

DORTON PARK RENOVATIONS VOL. 3

CONCORD, NC

THE DODD STUDIO
314 Tom Hall St.
Fort Mill, SC 29715
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Owner
City of Concord
147 Academy Ave. NW
Concord, North Carolina 28026
Contact: George Berger
Phone: 704.920.5641
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Landscape Architect
The Dodd Studio, LLC
314 Tom Hall Street
Fort Mill, SC 29715
Contact: Dan Dodd, RLA
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Civil Engineer
Roper Civil Engineering
3007 Hindsdale Street
Charlotte, NC 28210
Contact: Matthew Roper, PE
Phone: 704.582.3751
Email: matt@roperce.com

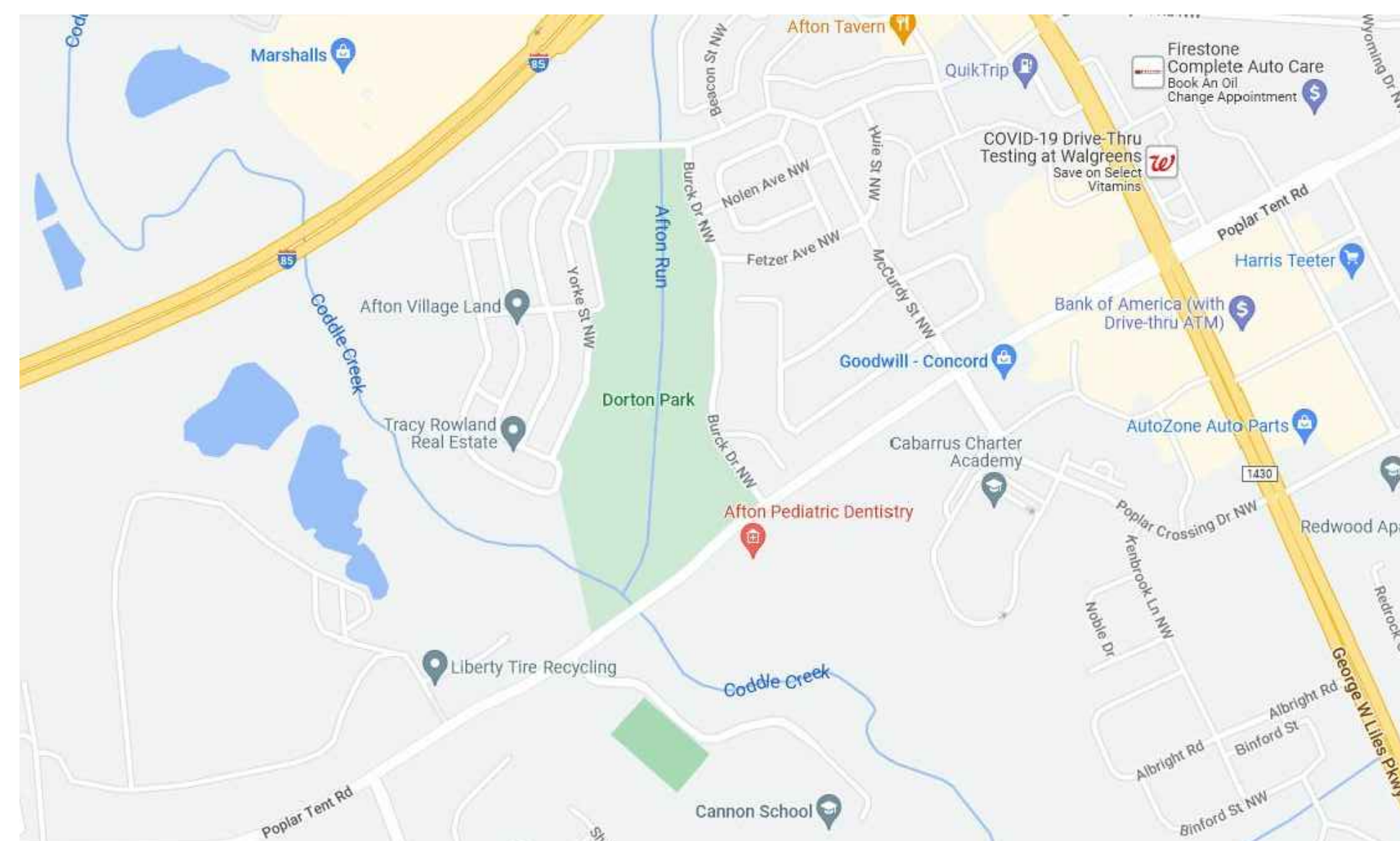
Stream Restoration Engineer
McAdams
2905 Meridian Parkway
Durham, NC 27713
Contact: Rebecca Stubbs, PE
Phone: 919.287.0740
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Architect
Citizen Design
2408 Commonwealth Avenue
Charlotte, NC 28205
Contact: Brian Conroy, AIA
Phone: 704.661.2337
Email: brian.citizen@citizendesign@gmail.com

Structural Engineer
Moffatt & Nichol
4700 Falls of Neuse Road, Suite 300
Raleigh, NC 27609
Contact: Jeff Loftus, PE
Phone: 919.781.4626
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Mechanical, Electrical and Plumbing Engineer
Shultz Engineering Group
212 North McDowell Street, Suite 204
Charlotte, NC 28204
Contact: Chuck Curlin, PE, CEM, CPD
Phone: 704.334.7363
Email: ccurlin@shultzeg.com

| SHEET TITLE | SHEET NO. |
|--|-----------|
| Cover | 001 |
| Appendix B New Restroom | A 0.1 |
| Appendix B Existing Restroom | A 0.2 |
| Soccer Restroom Floor Plans and Life Safety Plan | A 1.0 |
| Existing Restroom Floor Plans and Life Safety Plan | A 1.2 |
| Existing Large Shelter Floor Plan and Details | A 1.3 |
| Existing Small Shelter Floor Plan and Details | A 1.4 |
| Enlarged Floor Plans and Finish Schedules | A 1.5 |
| Soccer Restroom Elevations and Details | A 2.0 |
| Existing Restroom Elevations and Details | A 2.1 |
| Soccer Restroom Sections and Details | A 3.0 |
| Sections and Details | A 3.1 |
| Existing Restroom Sections and Details | A 3.2 |
| Existing Restroom Sections and Details | A 3.3 |
| Door Schedule and Details | A 4.0 |
| Window Schedule and Details | A 5.0 |
| Mechanical HVAC Schedules and Notes | M0.1 |
| Mechanical HVAC Plan and Details | M1.0 |
| Electrical Specifications and Schedules | E0.1 |
| Electrical Plans and Notes - Restroom | E1.0 |
| Electrical Plans and Notes - Shelters | E1.1 |
| Electrical Plans and Notes - Shelters | E1.2 |
| Electrical Power Riser and Panel Schedule | E2.0 |
| Plumbing Schedules and Notes | P0.1 |
| Plumbing Details | P0.2 |
| Soccer Restroom Plumbing Plan | P1.0 |
| Existing Restroom Plumbing Renovation Plans | P2.0 |



VICINITY MAP (NOT TO SCALE)

PERMIT SET



CONTRACTOR SHALL NOTIFY "NORTH CAROLINA ONE CALL" (811) OR (1-800-632-4949) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED.
CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NORTH CAROLINA ONE CALL".
REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

REVISIONS:

| | |
|-----------|------------|
| 6-14-2023 | ADDENDUM 1 |
|-----------|------------|

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

DORTON PARK RENOVATIONS
5650 POPLAR TENT ROAD
CONCORD, NORTH CAROLINA

SCALE: NTS
DATE: 5-4-23
SHEET NAME:
COVER
SHEET NO:
001

2018 APPENDIX B: Dorton Park New Restroom Building

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

Name of Project: Dorton Park Renovation
 Address: 5790 Poplar Tent Road, Concord NC Zip Code 28026
 Owner/Authorized Agent: Brian Conroy Phone No.: 704.661.2337 E-Mail: Brian.citizenstudio@gmail.com
 Owned By: City/County Private State
 Code Enforcement Jurisdiction: City Concord County Cabarrus State NC

CONTACT: Brian Conroy
 DESIGNER FIRM: citizen design NAME: Brian Conroy LICENSE # 12145 TELEPHONE # 704.661.2337 E-MAIL: Brian.citizenstudio@gmail.com
 Architectural: citizen design NAME: Brian Conroy LICENSE # 12145 TELEPHONE # 704.661.2337 E-MAIL: Brian.citizenstudio@gmail.com
 Civil: citizen design NAME: Brian Conroy LICENSE # 12145 TELEPHONE # 704.661.2337 E-MAIL: Brian.citizenstudio@gmail.com
 Electrical: Shults Engineering NAME: Brian D. Winkler LICENSE # 33160 TELEPHONE # 980.202.5646 E-MAIL: Bwinkler@shultzeg.com
 Fire Alarm: Shults Engineering NAME: Charlie Curlin LICENSE # 25028 TELEPHONE # 704.334.7363 E-MAIL: ccurlin@shultzeg.com
 Plumbing: Shults Engineering NAME: Charlie Curlin LICENSE # 25028 TELEPHONE # 704.334.7363 E-MAIL: ccurlin@shultzeg.com
 Mechanical: Shults Engineering NAME: Charlie Curlin LICENSE # 25028 TELEPHONE # 704.334.7363 E-MAIL: ccurlin@shultzeg.com
 Retaining Walls > 5'-0": IDE Charlotte NAME: Chad Ritter LICENSE # 31995 TELEPHONE # 704.999.3867 E-MAIL: chad@IDECharlotte.com
 Structural: IDE Charlotte NAME: Chad Ritter LICENSE # 31995 TELEPHONE # 704.999.3867 E-MAIL: chad@IDECharlotte.com

Other: (*Other* should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC BUILDING CODE: New Building Addition Renovation
 1st Time Interior Completion
 Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements.
 Phased Construction - Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements.

2018 NC EXISTING BUILDING CODE: EXISTING: Prescriptive Repair Chapter 14
 Alteration: Level I Level II Level III Level IV
 Historic Property Change of Use

CONSTRUCTED: (date) NA CURRENT OCCUPANCY(S) (Ch. 3): NA
 RENOVATED: (date) NA PROPOSED OCCUPANCY(S) (Ch. 3): A5

RISK CATEGORY (Table 1604.5): Current: I II III IV V
 Proposed: I II III IV V

BASIC BUILDING DATA
 Construction Type: I-A II-A III-A IV V-A
 I-B II-B III-B V-B
 Check all that apply: No Partial Yes NFPA 13 NFPA 13R NFPA 13D
 Standpipes: No Yes Class I II III Wet Dry
 Fire District: No Yes Flood Hazard Area: No Yes
 Special Inspections Required: No Yes (Contact the local inspection jurisdiction for additional procedures and requirements.)

| Gross Building Area Table | | | |
|---------------------------|------------------|-------------|-----------|
| FLOOR | EXISTING (SQ FT) | NEW (SQ FT) | SUB-TOTAL |
| 3 rd Floor | | | |
| 2 nd Floor | | | |
| Mezzanine | | | |
| 1 st Floor | 0sqft | 205sqft | 205sqft |
| Basement | | | |
| TOTAL | | | 205sqft |

ALLOWABLE AREA
 Primary Occupancy Classification(s): Select one Select one Select one Select one Select one
 Assembly A-1 A-2 A-3 A-4 A-5
 Business
 Educational
 Factory F-1 Moderate F-2 Low
 Hazardous H-1 Detonate H-2 Deftagrate H-3 Combust H-4 Health H-5 HPM
 Institutional I-1 Condition I-2 I-3 Condition I-4
 Mercantile
 Residential R-1 R-2 R-3 R-4
 Storage S-1 Moderate S-2 Low High-piled
 Parking Garage Open Enclosed Repair Garage
 Utility and Miscellaneous

Necessary Occupancy Classification(s):
 Incidental Uses (Table 509):
 Special Uses (Chapter 4 - List Code Sections):
 Special Provisions: (Chapter 5 - List Code Sections):
 Mixed Occupancy: No Yes Separation: NA Hr. Exception:
 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.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$
 NOT USED + NOT USED + ... = NA ≤ 1.00

| STORY NO. | DESCRIPTION AND USE | (A) BLDG AREA PER STORY (ACTUAL) | (B) TABLE 506.2.1 AREA | (C) AREA FOR FRONTAGE INCREASE ^{1,2} | (D) ALLOWABLE AREA PER STORY OR UNLIMITED ^{1,3} |
|-----------|---------------------|----------------------------------|------------------------|---|--|
| 1 | RESTROOM BLDG. | 205 | 9,000 | 0 | 9,000 |
| | TOTAL BLDG. | 205 | 9,000 | 0 | 9,000 |

¹ Frontage area increases from Section 506.2 are computed thus:
 a. Perimeter which fronts a public way or open space having 20 feet minimum width = NA (F)
 b. Total Building Perimeter = NA (P)
 c. Ratio (F/P) = NA (F/P)
 d. W = Minimum width of public way = NA (W)
 e. Percent of frontage increase $I = 100[(F/P - 0.25) \times W/30] = \text{NA}$ (%)
² Unlimited area applicable under conditions of Section 507.
³ Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).
⁴ The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.
⁵ Frontage increase is based on the unspinklered area value in Table 506.2.

| ALLOWABLE HEIGHT | | | |
|--|-----------|----------------|----------------|
| | ALLOWABLE | SHOWN ON PLANS | CODE REFERENCE |
| Building Height in Feet (Table 504.3) | 40' | 15' | |
| Building Height in Stories (Table 504.4) | 2 | 1 | |

Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

| FIRE PROTECTION REQUIREMENTS | | | | | | |
|--|---------------------------------|-------|---------------------------------|----------------------|-----------------------------|-------------------------------|
| BUILDING ELEMENT | FIRE SEPARATION DISTANCE (FEET) | REQ'D | RATING: PROVIDED (w/ REDUCTION) | DETAIL # AND SHEET # | DESIGN # FOR RATED ASSEMBLY | SHEET # FOR RATED PENETRATION |
| Structural Frame, including columns, girders, trusses | 30' < X | 0 | 0 | 1/A-3.0 | | |
| Bearing Walls | 30' < X | 0 | 0 | 1/A-3.0 | | |
| Exterior Walls | | | | | | |
| North | | | | | | |
| East | | | | | | |
| West | | | | | | |
| South | | | | | | |
| Interior | | 0 | 0 | NONE | | |
| Nonbearing Walls and Partitions | | 0 | 0 | 1/A-3.0 | | |
| Exterior walls | | | | | | |
| North | | | | | | |
| East | | | | | | |
| West | | | | | | |
| South | | | | | | |
| Interior walls and partitions | | 0 | 0 | 1/A-3.0 | | |
| Floor Construction including supporting beams and joists | | 0 | 0 | 1/A-3.0 | | |
| Floor Ceiling Assembly | | | | | | |
| Columns Supporting Floors | | | | | | |
| Roof Construction, including supporting beams and joists | | 0 | 0 | 1/A-3.0 | | |
| Roof Ceiling Assembly | | 0 | 0 | 1/A-3.0 | | |
| Columns Supporting Roof | | 0 | 0 | NONE | | |
| Shaft Enclosures - Exit | | NA | | | | |
| Shaft Enclosures - Other | | NA | | | | |
| Corridor Separation | | NA | | | | |
| Occupancy/Fire Barrier Separation | | NA | | | | |
| Party/Fire Wall Separation | | NA | | | | |
| Smoke Barrier Separation | | NA | | | | |
| Smoke Partition | | NA | | | | |
| Tenant/Dwelling Unit/Sleeping Unit Separation | | NA | | | | |
| Incidental Use Separation | | NA | | | | |

* Indicate section number permitting reduction

| PERCENTAGE OF WALL OPENING CALCULATIONS | | | |
|---|---|--------------------|---------------------------|
| FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES | DEGREE OF OPENINGS PROTECTION (TABLE 705.8) | ALLOWABLE AREA (%) | ACTUAL SHOWN ON PLANS (%) |
| 30' < X | UP, NS | NO LIMIT | 10% |

LIFE SAFETY SYSTEM REQUIREMENTS
 Emergency Lighting: No Yes
 Exit Signs: No Yes
 Fire Alarm: No Yes
 Smoke Detection Systems: No Yes Partial
 Carbon Monoxide Detection: No Yes

LIFE SAFETY PLAN REQUIREMENTS
 Life Safety Plan Sheet #: 3/A-1.0
 Fire and/or smoke rated wall locations (Chapter 7)
 Assumed and real property line locations (if not on the site plan)
 Exterior wall opening area with respect to distance to assumed property lines (705.8)
 Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
 Occupant loads for each area
 Exit access travel distances (1017)
 Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))
 Dead end lengths (1020.4)
 Clear exit widths for each exit door
 Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
 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
 Location of doors with panic hardware (1010.1.10)
 Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
 Location of doors with electromagnetic egress locks (1010.1.9.9)
 Location of doors equipped with hold-open devices
 Location of emergency escape windows (1030)
 The square footage of each fire area (202)
 The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
 Note any code exceptions or table notes that may have been utilized regarding the items above

| ACCESSIBLE DWELLING UNITS (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 |
| NA | | | | | | | |

| ACCESSIBLE PARKING (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 | |
| EXISTING | | 68 | | 3 | 3 |
| NEW | | 36 | | 2 | 2 |
| TOTAL | | 104 | | 5 | 5 |

| PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1) | | | | | | | | | | |
|--|---------------|---------|------------|--------|----------------|--------------------|---|---|---|---|
| USE | WATER CLOSETS | URINALS | LAVATORIES | | SHOWERS / TUBS | DRINKING FOUNTAINS | | | | |
| | | | MALE | FEMALE | | | | | | |
| EXIST'G | 1 | 3 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 1 |
| NEW* | 6 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 1 |
| TOTAL | 0 | 6 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 2 |

* INCLUDES FIXTURE COUNT FROM EXISTING RESTROOM TO SERVICE TOTAL DEMAND IN PARK

SPECIAL APPROVALS
 Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, 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.

Existing building envelope complies with code: No Yes (The remainder of this section is not applicable)

Exempt Building: No Yes (Provide code or statutory reference):
 Climate Zone: 3A 4A 5A
 Method of Compliance: Energy Code Performance ASHRAE 90.1 Performance (If "Other" specify source here) Prescriptive Prescriptive

THERMAL ENVELOPE (Prescriptive method only)
 Roof/Ceiling Assembly (each assembly)
 Description of assembly: WOOD RAFTER
 U-Value of total assembly: NA
 R-Value of insulation: R-38 BATT
 Skylights in each assembly: NONE
 U-Value of skylight: NA
 total square footage of skylights in each assembly: 0
 Exterior Walls (each assembly)
 Description of assembly: 2x6 WOOD STUD @ 16" O.C.
 U-Value of total assembly: NA
 R-Value of insulation: R-20 BATT
 Openings (windows or doors with glazing)
 U-Value of assembly: 0.45 MAX.
 Solar heat gain coefficient: 0.33 MAX.
 projection factor: 0.36
 Door R-Values: 2.22 MIN.

Walls below grade (each assembly)
 Description of assembly: NONE
 U-Value of total assembly: NA
 R-Value of insulation: NA

Floors over unconditioned space (each assembly)
 Description of assembly: NA
 U-Value of total assembly: NA
 R-Value of insulation: NONE

Floors slab on grade
 Description of assembly: 4" SLAB ON GRADE
 U-Value of total assembly: F-0.730
 R-Value of insulation: NONE
 Horizontal/vertical requirement: NA
 slab heated: NONE

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

STRUCTURAL DESIGN (PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:
 Importance Factors: Snow (I_s) 1.0
 Seismic (I_e) 1.0
 Live Loads: Roof 20 psf
 Mezzanine NA psf
 Floor 100 psf
 Ground Snow Load: 10 psf
 Wind Load: Ultimate Wind Speed 115 mph (ASCE-7)
 Exposure Category C

SEISMIC DESIGN CATEGORY: A B C D
 Provide the following Seismic Design Parameters:
 Risk Category (Table 1604.5) I II III IV
 Spectral Response Acceleration S_s 18.2 %g S₁ 7.8 %g
 Site Classification (ASCE 7) A B C D E F
 Data Source: Field Test Presumptive Historical Data
 Basic structural system: Bearing Wall Dual w/Special Moment Frame
 Building Frame Dual w/Intermediate R/C or Special Steel
 Moment Frame Inverted Pendulum
 Analysis Procedure: Simplified Equivalent Lateral Force Dynamic
 Architectural, Mechanical, Components anchored? Yes No

LATERAL DESIGN CONTROL: Earthquake Wind
 SOIL BEARING CAPACITIES:
 Field Test (provide copy of test report) N/A psf
 Presumptive Bearing capacity 1,500 psf
 Pile size, type, and capacity N/A

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

MECHANICAL DESIGN (PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY
 MECHANICAL SYSTEMS SERVICE SYSTEMS AND EQUIPMENT
 Thermal Zone
 winter dry bulb: _____
 summer dry bulb: _____
 Interior design conditions
 winter dry bulb: _____
 summer dry bulb: _____
 relative humidity: _____
 SEE MECHANICAL DRAWINGS

Building heating load: _____
 Building cooling load: _____
 Mechanical Spacing Conditioning System
 Unitary
 description of unit: _____
 heating efficiency: _____
 cooling efficiency: _____
 size category of unit: _____
 Boiler
 Size category. If oversized, state reason: _____
 Chiller
 Size category. If oversized, state reason: _____
 List equipment efficiencies: _____

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

ELECTRICAL DESIGN (PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY
 ELECTRICAL SYSTEM AND EQUIPMENT
 Method of Compliance: Energy Code Performance Prescriptive ASHRAE 90.1 Performance Prescriptive
 Lighting schedule (each fixture type)
 lamp type required in fixture _____
 number of lamps in fixture _____
 ballast type used in the fixture _____
 number of ballasts in fixture _____
 total wattage per fixture _____
 total interior wattage specified vs. allowed (whole building or space by space) _____
 total exterior wattage specified vs. allowed _____

Additional Efficiency Package Options (When using the 2018 NCECC; not required for ASHRAE 90.1)
 C406.2 More Efficient HVAC Equipment Performance
 C406.3 Reduced Lighting Power Density
 C406.4 Enhanced Digital Lighting Controls
 C406.5 On-Site Renewable Energy
 C406.6 Dedicated Outdoor Air System
 C406.7 Reduced Energy Use in Service Water Heating



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REVISIONS:

CITY OF CONCORD
 35 CABARRUS AVE. W
 CONCORD, NORTH CAROLINA

OWNER:

DORTON PARK
 5650 POPLAR TENT ROAD
 CONCORD, NORTH CAROLINA

SCALE: AS NOTED

DATE: 05-04-23

SHEET NAME:
 APPENDIX B
 NEW
 RESTROOM

SHEET NO:
 A 0.1

2018 APPENDIX B: Dorton Park Existing Restroom Renovation

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

Name of Project: Dorton Park Renovation
 Address: 5790 Poplar Tent Road, Concord NC Zip Code 28026
 Owner/Authorized Agent: Brian Conroy Phone No.: 704.661.2337 E-Mail: Brian.citizenstudio@gmail.com
 Owned By: City/County Private State
 Code Enforcement Jurisdiction: City Concord County Cabarrus State NC

CONTACT: Brian Conroy
 DESIGNER FIRM: citizen design NAME: Brian Conroy LICENSE # 12145 TELEPHONE # 704.661.2337 E-MAIL: Brian.citizenstudio@gmail.com
 Architectural: citizen design NAME: Brian Conroy LICENSE # 12145 TELEPHONE # 704.661.2337 E-MAIL: Brian.citizenstudio@gmail.com
 Civil: citizen design NAME: Brian Conroy LICENSE # 12145 TELEPHONE # 704.661.2337 E-MAIL: Brian.citizenstudio@gmail.com
 Electrical: Shults Engineering NAME: Brian D. Winkler LICENSE # 33160 TELEPHONE # 980.202.5646 E-MAIL: Bwinkler@shultzeg.com
 Fire Alarm: Shults Engineering NAME: Charlie Curlin LICENSE # 25028 TELEPHONE # 704.334.7363 E-MAIL: ccurlin@shultzeg.com
 Plumbing: Shults Engineering NAME: Charlie Curlin LICENSE # 25028 TELEPHONE # 704.334.7363 E-MAIL: ccurlin@shultzeg.com
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 Retaining Walls > 5'-0": IDE Charlotte NAME: Chad Ritter LICENSE # 31995 TELEPHONE # 704.999.3867 E-MAIL: chad@IDECharlotte.com
 Structural: IDE Charlotte NAME: Chad Ritter LICENSE # 31995 TELEPHONE # 704.999.3867 E-MAIL: chad@IDECharlotte.com

Other: (*Other* should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC BUILDING CODE: New Building Addition Renovation
 1st Time Interior Completion
 Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements.
 Phased Construction - Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements.

2018 NC EXISTING BUILDING CODE: EXISTING: Prescriptive Repair Chapter 14
 Alteration: Level I Level II Level III Level IV
 Historic Property Change of Use

CONSTRUCTED: (date) 2007 CURRENT OCCUPANCY(S) (Ch. 3): A5
 RENOVATED: (date) _____ PROPOSED OCCUPANCY(S) (Ch. 3): A5

RISK CATEGORY (Table 1604.5): Current: I II III IV V
 Proposed: I II III IV V

BASIC BUILDING DATA
 Construction Type: I-A II-A III-A IV V-A
 I-B II-B III-B V-B
 (check all that apply)
 Sprinklers: No Partial Yes NFPA 13 NFPA 13R NFPA 13D
 Standpipes: No Yes Class I II III Wet Dry
 Fire District: No Yes Flood Hazard Area: No Yes
 Special Inspections Required: No Yes (Contact the local inspection jurisdiction for additional procedures and requirements.)

| Gross Building Area Table | | | |
|---------------------------|------------------|-------------|-----------|
| FLOOR | EXISTING (SQ FT) | NEW (SQ FT) | SUB-TOTAL |
| 3 rd Floor | | | |
| 2 nd Floor | | | |
| Mezzanine | | | |
| 1 st Floor | 726sqft | 0sqft | 726sqft |
| Basement | | | |
| TOTAL | | | 726sqft |

ALLOWABLE AREA
 Primary Occupancy Classification(s): Select one Select one Select one Select one Select one
 Assembly A-1 A-2 A-3 A-4 A-5
 Business
 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 Condition I-2 I-3 Condition I-4
 Mercantile
 Residential R-1 R-2 R-3 R-4
 Storage S-1 Moderate S-2 Low High-piled
 Parking Garage Open Enclosed Repair Garage
 Utility and Miscellaneous

Necessary Occupancy Classification(s): _____
 Incidental Uses (Table 509): _____
 Special Uses (Chapter 4 - List Code Sections): _____
 Special Provisions: (Chapter 5 - List Code Sections) : _____
 Mixed Occupancy: No Yes Separation: _____ Hr. Exception: _____

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.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

NOT USED + NOT USED + ... = _____ ≤ 1.00

| STORY NO. | DESCRIPTION AND USE | (A) BLDG AREA PER STORY (ACTUAL) | (B) TABLE 506.2.1 AREA | (C) AREA FOR FRONTAGE INCREASE ^{1,2} | (D) ALLOWABLE AREA PER STORY OR UNLIMITED ^{2,3} |
|-----------|---------------------|----------------------------------|------------------------|---|--|
| 1 | RESTROOM BLDG. | 726 | 9,000 | 0 | 9,000 |
| | TOTAL BLDG. | 726 | 9,000 | 0 | 9,000 |

¹ Frontage area increases from Section 506.2 are computed thus:
 a. Perimeter which fronts a public way or open space having 20 feet minimum width = NA (F)
 b. Total Building Perimeter = NA (P)
 c. Ratio (F/P) = NA (F/P)
 d. W = Minimum width of public way = NA (W)
 e. Percent of frontage increase $I = 100[(F/P - 0.25) \times W/30] = \text{NA}$ (%)
² Unlimited area applicable under conditions of Section 507.
³ Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).
⁴ The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.
⁵ Frontage increase is based on the unspinklered area value in Table 506.2.

| ALLOWABLE HEIGHT | | | |
|--|-----------|----------------|----------------|
| | ALLOWABLE | SHOWN ON PLANS | CODE REFERENCE |
| Building Height in Feet (Table 504.3) | 40' | 15' | |
| Building Height in Stories (Table 504.4) | 2 | 1 | |

Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

| FIRE PROTECTION REQUIREMENTS | | | | | | |
|--|---------------------------------|-------|---------------------------------|----------------------|-----------------------------|-------------------------------|
| BUILDING ELEMENT | FIRE SEPARATION DISTANCE (FEET) | REQ'D | RATING: PROVIDED (w/ REDUCTION) | DETAIL # AND SHEET # | DESIGN # FOR RATED ASSEMBLY | SHEET # FOR RATED PENETRATION |
| Structural Frame, including columns, girders, trusses | 30' < X | 0 | 0 | 1/A-3.2 | | |
| Bearing Walls | 30' < X | 0 | 0 | 1/A-3.2 | | |
| Exterior Walls | | | | | | |
| North | | | | | | |
| East | | | | | | |
| West | | | | | | |
| South | | | | | | |
| Interior | | 0 | 0 | NONE | | |
| Nonbearing Walls and Partitions | | 0 | 0 | 1/A-3.2 | | |
| Exterior Walls | | | | | | |
| North | | | | | | |
| East | | | | | | |
| West | | | | | | |
| South | | | | | | |
| Interior walls and partitions | | 0 | 0 | 1/A-3.2 | | |
| Floor Construction including supporting beams and joists | | 0 | 0 | 1/A-3.2 | | |
| Floor Ceiling Assembly | | | | | | |
| Columns Supporting Floors | | | | | | |
| Roof Construction, including supporting beams and joists | | 0 | 0 | 1/A-3.2 | | |
| Roof Ceiling Assembly | | 0 | 0 | 1/A-3.2 | | |
| Columns Supporting Roof | | 0 | 0 | 3/A-3.2 | | |
| Shaft Enclosures - Exit | | NA | | | | |
| Shaft Enclosures - Other | | NA | | | | |
| Corridor Separation | | NA | | | | |
| Occupancy/Fire Barrier Separation | | NA | | | | |
| Party/Fire Wall Separation | | NA | | | | |
| Smoke Barrier Separation | | NA | | | | |
| Smoke Partition | | NA | | | | |
| Tenant/Dwelling Unit/Sleeping Unit Separation | | NA | | | | |
| Incidental Use Separation | | NA | | | | |

* Indicate section number permitting reduction

| PERCENTAGE OF WALL OPENING CALCULATIONS | | | |
|---|---|--------------------|---------------------------|
| FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES | DEGREE OF OPENINGS PROTECTION (TABLE 705.8) | ALLOWABLE AREA (%) | ACTUAL SHOWN ON PLANS (%) |
| 30' < X | UP, NS | NO LIMIT | 5% |

LIFE SAFETY SYSTEM REQUIREMENTS
 Emergency Lighting: No Yes
 Exit Signs: No Yes
 Fire Alarm: No Yes
 Smoke Detection Systems: No Yes Partial
 Carbon Monoxide Detection: No Yes

LIFE SAFETY PLAN REQUIREMENTS
 Life Safety Plan Sheet #: 4/A-1.2
 Fire and/or smoke rated wall locations (Chapter 7)
 Assumed and real property line locations (if not on the site plan)
 Exterior wall opening area with respect to distance to assumed property lines (705.8)
 Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
 Occupant loads for each area
 Exit access travel distances (1017)
 Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))
 Dead end lengths (1020.4)
 Clear exit widths for each exit door
 Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
 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
 Location of doors with panic hardware (1010.1.10)
 Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
 Location of doors with electromagnetic egress locks (1010.1.9.9)
 Location of doors equipped with hold-open devices
 Location of emergency escape windows (1030)
 The square footage of each fire area (202)
 The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
 Note any code exceptions or table notes that may have been utilized regarding the items above

| ACCESSIBLE DWELLING UNITS (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 |
| NA | | | | | | | |

| ACCESSIBLE PARKING (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 | |
| EXISTING | | 68 | | 3 | 3 |
| NEW | | 36 | | 2 | 2 |
| TOTAL | | 104 | | 5 | 5 |

| PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1) | | | | | | | | | | |
|--|--------------|--------|--------|---------|--------|------------|---------|----------------|--------------------|---|
| USE | WATERCLOSETS | | | URINALS | | LAVATORIES | | SHOWERS / TUBS | DRINKING FOUNTAINS | |
| | MALE | FEMALE | UNISEX | MALE | FEMALE | UNISEX | REGULAR | ACCESSIBLE | | |
| SPACE | EXIST'G | 1 | 3 | 0 | 2 | 2 | 2 | 0 | 0 | 1 |
| NEW* | | | | 6 | 0 | 0 | 0 | 6 | 0 | 1 |
| TOTAL | | 0 | 6 | 0 | 0 | 0 | 0 | 6 | 0 | 2 |

* INCLUDES FIXTURE COUNT FROM NEW RESTROOM TO SERVICE TOTAL DEMAND IN PARK

SPECIAL APPROVALS
 Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, 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.

