ALL FINISHED WALLS, CEILINGS AND FLOOR OPENINGS.
- PIPING SHALL BE DISINFECTED IN ACCORDANCE WITH STATE AND LOCAL CODE. (REFER TO SPECIFICATIONS.)
- ALL PIPING SHALL BE TESTED FOR LEAKS. IF ANY LEAKS ARE DETECTED THE PIPING SHALL BE REPAIRED, RESOLDERED OR REPLACED AND RETESTED.
- ALL SOLDER SHALL BE OF THE LEAD FREE TYPE.
- WATER HEATER SHALL BE SUPPLIED WITH FACTORY INSTALLED T&P VALVES AND SHALL HAVE UNIONS AND ISOLATION VALVES.
- DOMESTIC WATER SUPPLY PIPING SHALL BE COPPER, CPVC OR PEX WHERE ALLOWED BY CODE.
- WASTE AND VENT PIPING SHALL BE SCH. 40 PVC OR HEAVY DUTY CAST IRON UNDER TRAFFIC AREAS.
- INSTALL THERMOSTATICALLY CONTROLLED MIXING VALVES AS NEEDED TO ENSURE HOT WATER TEMPERATURE TO ALL HAND WASHING LOCATIONS DOES NOT EXCEED 110°F.
- ALL FLOOR DRAINS & HUB DRAINS SHALL BE PROVIDED WITH TRAP PRIMER EXCEPT FLOOR DRAINS IN TOILETS WHERE HOSE BIBS ARE PROVIDED.
- HOT WATER PIPING SHALL BE INSULATED WITH 1" THICK FIBROUS GLASS INSULATION. COLD WATER PIPING SHALL BE INSULATED WITH 1/2" FIBROUS GLASS INSULATION.
- ALL SUPPLY RUNS TO BE UNDER SLAB.



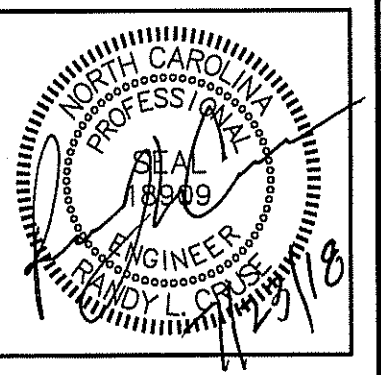
ALL FAUCETS/FIXTURES TO BE ADA COMPLIANT AS REQUIRED.

RESTROOM ACCESSIBILITY DETAILS
SCALE: 1/2" = 1'-0"

| PLUMBING LEGEND | |
|--------------------------------------|--------------------------------------|
| DESCRIPTION | SYMBOL |
| COLD WATER | — CW |
| HOT WATER | — HW |
| COLD WATER (FILTERED) | — L |
| RECIRCULATED WATER | — HWR |
| VENT PIPING | - - - V |
| WASTE PIPING | — NEW — EXISTING — W |
| CLEAN OUT IN GRADE | □ C.O.I.G. |
| FLOOR CLEAN OUT | ○ F.C.O. |
| NON FREEZE HOSE BIBB | — NFBH |
| FLOOR DRAIN | ○ F.D. |
| CHECK VALVE | — |
| BALL VALVE | — |
| GATE VALVE | — |
| SHUT-OFF VALVE | — |
| BACKFLOW PREVENTER | — |
| FIXTURE DESIGNATION | P-- |
| MOUNTING HEIGHT | MH |
| POINT OF CONNECTION NEW TO EXISTING | — |
| FLOOR SINK | — |
| SHOCK ABSORBER W/BALL VALVE SHUT-OFF | — SA SIZE PER MANUF. RECOMMENDATIONS |
| CHANGE IN PIPE SIZE | — |



WASTE & VENT RISER DIAGRAM
NOT TO SCALE



PLANS FOR:
CAMPBELL POINTE TOWNHOMES
OFFICE & GYM FACILITY
BUJES CREEK, NORTH CAROLINA

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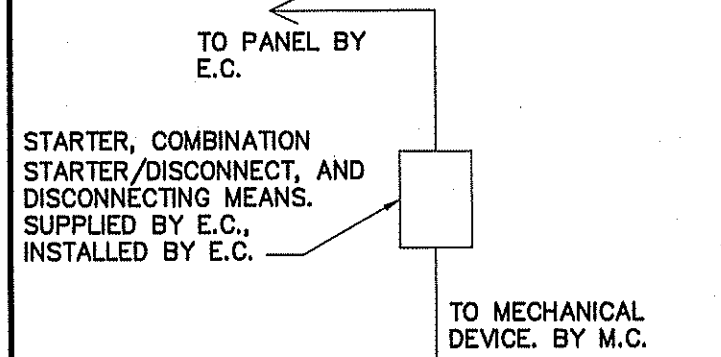
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SHEET NO.
P-3 OF 3

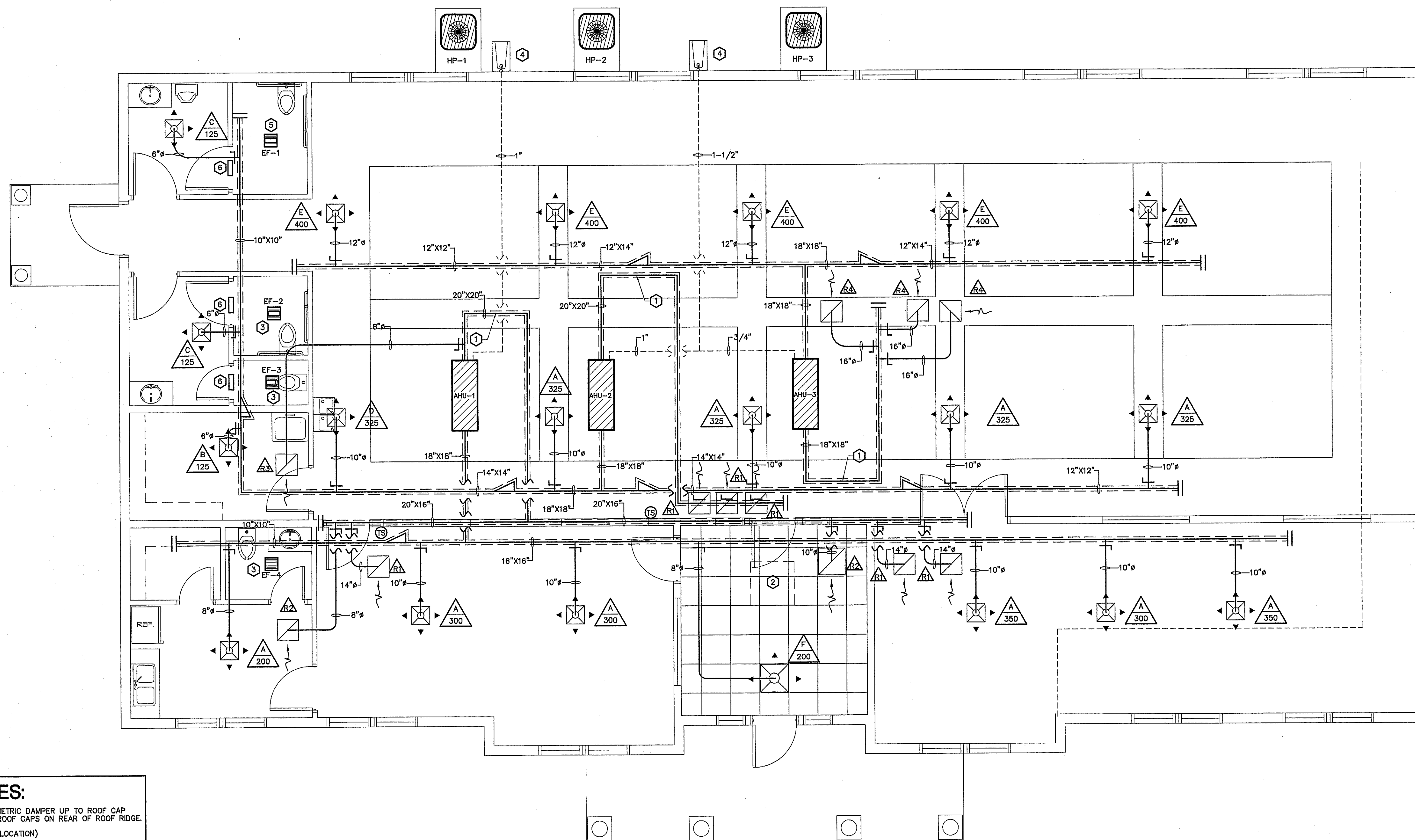
CONNECTION SCHEDULE



ALL STARTERS, COMBINATION STARTER/DISCONNECTS, AND DISCONNECTING MEANS, SUPPLIED BY E.C. FOR MECHANICAL EQUIPMENT AS REQUIRED BY NEC AND MECHANICAL EQUIPMENT MANUFACTURER'S REQUIREMENTS.

MECHANICAL SYMBOL LEGEND

| SINGLE LINE | DOUBLE LINE | DESCRIPTION | SINGLE LINE | DOUBLE LINE | DESCRIPTION | SINGLE LINE | DOUBLE LINE | DESCRIPTION |
|-------------|-------------|--|-------------|-------------|--|-------------|-------------|---|
| | | TAKE OFF TO SUPPLY AIR REGISTER WITH EXT. INSUL. DUCTWORK | | | VOLUME CONTROL DAMPER (TYP) CEILING DIFFUSER | | | SUPPLY AIR CEILING DIFFUSER, ARROW INDICATES DIRECTION OF BLOW & ACTIVE DIFFUSER SIDES |
| | | END CAP | | | F.D.=FIRE DAMPER (1-1/2)=RATED FOR 1-1/2 HRS. | | | ELECT. DUCT INSERT HEATER WITH CONTROL PANEL AHU W/FLEXIBLE CONNECTION AT SUPPLY AND RETURN DUCT |
| | | ACCESS DOOR DOOR SIZE DUCT HEIGHT 8X8 10" 10X10 12" 12X12 14" & LARGER | | | ONE SIDED REDUCING TRANSITION | | | KEY NOTE |
| | | | | | RETURN AIR OR EXHAUST GRILLE | | | MARK XXX - CFM-DIFFUSER, REGISTER OR GRILLE (SEE SCHEDULE) |
| | | | | | RETURN AIR OR EXHAUST GRILLE | | | EXHAUST FAN |



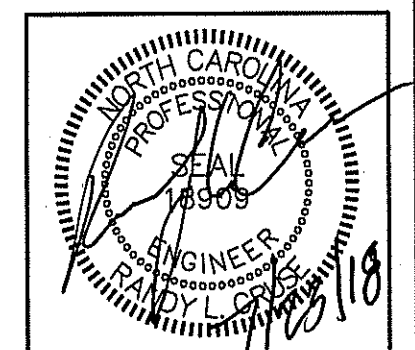
KEY NOTES:

- ① 10" OUTSIDE AIR DUCT WITH VOLUMETRIC DAMPER UP TO ROOF CAP (GREENHECK GR51-10). KEEP ALL ROOF CAPS ON REAR OF ROOF RIDGE.
 - ② ATTIC ACCESS (FIELD COORDINATE LOCATION)
 - ③ 6" EXHAUST AIR DUCT TO ROOF CAP.
 - ④ PVC CONDENSATE FROM AHU-1, 2, & 3. TURN DOWN IN WALL & SPILLS OVER SPLASH BLOCK.
 - ⑤ 8" EXHAUST AIR DUCT TO ROOF CAP.
 - ⑥ 12X6 TRANSFER GRILLE IN WALL ABOVE DOOR
- NOTE:
ROOF CAPS TO BE PLACED ON REAR SIDE OF RIDGE LINE.
MAINTAIN MINIMUM OF 10' SEPARATION BETWEEN EXHAUST & INTAKE.

HVAC MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

NOTE:
MAINTAIN A MINIMUM OF 10' SEPERATION BETWEEN ALL INTAKE & EXHAUST OUTLETS INCLUDING PLUMBING VTR'S.

NOTE:
MAINTAIN 3' BETWEEN HEAT PUMPS. MECHANICAL CONTRACTOR TO VERIFY & MAINTAIN MANUFACTURER'S MINIMUM SEPERATION REQUIREMENTS BEFORE INSTALLATION.



PLANS FOR:
CAMPBELL POINTE TOWNHOMES
OFFICE & GYM FACILITY
BUJES CREEK, NORTH CAROLINA

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SHEET NO.
M-1 OF 2

| AIR HANDLER UNIT | | | | | | | | | | | | | | SPLIT SYSTEM HEAT PUMP UNITS | | | | | | | | | | | | | |
|------------------|--------------|---------------|----------|--------|-------------------|------|----------|-----------|------|------|--------------|------------------------|-------|------------------------------|------|------|---------------------|----------|----------|--------|-----------|----------|---------|---------------------|----------|-----------|--------------|
| AHU NO. | MANUFACTURER | MODEL | VOLTAGE | E.S.P. | OUTSIDE AIR (CFM) | CFM | UNIT FLA | REF LINES | | SEER | HTR KW (240) | COOLING CAPACITY (MBH) | | HEATING CAPACITY (MBH) | | HSPF | MIN. CIRC. AMPACITY | M.O.C.P. | MARK | MANUF. | MODEL | VOLTAGE | # COMP. | MIN. CIRC. AMPACITY | M.O.C.P. | UNIT FLA. | ACCESSORIES |
| | | | | | | | | GAS | LIQ. | | | TOTAL | SENS. | HIGH | LOW | | | | | | | | | | | | |
| AHU-1,2,3 | RHEEM | RH1T-6024STAN | 240/1/60 | .46 | * | 2000 | 36.0 | 7/8 | 3/8 | 15.0 | 7.2 | 58.0 | 42.4 | 56.0 | 35.6 | 9.0 | 45 | 45 | HP-1,2,3 | RHEEM | RP1560AJ1 | 240/1/60 | 1 | 31 | 50 | 24.7 | EXCLUDE 8,18 |

* SEE OUTSIDE AIR CHART ON MECHANICAL SHEETS
 ** PROVIDE OUTDOOR THERMOSTAT TO LOCK OUT SUPPLEMENTAL ELECTRIC HEAT AT OUTDOOR TEMPERATURES ABOVE 40F.

- ACCESSORIES
- | | | |
|-------------------------------|---|--|
| 1 TIME-DELAY RELAY | 7 LIQUID SOLENOID VALVE | 13 DISCHARGE LINE MUFFLER |
| 2 CYCLE PROTECTOR | 8 LOW-AMBIENT CONTROLLER | 14 SUCTION AND LIQUID LINE SHUT OFF VALVES |
| 3 EVAPORATOR FREEZE PROTECTOR | 9 FILTER DRIER (LIQUID LINE) | 15 THERMOSTAT (SEE NOTE) |
| 4 ISOLATION RELAY | 10 OUTDOOR T-STAT TO LOCK OUT AUX. HT. (SET @ 40° F ADJ.) | 16 SUPPORT FEET |
| 5 TXV | 11 LOW PRESSURE CONTROL | 17 COIL GUARDS |
| 6 HIGH PRESSURE SWITCH | 12 CRANKCASE HEATER | 18 HUMIDISTAT |

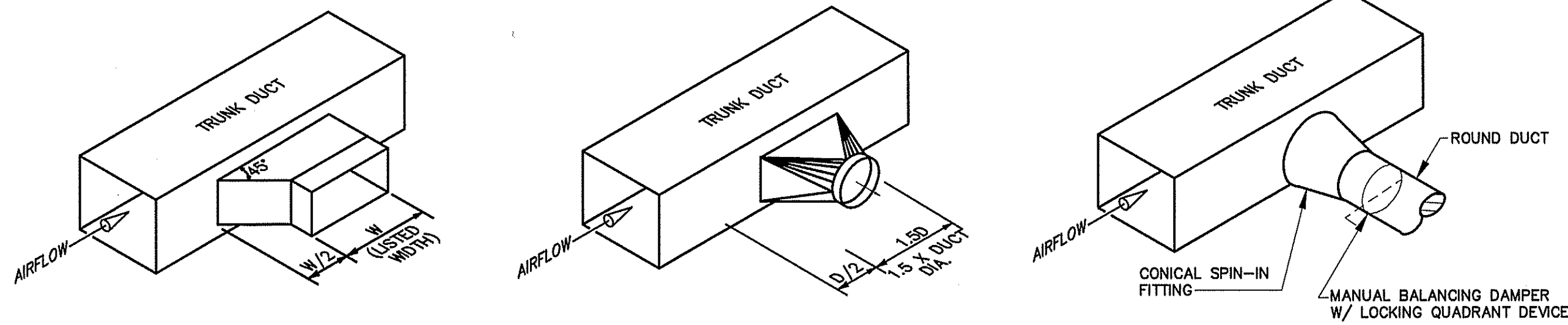
COOLING CAPACITY @ 80 DEG. F DB/67 DEG WB AIR ENTERING INDOOR UNIT & 95 DEG. F DB AIR ENTERING OUTDOOR UNIT
 HEATING CAPACITY: HIGH TEMP = 70 DEG F DB INDOOR EAT & 47 DEG F DB/43 DEG F WB AIR ENTERING OUTDOOR UNIT
 LOW TEMP = 70 DEG F DB INDOOR EAT & 17 DEG F DB/15 DEG F WB ENTERING OUTDOOR UNIT

T-STAT: THE NUMBER OF STAGES OF HEATING/COOLING SHALL MATCH THE NUMBER OF STAGES OF HEAT AVAILABLE IN THE HPU OR THE NUMBER OF STAGES OF COOLING AVAILABLE IN THE HPOU. PROVIDE WITH T-STAT; 7 DAY PROGRAMMABLE, DIGITAL.

REGISTER, GRILLE, & DIFFUSER SCHEDULE*

| MARK | DESCRIPTION | MAX. NC | NECK | BORDER TYPE | SIZE | MATERIAL | FINISH | MANUFACTURER | MODEL NUMBER | ACCESSORIES / NOTES |
|------|----------------|---------|---------|-------------|---------|----------|--------|--------------|----------------------|---------------------|
| A | DIFFUSER-4-WAY | 30 | 9"X9" | SURFACE | 15"X15" | STEEL | WHITE | TITUS | TDC 9X9 1 26 4 | SQ-TO-RND |
| B | DIFFUSER-4-WAY | 30 | 6"X6" | SURFACE | 12"X12" | STEEL | WHITE | TITUS | TDC 6X6 1 26 4 | SQ-TO-RND |
| C | DIFFUSER-3-WAY | 30 | 6"X6" | SURFACE | 12"X12" | STEEL | WHITE | TITUS | TDC 6X6 1 26 3 | SQ-TO-RND |
| D | DIFFUSER-3-WAY | 30 | 9"X9" | SURFACE | 15"X15" | STEEL | WHITE | TITUS | TDC 9X9 1 26 3 | SQ-TO-RND |
| E | DIFFUSER-4-WAY | 30 | 12"X12" | SURFACE | 18"X18" | STEEL | WHITE | TITUS | TDC 12X12 1 26 4 | SQ-TO-RND |
| F | DIFFUSER-3-WAY | 30 | 9"X9" | LAY-IN | 24"X24" | STEEL | WHITE | TITUS | TDC 9X9 3 26 3 | SQ-TO-RND |
| R1 | RETURN GRILLE | 30 | 14"X14" | SURFACE | | STEEL | WHITE | TITUS | 23RL 14X14 1 26 PFAP | SQ-TO-RND |
| R2 | RETURN GRILLE | 30 | 10"X10" | SURFACE | | STEEL | WHITE | TITUS | 23RL 10X10 1 26 PFAP | SQ-TO-RND |
| R3 | RETURN GRILLE | 30 | 8"X8" | SURFACE | | STEEL | WHITE | TITUS | 23RL 8X8 1 26 PFAP | SQ-TO-RND |
| R4 | RETURN GRILLE | 30 | 16"X16" | SURFACE | | STEEL | WHITE | TITUS | 23RL 16X16 1 26 PFAP | SQ-TO-RND |

* VERIFY CEILING TYPE BEFORE ORDERING, NARROW TEE REQUIREMENTS, PLASTER FRAMES, SPACE & SIZE, ETC. TO BE INCLUDED WITH DIFFUSERS AT NO ADDITIONAL COST TO OWNER