Existing building envelope complies with code: No Yes (The remainder of this section is not applicable)

Exempt Building: No Yes (Provide code or statutory reference): _____

Climate Zone: 3A 4A 5A

Method of Compliance: Energy Code Performance ASHRAE 90.1 Performance Prescriptive (If "Other" specify source here) _____

THERMAL ENVELOPE (Prescriptive method only)
 Roof/Ceiling Assembly (each assembly)
 Description of assembly: WOOD RAFTER/ WOOD TRUSS
 U-Value of total assembly: _____
 R-Value of insulation: R-38 BATT
 Skylights in each assembly: NONE
 U-Value of skylight: _____
 total square footage of skylights in each assembly: 0

Exterior Walls (each assembly)
 Description of assembly: EXISTING CMU
 U-Value of total assembly: _____
 R-Value of insulation: UNKNOW
 Openings (windows or doors with glazing)
 U-Value of assembly: 0.45 MAX.
 Solar heat gain coefficient: 0.40 MAX.
 projection factor: 2.67
 Door R-Values: 2.22 MIN.

Walls below grade (each assembly)
 Description of assembly: _____
 U-Value of total assembly: _____
 R-Value of insulation: _____

Floors over unconditioned space (each assembly)
 Description of assembly: _____
 U-Value of total assembly: _____
 R-Value of insulation: _____

Floors slab on grade
 Description of assembly: 4" SLAB ON GRADE
 U-Value of total assembly: F-0.730
 R-Value of insulation: NONE
 Horizontal/vertical requirement: _____
 slab heated: NONE

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS STRUCTURAL DESIGN (PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:
 Importance Factors: Snow (I_s) 1.0
 Seismic (I_e) 1.0
 Live Loads: Roof 20 psf
 Mezzanine NA psf
 Floor 100 psf
 Ground Snow Load: 10 psf
 Wind Load: Ultimate Wind Speed 115 mph (ASCE-7)
 Exposure Category C

SEISMIC DESIGN CATEGORY: A B C D
 Provide the following Seismic Design Parameters:
 Risk Category (Table 1604.5) I II III IV
 Spectral Response Acceleration S_s 18.2 %g S₁ 7.8 %g

Site Classification (ASCE 7) A B C D E F
 Data Source: Field Test Presumptive Historical Data

Basic structural system: Bearing Wall Dual w/Special Moment Frame
 Building Frame Dual w/Intermediate R/C or Special Steel
 Moment Frame Inverted Pendulum

Analysis Procedure: Simplified Equivalent Lateral Force Dynamic
 Architectural, Mechanical, Components anchored? Yes No

LATERAL DESIGN CONTROL: Earthquake Wind

SOIL BEARING CAPACITIES:
 Field Test (provide copy of test report) N/A psf
 Presumptive Bearing capacity 1,500 psf
 Pile size, type, and capacity N/A

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS MECHANICAL DESIGN (PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone
 winter dry bulb: _____
 summer dry bulb: _____

Interior design conditions
 winter dry bulb: _____
 summer dry bulb: _____
 relative humidity: _____

SEE MECHANICAL DRAWINGS

Building heating load: _____
 Building cooling load: _____

Mechanical Spacing Conditioning System
 Unitary description of unit: _____
 heating efficiency: _____
 cooling efficiency: _____
 size category of unit: _____
 Boiler Size category. If oversized, state reason: _____
 Chiller Size category. If oversized, state reason: _____

List equipment efficiencies: _____

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS ELECTRICAL DESIGN (PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Energy Code Performance Prescriptive ASHRAE 90.1 Performance Prescriptive

Lighting schedule (each fixture type)
 lamp type required in fixture _____
 number of lamps in fixture _____
 ballast type used in the fixture _____
 number of ballasts in fixture _____
 total wattage per fixture _____
 total interior wattage specified vs. allowed (whole building or space by space) _____
 total exterior wattage specified vs. allowed _____

SEE ELECTRICAL DRAWINGS

Additional Efficiency Package Options (When using the 2018 NCECC; not required for ASHRAE 90.1)
 C406.2 More Efficient HVAC Equipment Performance
 C406.3 Reduced Lighting Power Density
 C406.4 Enhanced Digital Lighting Controls
 C406.5 On-Site Renewable Energy
 C406.6 Dedicated Outdoor Air System
 C406.7 Reduced Energy Use in Service Water Heating



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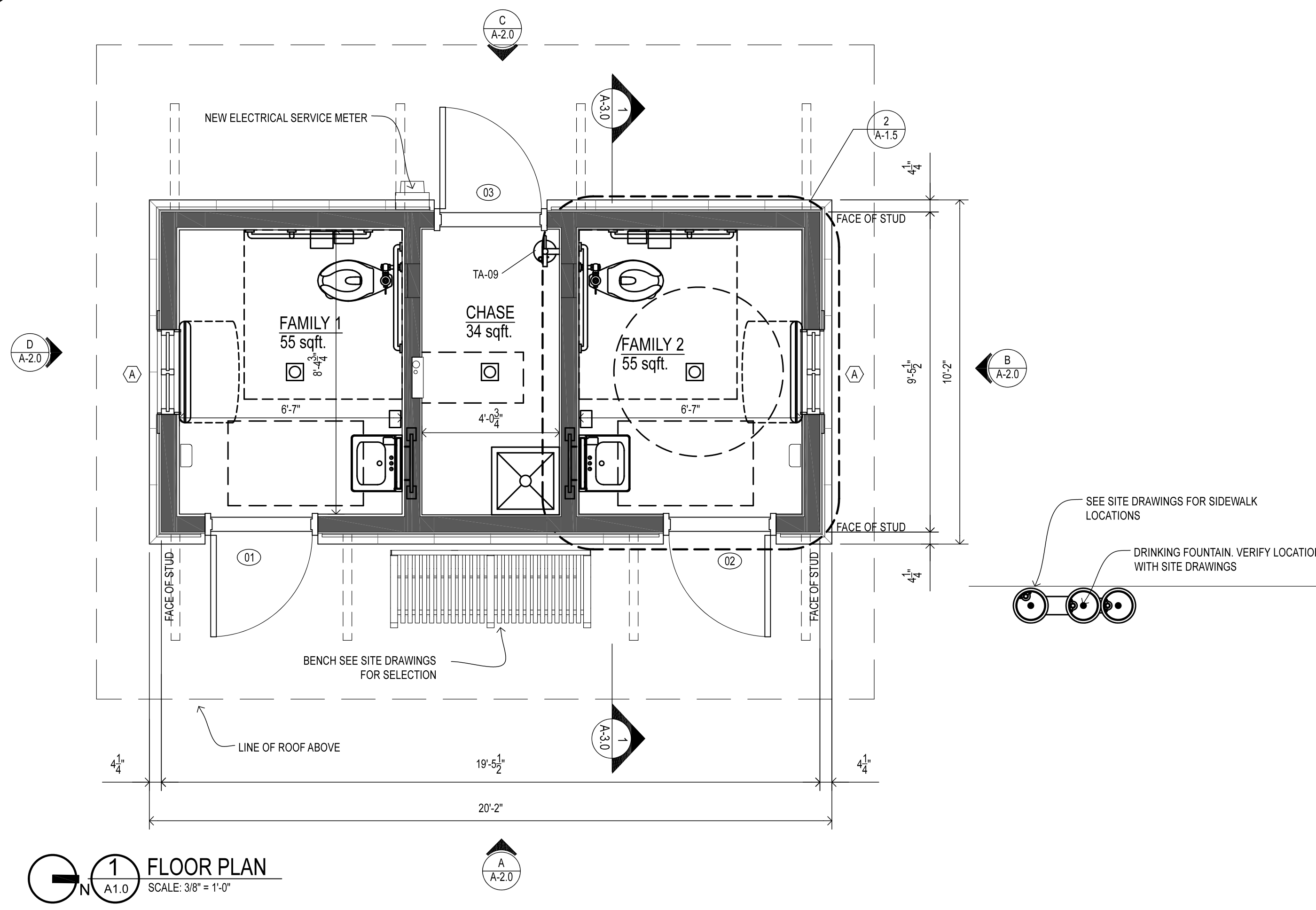
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DATE: 05-04-23

SHEET NAME:
 APPENDIX B
 EXISTING
 RESTROOM

SHEET NO:

A 0.2

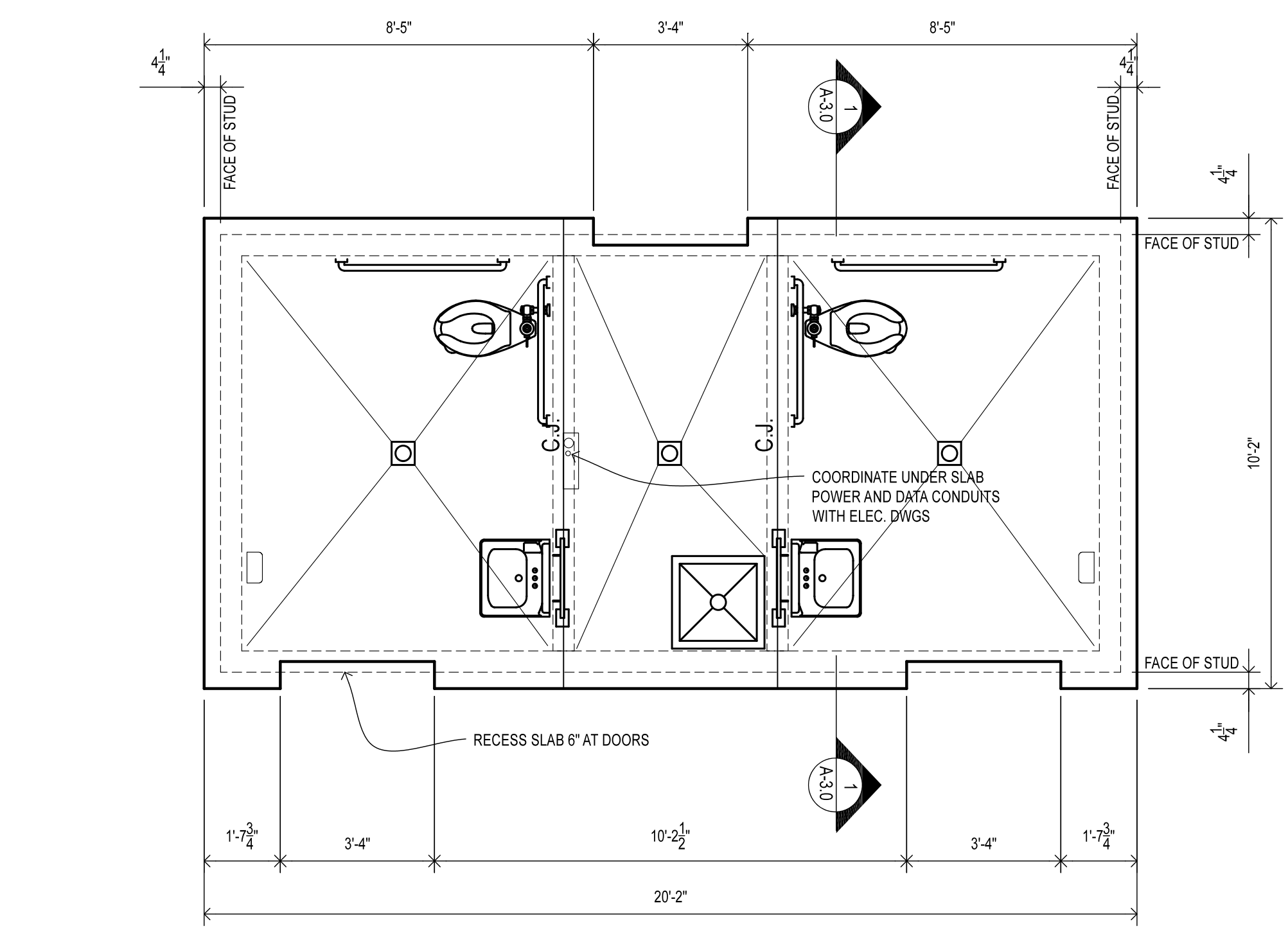


1 FLOOR PLAN
SCALE: 3/8" = 1'-0"

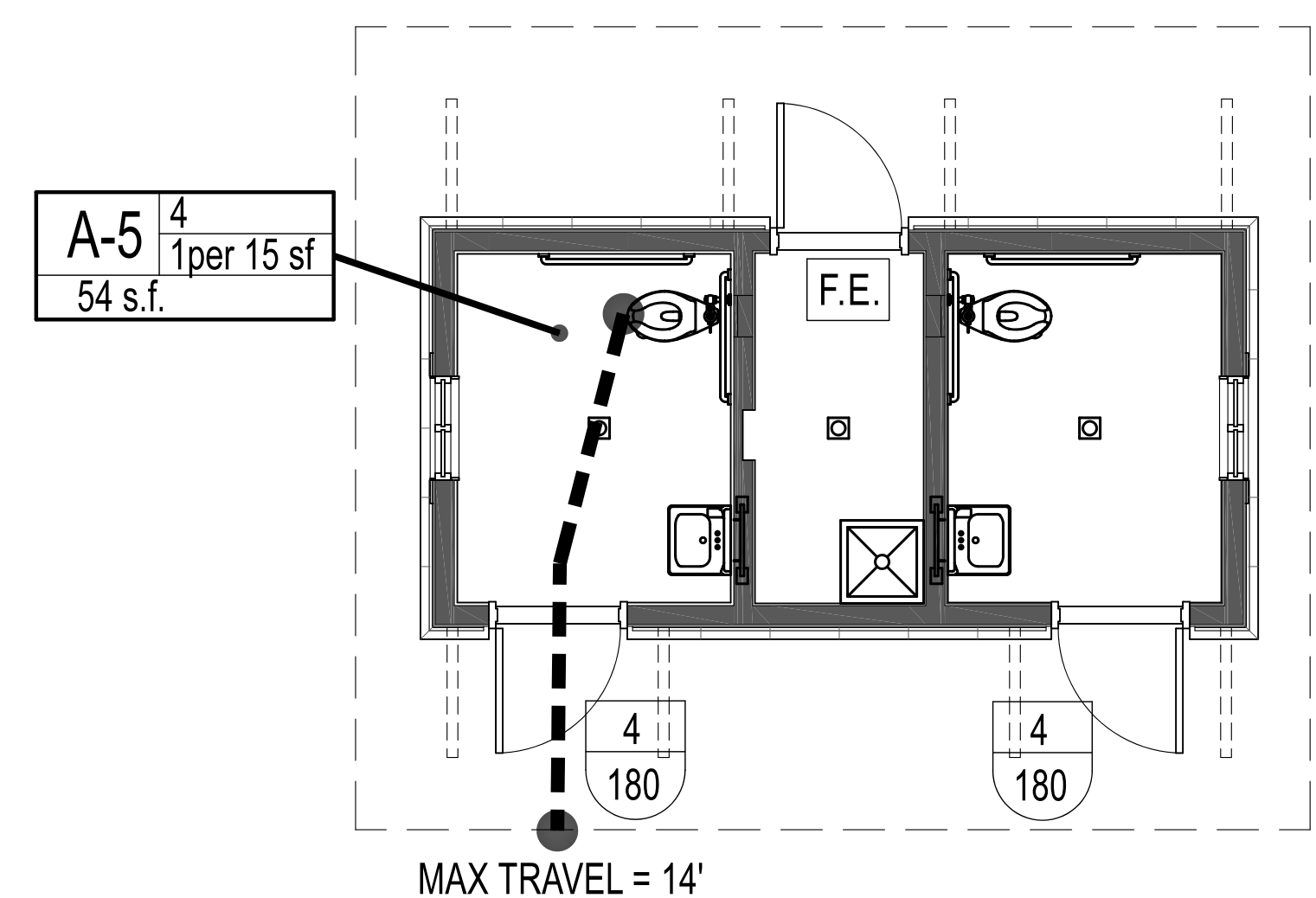
FLOOR PLAN SYMBOL KEY:

- 2x6 @ 16" O.C. WOOD STUD WALLS. (SEE DRAWING A-3.0)
- NEW THIN CUT STONE VENEER (SEE NOTES ON A-2.0)

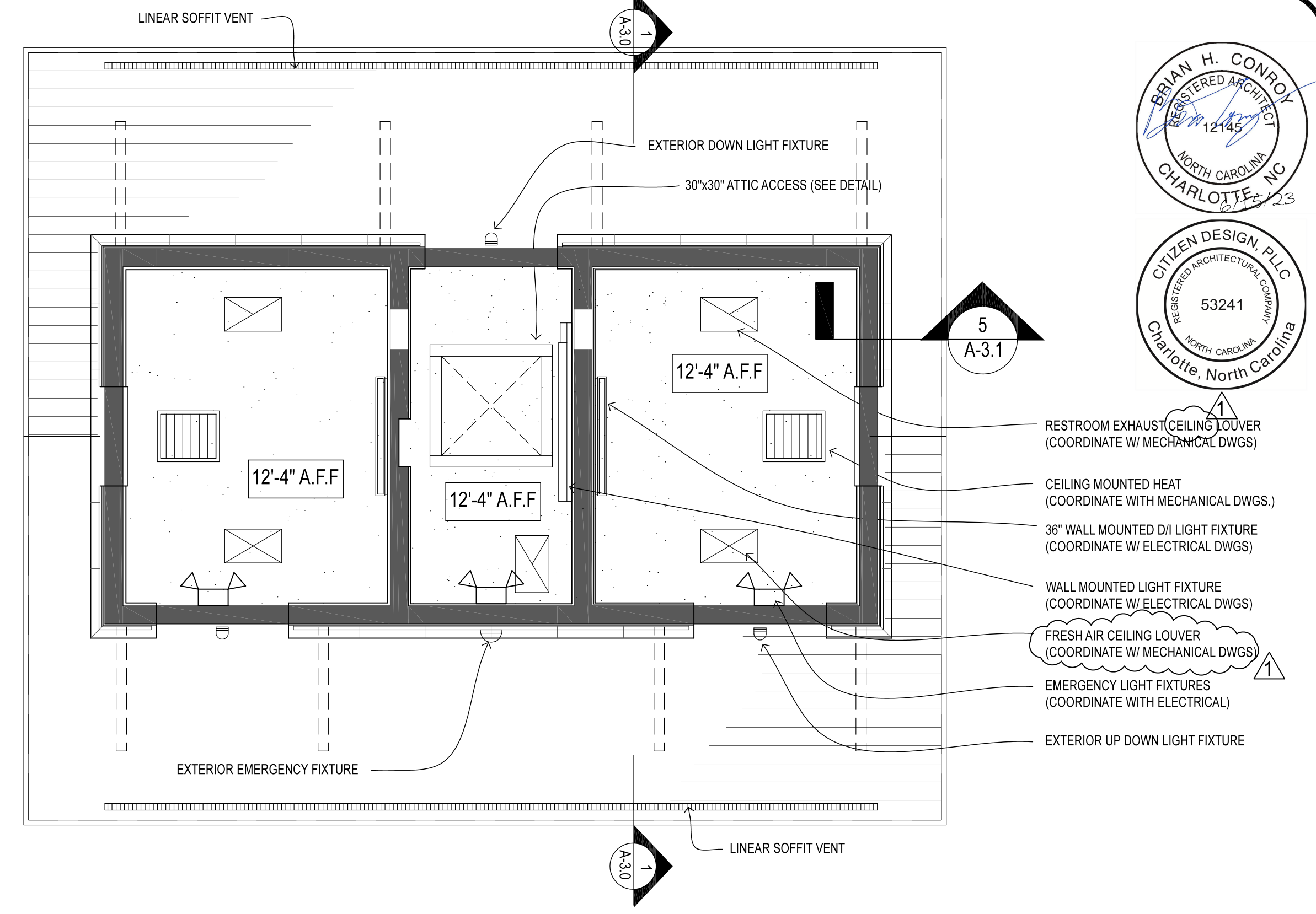
- FLOOR PLAN NOTES:**
- INTERIOR DIMENSIONS SHOWN ON FLOOR PLAN ARE FROM FACE OF FINISH WALL.
 - EXTERIOR DIMENSIONS SHOWN ARE FROM FACE OF STUD.
 - MAXIMUM CROSS SLOPE OF ANY FLOOR SURFACE SHALL NOT EXCEED 1:48.
 - INTERIOR CONCRETE FLOOR SLAB CURED AND PREPARED PER FINISH FLOOR COVERING MANUFACTURER'S WRITTEN INSTRUCTIONS. SMOOTH LIGHT TROWEL FINISH. DO NOT HARD TROWEL.
 - EXTERIOR CONCRETE TO HAVE LIGHT BROOM FINISH. E.J. - EXPANSION JOINT WITH TOOLED EDGES. C.J. - CONTROL JOINT WITH TOOLED EDGES ON EXTERIOR AND SAW CUT INTERIOR. (SEE FOUNDATION PLAN FOR ADDITIONAL JOINT LOCATIONS).
 - COORDINATE UTILITY AND CONDUIT ROUGH-INS WITH MEP AND SITE DRAWINGS.
 - FOUNDATIONS AND SLABS TO REST ON UNDISTURBED SUITABLE SOIL OR SELECTED STRUCTURAL FILL COMPACTED TO 100% MAXIMUM DRY DENSITY. 2,000PSF MINIMUM SOIL BEARING PRESSURE.



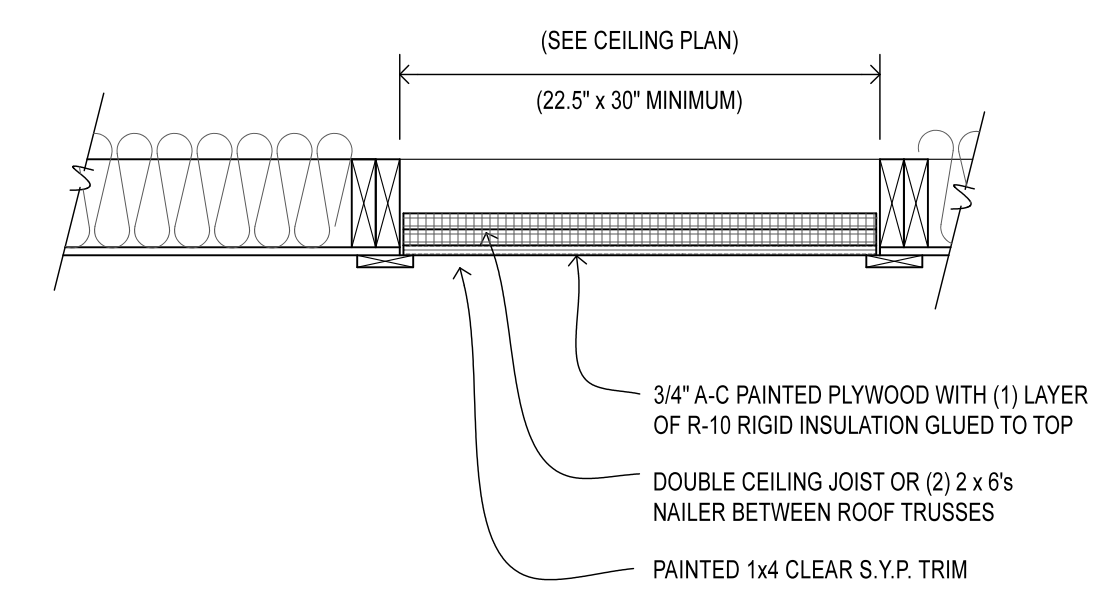
6 FOUNDATION PLAN
SCALE: 3/8" = 1'-0"



3 LIFE SAFETY PLAN
SCALE: 1/8" = 1'-0"



2 REFLECTED CEILING PLAN
SCALE: 3/8" = 1'-0"



5 ATTIC ACCESS DETAIL
SCALE: 1" = 1'-0"

- REFLECTED CEILING NOTES:**
- GYPSUM WALLBOARD CEILING @ 12'-4" A.F.F.:
- APPLY ONE LAYER OF 1/2" M.M.R.G.W.B. TO UNDERSIDE OF ALL INTERIOR CEILING JOISTS.
 - NEW ATTIC ACCESS DOOR:
- SEE DETAIL 5/A-1.0
 - EXPOSED 1x6 T&G DECK BOARDS WITH V-GROOVED EDGES. SOUTHERN YELLOW PINE No. 1
 - COORDINATE WITH MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR CEILING FIXTURE LOCATIONS.

LIFE SAFETY LEGEND

| OCCUPANCY SYMBOL | OCCUPANCY CLASSIFICATION | OCCUPANCY LOAD ALLOWABLE AREA PER OCCUPANT |
|----------------------------------|--------------------------------|--|
| | AREA | |
| EGRESS OPENING SYMBOL | XX | ACTUAL OCCUPANT LOAD OF OPENING |
| | XX | ALLOWABLE OCCUPANT LOAD OF OPENING |
| MAXIMUM TRAVEL DISTANCE IN SPACE | ----- | |
| F.E. | PORTABLE ABC FIRE EXTINGUISHER | |

ISO REQUIRED FIRE FLOW

$NFF = (C)(O) [1.0 + (X + P)]$
 $= (525)(.85) [1.0 + (0)]$
 $= 446\text{gpm}$

- * PER NCFC APPENDIX B, TABLE B105.2 AND B105.1(2). MINIMUM FIRE FLOW SHALL BE 1,500gpm @ 20psi.
- * PER 11 23.22 CONCORD FD HYDRANT TEST. 3,091gpm AND 4,317 gpm AVAILABLE AT NEAREST HYDRANTS

WHERE:
NFF = NEEDED FIRE FLOW (GPM)
C = 18F (VA)
F = 1.5 FOR WOOD FRAME CONSTRUCTION
A = AFFECTIVE AREA = 378sqft. UNDER ROOF
 $= 18(1.5)(\sqrt{378})$
 $= 525$ (CAN BE ROUNDED TO 500 PER ISO)
O = OCCUPANCY FACTOR = .85 FOR C-2 (LIMITED COMBUSTIBILITY) = .85 FOR C-2
(X + P) = EXPOSURE AND COMMUNICATION FACTOR = 0

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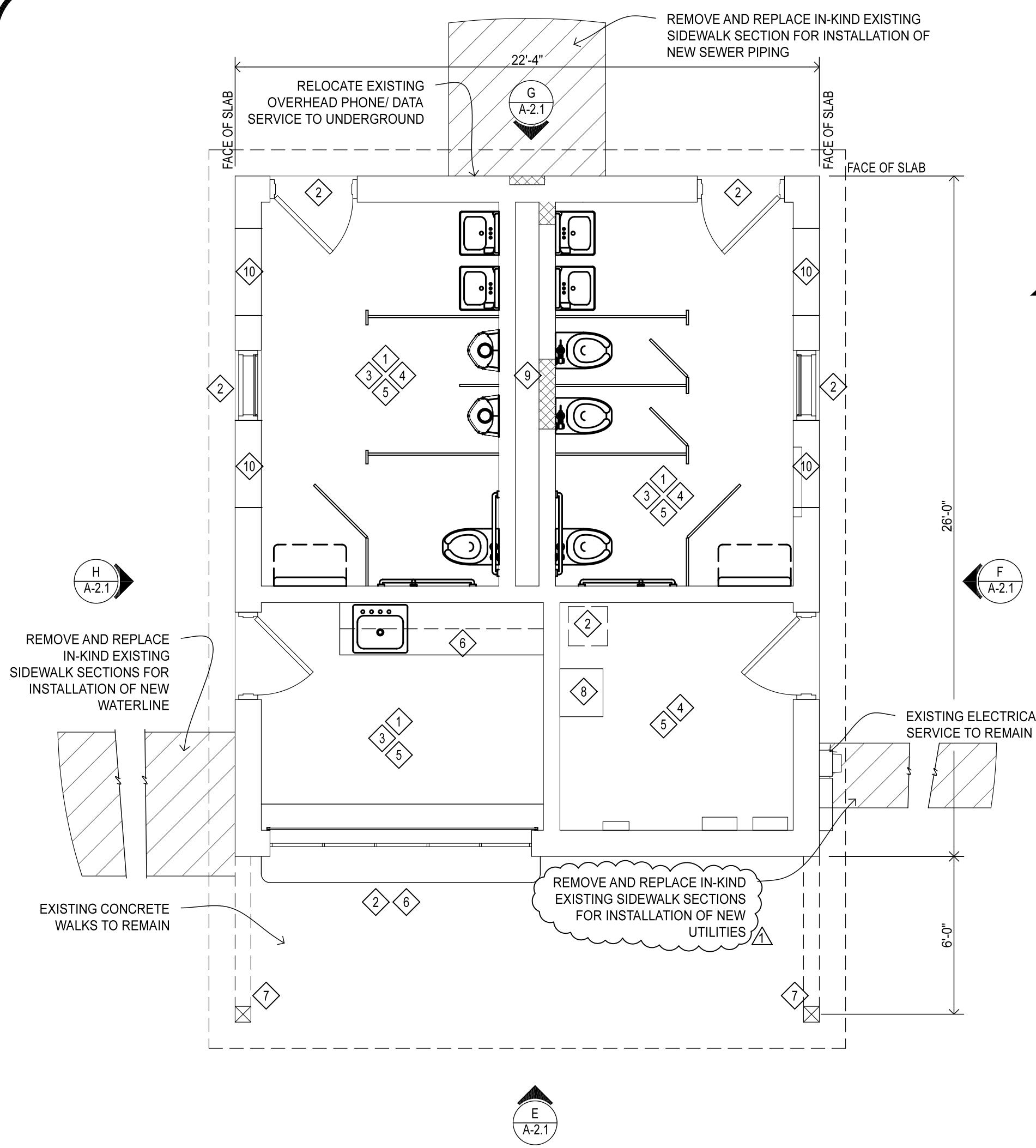
SCALE: AS NOTED

DATE: 05-04-23

SHEET NAME:
SOCCER RESTROOM
FLOOR PLANS AND
LIFE SAFETY PLAN

SHEET NO:
A 1.0

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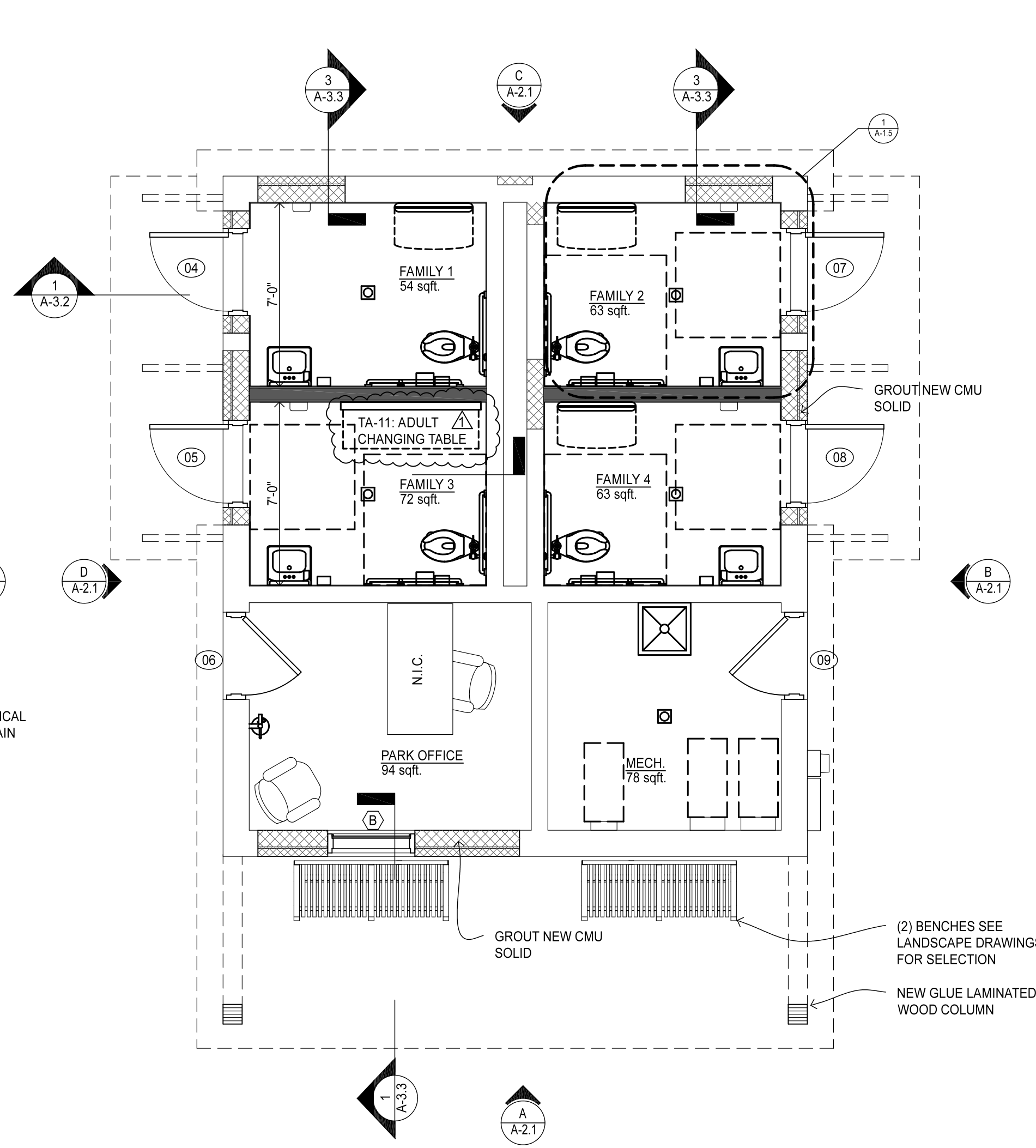
1 DEMOLITION PLAN
 SCALE: 1/4" = 1'-0"

DEMOLITION PLAN NOTES:

- THIS DEMOLITION PLAN IS INTENDED TO PROVIDE A GENERAL OVERALL VIEW OF ITEMS TO BE REMOVED. IT IS NOT A COMPLETE LIST OF ALL CUTTING AND PATCHING REQUIRED TO COMPLETE THE WORK.
- VERIFY EXISTING C.M.U. WALL CONSTRUCTION PRIOR TO ORDERING NEW CMU.
- C.M.U. WALLS TO REMAIN: SCRAPE, CLEAN AND PREP CMU WALLS TO A SMOOTH SURFACE TO ACCEPT SCHEDULED FINISH.
- INFILL CMU WALLS WHERE RECESSED EQUIPMENT HAS BEEN REMOVED (HAND DRYERS, DRINKING FOUNTAINS, HEATERS, ETC.) INFILL CMU WALLS WITH CUT CMU TO MATCH EXISTING.
- DAMAGED OR BROKEN EXISTING C.M.U. IN REMAINING WALLS TO BE REMOVED AND REPLACED IN-KIND.
- COORDINATE WITH MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS.
- ALL DEMOLISHED MATERIAL SHALL BE REMOVED FROM THE SITE AND PROPERLY RECYCLED AND OR DISPOSED OF AT THE APPROPRIATE MECKLENBURG COUNTY FACILITY.
- ALL TEMPORARY SHORING IS THE RESPONSIBILITY OF THE CONTRACTOR.