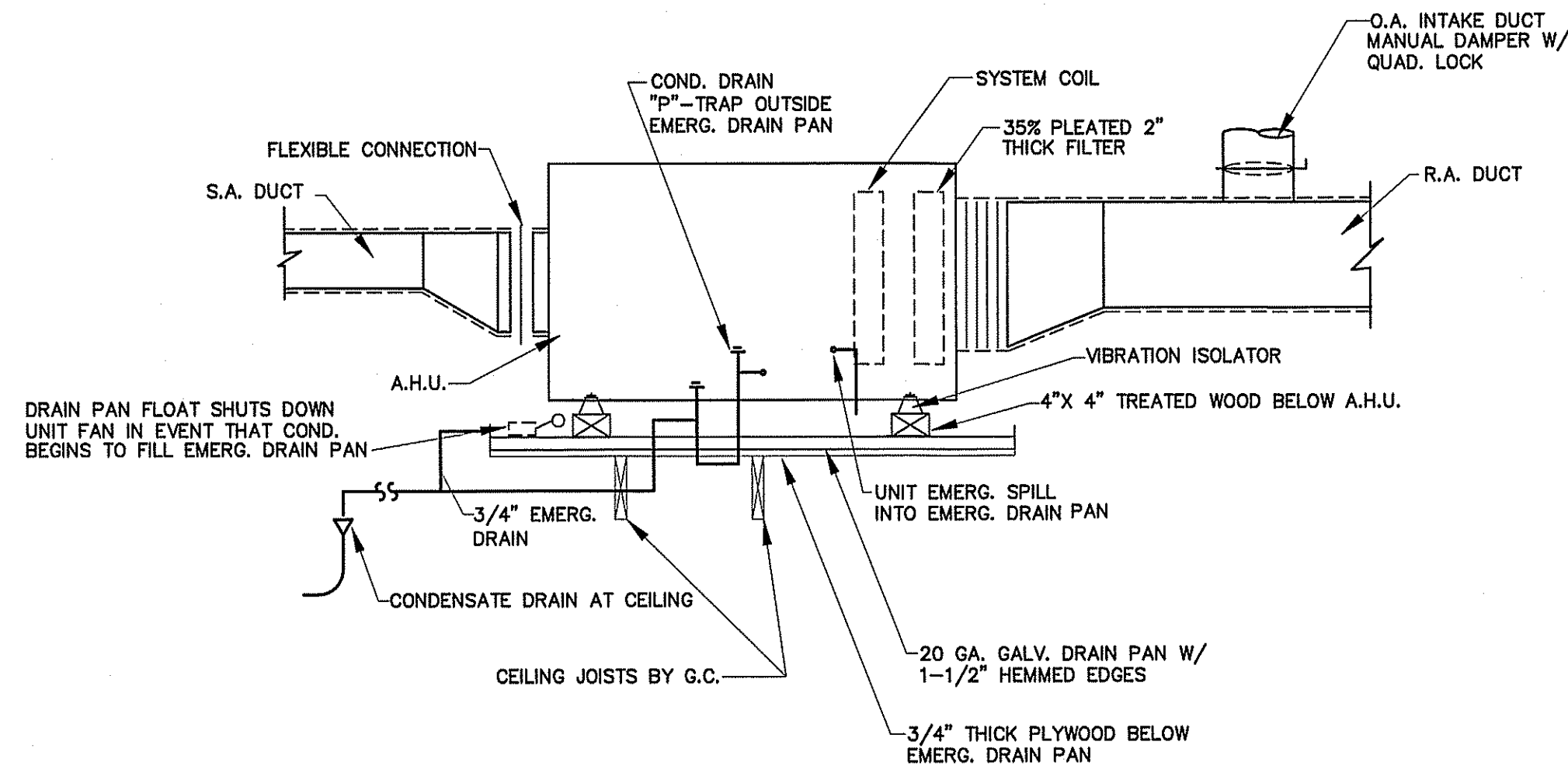
TYPICAL LATERAL TO REGISTER OR BRANCH DUCT

NOT TO SCALE

| EXHAUST FAN SCHEDULE | | | | | | | | |
|----------------------|-------------------------|-----|-------------------------|-------|------------|----|----|---|
| MARK | DESCRIPTION | CFM | EXTERNAL S.P. IN (W.G.) | WATTS | ELECTRICAL | | | NOTES |
| | | | | | VOLT | PH | HZ | |
| EF-1 | EXHAUST/FAN LIGHT COMBO | 155 | .125 | 80 | 115 | 1Ø | 60 | RCC-7 ROOF CAP, INSECT SCREEN W/BACK DRAFT DAMPER |
| EF-2,3 & 4 | EXHAUST/FAN LIGHT COMBO | 75 | .25 | 70 | 115 | 1Ø | 60 | ROOF CAP, INSECT SCREEN, W/BACK DRAFT DAMPER |

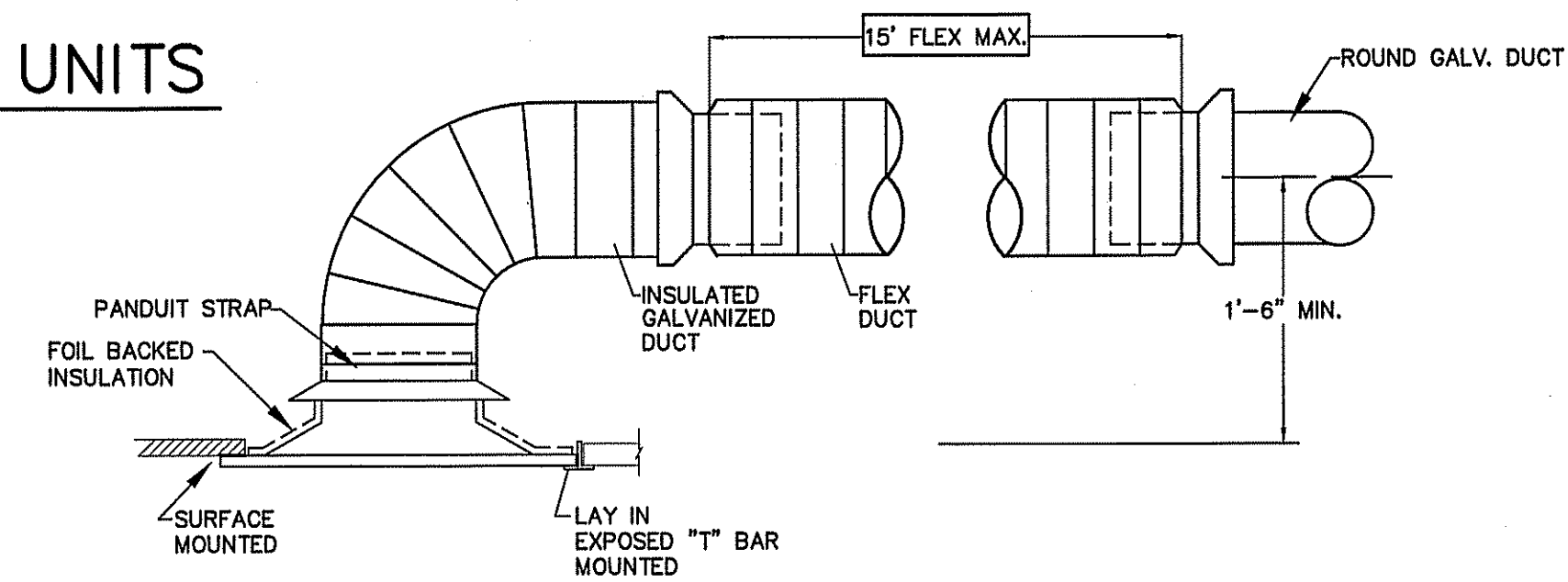
MECHANICAL NOTES (GENERAL)

- DUCTWORK LAYOUTS ARE SCHEMATIC. ALL RISES, DROPS, OFFSETS, AND TRANSITIONS REQUIRED BUT ARE NOT SHOWN SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- DUCTWORK SHALL BE GALVANIZED STEEL AND SHALL BE CONSTRUCTED IN COMPLIANCE WITH SMACNA STANDARDS FOR LOW VELOCITY DUCTWORK. DUCT SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS. FLEXIBLE RUNOUTS SHALL NOT EXCEED 15' AND SHALL NOT BE USED TO FORM ELBOWS. CONNECTIONS FROM RECTANGULAR TO ROUND DUCT SHALL BE MADE WITH MANUFACTURED 45 DEG. LATERAL TAPS.
- SUPPLY AND RETURN DUCTWORK SHALL BE INSULATED WITH FIBERGLASS INSULATION WITH A MINIMUM THERMAL RESISTANCE OF R-5.0 (IN UNCONDITIONED AREAS) AND AN "FSK" VAPOR BARRIER. DIFFUSERS SHALL BE INSULATED WITH FIBERGLASS INSULATION WITH VAPOR BARRIER. ALL JOINTS SHALL BE TAPED WITH A FOIL BACKED TAPE TO PROVIDE A CONTINUOUS VAPOR BARRIER.
- THE ELECT. CONTRACTOR SHALL SUPPLY, AND MECH. CONTRACTOR SHALL INSTALL A SMOKE DETECTOR IN THE RETURN AIR DUCTWORK, THE EVAPORATOR FAN AND THE COMPRESSOR SHALL BE INTERLOCKED WITH THE SMOKE DETECTORS SO THAT THE COMPRESSOR AND THE EVAPORATOR FAN ARE DE-ENERGIZED WHEN SMOKE IS DETECTED. THE SMOKE DETECTORS SHALL HAVE A SUFFICIENT NUMBER OF CONTACTS TO INTERFACE WITH THE BUILDING FIRE ALARM SYSTEM.
- ALL DUCTWORK SHALL BE SEALED AIR TIGHT WITH SEALING COMPOUND.
- THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF OTHER TRADES PRIOR TO INSTALLATION OF ANY OF HIS PIPING, DUCTWORK, OR EQUIPMENT.
- THE MECHANICAL CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE MECHANICAL PLANS, SCHEDULES, AND DETAILS PRIOR TO INSTALLATION OF THE MECHANICAL SYSTEMS AND REVIEW ANY CONFLICTS THAT ARE NOTED WITH THE ENGINEER.
- IT WILL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO ENSURE THAT ITEMS TO BE FURNISHED UNDER HIS CONTRACT WILL FIT THE SPACE AVAILABLE. HE SHALL MAKE NECESSARY FIELD MEASUREMENTS TO ASCERTAIN SPACE REQUIREMENTS, INCLUDING THOSE FOR CONNECTIONS AND SHALL FURNISH SUCH SIZES AND SHAPES OF EQUIPMENT THAT ARE THE TRUE AND INTENT MEANING OF THE PLANS AND SPECIFICATIONS. HE SHALL PROVIDE THE ENGINEER SCALED DRAWINGS OF ALL MECHANICAL DRAWINGS.
- ALL EQUIPMENT SHALL BE LOCATED AND INSTALLED TO PROVIDE MAXIMUM SPACE FOR MAINTENANCE AND SERVICE.
- ALL ELBOWS IN DUCTWORK SHALL BE RADIUS ELBOWS, UNLESS NOTED OTHERWISE. WHERE SQUARE ELBOWS ARE SHOWN, INSTALL TURNING VANES.
- MECHANICAL CONTRACTOR TO FIELD COORDINATE LOCATION OF MECHANICAL SYSTEMS WITH ELECTRICAL AND PLUMBING SYSTEMS. COORDINATE WITH ALL OTHER SYSTEMS AS NECESSARY.
- MECHANICAL WORK INCLUDES DEMOLITION, RELOCATION, IN EXISTING & NEW WORK AS APPLICABLE. MECHANICAL CONTRACTOR TO SUPPLY A COMPLETE SYSTEM IN EACH AREA.
- DUCT SIZES SHOWN ARE NET DIMENSIONS.