DEMOLITION BULLET KEY:

- REMOVE ALL EXISTING PLUMBING FIXTURES, TOILET ACCESSORIES, PARTITIONS AND ASSOCIATED CONNECTIONS IN ROOM. PATCH WALL IN-KIND (SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION).
- REMOVE EXISTING DOOR/ WINDOW AND FRAME FROM OPENING. CLEAN, PATCH AND PREP OPENING FOR NEW FINISH.
- REMOVE ENTIRE EXISTING CEILING IN WORK AREA. EXISTING EQUIPMENT SCHEDULED TO REMAIN SHALL BE CONCEALED IN A CODE COMPLIANT MANNER. CLEAN AND PREP EXISTING TRUSSES FOR APPLICATION OF FINISH. SEE M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.
- WET SAW CUT AND REMOVE EXISTING FLOOR SLAB FOR INSTALLATION OF NEW PLUMBING LINES.
- CLEAN AND PREP EXISTING FLOOR FOR NEW SCHEDULED COVERING. DIAMOND GRIND EXISTING FLOOR PER NEW FLOORING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- REMOVE EXISTING COUNTER/ WALL CABINETS TO BARE CMU. REPLACE BROKEN CMU FOR APPLICATION OF SCHEDULED FINISH.
- REMOVE EXISTING WOOD COLUMN AND SURROUNDING WOOD TRIM FROM HEADER.
- REMOVE EXISTING AHU AND ALL ASSOCIATED DUCT WORK COMPLETELY. PATCH FINISHES TO REMAIN IN-KIND.
- REMOVE AND REPLACE IN-KIND WITH NEW CMU FOR CHASE ACCESS TO REMOVE EXISTING PLUMBING.
- SAW CUT EXISTING WALL FOR NEW DOOR OPENING. SAW CUT FULL HEIGHT OF WALL. TOOTH IN NEW CMU END UNITS. GROUT VERT. #5 BAR EACH SIDE OF DOOR JAMB. 6" MIN EMBEDMENT INTO SLAB (SEE DOOR JAMB DETAIL).



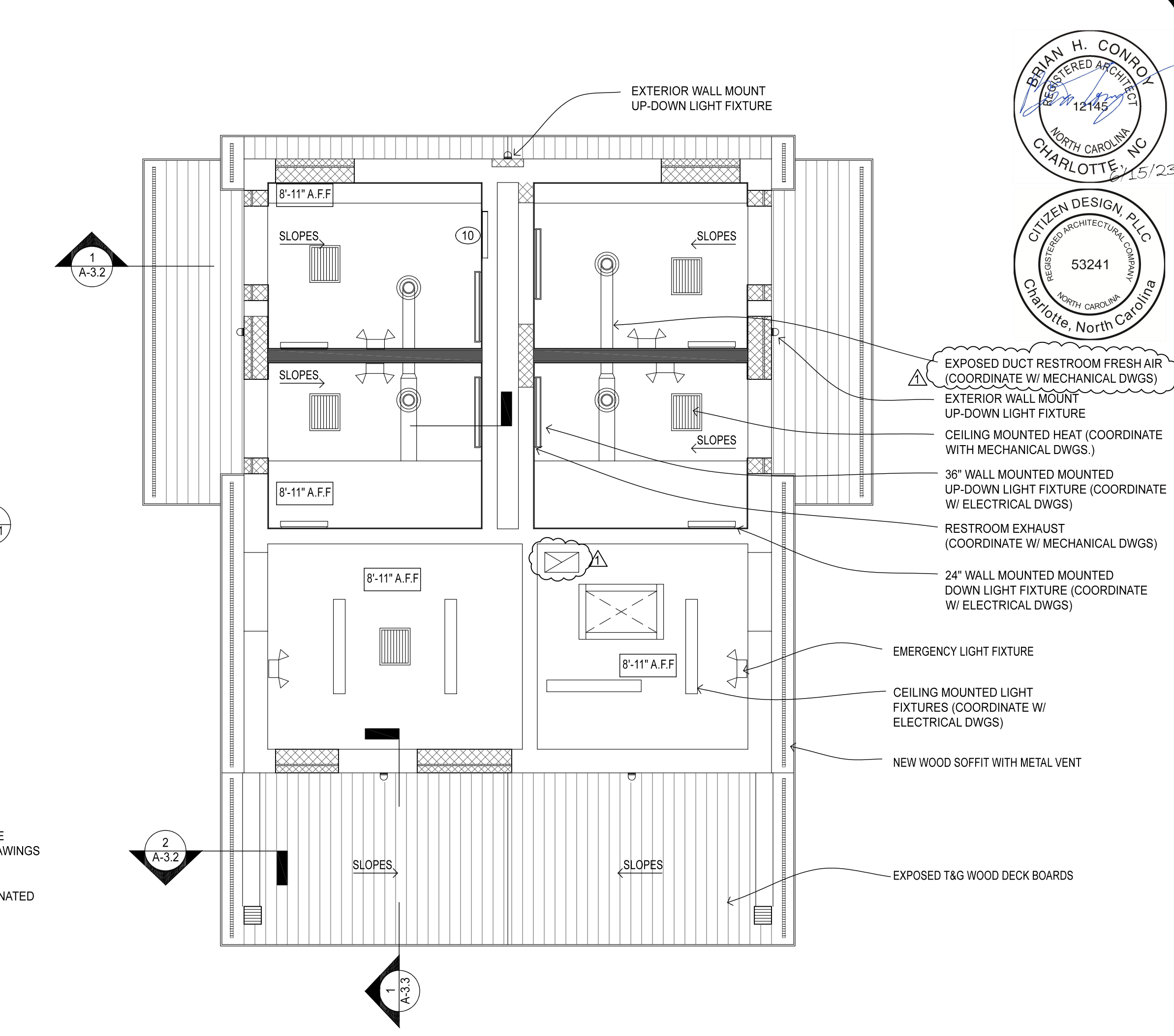
2 RENOVATED FLOOR PLAN
 SCALE: 1/4" = 1'-0"

FLOOR PLAN SYMBOL KEY:

- EXISTING MASONRY WALL TO REMAIN. CLEAN AND PREP WALL FOR SCHEDULED FINISH
- NEW 2x6 WOOD STUDS @ 16" O.C. WITH 1/2" CEMENT WALL BOARD SCREWED TO STUDS @ 8" O.C. WITH WALL TILE TO SCHEDULED HEIGHT. 1/2" MOLD AND MOISTURE RESISTANT G.W.B. ABOVE TILED AREA (SEE SECTIONS AND FINISH SCHEDULE FOR ADDITIONAL INFORMATION)
- NEW 8" INTERIOR CMU + 3/4" R4 RIGID INSULATION + 4" SPLIT FACE AND SMOOTH FACE CMU VENEER. VERIFY THICKNESS AND FINISH TO MATCH EXISTING. INSTALL VENEER BRICK TIES AT 16" O.C. VERT. AND 24" O.C. HORIZ. (SEE WALL SECTIONS).
- NEW INTERIOR CMU. FINAL THICKNESS TO MATCH EXISTING.

FLOOR PLAN NOTES:

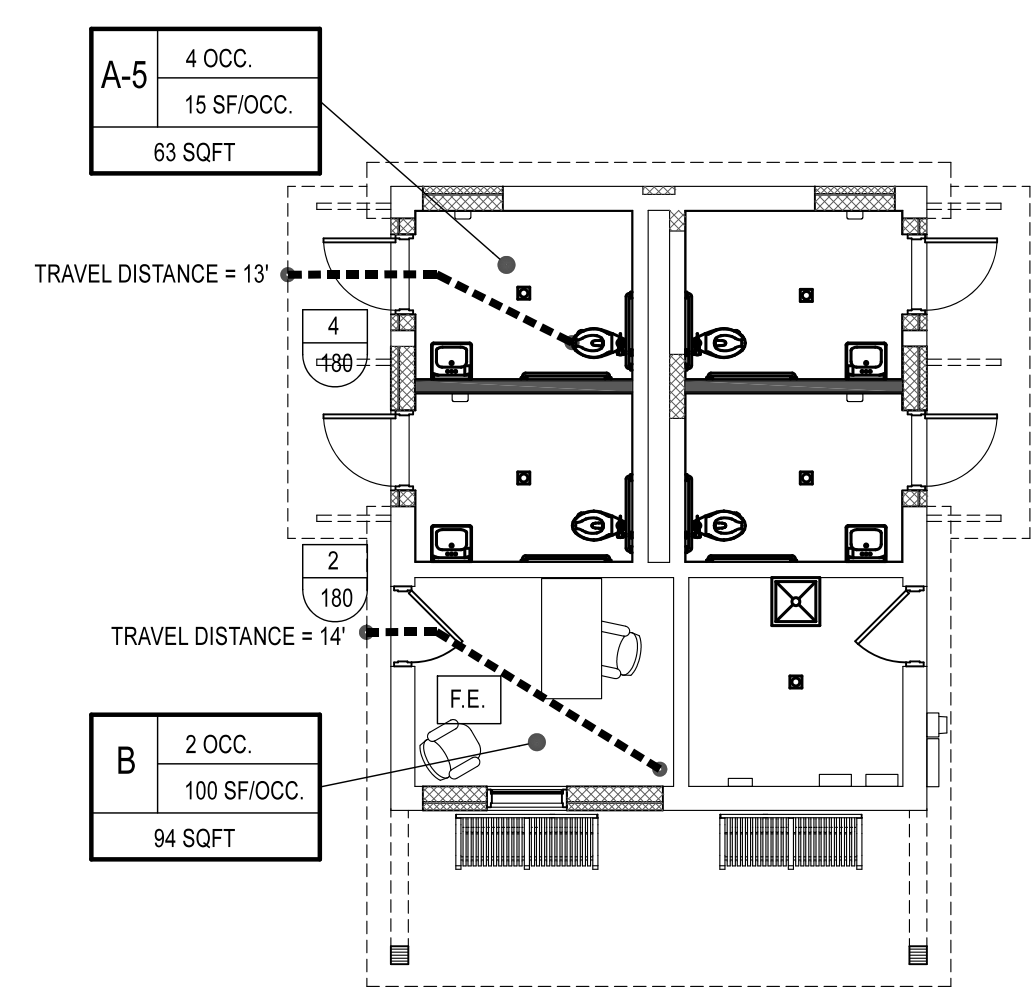
- INTERIOR DIMENSIONS SHOWN ON FLOOR PLAN ARE FROM FACE OF FINISH WALL
- EXTERIOR DIMENSIONS SHOWN ARE FROM FACE OF MASONRY WALL
- MAXIMUM CROSS SLOPE OF ANY FLOOR SURFACE SHALL NOT EXCEED 1:48
- INTERIOR CONCRETE FLOOR SLAB: COORDINATE WITH INSTALLER FOR CURING AND PREPARATION. SMOOTH LIGHT TROWEL FINISH. DO NOT HARD TROWEL.
- EXTERIOR CONCRETE TO HAVE LIGHT BROOM FINISH. E.J. - EXPANSION JOINT WITH TOOLED EDGES C.J. - CONTROL JOINT WITH TOOLED EDGES ON EXTERIOR AND SAW CUT INTERIOR
- COORDINATE UTILITY AND CONDUIT ROUGH-INS WITH MEP DRAWINGS.
- PROVIDE POSITIVE DRAINAGE AROUND AND AWAY FROM BUILDING.



3 REFLECTED CEILING PLAN
 SCALE: 1/4" = 1'-0"

REFLECTED CEILING NOTES:

- GYPSUM WALLBOARD CEILING:
 - APPLY ONE LAYER OF 1/2" M.M.R.G.W.B. TO UNDERSIDE OF ALL INTERIOR CEILING JOISTS.
- NEW 22" x 36" ATTIC ACCESS DOOR:
 - SEE DETAIL 5/A1.0
- EXPOSED 1x8 T&G SOFFIT BOARDS WITH V-GROOVED EDGES. SOUTHERN YELLOW PINE No. 1
- COORDINATE WITH MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR CEILING FIXTURE LOCATIONS.



4 LIFE SAFETY PLAN
 SCALE: 1/8" = 1'-0"

| LIFE SAFETY LEGEND | | | |
|-------------------------|--------------------------------|------------------------------------|-----------------------------|
| OCCUPANCY SYMBOL | OCCUPANCY CLASSIFICATION | OCCUPANCY LOAD | |
| | AREA | | ALLOWABLE AREA PER OCCUPANT |
| EGRESS OPENING SYMBOL | XX | ACTUAL OCCUPANT LOAD OF OPENING | |
| | XX | ALLOWABLE OCCUPANT LOAD OF OPENING | |
| MAXIMUM TRAVEL DISTANCE | ----- | | |
| F.E. | PORTABLE ABC FIRE EXTINGUISHER | | |

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 12145
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 4.5/2.5

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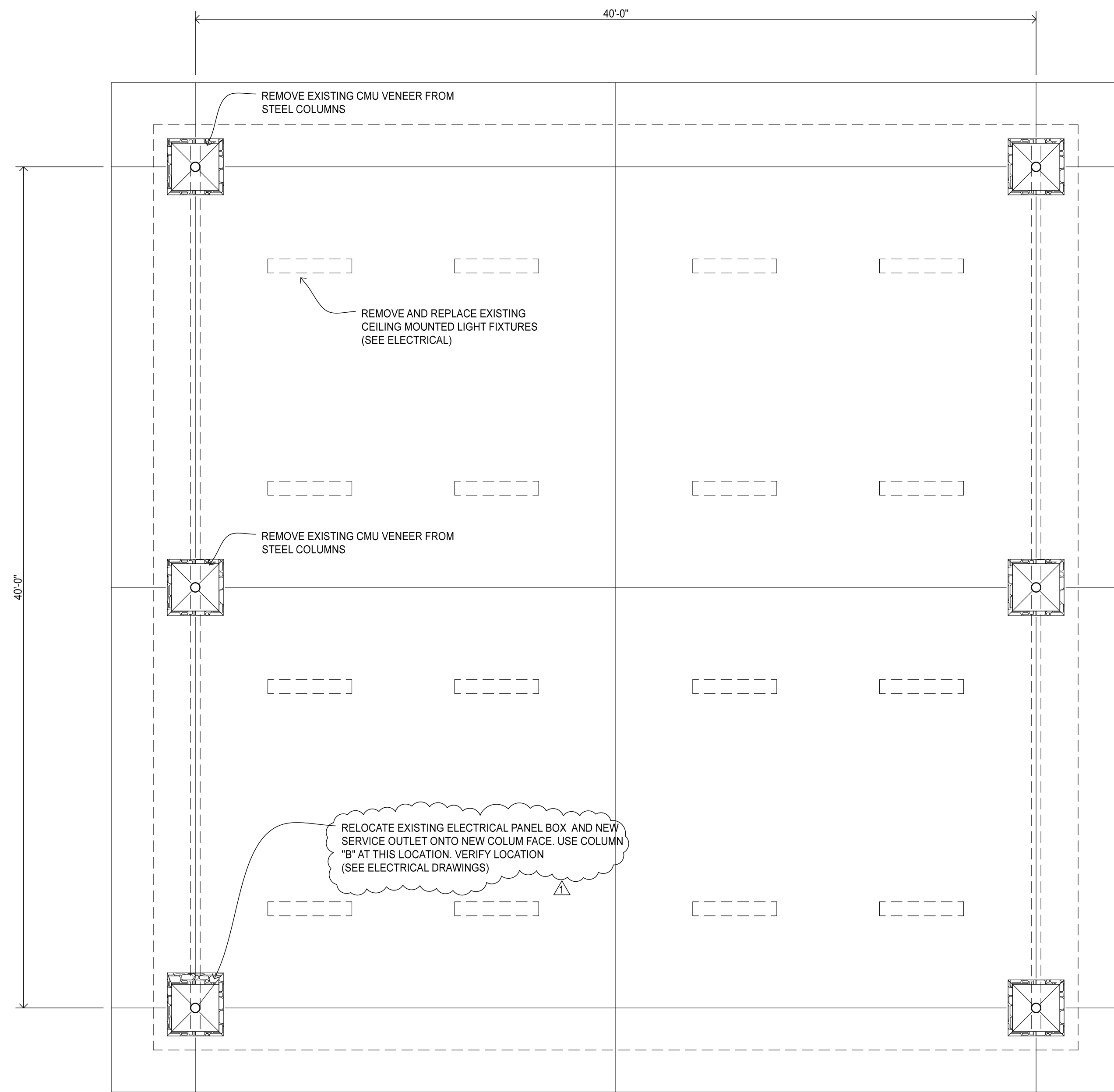
CITY OF CONCORD
 35 CABARRUS AVE. W
 CONCORD, NORTH CAROLINA

OWNER:

DORTON PARK
 5650 POPLAR TENT ROAD
 CONCORD, NORTH CAROLINA

SCALE: AS NOTED
 DATE: 05-04-23
 SHEET NAME:
 EXISTING RESTROOM
 FLOOR PLANS AND LIFE
 SAFETY PLAN
 SHEET NO:
 A 1.2

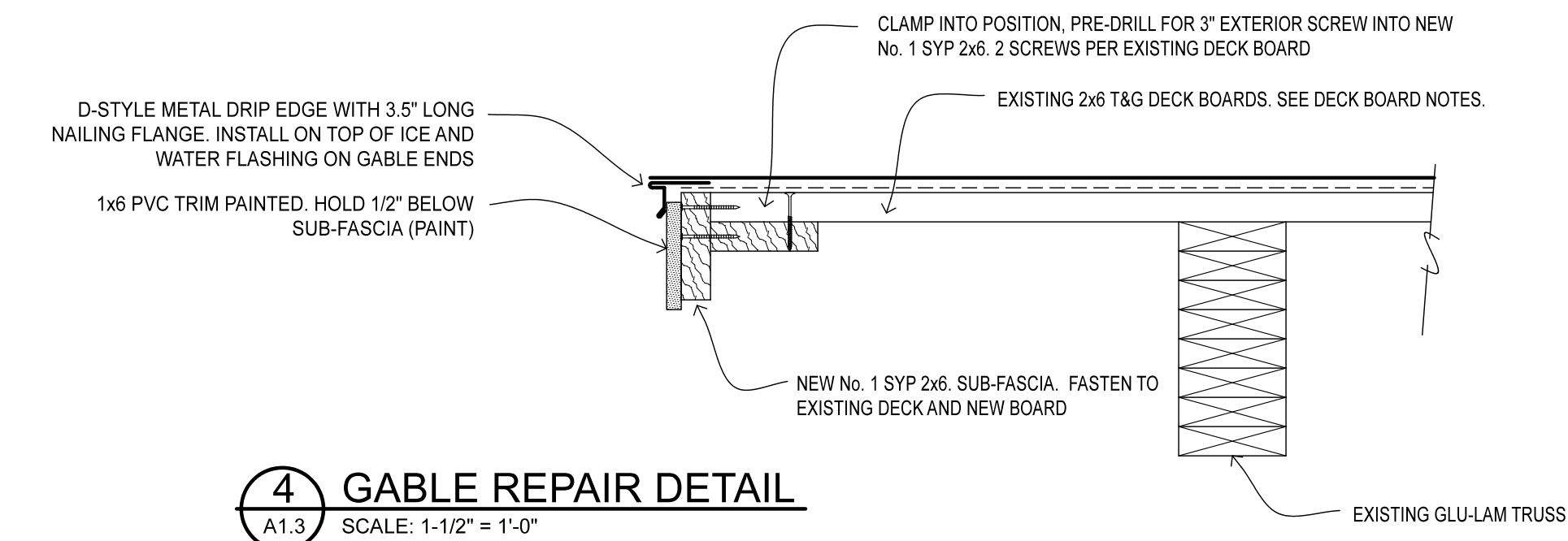
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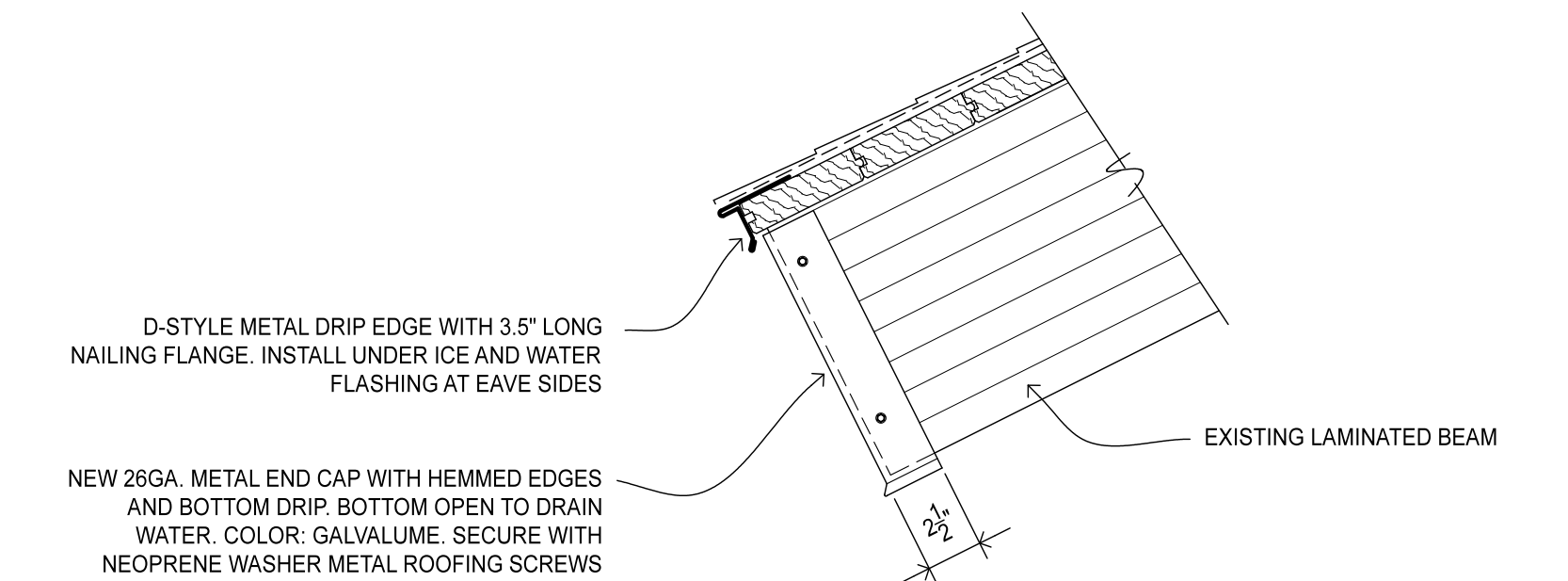
EXISTING WOOD SURFACES:

1. PREPARATION: CLEAN EXISTING WOOD SURFACES WITH A STAIN AND SEALER REMOVER AND WOOD BRIGHTENER (SHERWIN WILLIAMS SuperDeck Stain and Sealer Remover AND SuperDeck Revive Deck and Siding Brightener, OR APPROVED EQUALS). APPLICATION OF PRODUCTS MUST ADHERE TO MANUFACTURER'S WRITTEN APPLICATION INSTRUCTIONS.
2. DO NOT APPLY STAIN AND SEALER REMOVER TO NEW WOOD SURFACES. PRODUCT WILL DARKEN NEW WOOD.
3. COVER ALL METAL AND FINISHED SURFACES TO PROTECT FROM CONTACT WITH PRODUCT. THOROUGHLY RINSE SURROUNDING WORK AREA AND VEGETATION WITH WATER AFTER APPLICATION.
4. ALLOW APPROXIMATELY 2 DAYS FOR WOOD TO THOROUGHLY DRY BEFORE APPLICATION OF PROTECTIVE FINISH.
5. PROTECTIVE FINISH: APPLY MINIMUM OF TWO COATS OF SATIN FINISH SEMI-TRANSPARENT STAIN (SHERWIN WILLIAMS SuperDeck Log Home & Deck Stain, OR APPROVED EQUAL). APPLICATION OF PRODUCTS MUST STRICTLY FOLLOW MANUFACTURER'S WRITTEN APPLICATION INSTRUCTIONS.
6. COVER ALL FINISHED SURFACES TO PROTECT FROM SPLATTER.

UNIT COST (SEE BID FORM):
 BASE BID TO ANTICIPATE REMOVAL AND REPLACEMENT IN-KIND OF 350sqft OF 2x6 SOUTHERN YELLOW PINE #1 T&G ROOF DECK FOR THE 3 SHELTERS. CONTRACTOR TO PROVIDE SQUARE FOOT UNIT COST FOR REMOVAL AND REPLACEMENT OF 2x6 SOUTHERN YELLOW PINE #1 T&G ROOF DECK BEYOND 350sqft. BASE BID AMOUNT.

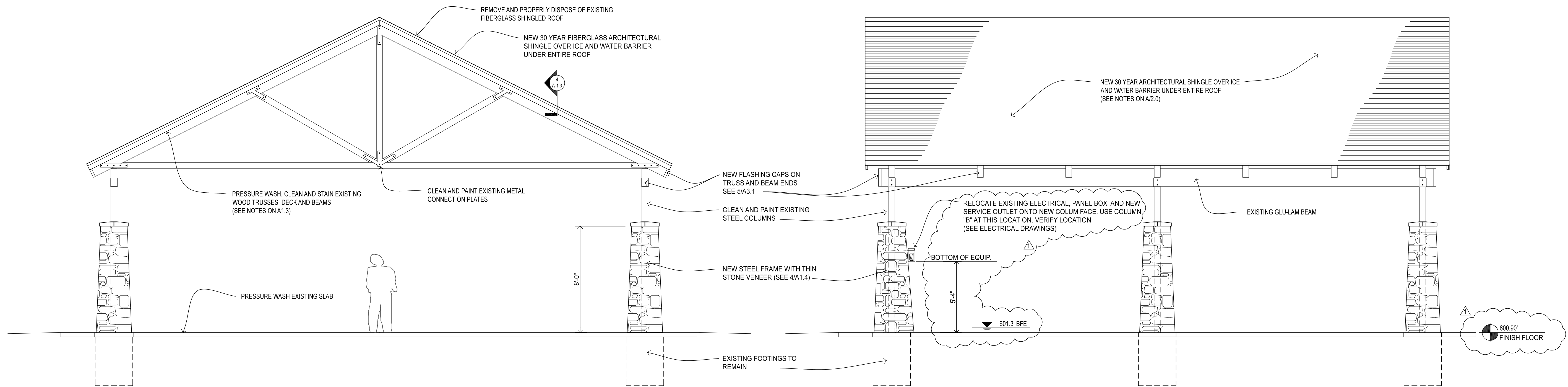


4 GABLE REPAIR DETAIL
 A1.3 SCALE: 1-1/2" = 1'-0"



5 END CAP DETAIL
 A1.3 SCALE: 1-1/2" = 1'-0"

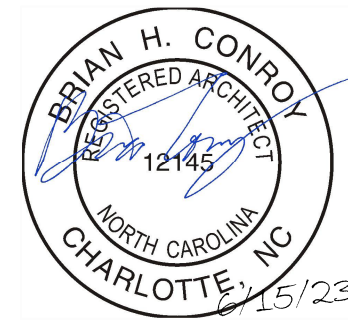
1 EXISTING LARGE SHELTER FLOOR PLAN
 A1.3 SCALE: 1/4" = 1'-0"



A LARGE SHELTER FRONT ELEVATION
 A1.3 SCALE: 1/4" = 1'-0"

B LARGE SHELTER SIDE ELEVATION
 A1.3 SCALE: 1/4" = 1'-0"

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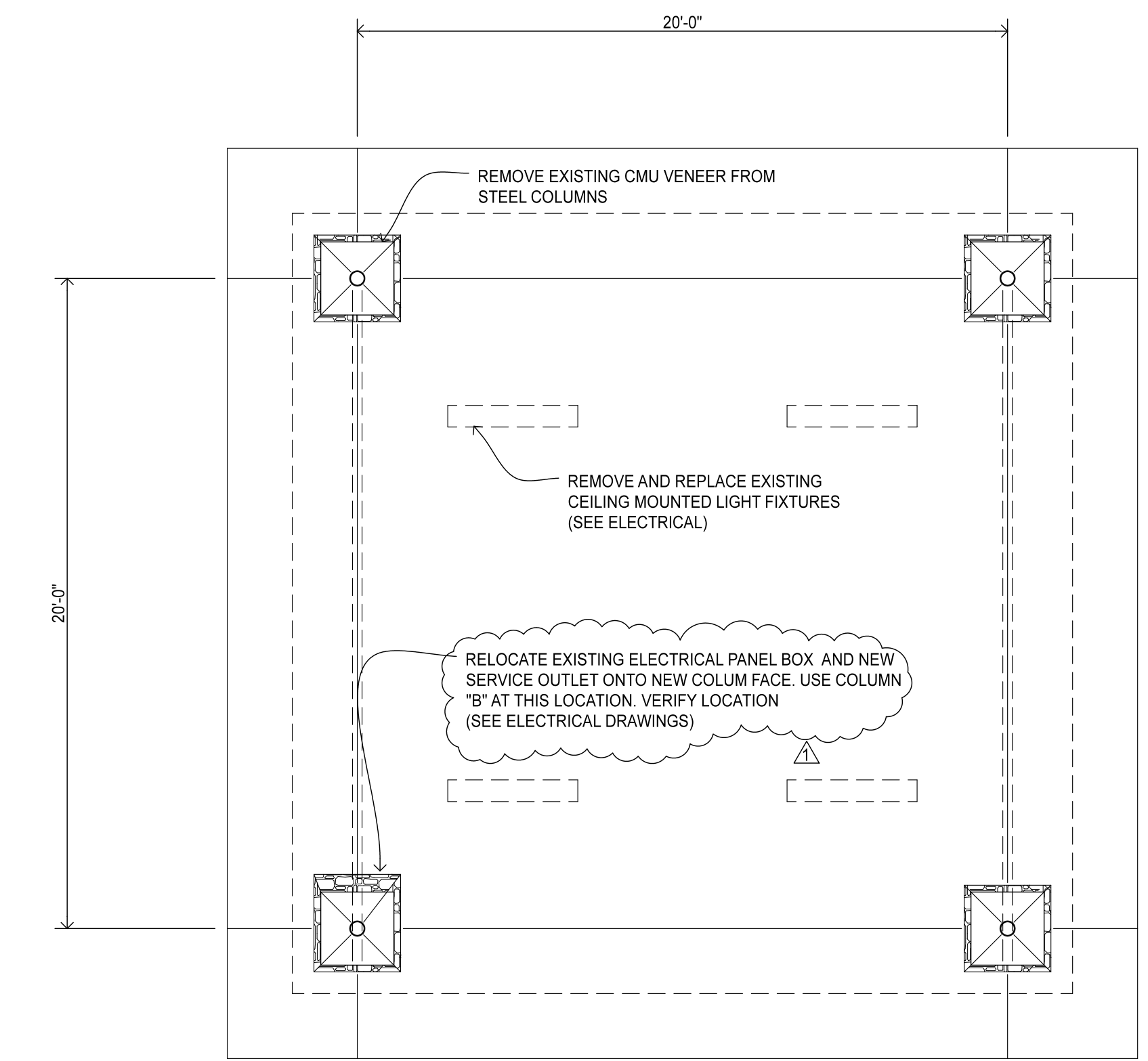
| | |
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| ADDENDUM 1 | 06/15/23 |
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 CONCORD, NORTH CAROLINA

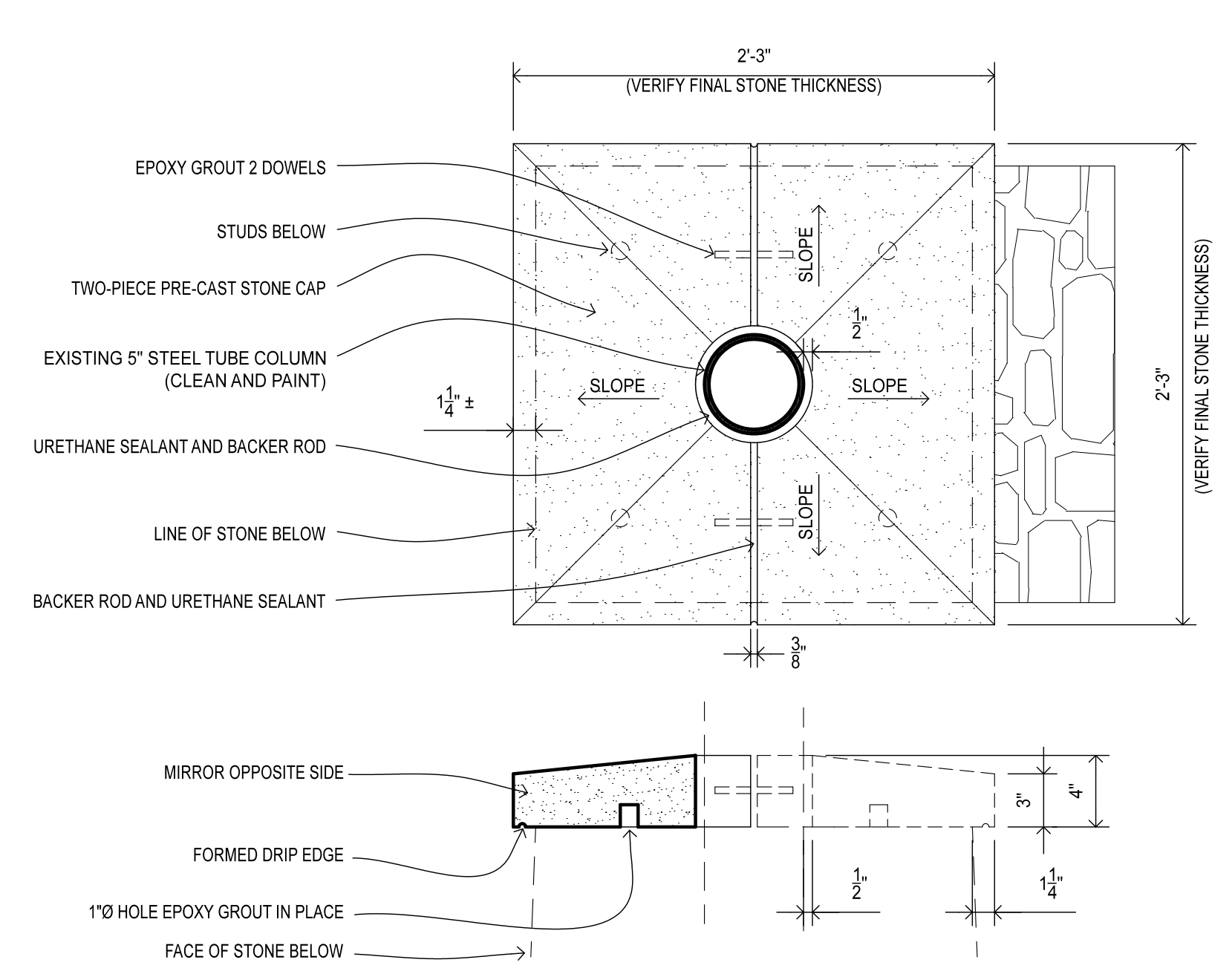
OWNER:

DORTON PARK
 5650 POPLAR TENT ROAD
 CONCORD, NORTH CAROLINA

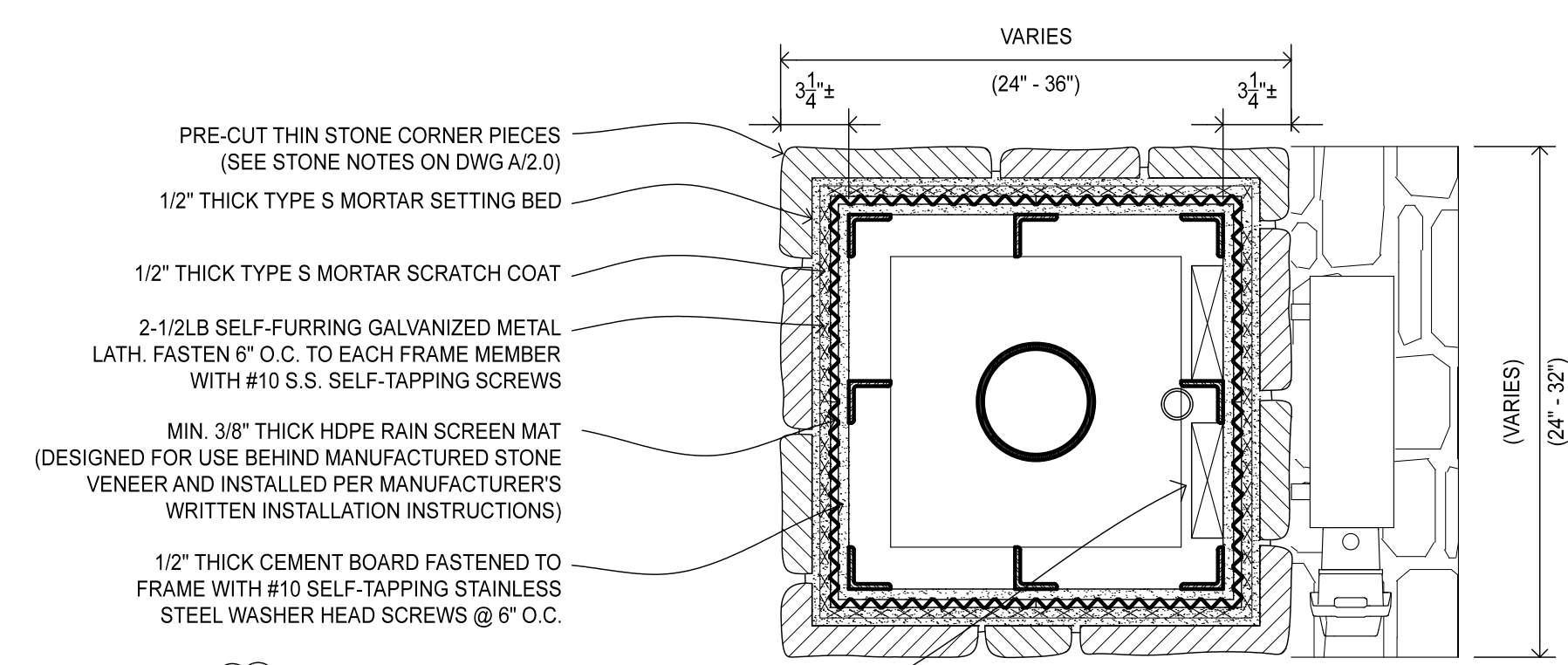
SCALE: AS NOTED
 DATE: 05-04-23
 SHEET NAME:
 EXISTING LARGE SHELTER FLOOR PLAN AND DETAILS
 SHEET NO:
 A 1.3



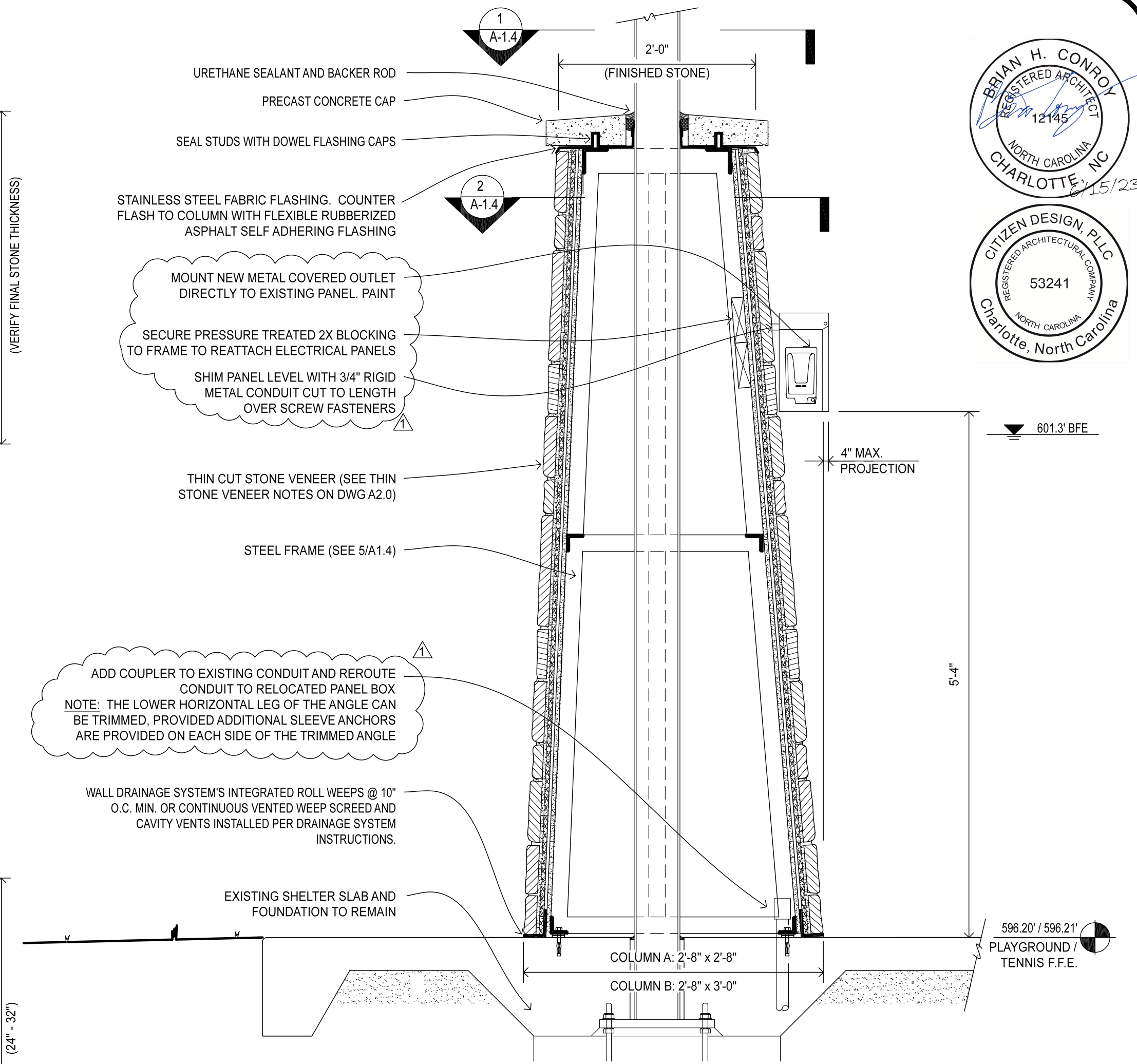
1 EXISTING SMALL SHELTER FLOOR PLAN
A1.4 SCALE: 1/4" = 1'-0"



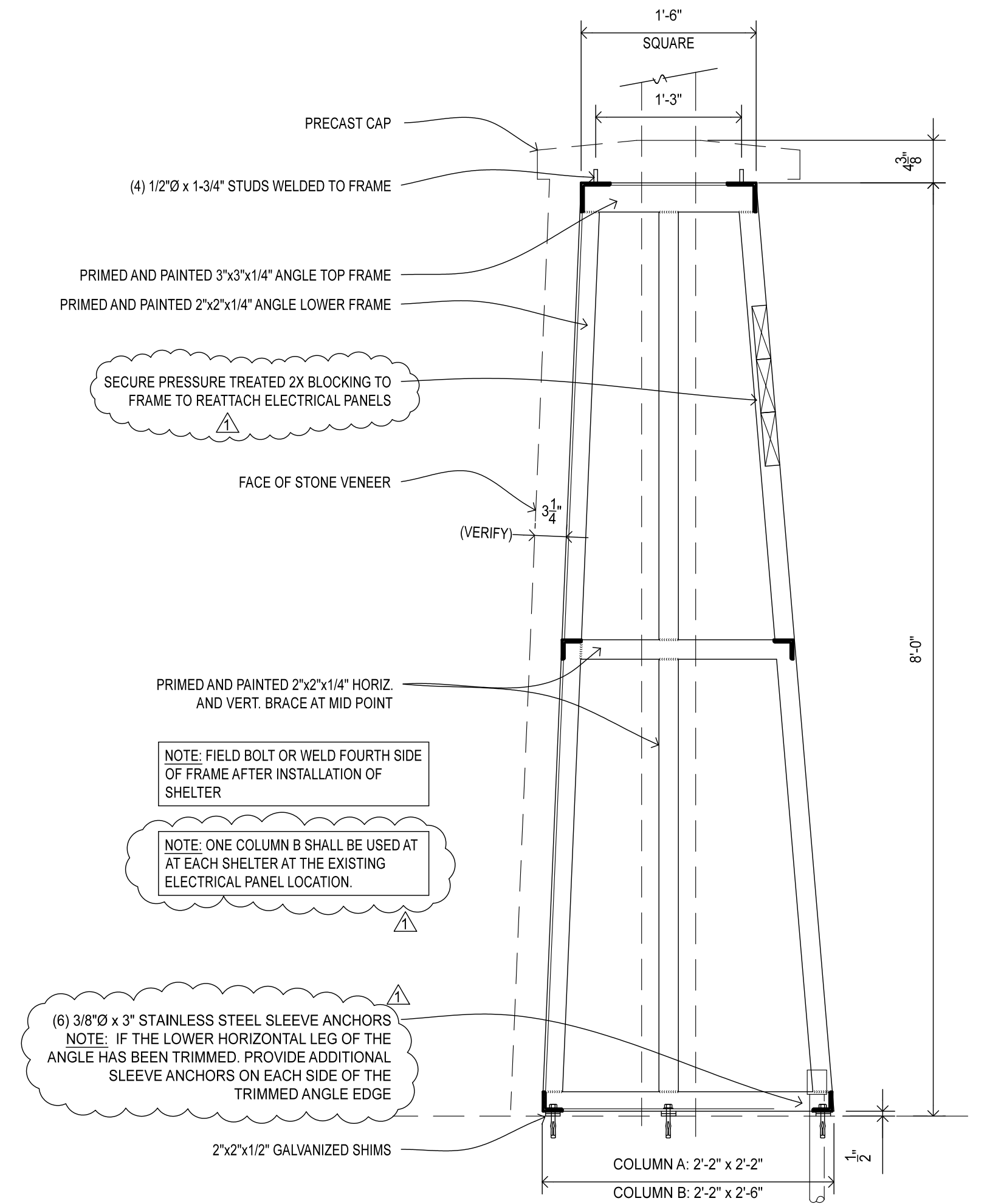
6 PRECAST CAP DETAIL
A1.4 SCALE: 1-1/2" = 1'-0"



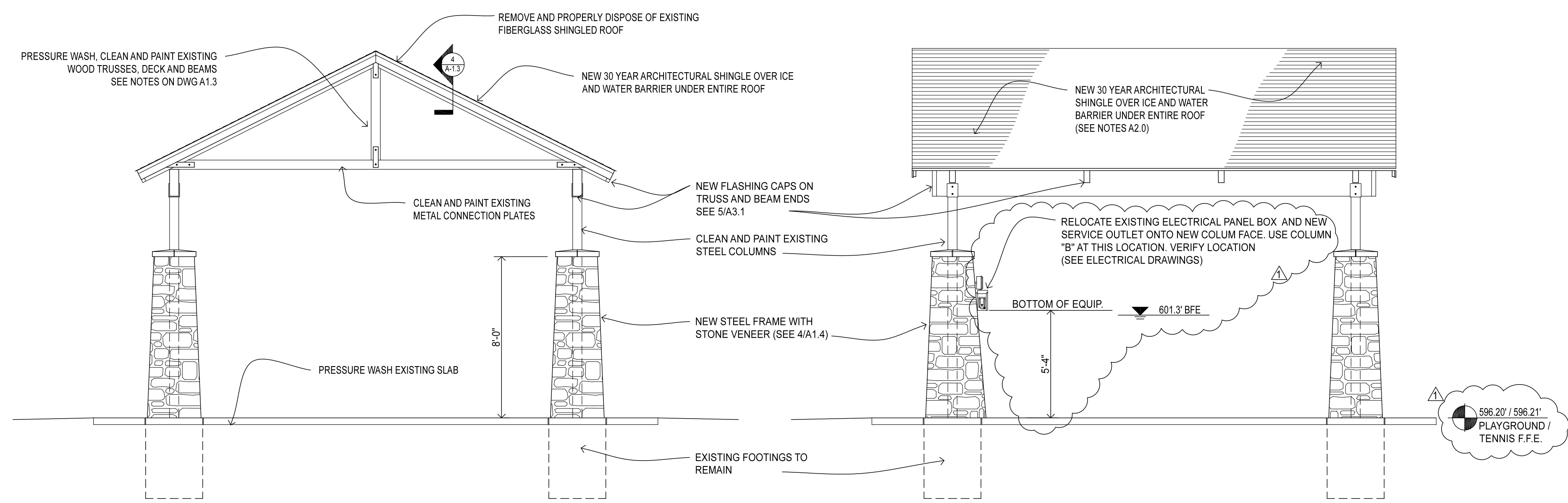
2 COLUMN PLAN DETAIL
A1.4 SCALE: 1-1/2" = 1'-0"



4 COLUMN SECTION
A1.4 SCALE: 1" = 1'-0"



5 COLUMN FRAME DETAIL
A1.4 SCALE: 1" = 1'-0"



A SMALL SHELTER FRONT ELEVATION
A1.4 SCALE: 1/4" = 1'-0"

B SMALL SHELTER SIDE ELEVATION
A1.4 SCALE: 1/4" = 1'-0"

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CONCORD, NORTH CAROLINA

SCALE: AS NOTED
DATE: 05-04-23
SHEET NAME:
EXISTING SMALL SHELTER FLOOR PLAN AND DETAILS
SHEET NO:
A 1.4

| NEW SOCCER RESTROOM FINISH SCHEDULE | | | | | | | | |
|-------------------------------------|-------------------|--------------|---------------|---------------------|------------|-------------------|--------|-------------------------------|
| ROOM NUM. | ROOM NAME | FLOOR FINISH | BASE | WALLS MATERIAL | FINISH | CEILING MATERIAL | FINISH | COMMENTS |
| 01 | FAMILY RESTROOM 1 | EPOXY | STACK-ON COVE | CMU/ M.M.R.G.W.B. | TILE/ PT-2 | 1/2" M.M.R.G.W.B. | PT-2 | |
| 02 | FAMILY RESTROOM 2 | EPOXY | STACK-ON COVE | CMU/ M.M.R.G.W.B. | TILE/ PT-2 | 1/2" M.M.R.G.W.B. | PT-2 | |
| 03 | CHASE | SEALED CONCR | NONE | 5/8" M.M.R.G.W.B. | PT-2 | 1/2" M.M.R.G.W.B. | PT-2 | 4 TALL FRP BEHIND MOP SINK |
| 04 | EXTERIOR | CONCRETE | | FIBER CEMENT PANELS | PT-1 | WOOD | PT-3 | |
| 05 | WOOD BRACKETS | | | | | WOOD | PT-5 | COLOR TO MATCH PICNIC SHELTER |
| 06 | | | | | | | | |

| EXISTING RESTROOM FINISH SCHEDULE | | | | | | | | |
|-----------------------------------|----------------------|-----------------|---------------|--------------------------|------------|-------------------|--------|-------------------------------------|
| ROOM NUM. | ROOM NAME | FLOOR FINISH | BASE | WALLS MATERIAL | FINISH | CEILING MATERIAL | FINISH | COMMENTS |
| 01 | FAMILY RESTROOM 1 | EPOXY | STACK-ON COVE | CMU/ M.M.R.G.W.B. | TILE/ PT-2 | 1/2" M.M.R.G.W.B. | PT-2 | SEE NOTE 7 |
| 02 | FAMILY RESTROOM 2 | EPOXY | STACK-ON COVE | CMU/ M.M.R.G.W.B. | TILE/ PT-2 | 1/2" M.M.R.G.W.B. | PT-2 | SEE NOTE 7 |
| 03 | FAMILY RESTROOM 3 | EPOXY | STACK-ON COVE | CMU/ M.M.R.G.W.B. | TILE/ PT-2 | 1/2" M.M.R.G.W.B. | PT-2 | SEE NOTE 7 |
| 04 | FAMILY RESTROOM 4 | EPOXY | STACK-ON COVE | CMU/ M.M.R.G.W.B. | TILE/ PT-2 | 1/2" M.M.R.G.W.B. | PT-2 | SEE NOTE 7 |
| 05 | MECHANICAL | SEALED CONCRETE | NONE | C.M.U. | PT-2 | 1/2" M.M.R.G.W.B. | PT-2 | INSTALL FRP 4' x 4' BEHIND MOP SINK |
| 06 | OFFICE | EPOXY | NONE | C.M.U. | PT-2 | 1/2" M.M.R.G.W.B. | PT-2 | SEE NOTE 7 |
| 07 | EXTERIOR | CONCRETE | STONE | C.M.U./ FIBER CEMENT LAP | PT-7/ PT-1 | EXPOSED WOOD | PT-3 | |
| 08 | EXTR. BRCKTS. CLMNS. | | | | | EXPOSED WOOD | PT-5 | COLOR TO MATCH PICNIC SHELTER |

CEMENT BRD. 1/2" THICK CEMENT BOARD SCREWED TO STUDS AT 8" O.C.
M.M.R.G.W.B. 1/2" or 5/8" thick MOLD AND MOISTURE RESISTANT GYPSUM WALLBOARD FASTENED WITH SCREWS AT 6" O.C. EDGES, 12" O.C. FIELD

| PICNIC SHELTER FINISH SCHEDULE | | | | | | | | |
|--------------------------------|----------------|--------------|-------|----------------|--------|------------------|--------|---------------------------|
| ROOM NUM. | ROOM NAME | FLOOR FINISH | BASE | WALLS MATERIAL | FINISH | CEILING MATERIAL | FINISH | COMMENTS |
| 01 | PICNIC SHELTER | CONCRETE | STONE | EXPOSED STEEL | PT-6 | EXPOSED WOOD | PT-5 | SEE WOOD PREP NOTES BELOW |
| 02 | | | | | | | | |
| 03 | | | | | | | | |
| 04 | | | | | | | | |
| 05 | | | | | | | | |
| 06 | | | | | | | | |

PICNIC SHELTER EXISTING WOOD SURFACES:

- PREPARATION: CLEAN EXISTING WOOD SURFACES WITH A STAIN AND SEALER REMOVER AND WOOD BRIGHTENER (SHERWIN WILLIAMS SuperDeck Stain and Sealer Remover AND SuperDeck Revive Deck and Siding Brightener, OR APPROVED EQUALS). APPLICATION OF PRODUCTS MUST ADHERE TO MANUFACTURER'S WRITTEN APPLICATION INSTRUCTIONS.
- DO NOT APPLY STAIN AND SEALER REMOVER TO NEW WOOD SURFACES. PRODUCT WILL DARKEN NEW WOOD.
- COVER ALL METAL AND FINISHED SURFACES TO PROTECT FROM CONTACT WITH PRODUCT. THOROUGHLY RINSE SURROUNDING WORK AREA AND VEGETATION WITH WATER AFTER APPLICATION.
- ALLOW APPROXIMATELY 2 DAYS FOR WOOD TO THOROUGHLY DRY BEFORE APPLICATION OF PROTECTIVE FINISH.
- PROTECTIVE FINISH: APPLY MINIMUM OF TWO COATS OF SATIN FINISH SEMI-TRANSPARENT STAIN (SHERWIN WILLIAMS SuperDeck Log Home & Deck Stain, OR APPROVED EQUAL). APPLICATION OF PRODUCTS MUST STRICTLY FOLLOW MANUFACTURER'S WRITTEN APPLICATION INSTRUCTIONS.
- COVER ALL FINISHED SURFACES TO PROTECT FROM SPLATTER.

ROOM FINISH NOTES:

- OWNER APPROVED PRODUCT SUBMITTALS AND COLOR SELECTION REQUIRED PRIOR TO INSTALLATION OF ANY FINISH MATERIAL.
- FINISH LEVEL TO MEET OR EXCEED ASTM C840 LEVEL 5. CONTRACTOR TO PRESSURE WASH, CLEAN, SAND SURFACES AS REQUIRED TO ACHIEVE REQUIRED FINISH.
- ALL FINISHES SHALL BE STORED, APPLIED AND CURED PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
- BUILDING MATERIALS TO RECEIVE FINISH APPLICATION SHALL BE CLEANED AND PREPARED FOR APPLIED FINISH ACCORDING MANUFACTURER'S SPECIFICATIONS.
- THE MAXIMUM VERTICAL DIFFERENCE BETWEEN ANY TWO ADJACENT FLOOR SURFACES SHALL NOT EXCEED 1/2".
- ALL ROOM SURFACES AND INTERSECTIONS SHALL BE SMOOTH, HARD AND NON-ABSORBENT PER REQUIREMENTS OF SECTION 1210 OF THE NORTH CAROLINA BUILDING CODE.
- EXISTING C.M.U. WALLS: REMOVE ALL LOOSE PAINT, SURFACE CONTAMINATION AND MILDEW FROM SURFACE PER MANUFACTURER'S WRITTEN INSTRUCTIONS FOR APPLICATION OF SPECIFIED FINISH.

EPOXY FLOOR: CONTRACTOR TO COORDINATE SLAB PREP WITH EPOXY FLOORING INSTALLER. SLIP RESISTANT, SEAMLESS EPOXY FLOOR WITH URETHANE TOP COAT. FLOOR PREPARATION, MOISTURE TESTING (IN SITU PROBE TEST), INSTALLATION AND APPLICATION PER MANUFACTURER'S SPECIFICATIONS. CONCRETE FLOOR TO BE DIAMOND GROUND PER FLOORING MANUFACTURER INSTALLATION INSTRUCTIONS. BASIS OF DESIGN RIO-X FLOORING SYSTEMS AS DISTRIBUTED BY TURNING POINT SUPPLY, lim@theconcreteexperts.com, 704.333.4235.

- EXISTING RESTROOM: APPLY BASE COAT OF A 2-PART EPOXY MOISTURE MITIGATION BARRIER: APPLICATION THICKNESS BETWEEN 15 TO 23MILS, AS DETERMINED BY RESULTS OF MOISTURE TEST: RIO-COAT EVS.
- SINGLE BROADCAST QUARTZ EPOXY COAT: RIO-COAT EMP. COLOR AS SELECTED BY OWNER.
- 2ND. GROUT COAT TO CONTROL ABRASION: RIO-COAT EMP.
- URETHANE TOP COAT: RIO-COAT UHW. SATIN FINISH

SEALED CONCR.: HEAVY DUTY, HEAVY SOLIDS, GLOSS URETHANE FLOOR COATING. MEETING ADA REQUIREMENTS FOR SLIP RESISTANCE. APPLIED 3 TO 4.5 MILS WET. ACCEPTABLE MANUFACTURES: (SHERWIN WILLIAMS, ARMORSEAL REXTHANE 1 OR EQUAL)

TILE: 6"x6" BRIGHT WHITE SEMI-GLOSS GLAZED CERAMIC WALL TILE WITH MATCHING 6"x6" STACK-ON COVE BASE AND 2"x6" BULLNOSE CAP AND TRIM PIECES. TILE HEIGHT TO NEAREST FULL COURSE AT 7'-10" A.F.F. (DALITILE - CLASSIC COLOR WHEEL COLLECTION, OR APPROVED EQUAL).

- OUTSIDE CORNERS: SCHLUTER ANODIZED ALUM RONDEC. (SEE DETAILS).
- DOOR FRAME EDGES: SCHLUTER SCHIENE ANODIZED ALUMINUM (SEE DETAILS)
- GROUT: NON-SANDED DELOREAN GREY EPOXY GROUT, 3/32" WIDE GROUT LINE.

PT-1: ONE COAT EXTERIOR LATEX PRIMER/ SEALER (SHERWIN WILLIAMS B51-450 SERIES) PLUS, MINIMUM TWO COATS PREMIUM EXTERIOR, VINYL SAFE, ACRYLIC, SATIN FINISH. SHERWIN WILLIAMS DURATION K33-200 SERIES OR EQUAL. (5.3-6.4 MILS WET, 2.1-2.6 MILS DRY PER COAT)

PT-2: NEW CMU: ONE COAT HEAVY DUTY BLOCK FILLER PRIOR TO APPLICATION OF PRIMER (SHERWIN WILLIAMS PrepRite B25W25, OR EQUAL). PRIMERS: ONE COAT LATEX PRIMER SHERWIN-WILLIAMS PRO-MAR 200 B28W2600 OR EQUAL. FINISH: TWO COATS INDUSTRIAL PRE-CATALYZED WATER BASE EPOXY (SHERWIN-WILLIAMS PRO INDUSTRIAL B73-300 SERIES, OR EQUAL) (4.0MILS WET, 1.5 MILS DRY PER COAT) COLOR: SW 6176, LIVEABLE GREEN SEMI-GLOSS

PT-3: REMOVE ALL SURFACE CONTAMINATION, MARKS AND MILDEW FROM SURFACE BY PROPER CLEANING PER MANUFACTURERS APPROVED METHODS. SAND ANY DETERIORATED OR MARKED WOOD TO A FRESH SURFACE. APPLY MINIMUM TWO COATS CLEAR SATIN FINISH URETHANE EXTERIOR TOP COAT, CONTAINING UV AND MILDEW INHIBITOR. SHERWIN WILLIAMS MINWAX HELMSMAN SPAR URETHANE OR EQUAL

PT-4: REMOVE ALL SURFACE CONTAMINATION, MARKS AND MILDEW FROM SURFACE BY PROPER CLEANING PER MANUFACTURERS APPROVED METHODS. SAND ANY DETERIORATED OR MARKED WOOD TO A FRESH SURFACE. APPLY MINIMUM TWO COATS CLEAR ACRYLIC EXTERIOR SEALER, CONTAINING A MILDEW INHIBITOR. SHERWIN WILLIAMS ARMORSEAL REXTHANE OR EQUAL

PT-5: REMOVE ALL SURFACE CONTAMINATION, MARKS AND MILDEW FROM SURFACE BY PROPER CLEANING PER MANUFACTURERS APPROVED METHODS. APPLY MINIMUM TWO COATS SEMI-TRANSPARENT SATIN FINISH EXTERIOR LOG HOME STAIN AND SEALER CONTAINING UV AND MILDEW INHIBITOR. SHERWIN WILLIAMS SUPERDECK LOG HOME & DECK STAIN OR APPROVED EQUAL

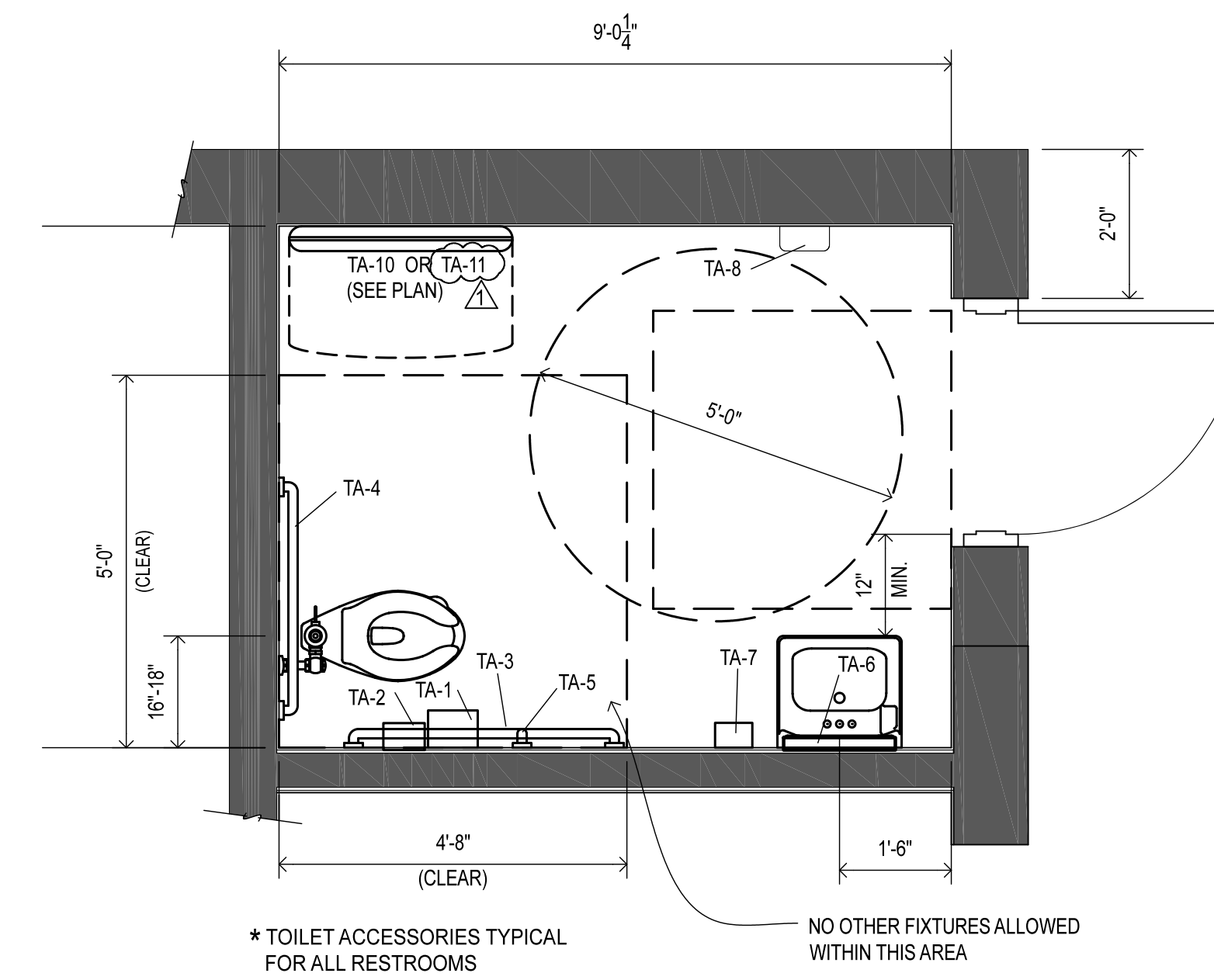
PT-6: ONE COAT EXTERIOR ACRYLIC PRIMER FOR USE OVER GALVANIZED METALS (SHERWIN WILLIAMS PRO INDUSTRIAL PRO-CRYL UNIVERSAL PRIMER B98-1300 SERIES) PLUS, MINIMUM TWO COATS PREMIUM EXTERIOR CHEMICAL CORROSION RESISTANT, ACRYLIC, SEMI-GLOSS FINISH, (SHERWIN WILLIAMS PRO INDUSTRIAL DTM ACRYLIC B66-1150 SERIES)