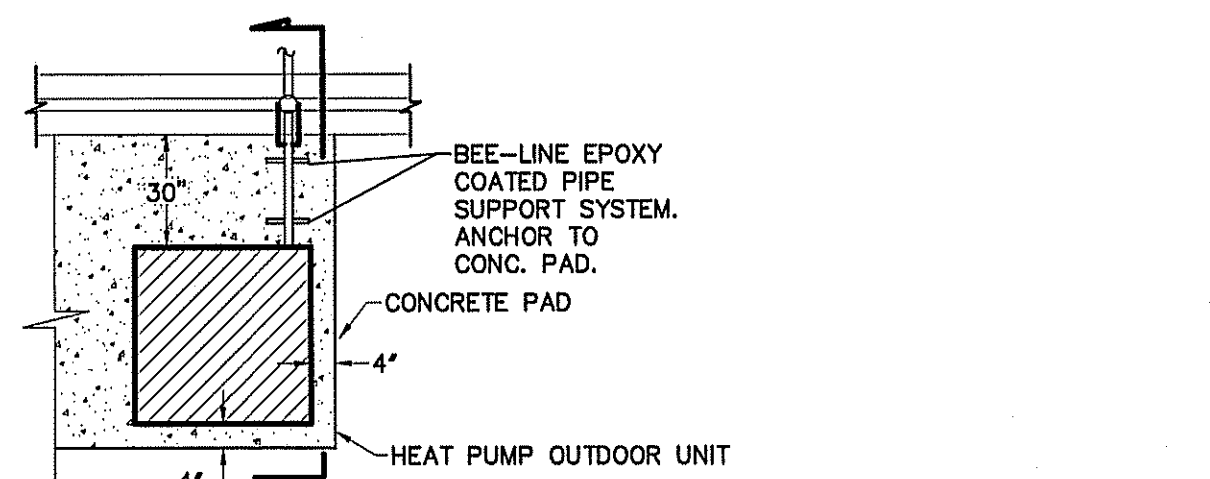
TYPICAL DETAIL AT AIR HANDLING UNITS

NOT TO SCALE



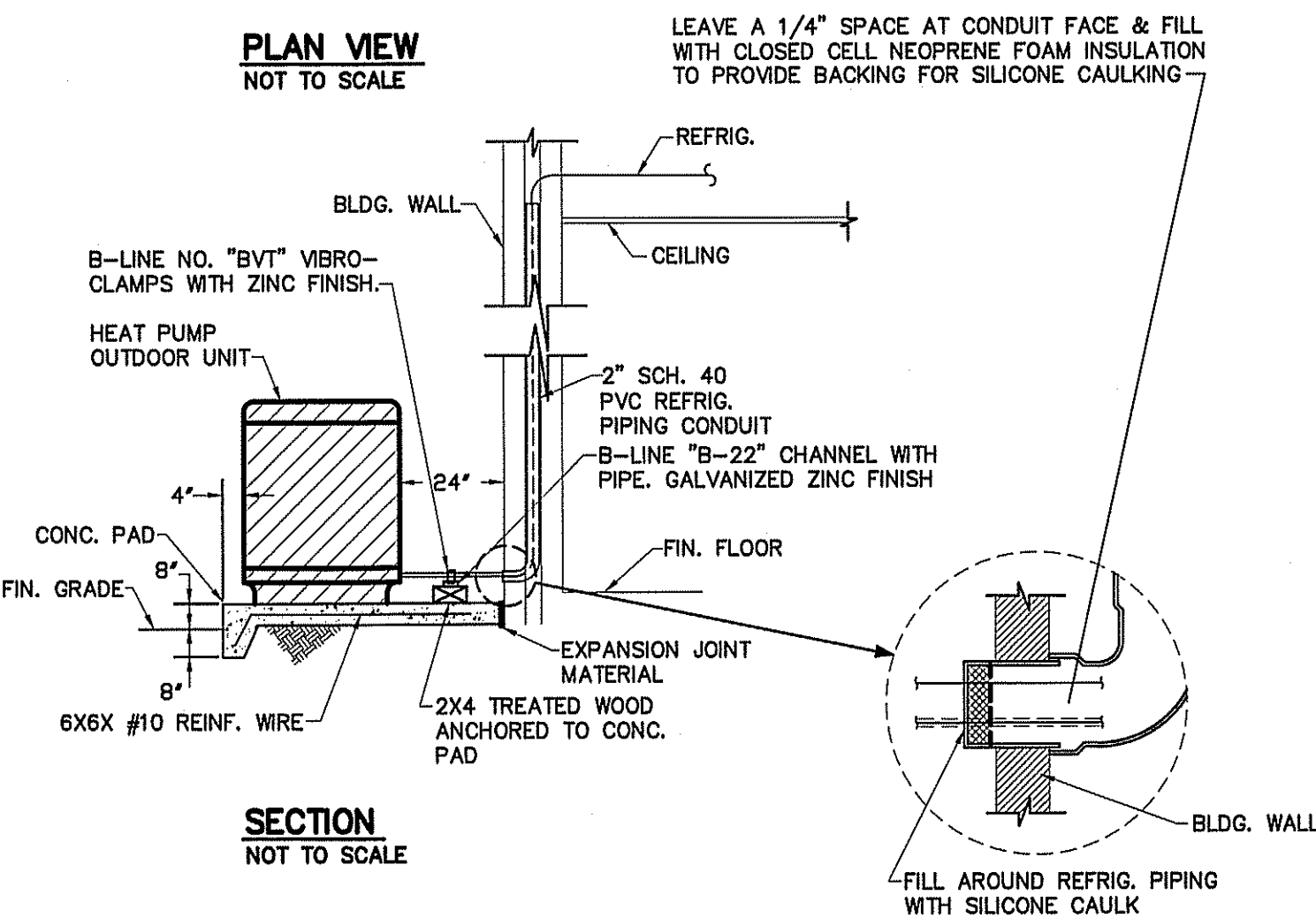
DETAIL-CEILING DIFFUSER CONNECTION

NOT TO SCALE



PLAN VIEW

NOT TO SCALE



SECTION

NOT TO SCALE

DETAIL-TYPICAL HEAT PUMP OUTDOOR UNIT

NOT TO SCALE

METHOD OF COMPLIANCE:

PRESCRIPTIVE ENERGY COST BUDGET
 THERMAL ZONE 4A - HARNETT COUNTY, NC

EXTERIOR DESIGN CONDITIONS

WINTER DRY BULB 22 DEG. F.
 SUMMER DRY BULB 93 DEG. F.

INTERIOR DESIGN CONDITIONS

WINTER DRY BULB 70 DEG. F.
 SUMMER DRY BULB 74 DEG. F.
 RELATIVE HUMIDITY 56%

BUILDING HEATING LOAD 36.3 MBH

BUILDING COOLING LOAD 14.2 TONS

MECHANICAL SPACE CONDITIONING SYSTEM

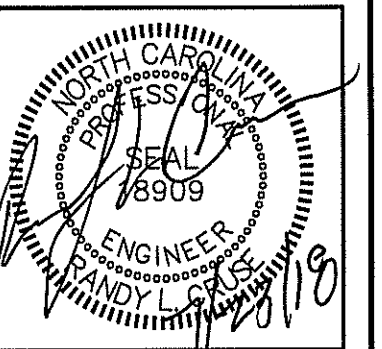
UNITARY— COOLING — 15.0 SEER
 HEATING — 9.0 HSPF

BOILER— NOT APPLICABLE IN THIS PROJECT
 CHILLER— NOT APPLICABLE IN THIS PROJECT

LIST EQUIPMENT EFFICIENCIES

EQUIPMENT SCHEDULES WITH MOTORS (MECHANICAL SYSTEMS)

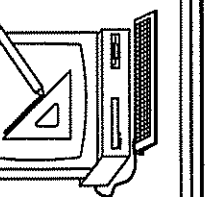
MOTORS USED ON THIS PROJECT ARE INCLUDED IN THE EFFICIENCY RATING OF THE UNIT. SEE PLANS FOR EFFICIENCIES.



PLANS FOR:
 CAMPBELL PONTE TOWN-HOMES
 OFFICE & GYM FACILITY
 BUJES CREEK, NORTH CAROLINA

REVISIONS

| NO. | |
|-----|--|
| | |



Cruse and Associates, P.A.
 414 E. Edgerton St.
 Raleigh, NC 27604
 PHONE: (919) 886-4400
 FAX: (919) 886-4402
 LICENSE NO.: C-1721

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DATE 07-23-18
 DRAWN BY BAM
 JOB NO. 18-21

SHEET NO.
 M-2 OF 2

| LIGHT FIXTURE SCHEDULE | | | | | | | | |
|------------------------|--|--------------|--|-------|----------|---------|--------------------|-----|
| MARK | DESCRIPTION | MANUFACTURER | CATALOG NUMBER | LAMPS | BALLASTS | WATTAGE | REMARKS | |
| A | LED FLUSH MOUNT LINEAR LOW PROFILE | LITHONIA | FMLL 9 30840 DFMLL | LED | | 36.23 | | |
| B | 6" OPEN CAN DOWN LED LIGHT | LITHONIA | LDN6 35/15 L06AR LSS MVOLT EZ10 | LED | | 20.5 | | |
| C | 3" LED RECESSED DOWNLIGHT | ACULLUX | AX3 D G4 12LM 35K 80CRI 50D GZ1 120 ICAT 3DP CS SF WET | LED | | 11.0 | TO BE ON PHOTOCELL | |
| D | HANGING PENDANT SELECTED & PURCHASED BY OWNER INSTALLED BY CONTRACTOR | | | | | | LED | 120 |
| F | CEILING FAN SELECTED & PURCHASED BY OWNER, INSTALLED BY CONTRACTOR | | | | | | | 120 |
| G | LED CHANDELIER SELECTED & PURCHASED BY OWNER, INSTALLED BY CONTRACTOR | | | | | | LED | 240 |
| EF/LT | EXHAUST FAN/LIGHT COMBO WITH WITH 75 OR 155 CFM (SEE MECHANICAL PLANS FOR CFM & STATIC PRESSURE) | | | | | | LED | 7 |
| EM | EMERGENCY LIGHT WITH BATTERY BACKUP | SURE-LITES | COBMR2142SM | | | | | |
| EX | LED TYPE EXIT LIGHT WITH BATTERY BACKUP | SURE-LITES | LPX 70 RW 120/277 | | | | | |
| EM2 | EMERGENCY LIGHT REMOTE WEATHERHEAD(S) | SURE-LITES | 12T-12-WMH OR 12T-12-DWMH OR EQUAL | | | | | |

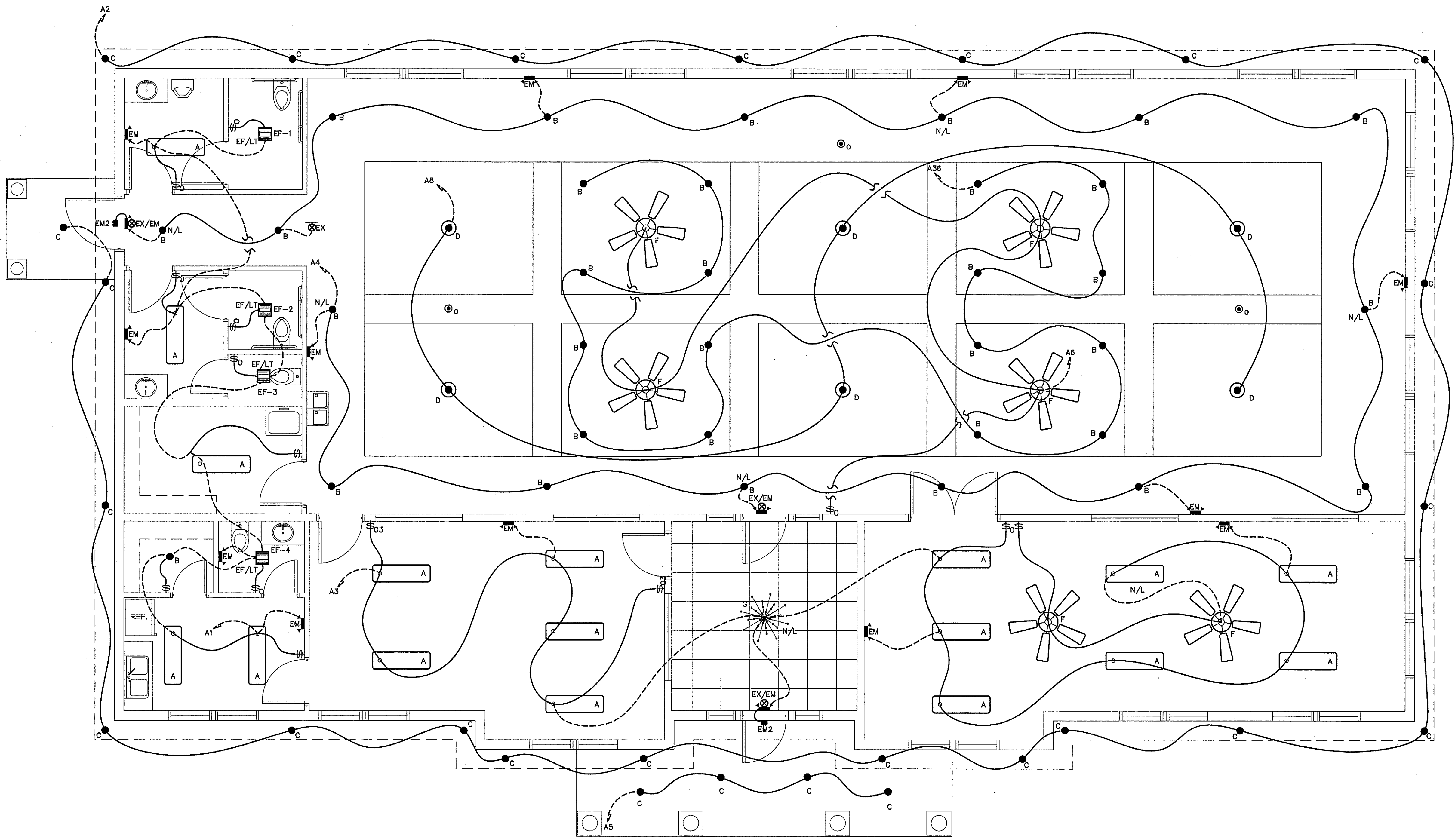
FIXTURES SELECTED BY OWNER AND PURCHASED BY CONTRACTOR

| LIGHTING DATA FOR ENERGY CODE | | | | | |
|-------------------------------|----------------------|-----------------------------------|---------------------|------------------|-----------------------|
| AREA USE | AREA FT ² | WATTS PER FT ² ALLOWED | TOTAL WATTS ALLOWED | TOTAL WATTS USED | TOTAL WATTS LEFT OVER |
| EXERCISE/GYM | 4108 | 0.72 | 2958 | 1847 | 1111 |
| TOTAL | | | 2958 | 1847 | 1111 |

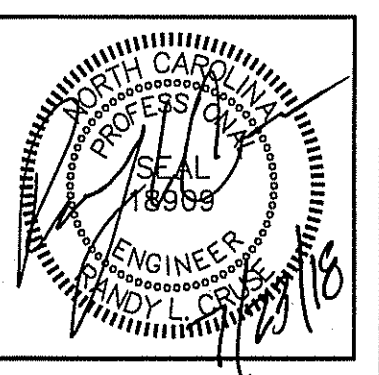
LIGHTING CONTROLS FOR ROOMS 106 & 107

1. PROVIDE WALL MOUNTED OCCUPANCY SENSOR WITH MANUAL SWITCH AT ENTRANCE TO ROOMS 106 AND 107.
2. PROVIDE CEILING MOUNTED OCCUPANCY SENSORS IN ROOM 107.
3. TIE OCCUPANCY SENSORS IN ROOM 107 TO CONTACTOR TO BRING ON CIRCUITS A4, A5, AND A36 UPON ACTIVATION OF ANY OCCUPANCY SENSOR IN THAT SPACE. SET DELAY AS SPECIFIED BY OWNER.
4. SENSORS TO HAVE PIR AND MICROPHONICS CAPABILITY.
5. INSTALL SENSORS PER MANUFACTURER'S RECOMMENDATION.

| ELECTRICAL LEGEND | |
|-------------------|---|
| MARK | DESCRIPTION |
| ⊕ WP | 'GFI' DUPLEX WITH WEATHERPROOF COVER |
| ⊕ GFI | GROUND FAULT INTERRUPTING RECEPTACLE |
| ⊕ IG | 208V OR 240 V RECEPTACLE |
| ◀ | TELEPHONE/DATA OUTLET |
| ⊠ | JUNCTION BOX |
| ⊠ | FUSED DISCONNECT SWITCH |
| ⊠ FB | "STEEL CITY" FLOOR BOX WITH CAT SE CABLE FOR DATA |
| ↔ | SWITCHED BRANCH CIRCUIT |
| ↔ | UNSWITCHED BRANCH CIRCUIT |
| ↔ | 120/208 VOLT CIRCUIT |
| ⊕ | CEILING OR ATTIC MOUNTED DUPLEX RECEPTACLE |
| ⊕ O/O | LIGHT FIXTURE (WALL/CEIL.) |
| ⊕ | FLUORESCENT FIXTURE |
| ⊕ N/L | UNSWITCHED FIXTURE |
| ⊕ | 'EXIT' LIGHT FIXTURE, TYPE 'EX' |
| ⊕ | BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.) |
| ⊕ | SINGLE-POLE SWITCH |
| ⊕ ₃₍₄₎ | 3-WAY SWITCH (4-WAY SWITCH) |
| ⊕ | DUPLEX RECEPTACLE |
| ⊕ | CEILING MOUNTED RECEPTACLE |
| ⊕ | EMERGENCY LIGHT REMOTE WEATHERHEAD(S) |
| ⊕ | WALL MOUNTED OCCUPANCY SENSOR WITH SWITCH |
| ⊕ | CEILING MOUNTED OCCUPANCY SENSOR |



ELECTRICAL LIGHTING PLAN
SCALE: 1/4" = 1'-0"



PLANS FOR:
CAMPBELL PONTE TOWNHOMES
OFFICE & GYM FACILITY
BUJES CREEK, NORTH CAROLINA

| REVISIONS | |
|-----------|--|
| NO. | |
| | |

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FAX: (919) 966-5188

Cruse And Associates, P.A.