PT-7: ONE COAT EXTERIOR BLOCK FILLER (SHERWIN WILLIAMS PrepRite B25W25, OR EQUAL) PLUS MINIMUM TWO COATS PREMIUM EXTERIOR LATEX, SELF PRIMING, 100% ACRYLIC SATIN FINISH. SHERWIN-WILLIAMS EMERALD K48 SERIES, OR EQUAL. (5.3-6.4 MILS WET, 2.1-2.6 MILS DRY PER COAT)

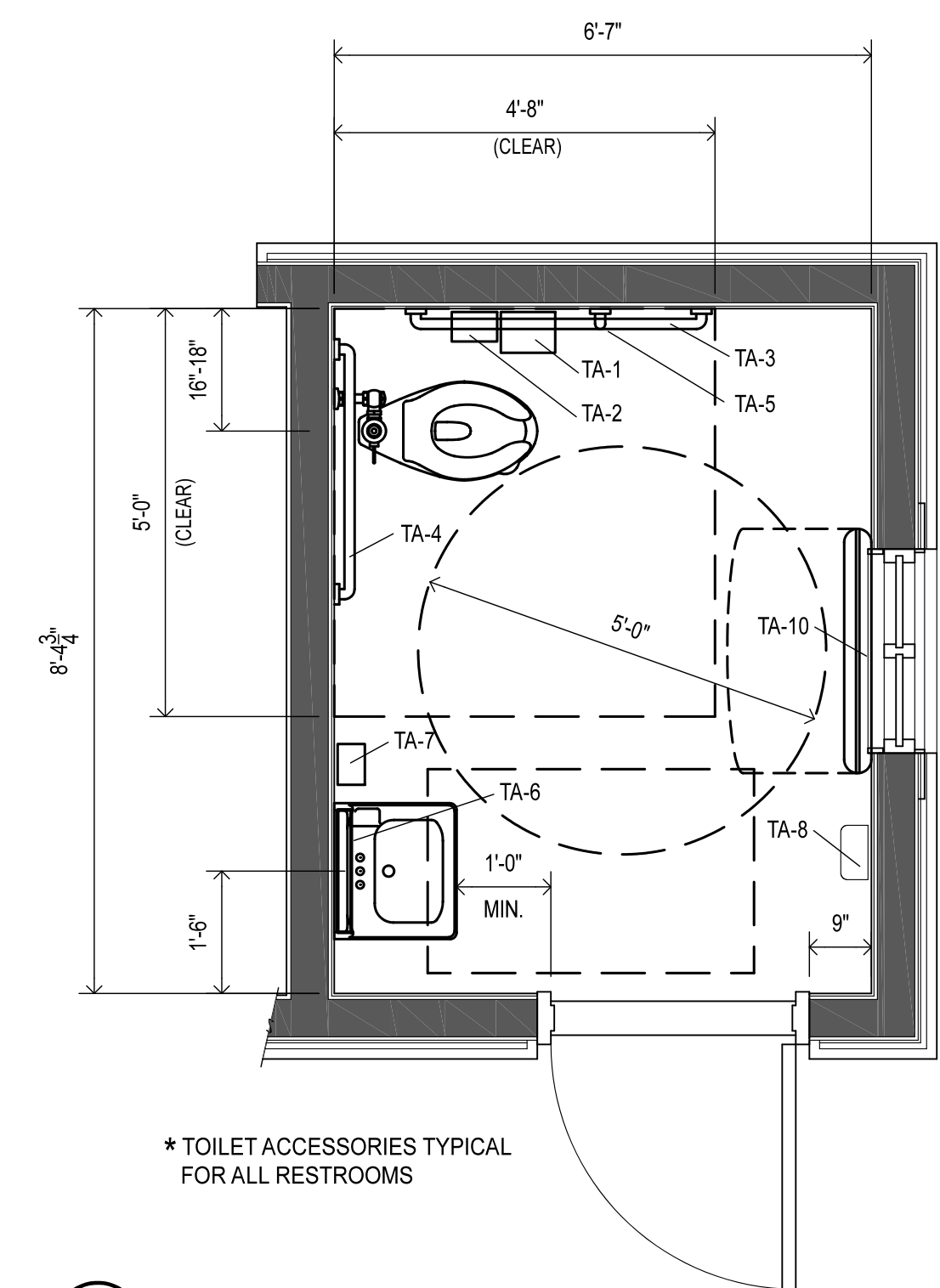
F.R.P.: FIBER REINFORCED PLASTIC. SMOOTH FINISH, NOMINAL 3/32" THICK. PANEL INSTALLED PER MANUFACTURERS INSTALLATION INSTRUCTIONS. USE MANUFACTURER'S APPROVED ADHESIVE. MANUFACTURER'S MOLDINGS SHALL SURROUND ALL PANELS AND BE PROPERLY SEALED WITH A CONTINUOUS BEAD OF SILICONE SEALANT.

UNFINISHED METALS: SHOP PRIMED AND PAINTED WITH TWO COATS OF SEMI-GLOSS POLYAMIDE EPOXY PAINT.

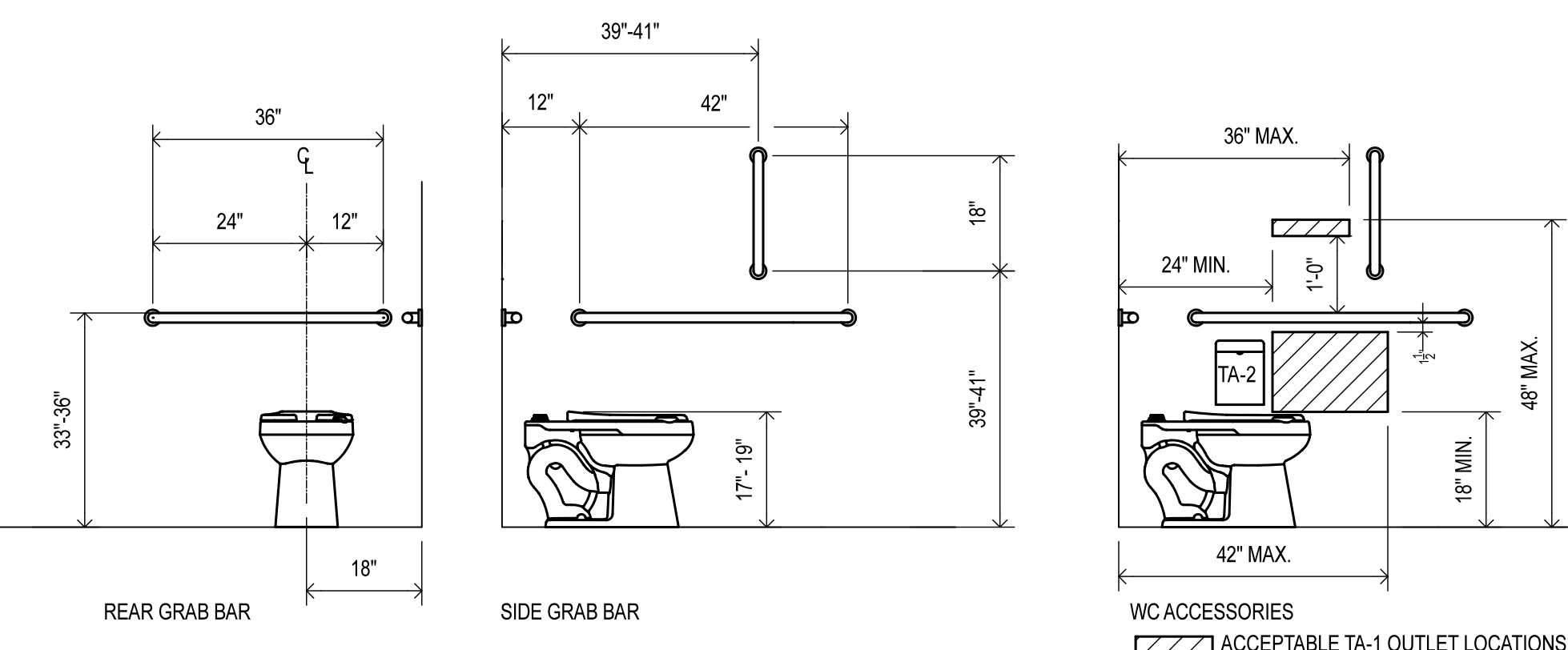
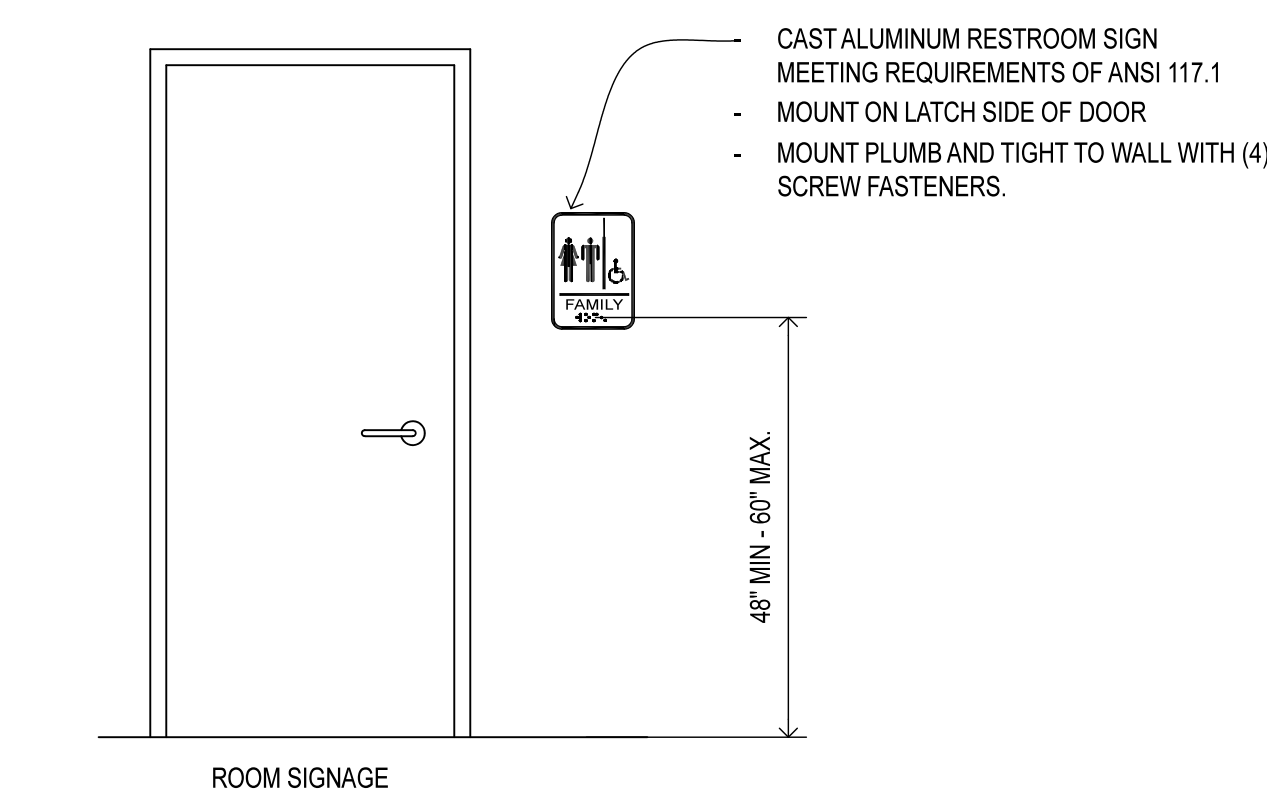
STONE VENEER: SEE STONE VENEER NOTES ON A2.0



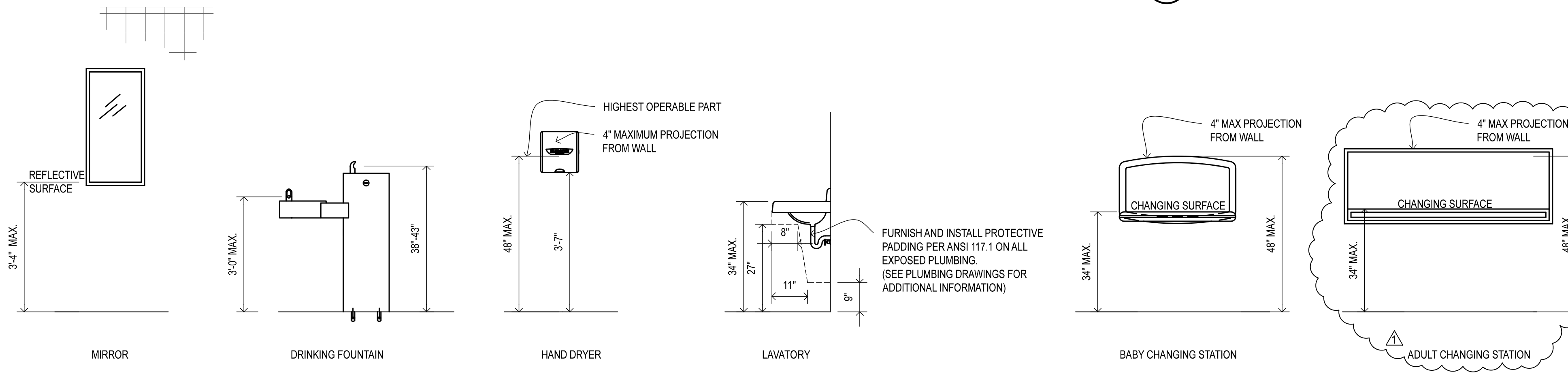
1 FAMILY RESTROOM
SCALE: 1/2" = 1'-0"



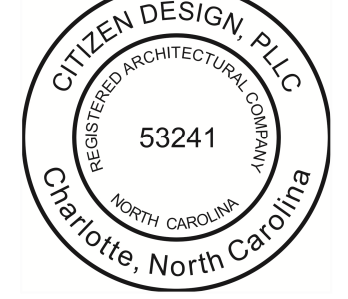
2 FAMILY RESTROOM
SCALE: 1/2" = 1'-0"



3 TYPICAL MOUNTING HEIGHTS
SCALE: 1/2" = 1'-0"



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SCALE: AS NOTED
DATE: 05-04-23
SHEET NAME:
ENLARGED FLOOR PLANS AND FINISH SCHEDULES
SHEET NO:
A 1.5



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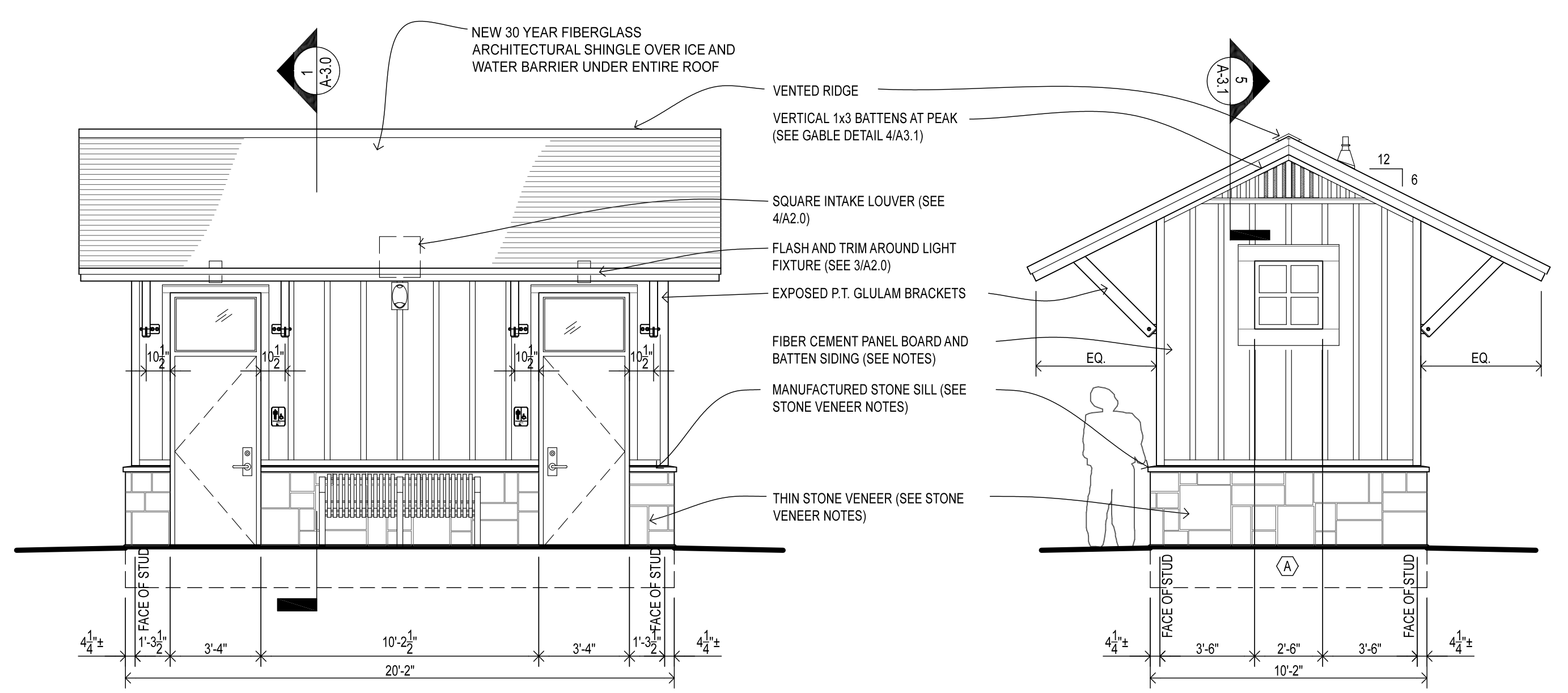
DORTON PARK
5650 POPLAR TENT ROAD
CONCORD, NORTH CAROLINA

SCALE: AS NOTED

DATE: 05-04-23

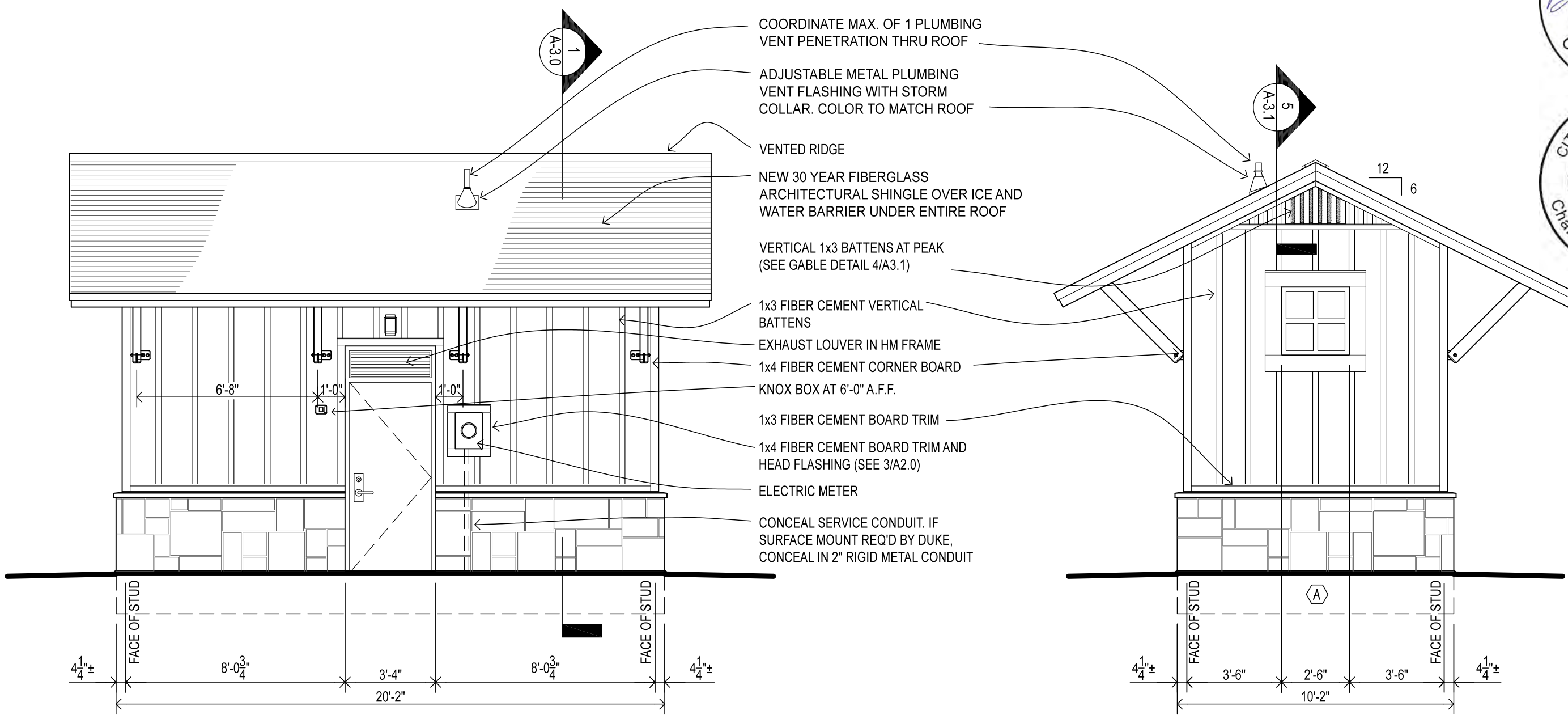
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SOCCER RESTROOM
ELEVATIONS AND
DETAILS

SHEET NO:
A 2.0



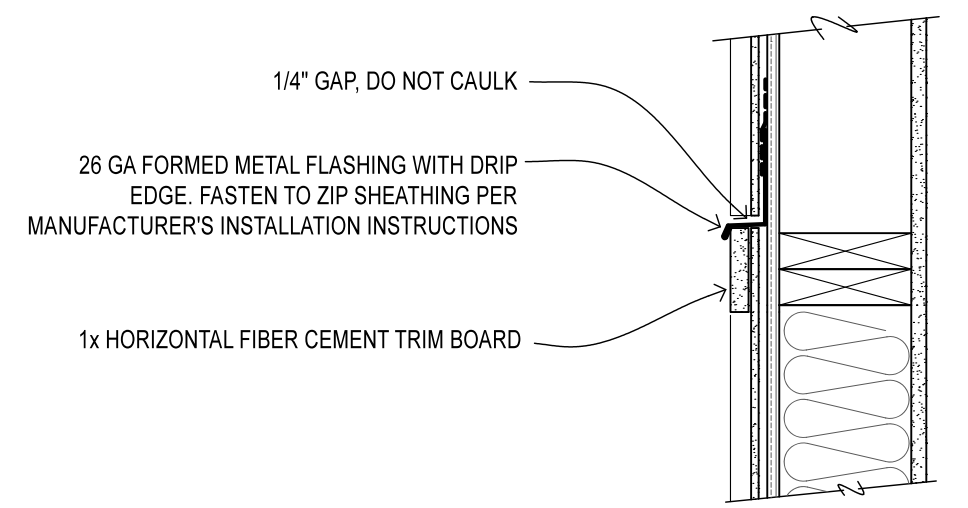
A FRONT ELEVATION
A2.0 SCALE: 1/4"=1'-0"

B WEST ELEVATION
A2.0 SCALE: 1/4"=1'-0"

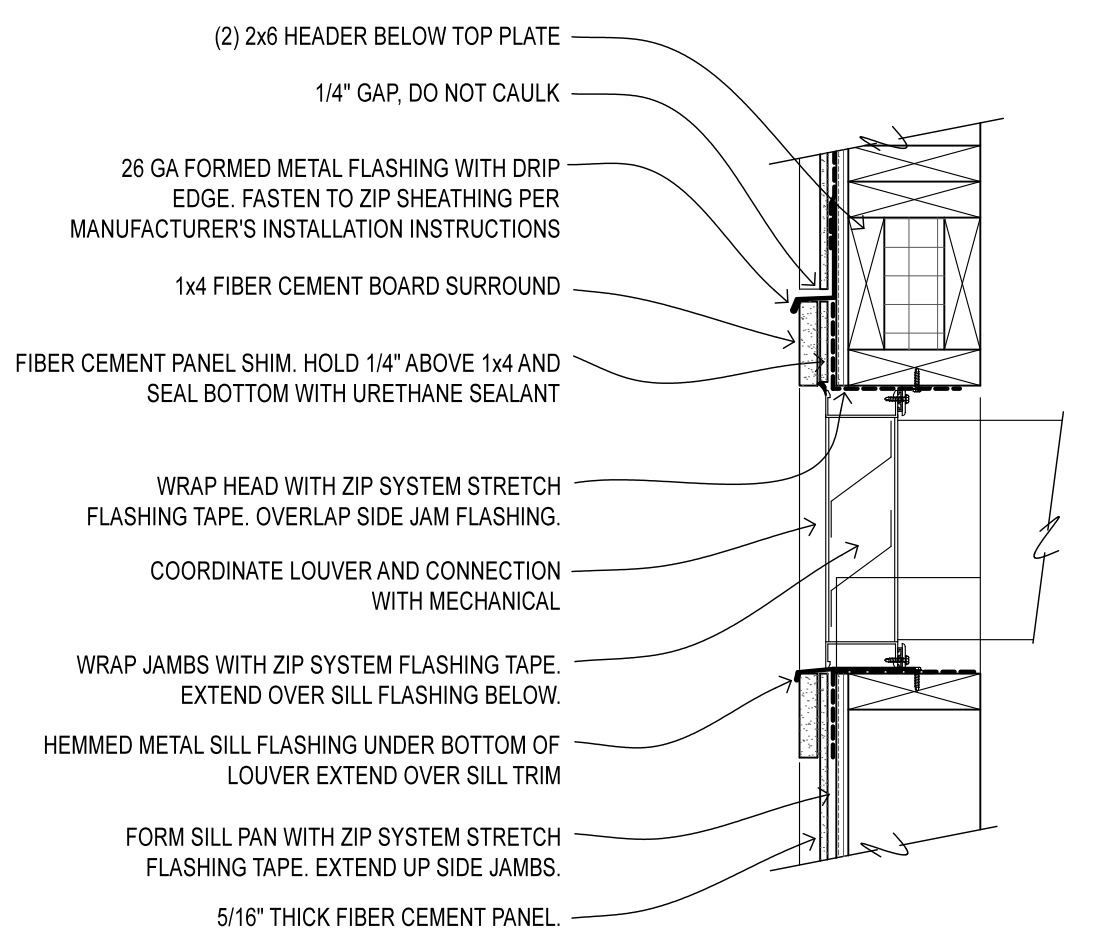


C REAR ELEVATION
A2.0 SCALE: 1/4"=1'-0"

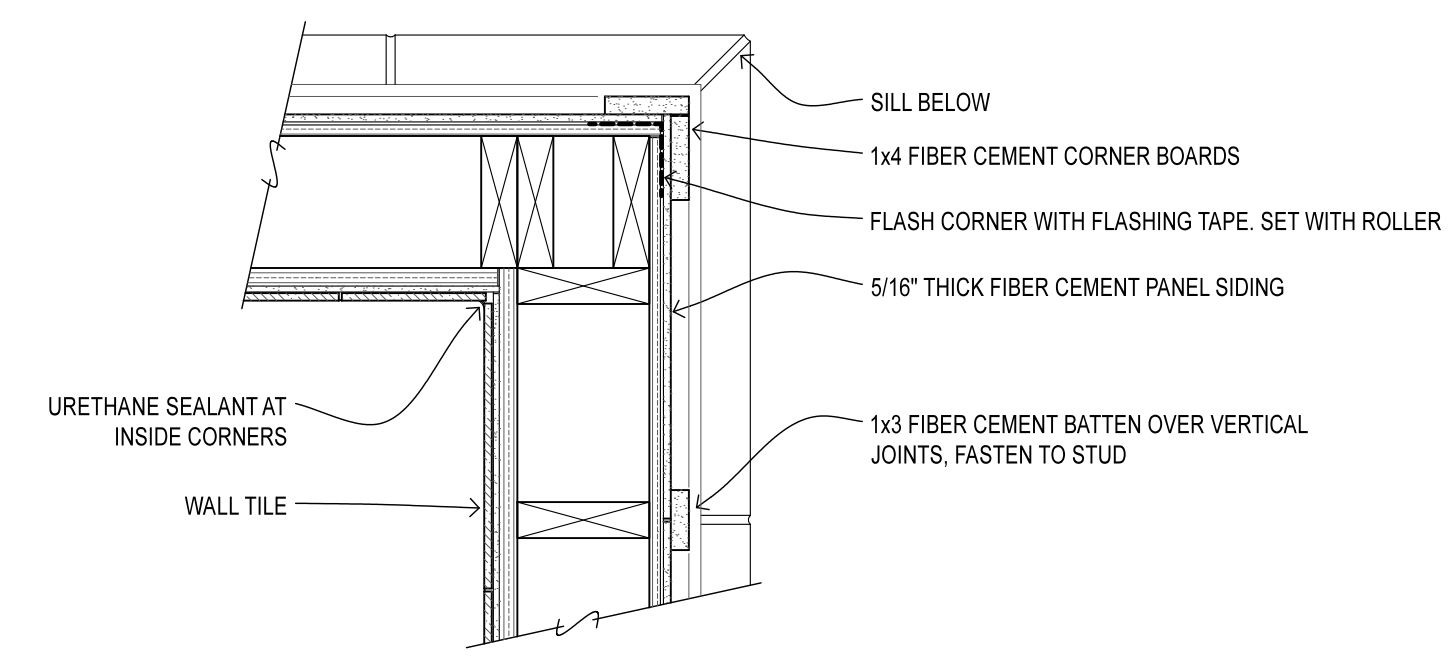
D EAST ELEVATION
A2.0 SCALE: 1/4"=1'-0"



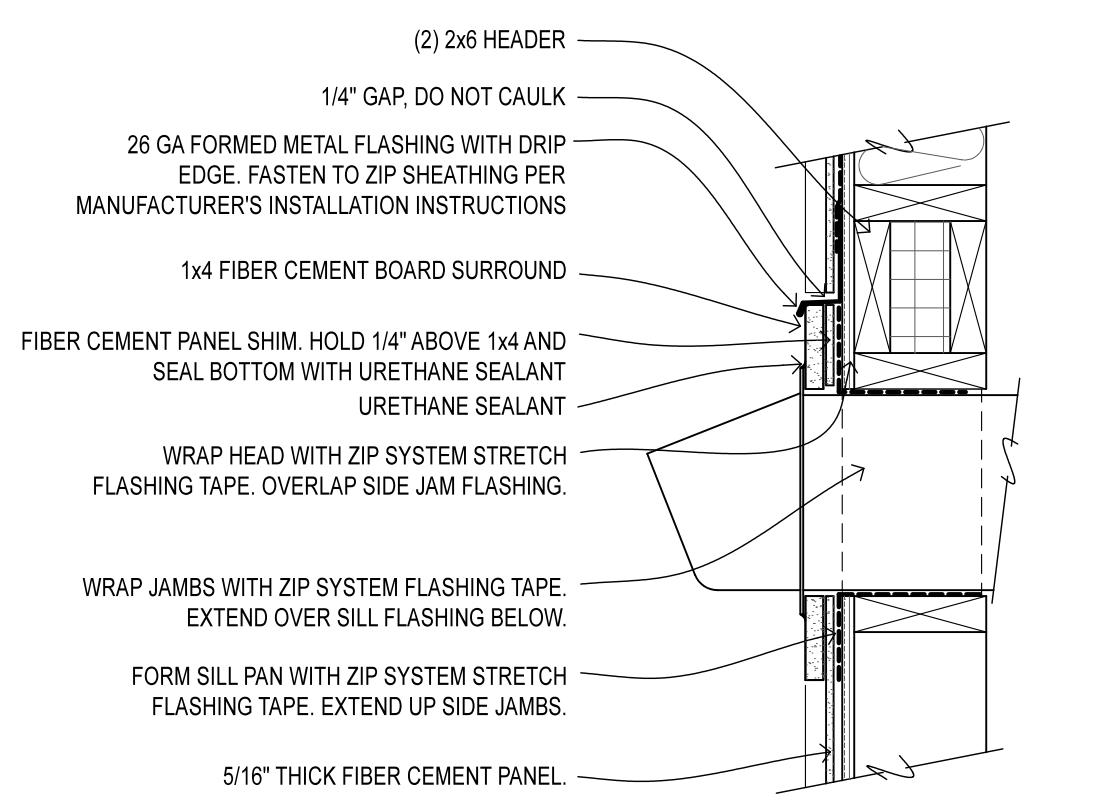
1 TYPICAL HORIZONTAL SIDING JOINT
A2.0 SCALE: 1-1/2"=1'-0"