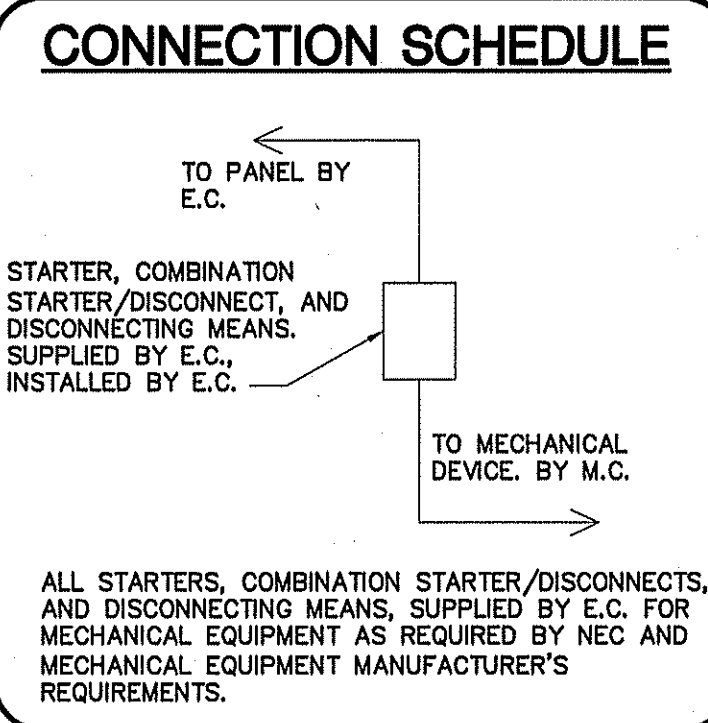
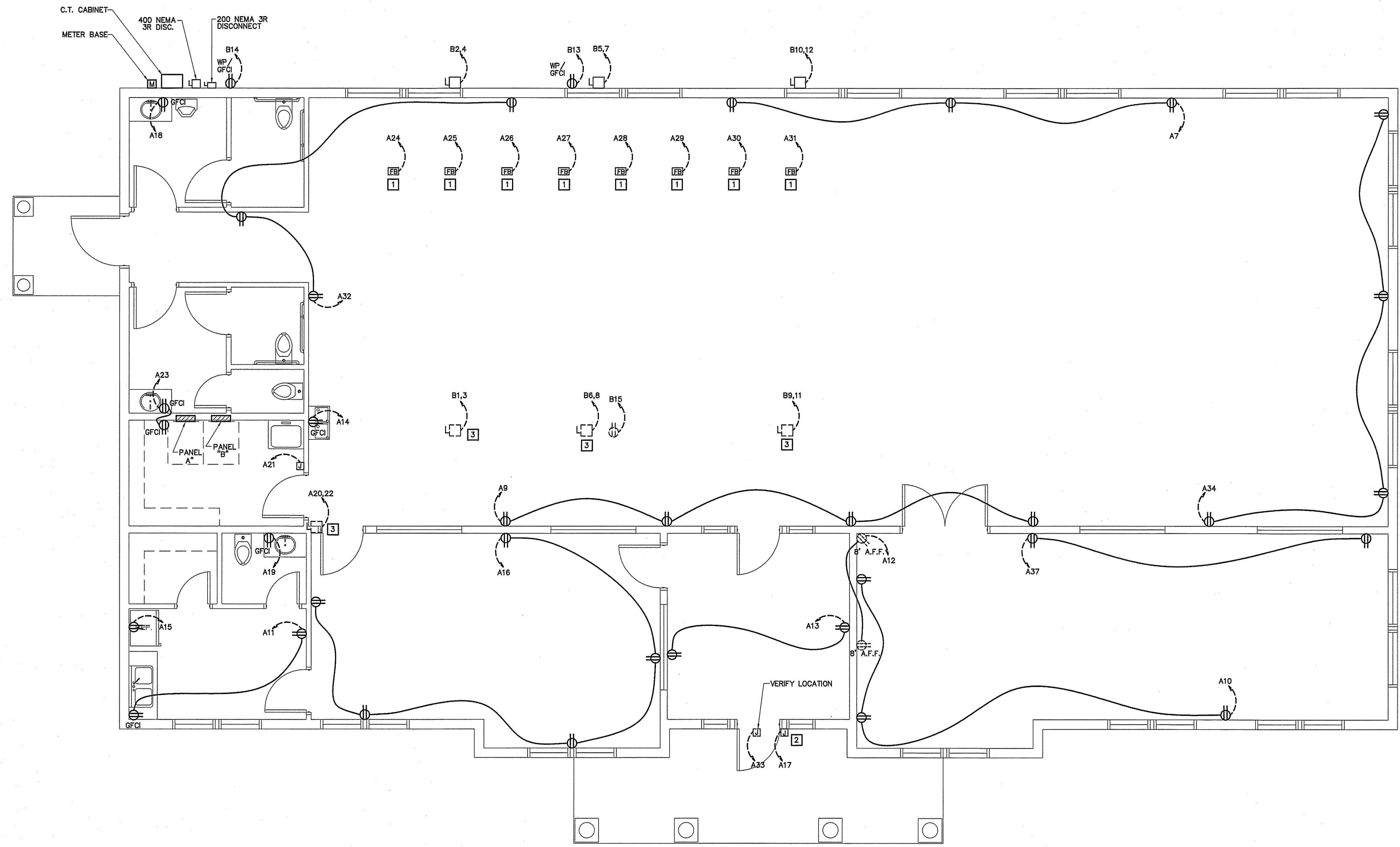
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DATE 07-23-18
DRAWN BY BAM
JOB NO. 18-21

SHEET NO.
E-1 OF 3

| ELECTRICAL LEGEND | |
|-------------------|---|
| MARK | DESCRIPTION |
| Ⓜ WP | 'GFI' DUPLEX WITH WEATHERPROOF COVER |
| Ⓜ GFI | GROUND FAULT INTERRUPTING RECEPTACLE |
| Ⓜ IG | 208V OR 240 V RECEPTACLE |
| ◀ | TELEPHONE/DATA OUTLET |
| Ⓜ | JUNCTION BOX |
| Ⓜ | FUSED DISCONNECT SWITCH |
| Ⓜ FB | "STEEL CITY" FLOOR BOX WITH CAT 5E CABLE FOR DATA |
| ↗ | SWITCHED BRANCH CIRCUIT |
| ↘ | UNSWITCHED BRANCH CIRCUIT |
| ↗↘ | 120/208 VOLT CIRCUIT |
| Ⓜ | CEILING OR ATTIC MOUNTED DUPLEX RECEPTACLE |
| Ⓜ/O | LIGHT FIXTURE (WALL/CEIL.) |
| Ⓜ | FLUORESCENT FIXTURE |
| Ⓜ N/L | UNSWITCHED FIXTURE |
| Ⓜ | 'EXIT' LIGHT FIXTURE, TYPE 'EX' |
| Ⓜ | BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.) |
| Ⓜ | SINGLE-POLE SWITCH |
| Ⓜ(4) | 3-WAY SWITCH (4-WAY SWITCH) |
| Ⓜ | DUPLEX RECEPTACLE |
| Ⓜ | CEILING MOUNTED RECEPTACLE |
| Ⓜ | EMERGENCY LIGHT REMOTE WEATHERHEAD(S) |
| Ⓜ | WALL MOUNTED OCCUPANCY SENSOR WITH SWITCH |
| Ⓜ | CEILING MOUNTED OCCUPANCY SENSOR |

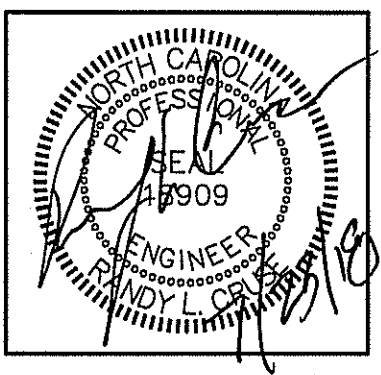


GENERAL NOTE:
ELECTRICAL CONTRACTOR TO VERIFY ALL POWER & DATA OUTLET LOCATIONS BEFORE BEGINNING CONSTRUCTION.

ELECTRICAL POWER PLAN
SCALE: 1/4" = 1'-0"

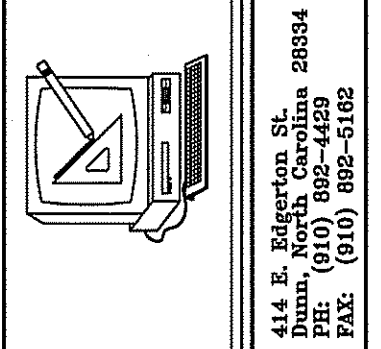
- KEY NOTES**
- 1 DEDICATED 20A 115 VOLT CIRCUITS WITH CAT 5E CABLE IN FLOOR BOX.
 - 2 LOW VOLTAGE KEY CAR ACCESS VERIFY WITH OWNER BEFORE INSTALLATION
 - 3 LOCATED IN ATTIC, COORDINATE LOCATION WITH TRUSS LAYOUT.

GENERAL NOTE:
SECURITY SYSTEM AND KEYCARD ACCESS SYSTEMS BY OTHERS



PLANS FOR:
**CAMPBELL PONTE TOWNHOMES
OFFICE & GYM FACILITY**
BUJES CREEK, NORTH CAROLINA

| REVISIONS | |
|-----------|--|
| NO. | |
| | |
| | |



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DATE 07-23-18
DRAWN BY BAM
JOB NO. 18-21

SHEET NO.
E-2 OF 3

ELECTRICAL NOTES (GENERAL)

- THE ELECTRICAL INSTALLATION, EQUIPMENT, MATERIALS, AND WORKMANSHIP SHALL, AS A MINIMUM, BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC), OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), ALL APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL CODES, LAWS, AND ORDINANCES, AND RULINGS OF THE INSPECTION AUTHORITIES HAVING JURISDICTION. ALL FEES, PERMITS, ETC., ASSOCIATED WITH THE ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- THE DRAWINGS GENERALLY INDICATE THE WORK TO BE INSTALLED, BUT DO NOT SHOW ALL BENDS, BOXES, FITTINGS, AND SPECIALTIES WHICH MAY BE REQUIRED FOR A COMPLETE INSTALLATION. ALL SUCH ITEMS REQUIRED TO COMPLETE THE INSTALLATION ACCORDING TO INDUSTRY ACCEPTED PRACTICES SHALL BE INCLUDED IN THE BID.
- ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND LISTED AND LABELED BY UNDERWRITERS LABORATORIES, INC.
- ALL PENETRATIONS OF FIRE WALLS SHALL BE SEALED WITH APPROVED SEALING MATERIALS TO MAINTAIN THE FIRE RATING OF THE WALLS.
- THE CONTRACTOR SHALL VERIFY WIRE AND FUSE/CIRCUIT BREAKER SIZING FOR ALL MECHANICAL EQUIPMENT PRIOR TO PURCHASING MATERIALS AND INSTALLING BRANCH CIRCUITS.
- THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES TO AVOID INTERFERENCES AND CONFLICTS. APPARENT INTERFERENCES OR CONFLICTS SHALL BE REPORTED TO THE PRIME CONTRACTOR AND RESOLVED PRIOR TO PROCEEDING WITH THE WORK IN QUESTION.
- THE ELECTRICAL CONTRACTOR SHALL CONNECT BRANCH CIRCUITS TO THE MAIN LINE TERMINALS OF EQUIPMENT FURNISHED BY OTHER CONTRACTORS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY NECESSARY SWITCHES, DISCONNECTS, OR OVERCURRENT PROTECTION AHEAD OF SUCH EQUIPMENT.
- RACEWAYS ARE SHOWN SCHEMATICALLY AND MAY BE REROUTED IN THE FIELD. THEY SHALL BE INSTALLED AT RIGHT ANGLES TO OR PARALLEL WITH BUILDING LINES. THEY SHALL BE RUN CONCEALED WITHIN WALLS OR BUILDING STRUCTURES WHEREVER POSSIBLE.
- ALL RACEWAYS, EQUIPMENT, ETC., ABOVE A SUSPENDED CEILING SHALL BE MOUNTED A MINIMUM OF 18" ABOVE THE CEILING SO AS NOT TO BLOCK ANY TILE OR FIXTURE ACCESS.
- THE MINIMUM ALLOWABLE SIZE FOR ANY CONDUIT, IMC, OR EMT SHALL BE 1/2" AND MAY BE USED FOR 2#12 WIRE SWITCHLEGS ONLY. A SWITCHLEG SHALL BE DEFINED AS THE RUN OF CONDUIT FROM THE SWITCH OUTLET BOX TO THE FIRST OUTLET BEING SWITCHED.
- FULL WEIGHT GALVANIZED RIGID STEEL CONDUIT SHALL BE USED IN THE FOLLOWING AREAS:
 - ON THE EXTERIOR OF THE BUILDING OR ROOF.
 - VERTICAL DROPS WHERE THE CONDUIT CANNOT BE ANCHORED TO WALLS OR OTHER SUPPORT STRUCTURES.
 - WHERE SUBJECT TO MECHANICAL DAMAGE.
- ALL WIRE AND CABLE SHALL BE COPPER AND HAVE 600 VOLT THHN-THWN INSULATION. ALUMINUM WIRING SHALL NOT BE PERMITTED. ROMEX IS ACCEPTABLE WHERE PERMITTED BY CODE.
- THE MINIMUM WIRE SIZE SHALL BE #12 AWG EXCEPT FOR CONTROL WIRING, WHICH MAY BE #14 AWG. CONTROL WIRING SHALL USE STRANDED CONDUCTORS UNLESS OTHERWISE NOTED.
- ALL METAL RACEWAY SYSTEMS SHALL BE MADE ELECTRICALLY CONTINUOUS. THE RACEWAY SYSTEM SHALL NOT BE THE SOLE GROUNDING METHOD. AN INSULATED COPPER GROUNDING CONDUCTOR SHALL BE INSTALLED FOR ALL FEEDERS AND BRANCH CIRCUITS. AT RECEPTACLES, A GREEN GROUND CONDUCTOR SHALL BE CONNECTED TO THE GROUND TERMINAL OF THE RECEPTACLE.
- THE ELECTRICAL CONTRACTOR SHALL COORDINATE FUSE AND DISCONNECT SWITCH SIZES WITH THE MECHANICAL EQUIPMENT SUPPLIER PRIOR TO PURCHASE AND INSTALLATION OF BRANCH CIRCUIT EQUIPMENT. IF EQUIPMENT SIZING CHANGES FROM DESIGN SIZES, CIRCUITS SHALL BE RESIZED ACCORDINGLY.
- LIGHT FIXTURES FOR INSTALLATION IN A SUSPENDED CEILING SHALL BE SECURELY FASTENED TO THE CEILING SUSPENSION SYSTEM IN A MANNER TO PREVENT FIXTURES FROM FALLING. IN ADDITION, 16 GAGE WIRE HANGERS SHALL BE FASTENED TO THE FOUR CORNERS OF THE FIXTURES.
- CONNECTIONS TO FIXTURES INSTALLED IN SUSPENDED CEILINGS SHALL BE MADE WITH FLEXIBLE METAL CONDUIT TO ALLOW THE FIXTURE TO BE LIFTED OUT OF THE GRID AND MOVED TO AN ADJACENT GRID LOCATION.
- BREAKERS SUPPLYING HVAC OR REFRIGERATION EQUIPMENT SHALL BE HACR TYPE.
- 3/4" CONDUIT IS MINIMUM ALLOWABLE SIZE EXCEPT AS INDICATED IN #10. CONDUIT FILL NOT TO EXCEED 40% AS PERMITTED BY THE NATIONAL ELECTRIC CODE.
- ALL CONDUCTORS TO BE INSTALLED IN CONDUIT (EXCEPT WHERE ROMEX IS INSTALLED). EMT FITTINGS TO BE COMPRESSION TYPE, INSULATED THROAT.
- NOT USED
- DATA SECURITY, THEATRICAL AND VIDEO SYSTEMS TO BE PROVIDED BY OWNER. ROUGH-IN OF OUTLETS AND CONDUIT WILL BE BY CONTRACTOR AS SHOWN ON DRAWINGS.
- NOT USED
- NO. 10 AWG CONDUCTORS SHALL BE USED FOR 20 AMP BRANCH CIRCUIT HOME RUNS EXCEEDING 50 FT. TO THE JUNCTION POINT. 20 AMP BRANCH CIRCUIT WIRING SHALL BE NO. 10 AWG THROUGHOUT IF THE CIRCUIT IS LONGER THAN 100 FEET TOTAL LENGTH.
- CONDUCTORS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET. SPLICES WILL NOT BE MADE EXCEPT WITHIN ACCESSIBLE OUTLET OR JUNCTION BOXES, TROUGHS, OR GUTTERS.
- MAKE CONDUCTOR LENGTHS FOR PARALLEL CIRCUITS EQUAL.
- INSTALL TELEPHONE OUTLETS WITH 3/4" EMPTY CONDUIT AND PULL CORD. STUB OUT ABOVE CEILING. PHONE SYSTEM INSTALLED BY OWNER.
- ALL CONDUIT WITHOUT CONDUCTORS SHALL HAVE NYLON PULLCORDS INSTALLED.
- THE CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE PLANS, SCHEDULES, AND DETAILS PRIOR TO INSTALLATION, AND REVIEW ANY CONFLICTS THAT ARE NOTED WITH THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES FOR PERMITS AND INSPECTIONS. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR ELECTRIC UTILITY CONNECTION FEES AND LINE EXTENSION FEES.
- ELECTRICAL CONNECTIONS TO EQUIPMENT SUBJECT TO VIBRATION WHICH DEVELOPS OBJECTIONABLE NOISES SHALL BE MADE FROM THE CONDUIT SYSTEM WITH SHORT LENGTHS OF FLEXIBLE "LIQUID-TITE" CONDUIT.
- ALL WIRE TERMINATIONS AND EQUIPMENT TO BE RATED FOR 75° C MINIMUM.
- ELECTRICAL CONTRACTOR TO MAINTAIN 2" OF SEPARATION ON RECEPTACLES ON OPPOSITE SIDES OF ANY FIRE RATED WALL PER 2017 N.E.C. 300.21.
- WIRING TO DISCONNECT SWITCH AND DISCONNECT SWITCH SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR. WIRING FROM THE DISCONNECT TO THE EQUIPMENT SHALL BE BY THE MECHANICAL CONTRACTOR.

PANEL: A SCHEDULE: _____ MANUFACTURER: SQ.D NO. OF SPACES 42
 VOLTS: 120/240 AMPS: 200 TYPE: 'NQOD' MOUNTING: FLUSH
 ENCLOSURE: NEMA 1 Ø: 1 SHORT CIRCUIT RATING: 22000
 MAIN BS MLO □ TOP FEED □ BOTTOM FEED □ COPPER BUS BS GROUND BAR KIT □ NEUTRAL BAR KIT □

| L1 | L2 | CIRCUIT | POLES | TRIP | ASSIGNMENT | PHASE | ASSIGNMENT | TRIP | POLES | CIRCUIT | L1 | L2 |
|-----|------|---------|-------|------|-----------------------------|-------|-----------------------------|------|-------|---------|------|------|
| 7.5 | | 1 | 1 | 20 | RESTROOM LIGHTS/EX. FANS | o | SOFFIT LIGHTING | 20 | 1 | 2 | 3.8 | |
| | 5.6 | 3 | 1 | 20 | OFFICE & YOGA RM. LTS./FANS | o | EXERCISE RM. PERIMETER LTS. | 20 | 1 | 4 | | 2.7 |
| | | 5 | 1 | 20 | FRONT PORCH DOWNLIGHTS | o | EXERCISE ROOM CEILING FANS | 20 | 1 | 6 | 4.0 | |
| | 4.5 | 7 | 1 | 20 | ROOM 107 WALL RECEPTACLES | o | ROOM 107 HANGING PENDANTS | 20 | 1 | 8 | | 6.0 |
| | | 9 | 1 | 20 | ROOM 107 WALL RECEPTACLES | o | YOGA ROOM RECEPTACLES | 20 | 1 | 10 | 4.5 | |
| | 3.0 | 11 | 1 | 20 | BREAK ROOM RECEPTACLES | o | YOGA RM. TELEVISION OUTLETS | 20 | 1 | 12 | | 7.0 |
| | | 13 | 1 | 20 | FOYER RECEPTACLES | o | DRINKING FOUNTAIN | 20 | 1 | 14 | 5.6 | |
| | 8.0 | 15 | 1 | 20 | REFRIGERATOR | o | OFFICE RECEPTACLES | 20 | 1 | 16 | | 7.5 |
| | | 17 | 1 | 20 | KEY CARD SYSTEM | o | MEN'S RESTROOM GFCI RECEPT. | 20 | 1 | 18 | 1.5 | |
| | 1.5 | 19 | 1 | 20 | BREAKROOM RESTROOM GFCI | o | WATER HEATER | 30 | 2 | 20 | | 18.8 |
| | | 21 | 1 | 20 | BOOSTER PUMP | o | | | | 22 | 18.8 | |
| | 3.0 | 23 | 1 | 20 | ROOMS 101 & 102 GFCI'S | o | FLOOR BOX TREADMILL REC. | 20 | 1 | 24 | | 10.0 |
| | | 25 | 1 | 20 | FLOOR BOX TREADMILL REC. | o | FLOOR BOX TREADMILL REC. | 20 | 1 | 26 | 10.0 | |
| | 10.0 | 27 | 1 | 20 | FLOOR BOX TREADMILL REC. | o | FLOOR BOX TREADMILL REC. | 20 | 1 | 28 | | 10.0 |
| | | 29 | 1 | 20 | FLOOR BOX ELLIPTICAL REC. | o | FLOOR BOX ELLIPTICAL REC. | 20 | 1 | 30 | 10.0 | |
| | | 31 | 1 | 20 | FLOOR BOX ELLIPTICAL REC. | o | ROOM 107 WALL RECEPTACLES | 20 | 1 | 32 | | 4.5 |
| | 5.0 | 33 | 1 | 20 | BUILDING SIGN | o | ROOM 107 WALL RECEPTACLES | 20 | 1 | 34 | 6.0 | |
| | | 35 | 1 | 20 | SPARE | o | EXERCISE ROOM DOWNLIGHTS | 20 | 1 | 36 | | 2.8 |
| | 3.0 | 37 | 1 | 20 | YOGA ROOM RECEPTACLES | o | SPARE | 20 | 1 | 38 | X | |
| | | 39 | 1 | 20 | SPARE | o | SPARE | 20 | 1 | 40 | X | |
| | X | 41 | 1 | 20 | SPARE | o | SPARE | 20 | 1 | 42 | X | |

L1 = 116.7 A
L2 = 114.9 A

NOTE:
VERIFY AIC RATING WITH UTILITY COMPANY BEFORE ORDERING PANELS.