4 LOUVER PENETRATION
A2.0 SCALE: 1-1/2"=1'-0"



2 SIDING OUTSIDE CORNER
A2.0 SCALE: 1-1/2"=1'-0"



5 HOODED EXHAUST
A2.0 SCALE: 1-1/2"=1'-0"



NEW RESTROOM STONE



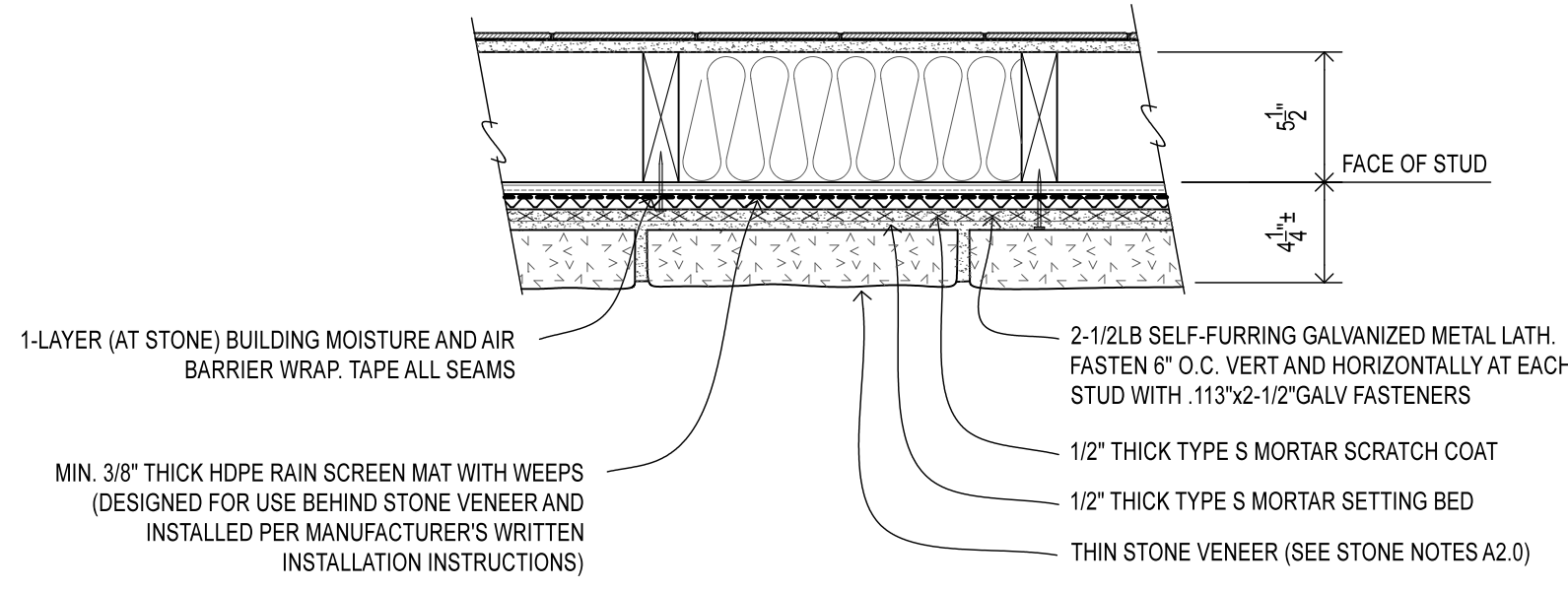
PICNIC SHELTER STONE COLUMNS

FIBER CEMENT BOARD AND BATTEN SIDING:

- SIDING PANELS: 5/16" Thick x 120" MIN. TALL SHEETS INSTALLED VERTICALLY. FINISH: SMOOTH TEXTURE.
BATTENS: 3/4"x2-1/2" FIBER CEMENT, SMOOTH FINISH TEXTURE. NAIL TO STUD FRAMING. SEE ELEVATIONS FOR SPACING.
TRIM BOARDS: 3/4" THICK FIBER CEMENT BOARDS, (PVC SPECIFIED IN SOME AREAS) SMOOTH TEXTURE. MINIMUM LENGTH OF BOARD BETWEEN CUT JOINTS SHALL BE 8'-0". BEVEL CUT ALL JOINTS.
VERTICAL JOINTS IN WALL PANELS SHALL BE CONCEALED WITH 3/4"x2-1/2" FIBER CEMENT BATTENS.
HORIZONTAL JOINTS IN PANELS MUST BE FLASHED AS SHOWN. LIMIT HORIZONTAL JOINTS IN PANELS.
- FIBER CEMENT PANELS AND TRIM TO BE INSTALLED BY CERTIFIED MANUFACTURER INSTALLER PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
- ALL SIDING AND TRIM MUST BE FLASHED IN ACCORDANCE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS
- MANUFACTURER'S RECOMMENDED FASTENERS AND FASTENER SPACINGS FOR INSTALLATION INTO SPECIFIED MATERIALS SHALL BE USED.

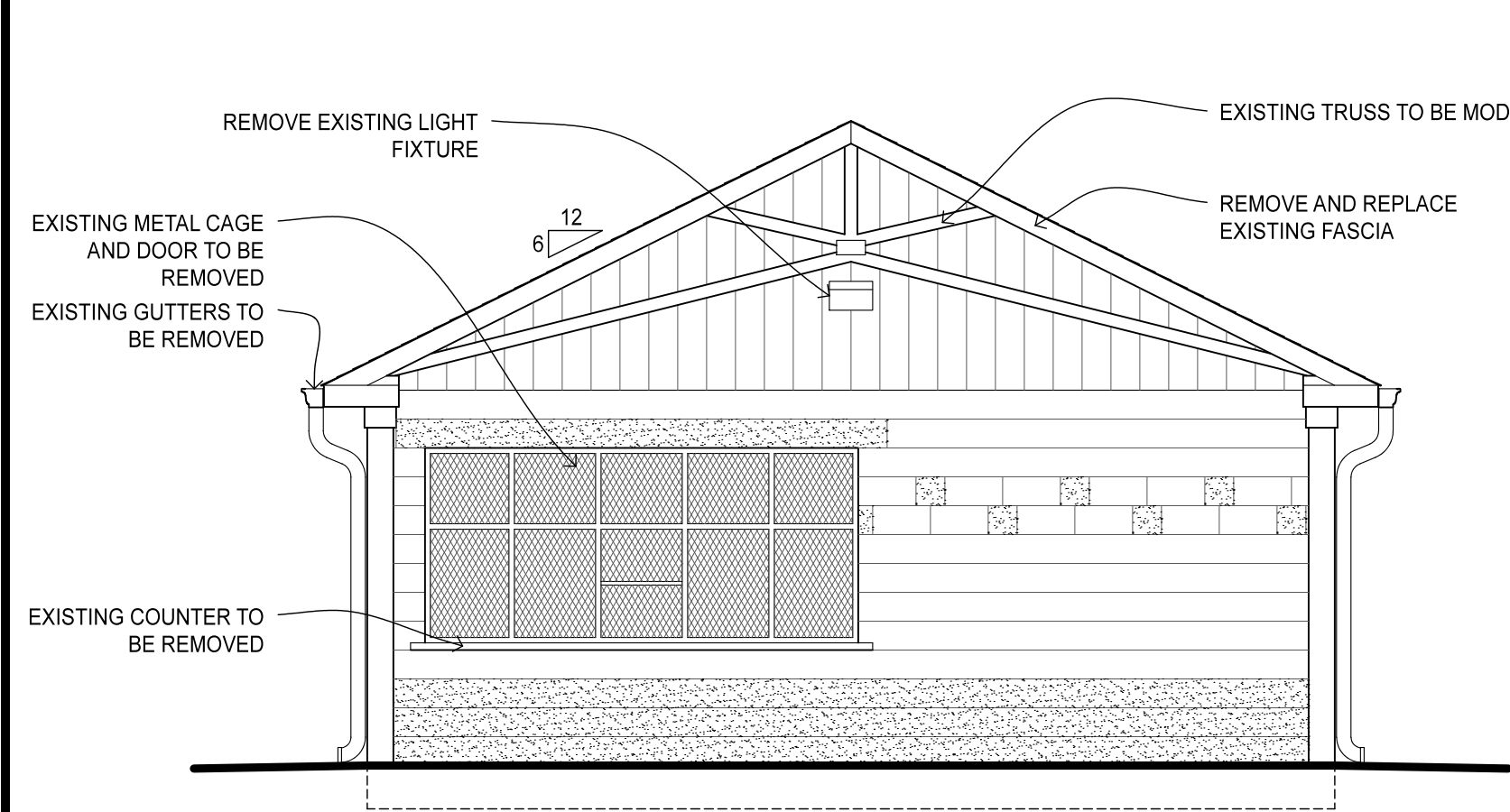
ARCHITECTURAL ROOF SHINGLES

- 30 YEAR MINIMUM WARRANTY. ARCHITECTURAL FIBERGLASS REINFORCED ASPHALT SHINGLES. COLOR: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE OF STANDARD AND PREMIUM COLORS.
- APPLY 40 MIL. MINERAL SURFACED SELF ADHERING, SELF SEALING ICE AND WATER BARRIER UNDER ENTIRE ROOF. BARRIER SHALL BE SUITABLE FOR USE UNDER ASPHALT SHINGLED ROOF SYSTEMS
- PROVIDE MANUFACTURER'S VENTED RIDGE WITH MATCHING CAP SHINGLES. INSTALL VENTED RIDGE ENTIRE LENGTH OF RIDGE. HOWEVER, STOP SHEATHING VENT SLOTS 12" FROM ENDS AND 12" FROM DORMER INTERSECTIONS.
- PROVIDE PERIMETER PRE-FINISHED METAL DRIP EDGE WITH 3.5" LONG NAILING FLANGE.
- ROOF SHEATHING SHALL BE APA RATED 5/8" T&G ROOF SHEATHING.
- MANUFACTURER'S APPROVED INSTALLER, PROPERLY TRAINED BY MANUFACTURER, SHALL INSTALL ROOF SYSTEM. SHINGLES SHALL BE INSTALLED IN STRAIGHT AND TRUE LINES ACROSS THE ROOF.

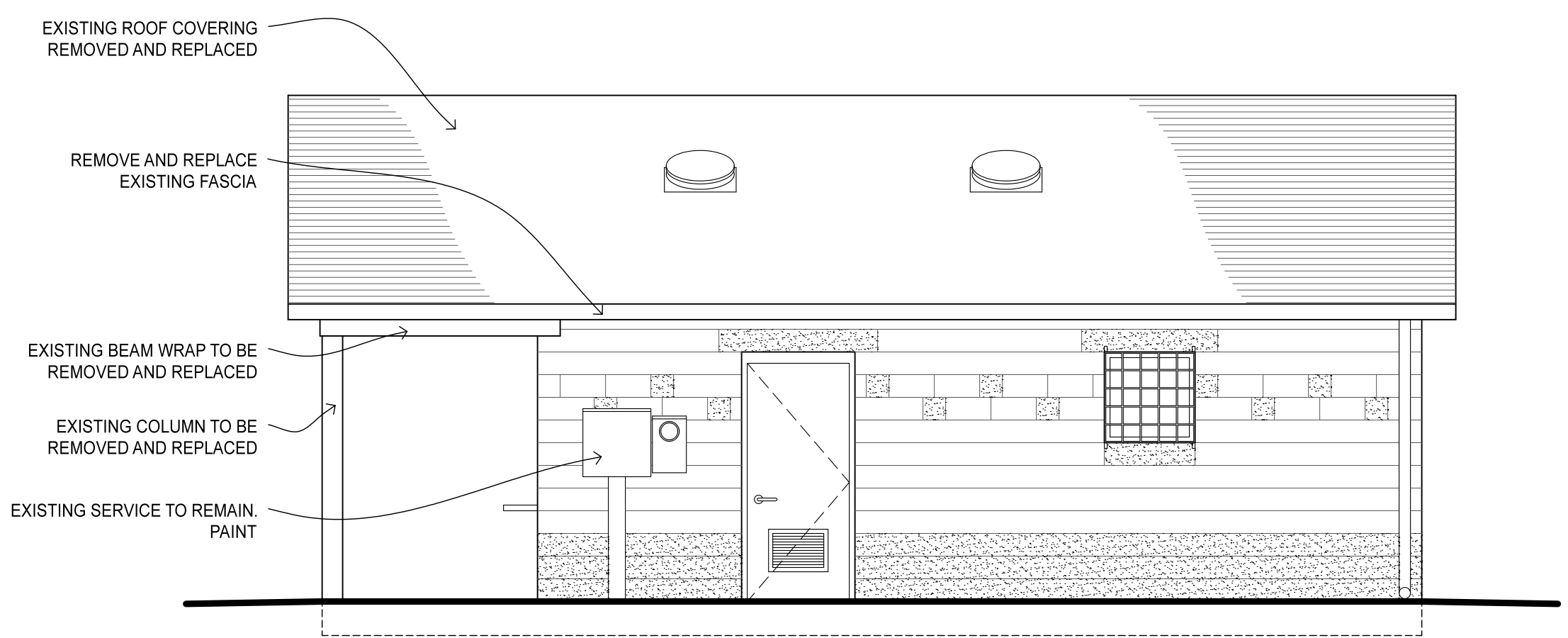


6 STONE PLAN DETAIL
A2.0 SCALE: 1-1/2"=1'-0"

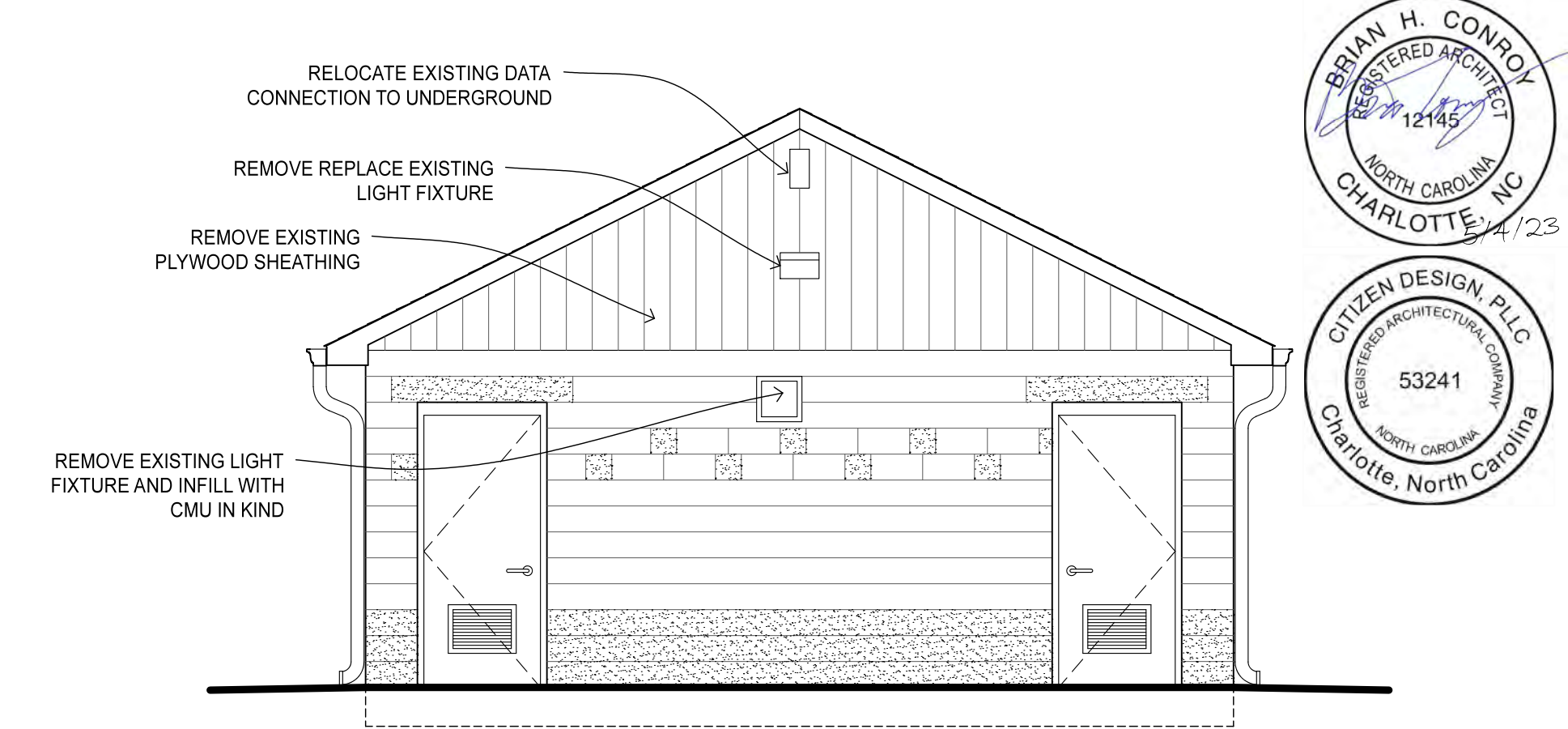
3 TYPICAL PLUMBING/ ELECT. PENETRATION
A2.0 SCALE: 1-1/2"=1'-0"



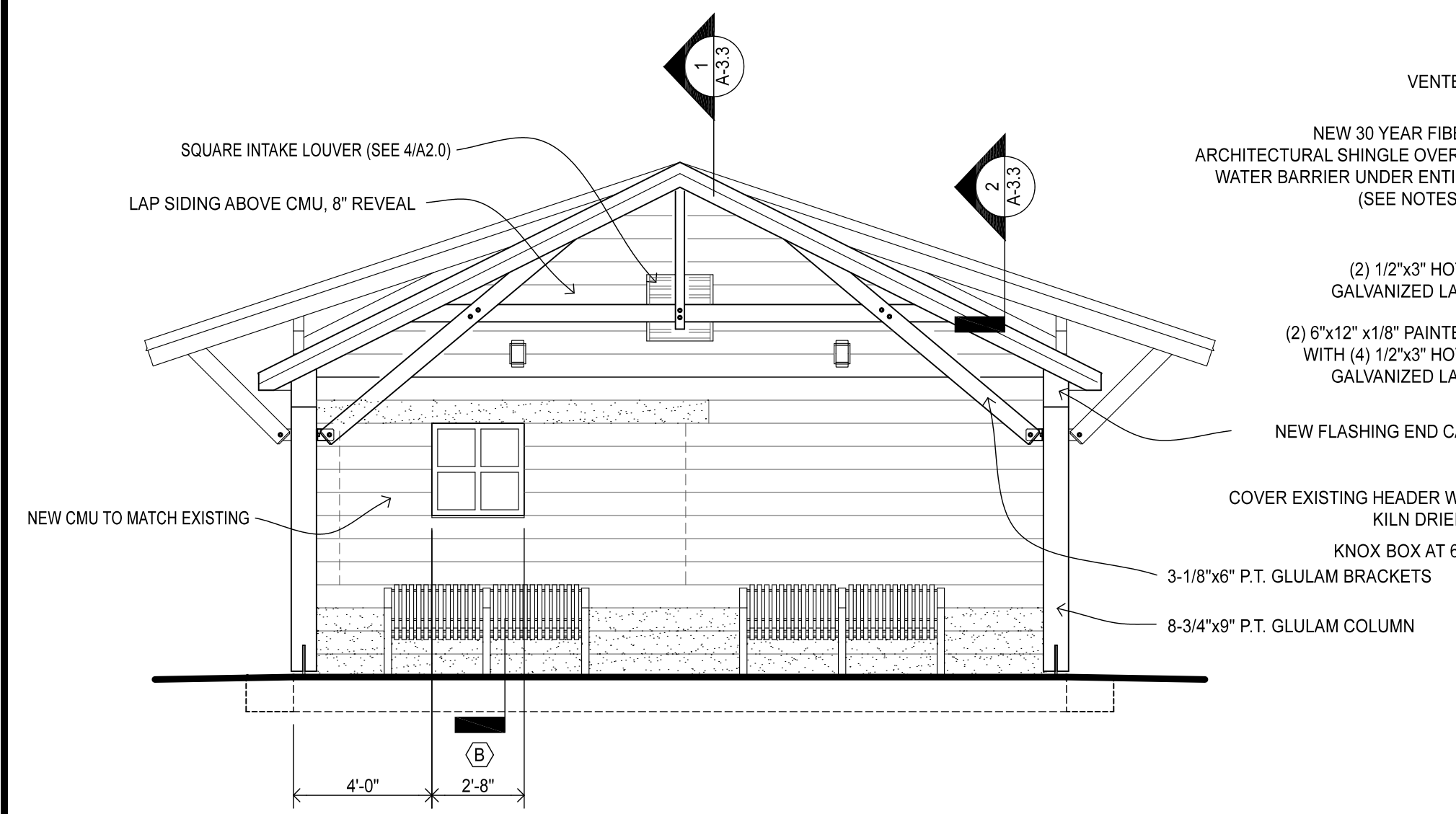
A EXISTING FRONT ELEVATION
A2.1 SCALE: 1/4" = 1'-0"



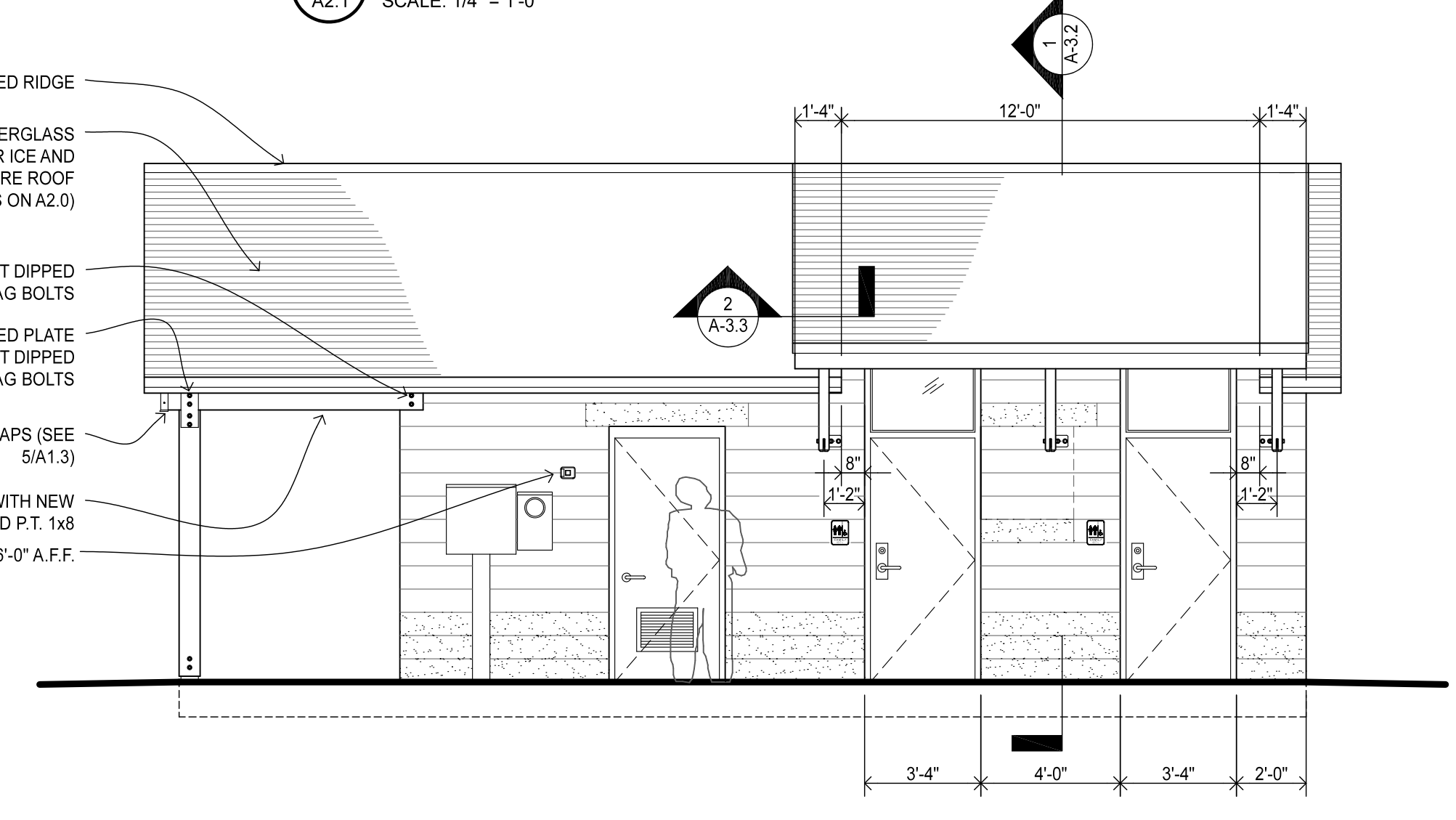
B EXISTING NORTH ELEVATION
A2.1 SCALE: 1/4" = 1'-0"



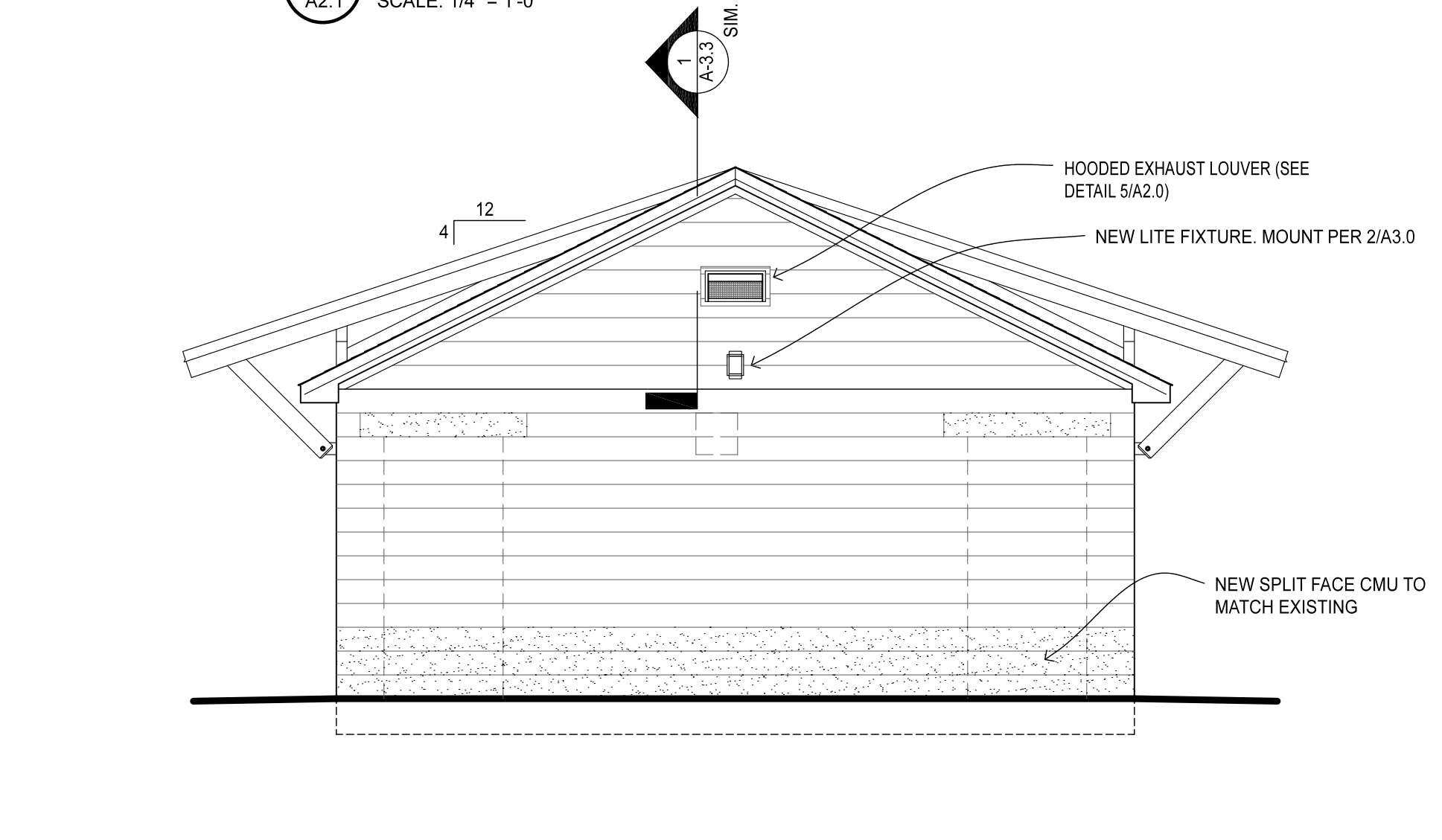
C EXISTING REAR ELEVATION
A2.1 SCALE: 1/4" = 1'-0"



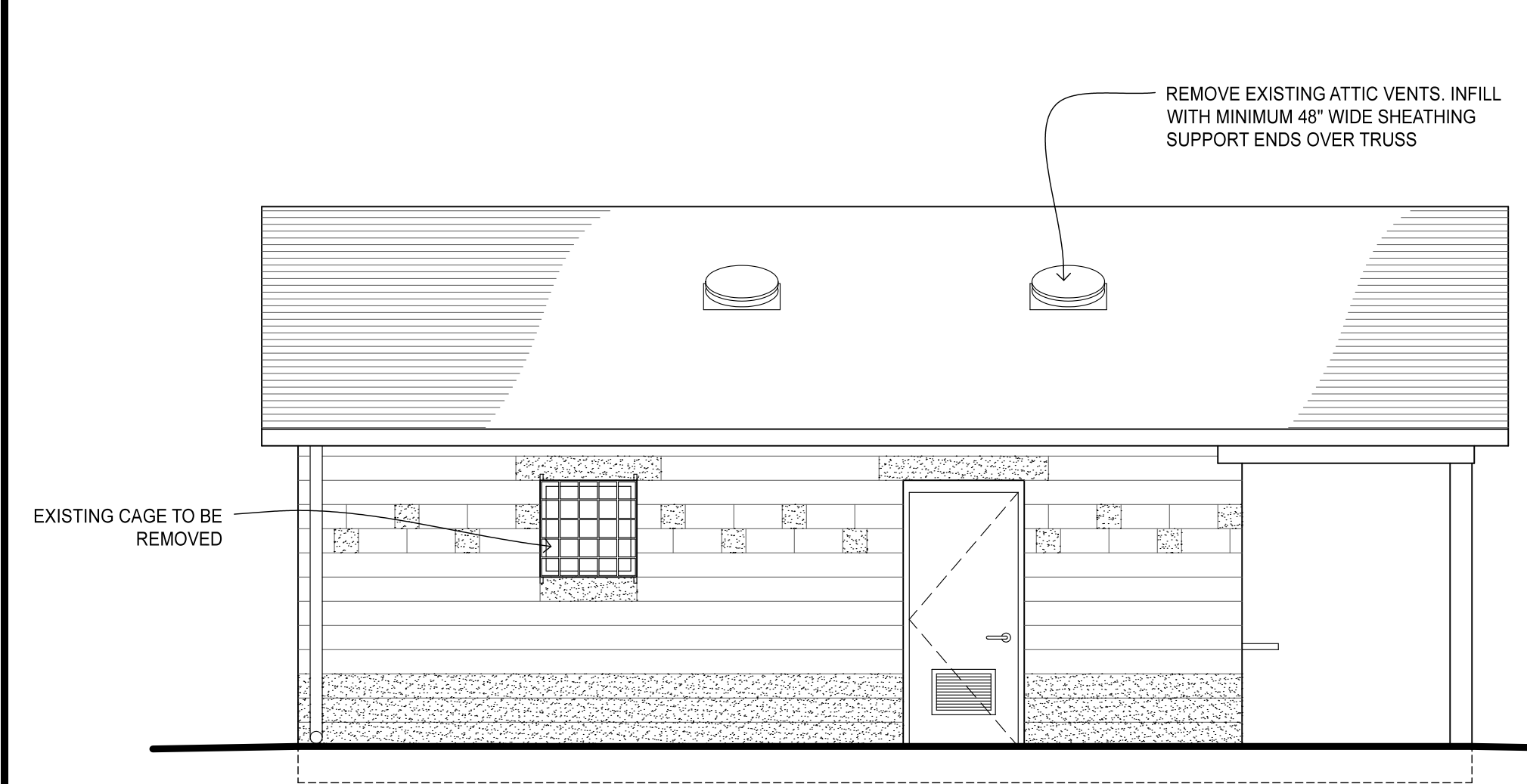
E PROPOSED FRONT ELEVATION
A2.1 SCALE: 1/4" = 1'-0"



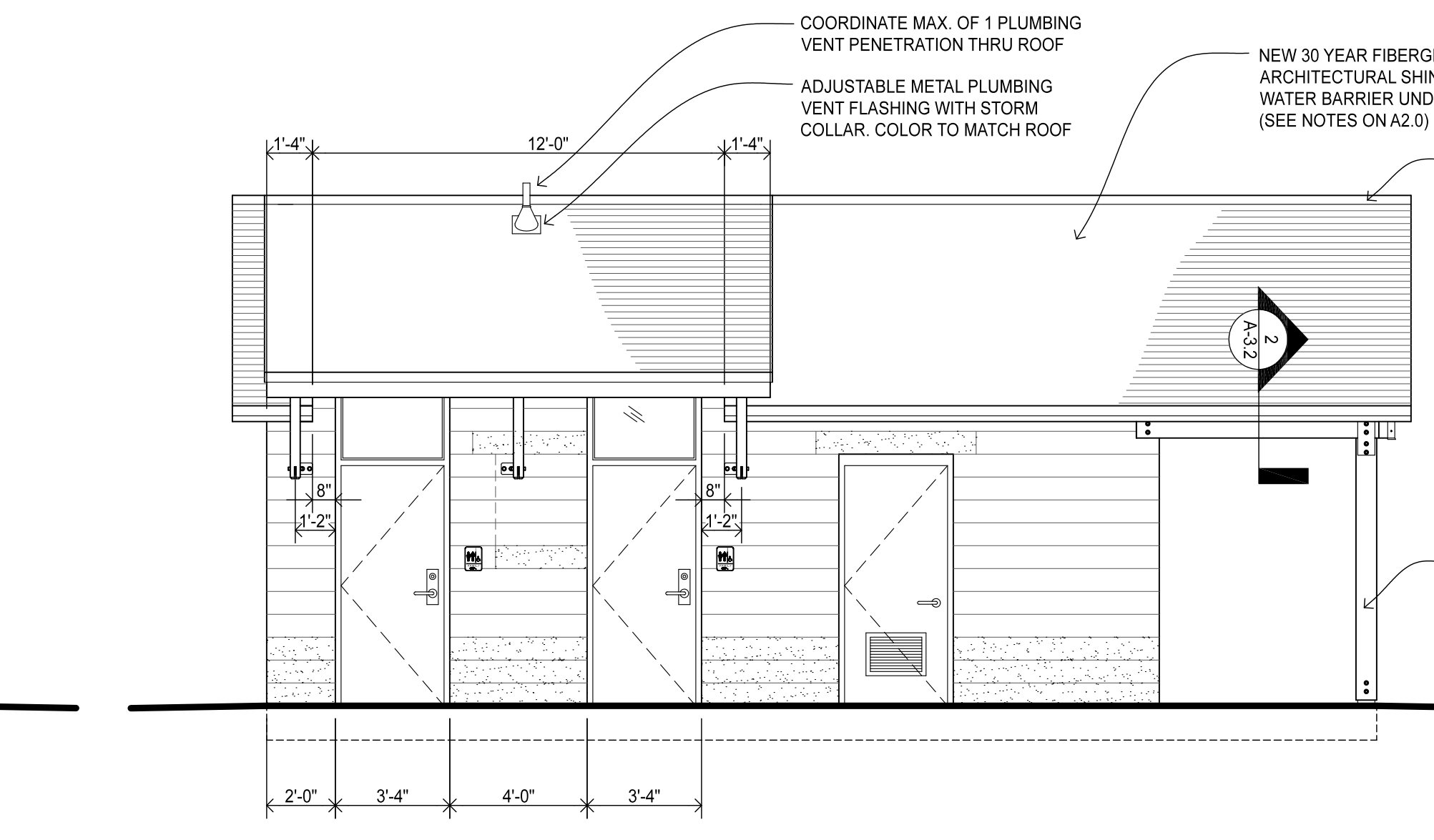
F PROPOSED NORTH ELEVATION
A2.1 SCALE: 1/4" = 1'-0"



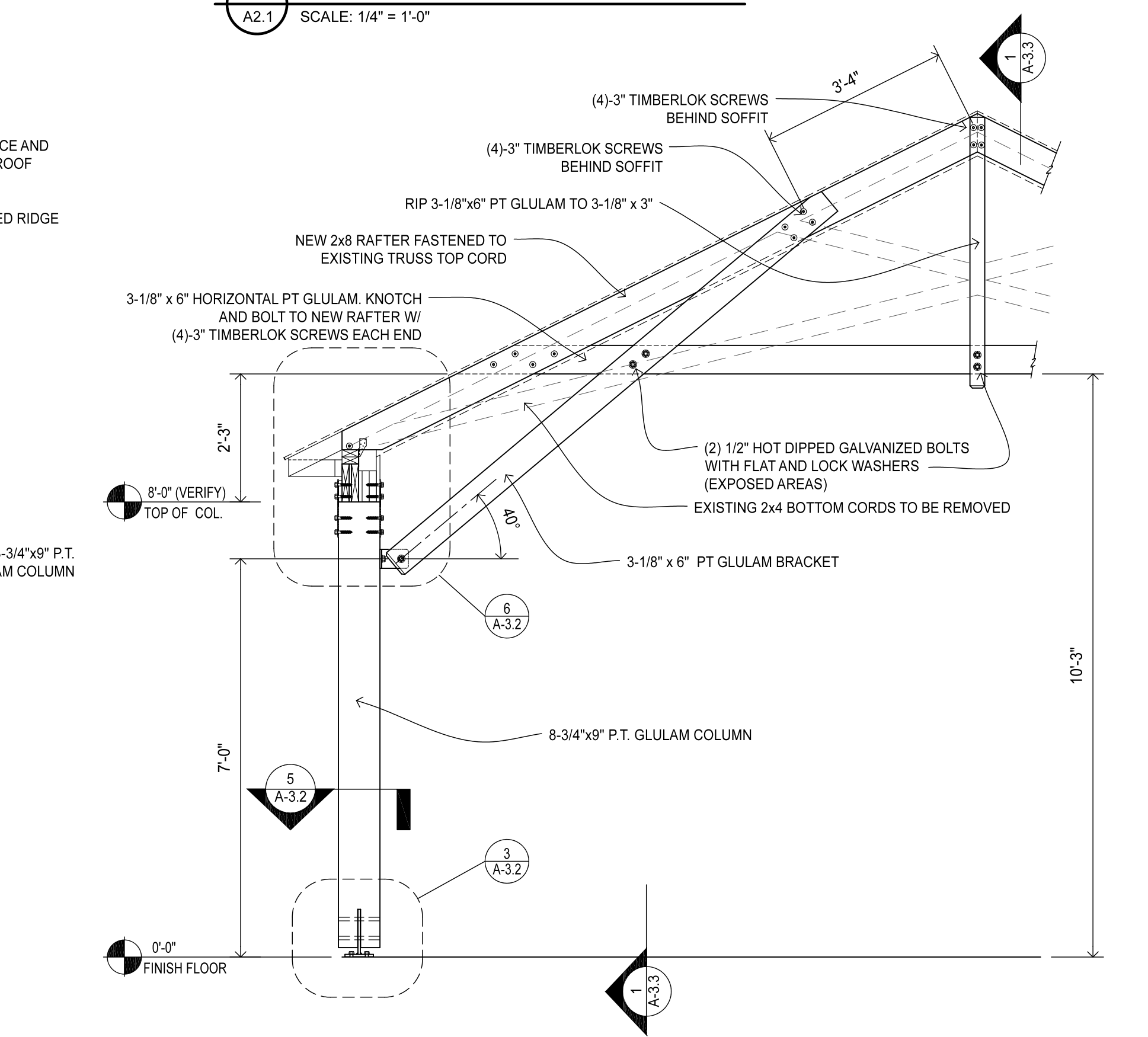
G PROPOSED REAR ELEVATION
A2.1 SCALE: 1/4" = 1'-0"



D EXISTING SOUTH ELEVATION
A2.1 SCALE: 1/4" = 1'-0"



H PROPOSED SOUTH ELEVATION
A2.1 SCALE: 1/4" = 1'-0"



1 ENLARGED FRONT TRUSS AND COLUMN
A2.1 SCALE: 1/2" = 1'-0"



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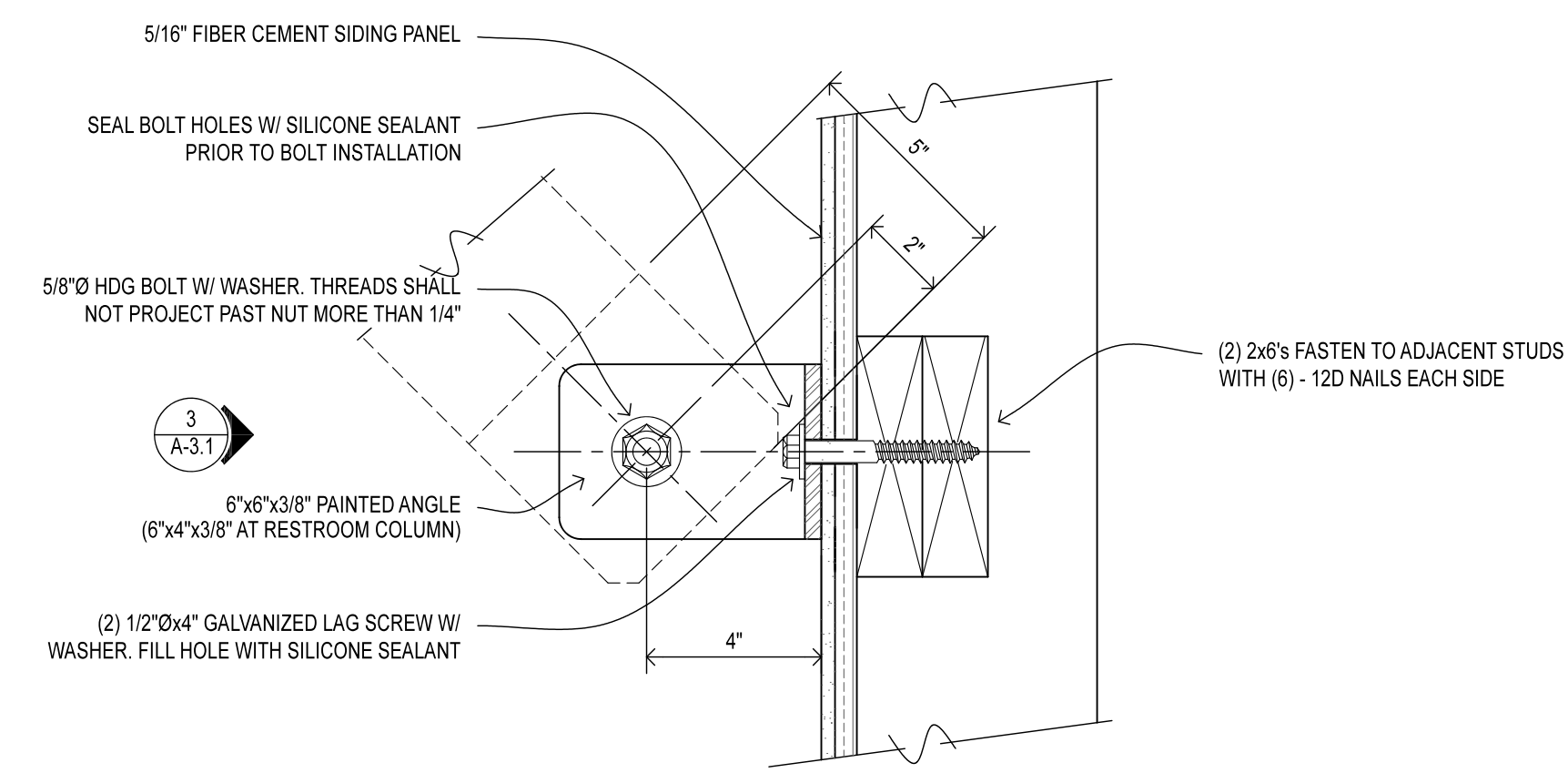
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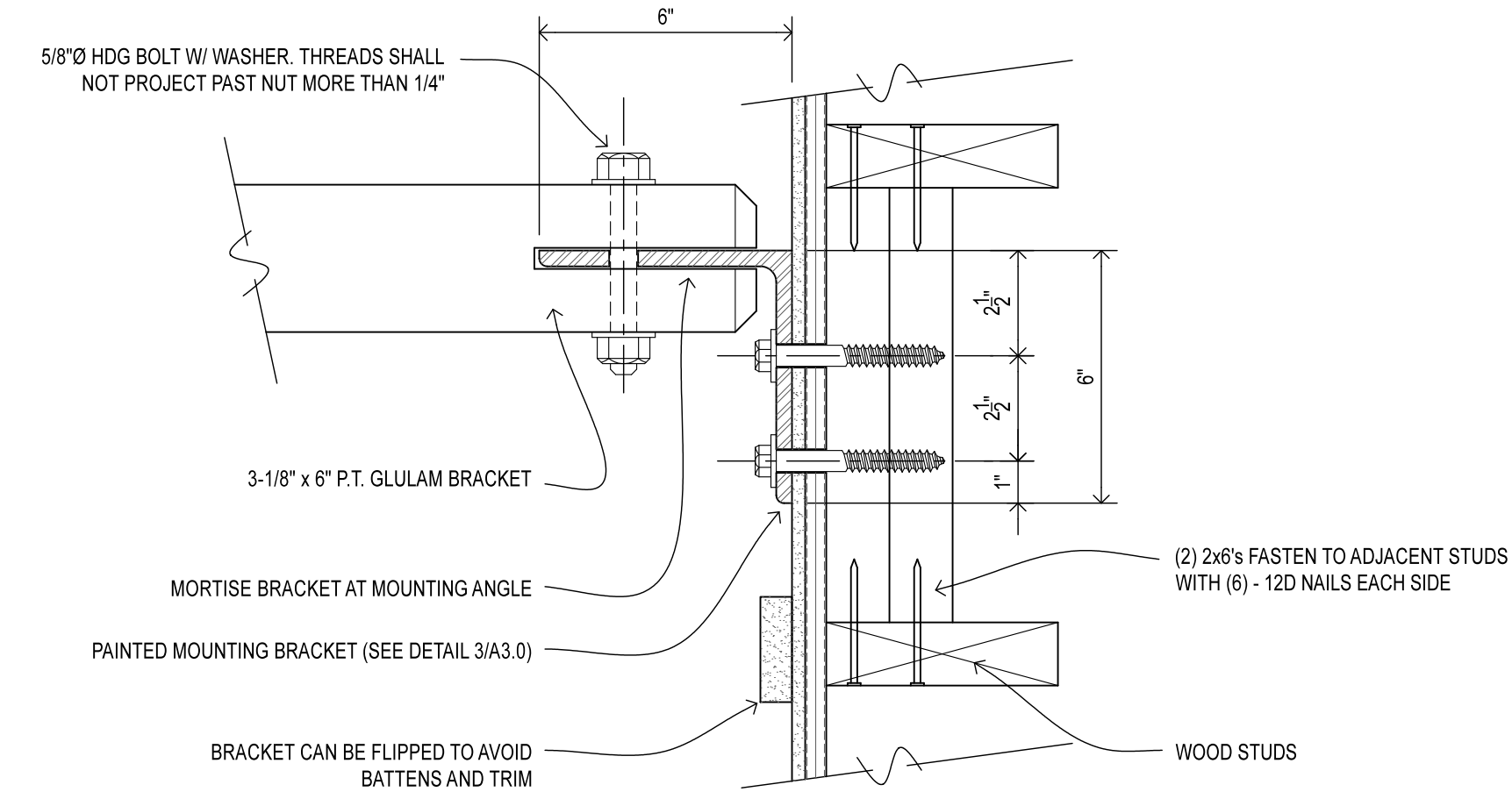
OWNER:

DORTON PARK
5650 POPLAR TENT ROAD
CONCORD, NORTH CAROLINA

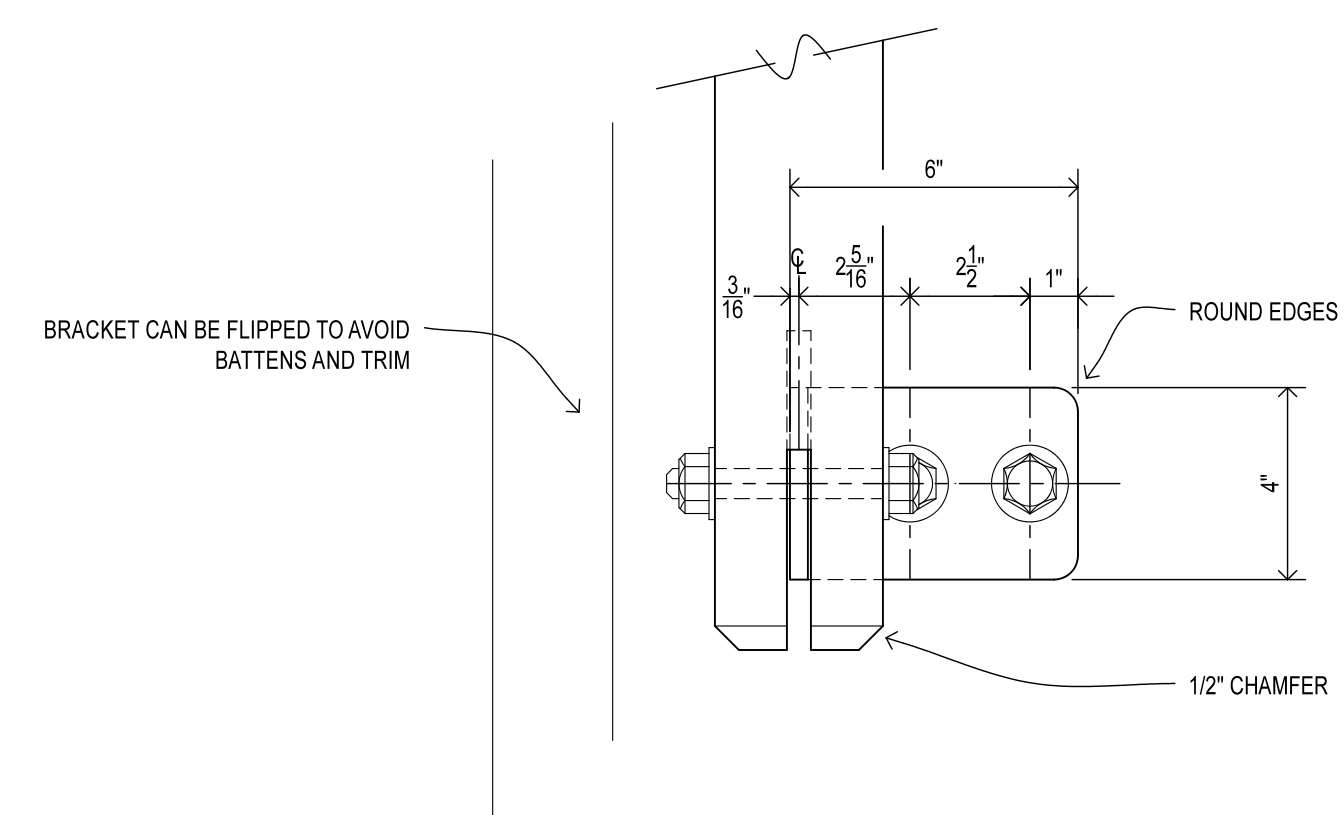
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DATE: 05-04-23
SHEET NAME:
EXISTING RESTROOM
ELEVATIONS AND
DETAILS
SHEET NO:
A 2.1



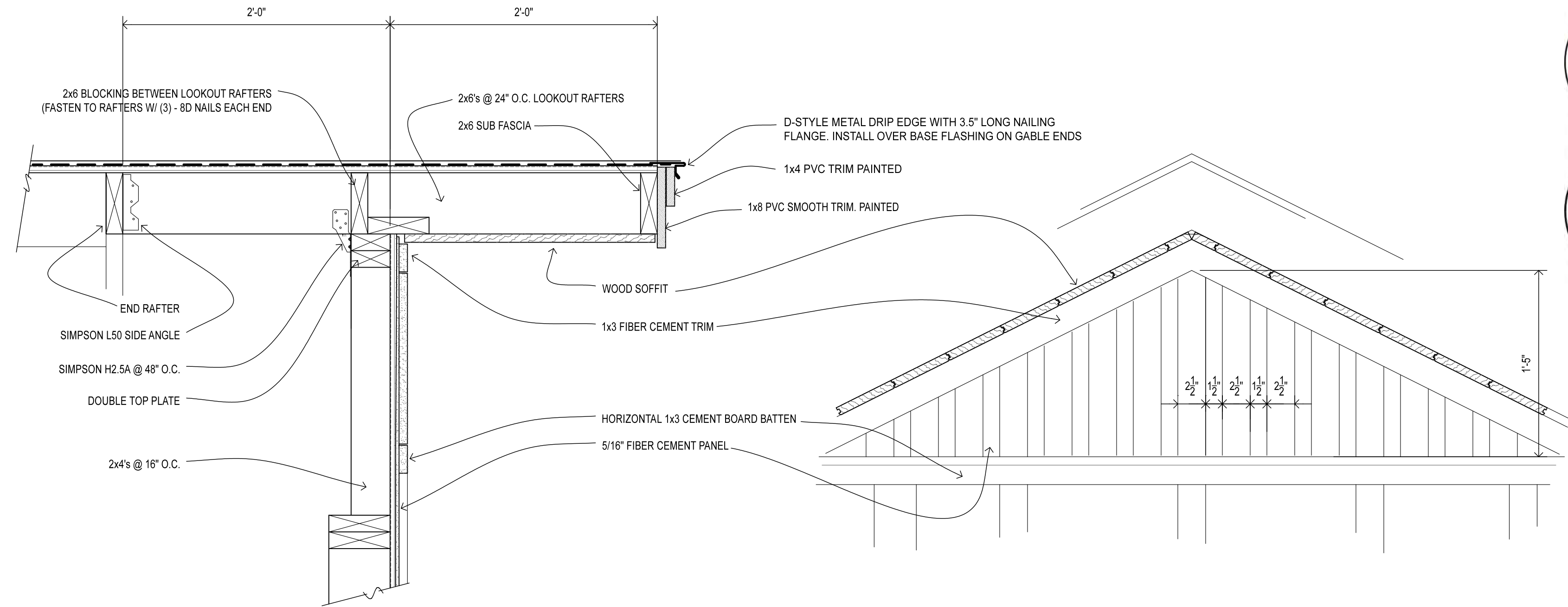
1 ANGLE BRACKET DETAIL (SIDE VIEW)
A3.1 SCALE: 3"=1'-0"



2 ANGLE BRACKET DETAIL (TOP VIEW)
A3.1 SCALE: 3"=1'-0"

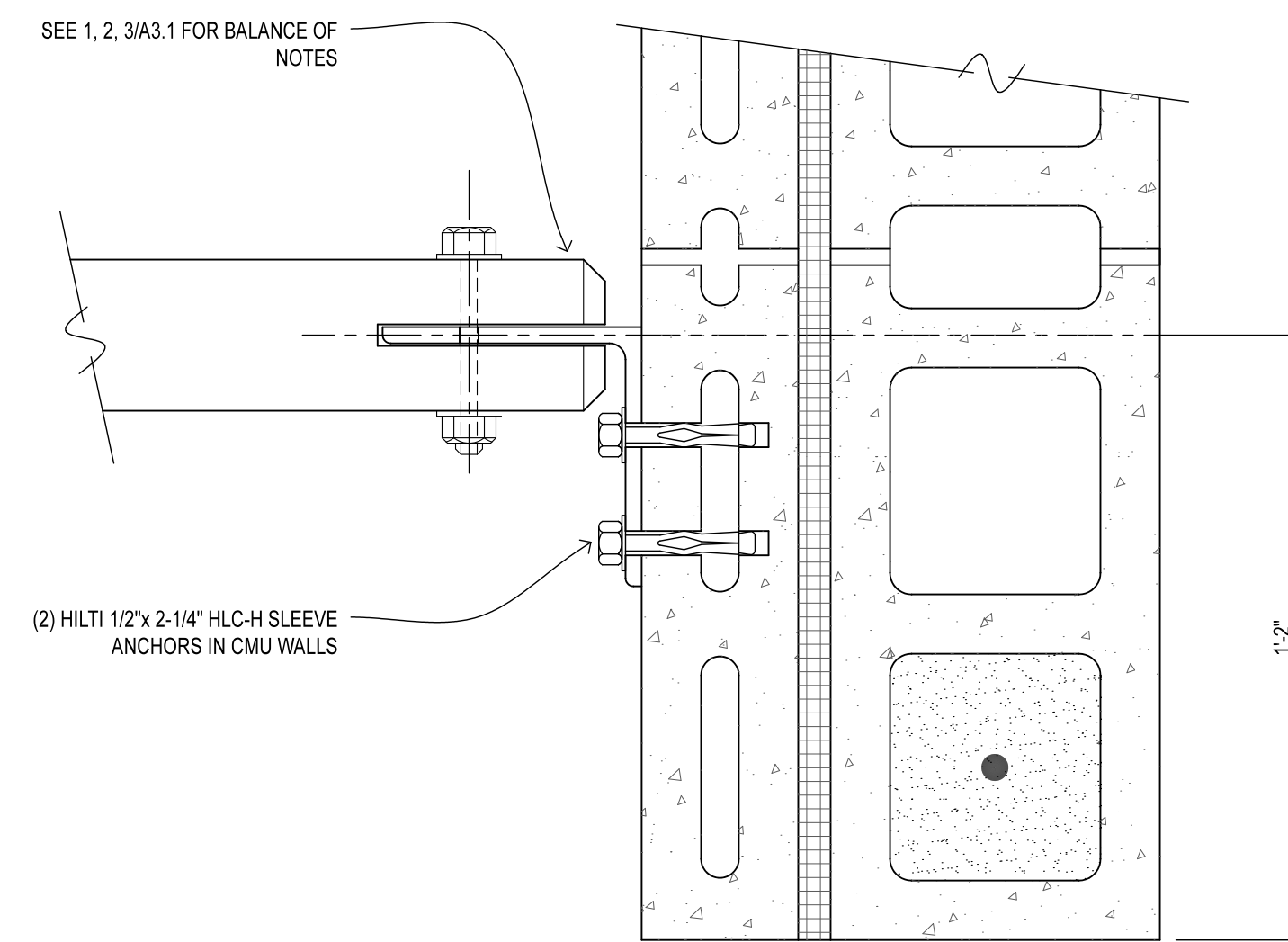


3 ANGLE BRACKET DETAIL (FRONT VIEW)
A3.1 SCALE: 3"=1'-0"

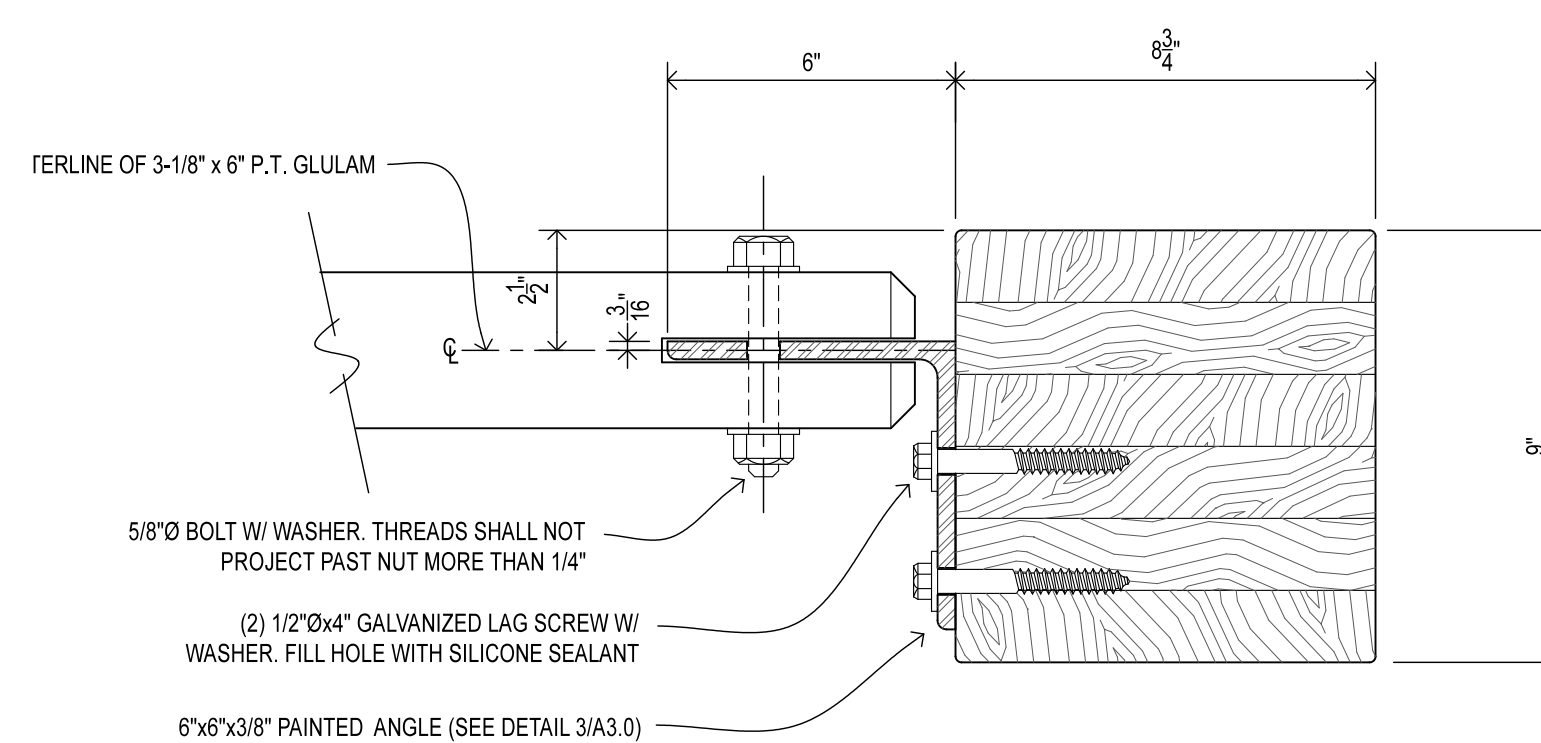


5 SIDE OVERHANG AND TRIM
A3.1 SCALE: 1-1/2"=1'-0"

4 SOCCER RESTROOM GABLE
A3.1 SCALE: 1-1/2"=1'-0"



7 ANGLE BRACKET DETAIL AT CMU WALL DETAIL
A3.1 SCALE: 3"=1'-0"



8 ANGLE BRACKET AT COLUMN
A3.1 SCALE: 3"=1'-0"



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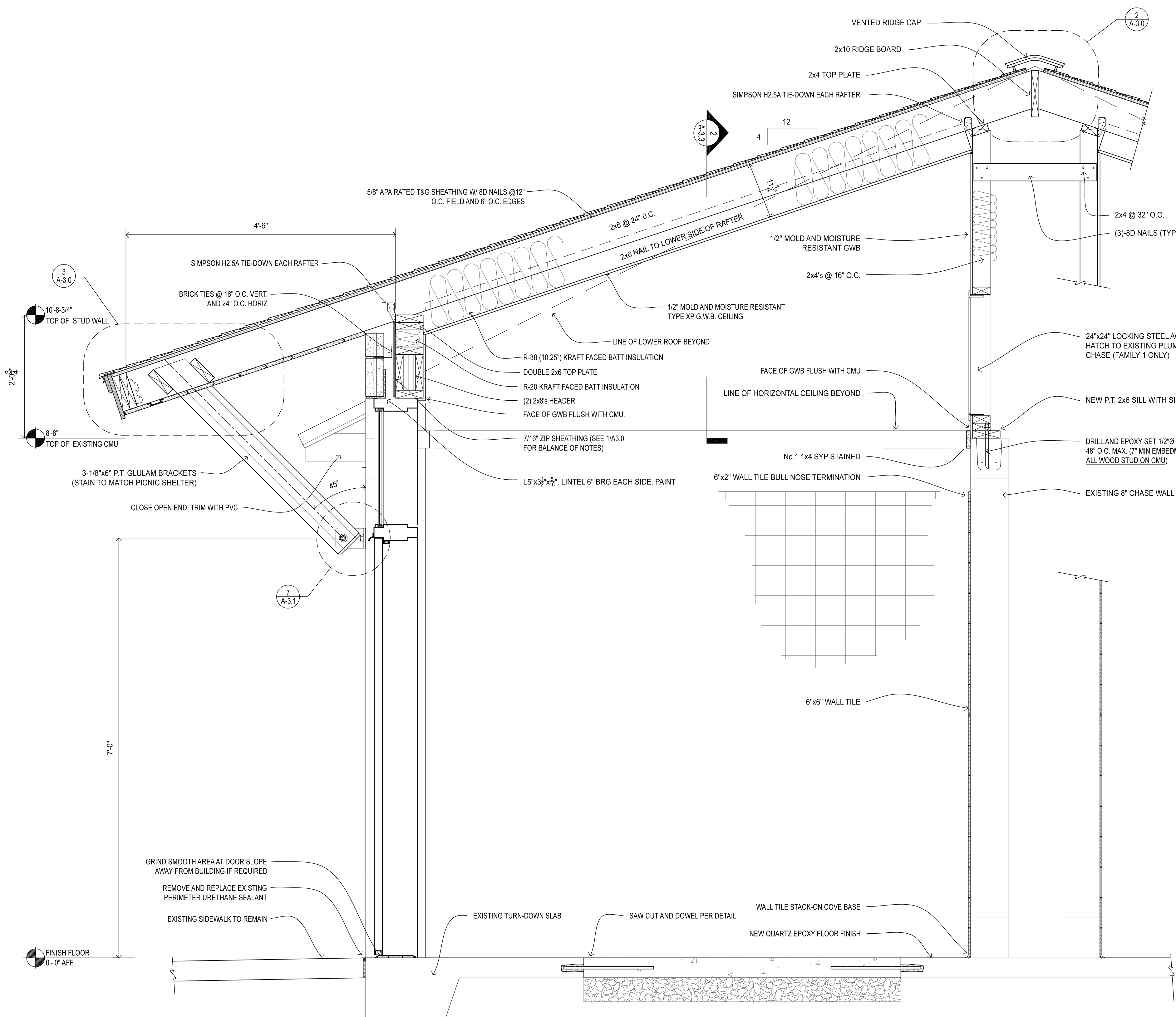
DORTON PARK
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SCALE: AS NOTED