PANEL: B SCHEDULE: _____ MANUFACTURER: SQ.D NO. OF SPACES 42
 VOLTS: 120/240 AMPS: 400 TYPE: 'NQOD' MOUNTING: FLUSH
 ENCLOSURE: NEMA 1 Ø: 1 SHORT CIRCUIT RATING: 22000
 MAIN BS MLO □ TOP FEED □ BOTTOM FEED □ COPPER BUS BS GROUND BAR KIT □ NEUTRAL BAR KIT □

| L1 | L2 | CIRCUIT | POLES | TRIP | ASSIGNMENT | PHASE | ASSIGNMENT | TRIP | POLES | CIRCUIT | L1 | L2 |
|------|------|---------|-------|------|-------------------------|-------|-----------------------------|------|-------|---------|------|------|
| 36.0 | | 1 | 2 | 45 | AIR HANDLING UNIT #1 | o | HEAT PUMP UNIT # 1 | 50 | 2 | 2 | 24.7 | |
| | 36.0 | 3 | | | | o | | | | 4 | | 24.7 |
| 24.7 | | 5 | 2 | 50 | HEAT PUMP UNIT 2 | o | AIR HANDLING UNIT 2 | 45 | 2 | 6 | 36.0 | |
| | 24.7 | 7 | | | | o | | | | 8 | | 36.0 |
| 36.0 | | 9 | 2 | 45 | AIR HANDLING UNIT 3 | o | HEAT PUMP UNIT # 3 | 50 | 2 | 10 | 24.7 | |
| | 36.0 | 11 | | | | o | | | | 12 | | 24.7 |
| 1.5 | | 13 | 1 | 20 | HEAT PUMP CONV. RECEPT. | o | SERVICE CONVENIENCE RECEPT. | 20 | 1 | 14 | 1.5 | |
| | 1.5 | 15 | 1 | 20 | AHU CONV. RECEPTACLE | o | | 20 | 1 | 16 | | X |
| X | | 17 | 1 | 20 | SPARE | o | SPARE | 20 | 1 | 18 | X | |
| X | X | 19 | 1 | 20 | SPARE | o | SPARE | 20 | 1 | 20 | X | X |
| X | X | 21 | 1 | 20 | SPARE | o | SPARE | 20 | 1 | 22 | X | X |
| X | X | 23 | 1 | 20 | HOTBOX HEAT TRACE TAPE | o | SPARE | 20 | 1 | 24 | X | X |
| X | X | 25 | 1 | 20 | SPARE | o | SPARE | 20 | 1 | 26 | X | X |
| X | X | 27 | 1 | 20 | SPARE | o | SPARE | 20 | 1 | 28 | X | X |
| X | X | 29 | 1 | 20 | SPARE | o | SPARE | 20 | 1 | 30 | X | X |
| X | X | 31 | 1 | 20 | SPARE | o | SPARE | 20 | 1 | 32 | X | X |
| X | X | 33 | 1 | 20 | SPARE | o | SPARE | 20 | 1 | 34 | X | X |
| X | X | 35 | 1 | 20 | SPARE | o | SPARE | 20 | 1 | 36 | X | X |
| X | X | 37 | 1 | 20 | SPARE | o | SPARE | 20 | 1 | 38 | X | X |
| X | X | 39 | 1 | 20 | SPARE | o | SPARE | 20 | 1 | 40 | X | X |
| X | X | 41 | 1 | 20 | SPARE | o | SPARE | 20 | 1 | 42 | X | X |

L1 = 185.1 A
L2 = 184.1 A

COORDINATE LOCATION W/ CIVIL PLAN

ELECTRICAL LOAD CALCULATIONS

4108 SQUARE FEET VA.

NONCONTINUOUS LOADS:

| | |
|-----------------------------|------|
| 36 RECEPTACLES @ 180 VA EA. | 6480 |
| 1ST 10000 REMAINDER @ 50% | 6480 |
| TOTAL | 6480 |

CONTINUOUS LOADS:

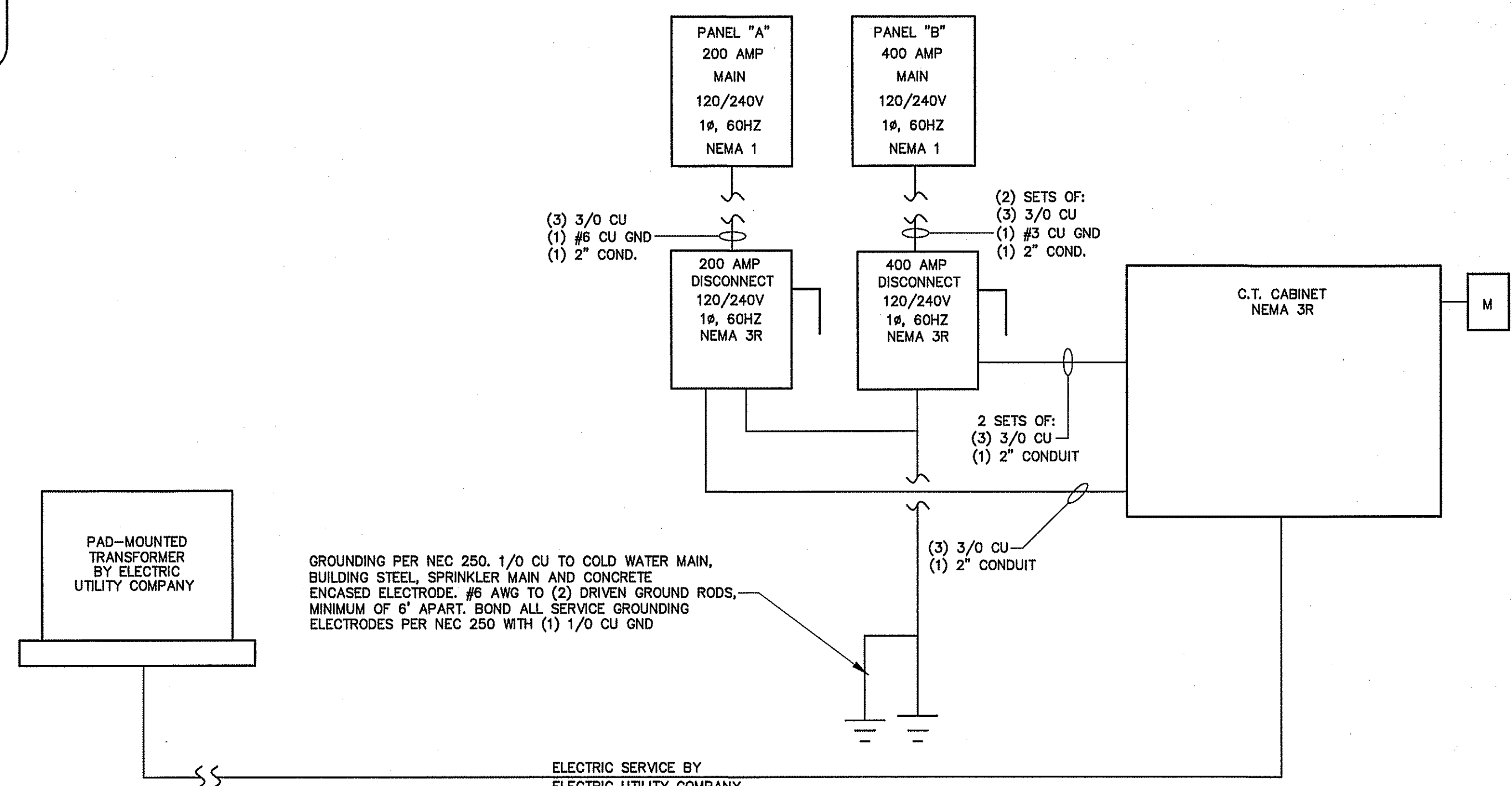
| | |
|----------------------------------|-------|
| GENERAL LIGHTING LOAD VA/SQ. FT. | |
| 4108 SQ. FT. 2.0 | 8216 |
| 8216 x 1.25 | 10270 |

AIR HANDLER UNIT 25920
 HEAT PUMPS 17784
 EQUIPMENT: 17431
 25% OF LARGEST MOTOR 1482
 GRAND TOTAL 79367

331 AMPS @ 120/240V, 1ϕ, 60HZ

FEEDER SCHEDULE

| UNIT | FEEDERS | FUSED DISCONNECT | CONDUIT |
|-------------------|----------------------|------------------|---------|
| AIR HANDLER 1,2,3 | 2#8 CU, 1#10 CU GND | 60 | 3/4" |
| HEAT PUMP 1,2,3 | 2#8 CU, 1#10 CU GND | 60 | 3/4" |
| WATER HEATER | 2#10 CU, 1#12 CU GND | 30 | 3/4" |



ELECTRICAL RISER DIAGRAM
NOT TO SCALE

ELECTRICAL SYSTEM AND EQUIPMENT METHOD OF COMPLIANCE:

ENERGY CODE: PRESCRIPTIVE PERFORMANCE
 ASHRAE 90.1: PRESCRIPTIVE PERFORMANCE

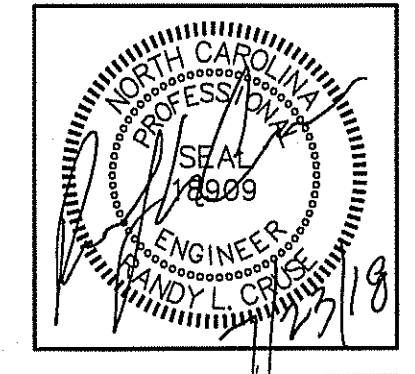
REFER TO DRAWINGS FOR RISER DIAGRAM AND PANEL SCHEDULES

LIGHTING SCHEDULE

LAMP TYPE REQUIRED IN FIXTURE: SEE SCHEDULE
 NUMBER OF LAMPS IN FIXTURE:
 BALLASTS TYPE USED IN FIXTURE:
 NUMBER OF BALLASTS IN FIXTURE:
 TOTAL WATTAGE PER FIXTURE:
 TOTAL INTERIOR WATTAGE SPECIFIED VS. ALLOWED:
 TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED:

ADDITIONAL PRESCRIPTIVE COMPLIANCE

- 506.2.1 MORE EFFICIENT MECHANICAL EQUIPMENT
- 506.2.2 REDUCED LIGHTING POWER DENSITY
- 506.2.3 ENERGY RECOVERY VENTILATION SYSTEMS
- 506.2.4 HIGHER EFFICIENCY SERVICE WATER HEATING
- 506.2.5 ON-SITE SUPPLY OF RENEWABLE ENERGY
- 506.2.6 AUTOMATIC DAYLIGHTING CONTROL SYSTEMS



PLANS FOR:
CAMPBELL POINTE TOWNHOMES
OFFICE & GYM FACILITY
 BUIES CREEK, NORTH CAROLINA

REVISIONS

| NO. | |
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| | |

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 JOB NO. 18-21

SHEET NO.
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