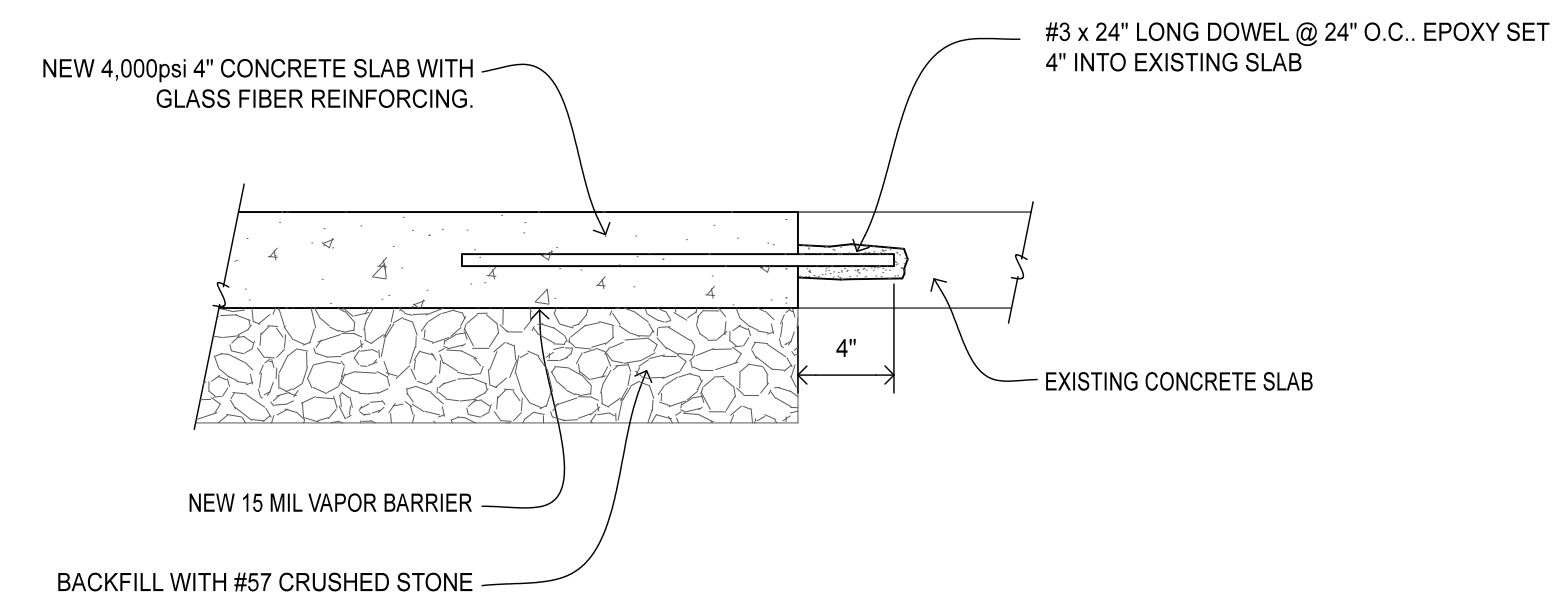
DATE: 05-04-23

SHEET NAME:
SECTIONS AND
DETAILS

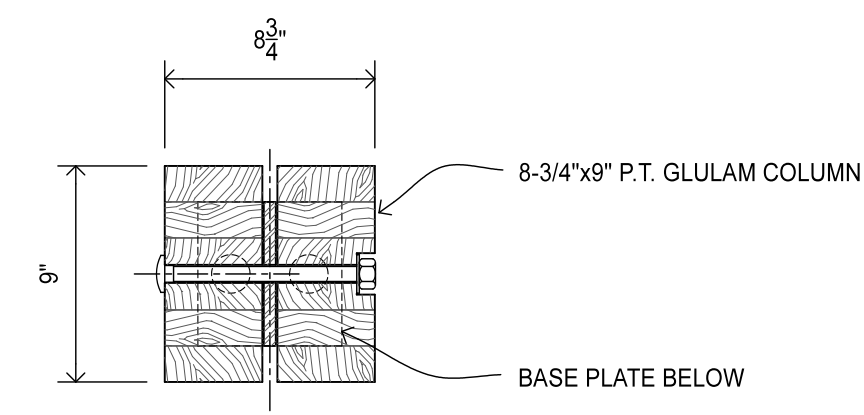
SHEET NO:
A 3.1



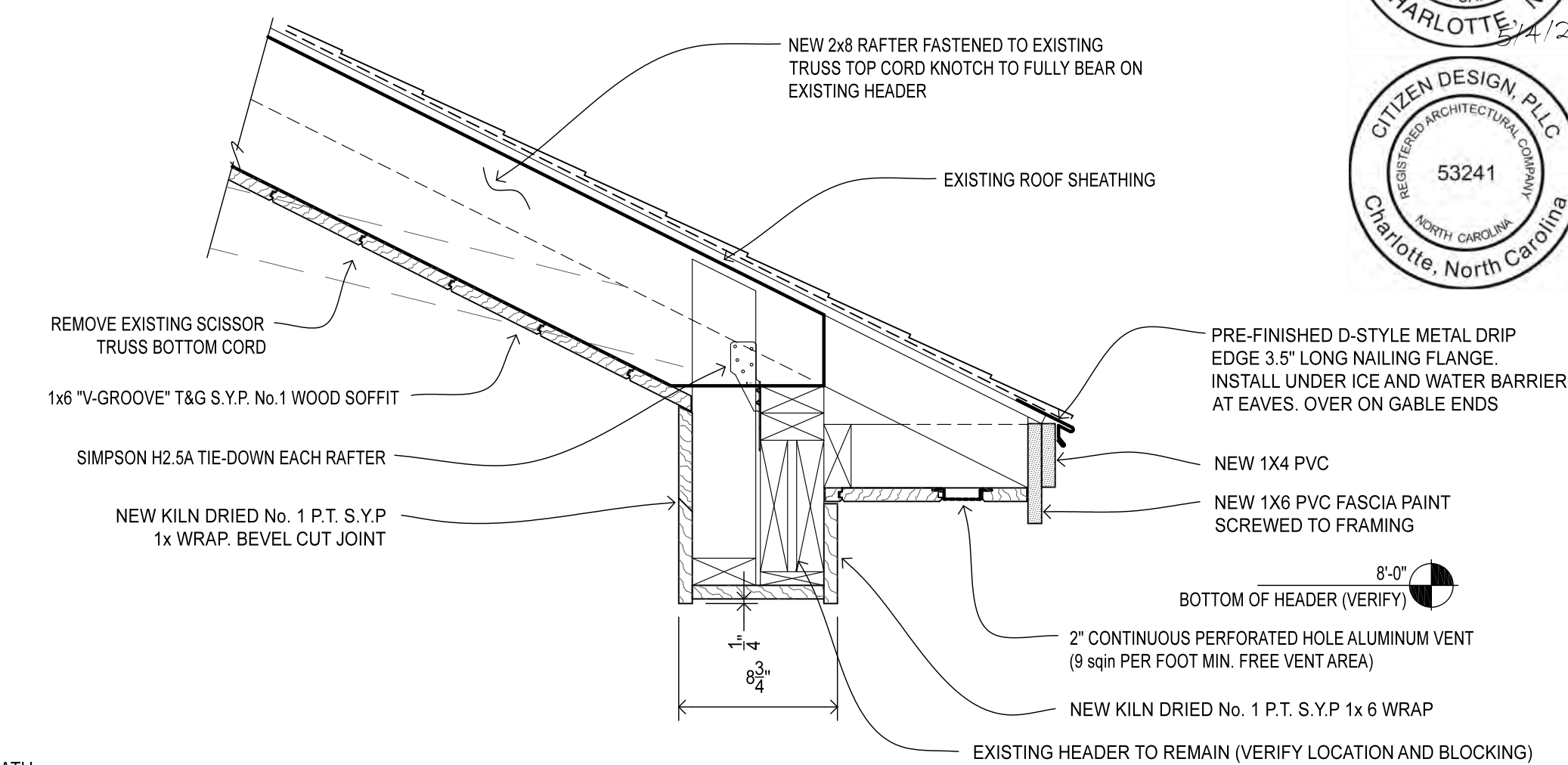
1 EXISTING WALL SECTION
A3.2 SCALE: 1" = 1'-0"



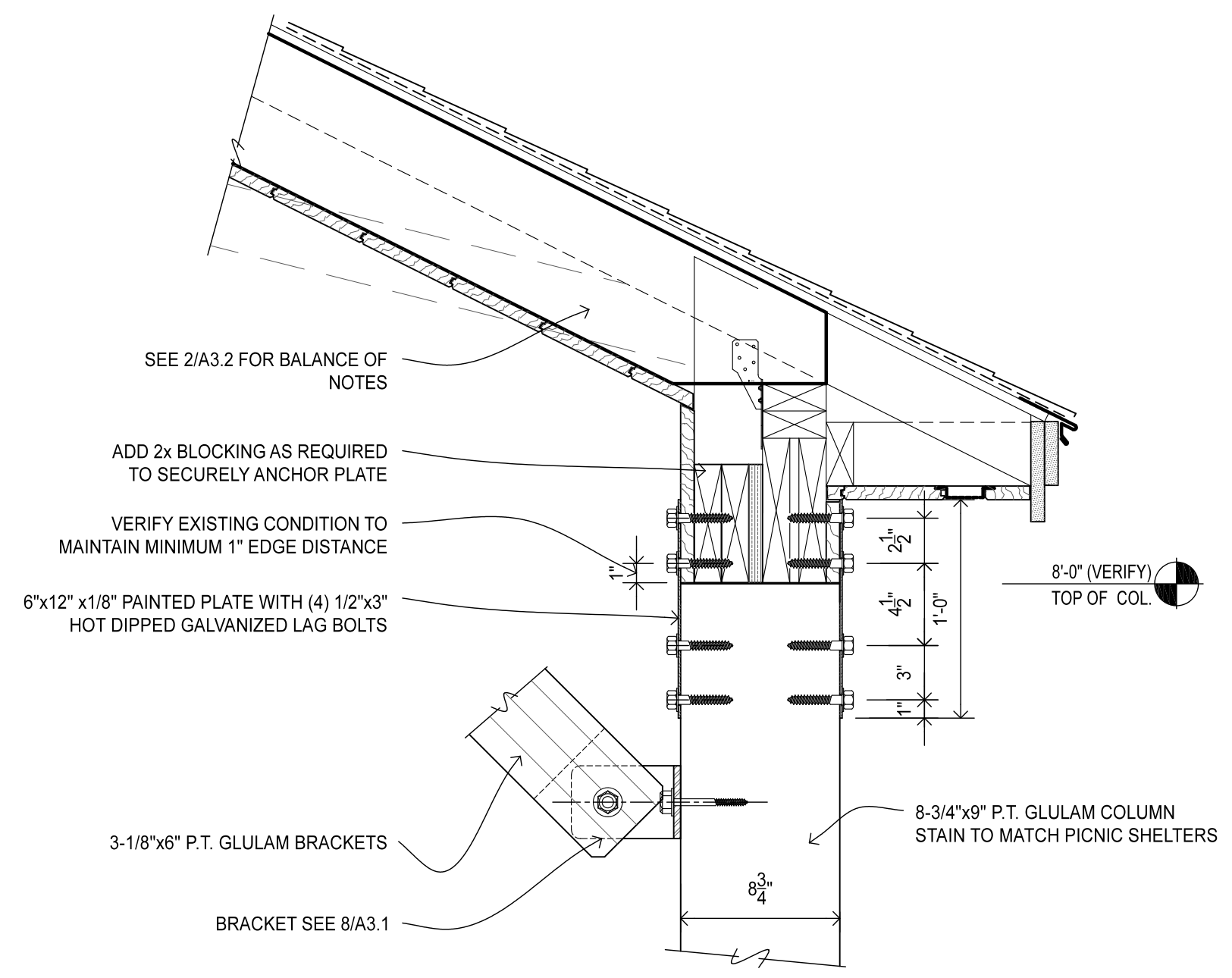
4 NEW TO EXISTING SLAB DETAIL
A3.2 SCALE: 1-1/2" = 1'-0"



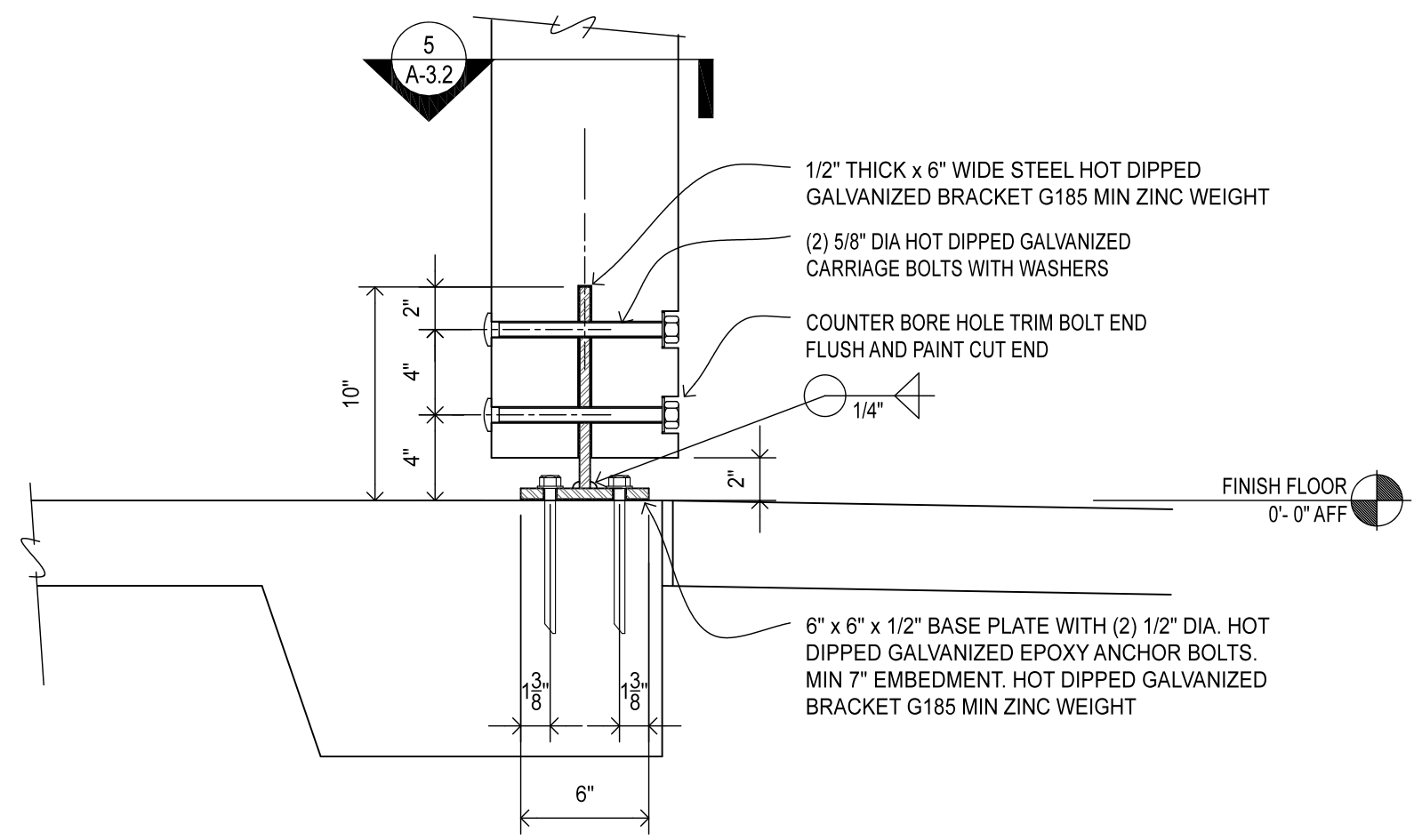
5 COLUMN SECTION
A3.2 SCALE: 1-1/2" = 1'-0"



2 EXISTING HEADER DETAIL
A3.2 SCALE: 1-1/2" = 1'-0"



6 TOP OF COLUMN DETAIL
A3.2 SCALE: 1-1/2" = 1'-0"



3 COLUMN BASE DETAIL
A3.2 SCALE: 1-1/2" = 1'-0"



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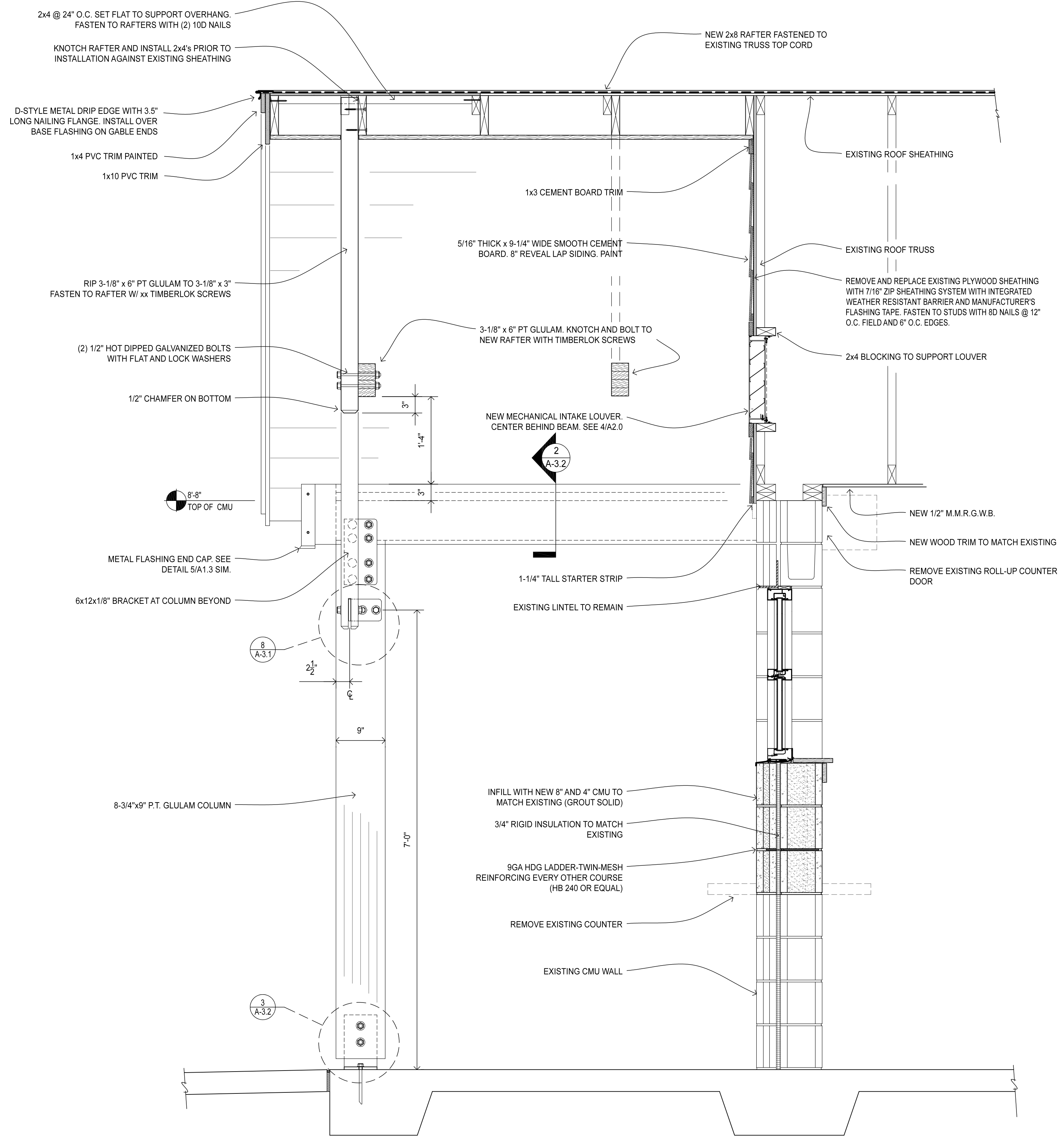
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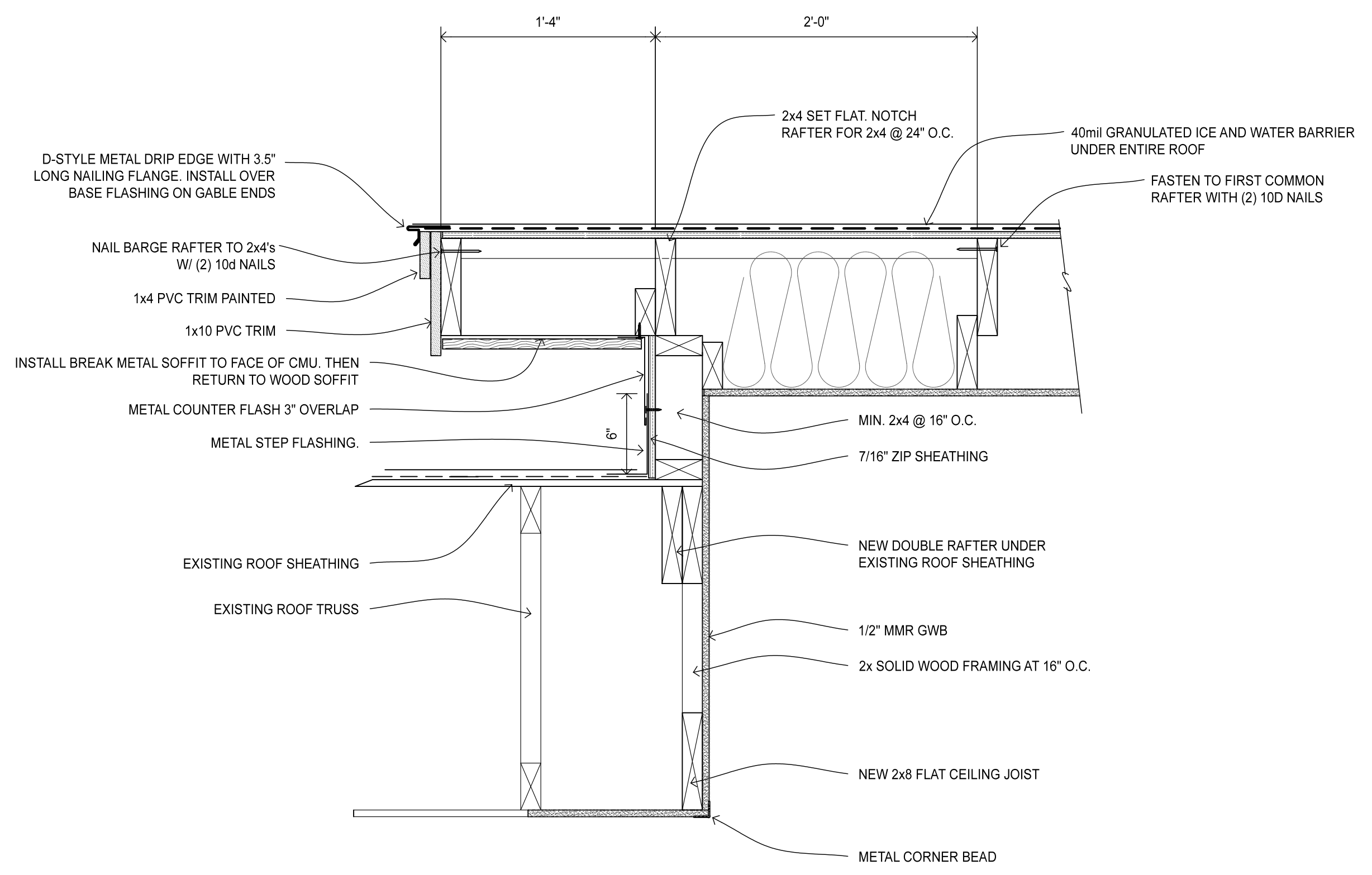
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EXISTING RESTROOM
SECTIONS AND
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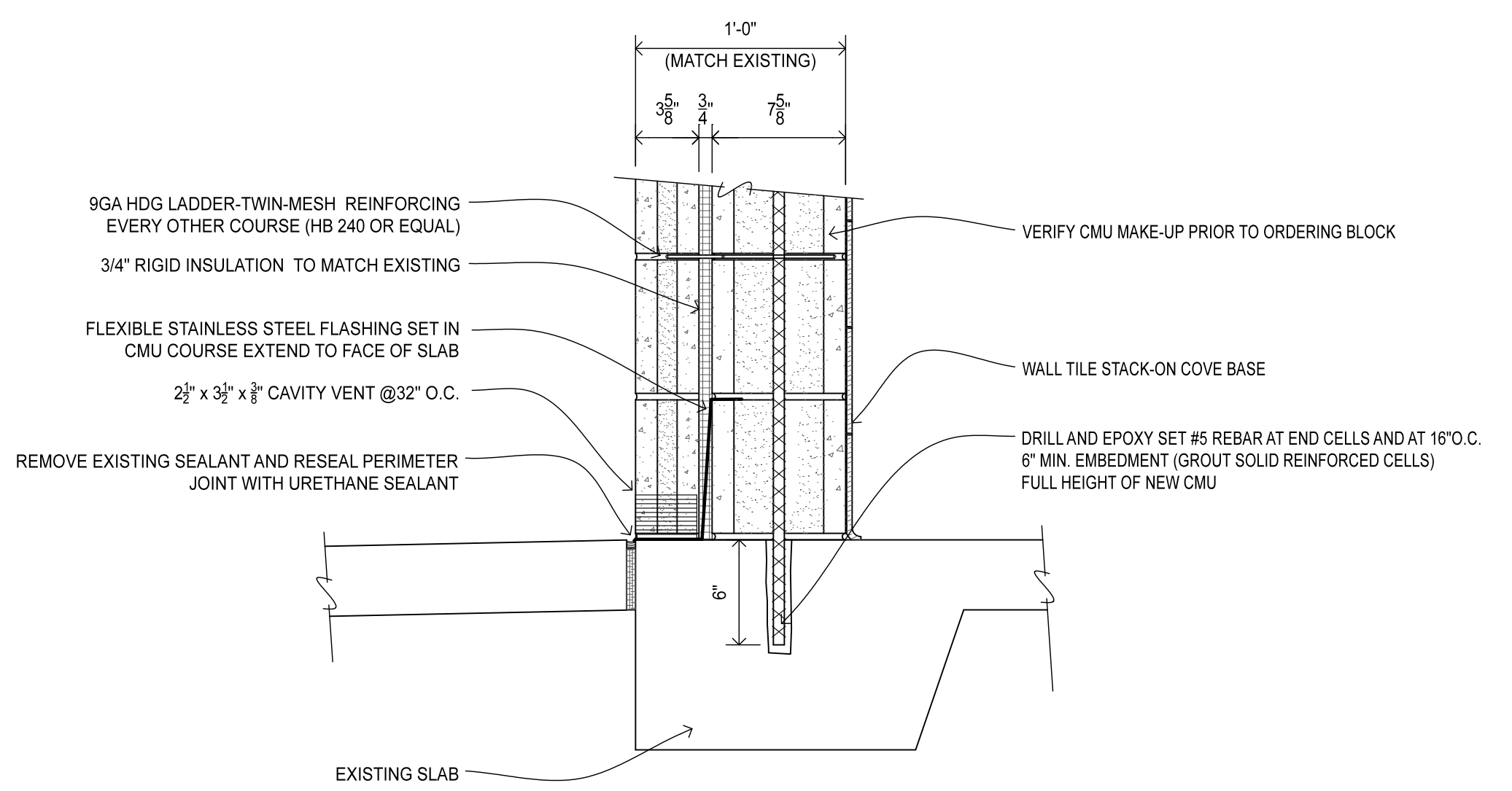
A 3.2



1 WALL SECTION
A3.3 SCALE: 1" = 1'-0"



2 SIDE DORMER SECTION
A3.3 SCALE: 1-1/2" = 1'-0"



3 CMU IN-FILL AT BASE
A3.3 SCALE: 1-1/2" = 1'-0"



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SCALE: AS NOTED
DATE: 05-04-23
SHEET NAME:
EXISTING RESTROOM
SECTIONS AND
DETAILS
SHEET NO:
A 3.3

DOOR SCHEDULE

| DOOR No. | DOOR | DOOR SIZE | FRAME | HARDWARE SET | COMMENTS |
|----------|-------|-------------|--------|--------------|---------------------|
| 01 | H.M. | 3'-0"x7'-0" | A | 01 | GLASS TRANSOM ABOVE |
| 02 | H.M. | 3'-0"x7'-0" | A | 01 | GLASS TRANSOM ABOVE |
| 03 | H.M. | 3'-0"x7'-0" | B | 02 | FLANGED DOOR LOUVER |
| 04 | H.M. | 3'-0"x7'-0" | C | 01 | GLASS TRANSOM ABOVE |
| 05 | H.M. | 3'-0"x7'-0" | C | 01 | GLASS TRANSOM ABOVE |
| 06 | H.M. | 3'-0"x7'-0" | E.T.R. | E.T.R. | SEE NOTE 2 |
| 07 | H.M. | 3'-0"x7'-0" | C | 01 | GLASS TRANSOM ABOVE |
| 08 | H.M. | 3'-0"x7'-0" | C | 01 | GLASS TRANSOM ABOVE |
| 09 | H.M. | 3'-0"x7'-0" | E.T.R. | E.T.R. | SEE NOTE 2 |
| 10 | METAL | 24" x 24" | | 03 | CHASE ACCESS DOOR |

E.T.R.: EXISTING TO REMAIN

DOOR NOTES:

- OWNER APPROVED SUBMISSION BY AHC CERTIFIED DOOR HARDWARE CONSULTANT REQUIRED BEFORE INSTALLATION OF DOORS AND HARDWARE.
 - ALL DOORS AND FRAMES TO BE PAINTED WITH TWO COATS OF HIGH GLOSS EPOXY PAINT. CLEAN PREP AND PAINT EXISTING DOORS AND FRAMES TO REMAIN. REPAIR ANY DENTS IN EXISTING WITH METAL FILLER.
 - DOOR HARDWARE TO MEET THE ACCESSIBILITY REQUIREMENTS OF ANSI 117.1 AND NC BUILDING CODE.
 - ALL DOOR HARDWARE TO MEET ANSI GRADE 1 STANDARDS FOR INSTITUTIONAL DUTY. INCLUDE ALL APPURTENANCES TO MAKE FULLY FUNCTIONAL AS INTENDED BY OWNER.
 - ALL HARDWARE TO BE STAINLESS STEEL. SATIN FINISH.
 - OWNER TO PROVIDE PERMANENT 7-PIN MEDECO CORES AT SUBSTANTIAL COMPLETION. CONTRACTOR TO PROVIDE REMOVABLE CONSTRUCTION CORES.
 - CONTRACTOR TO PROVIDE AND INSTALL KNOX BOX ON EXTERIOR OF BUILDINGS. COORDINATE LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.
- FRAME:**
- 14 GAGE GALVANIZED WELDED HOLLOW METAL FRAME. KNOCKDOWN FRAMES ARE NOT PERMITTED. EXPOSED WELDS TO BE GROUND AND FINISHED SMOOTH.
 - ALL HARDWARE LOCATIONS TO BE REINFORCED.
 - GALVANIZED METALS TO RECEIVE SHOP COAT OF PAINT-GRIP FINISH.
- METAL DOOR:**
- 16 GAGE FACE SHEETS AND INTERNAL STEEL STIFFENER CHANNELS.
 - GALVANIZED FLUSH HOLLOW METAL DOOR. INSULATED CORE (R2.2min.)
 - GALVANIZED METALS TO RECEIVE SHOP COAT OF PAINT-GRIP FINISH.

HARDWARE SET 01:

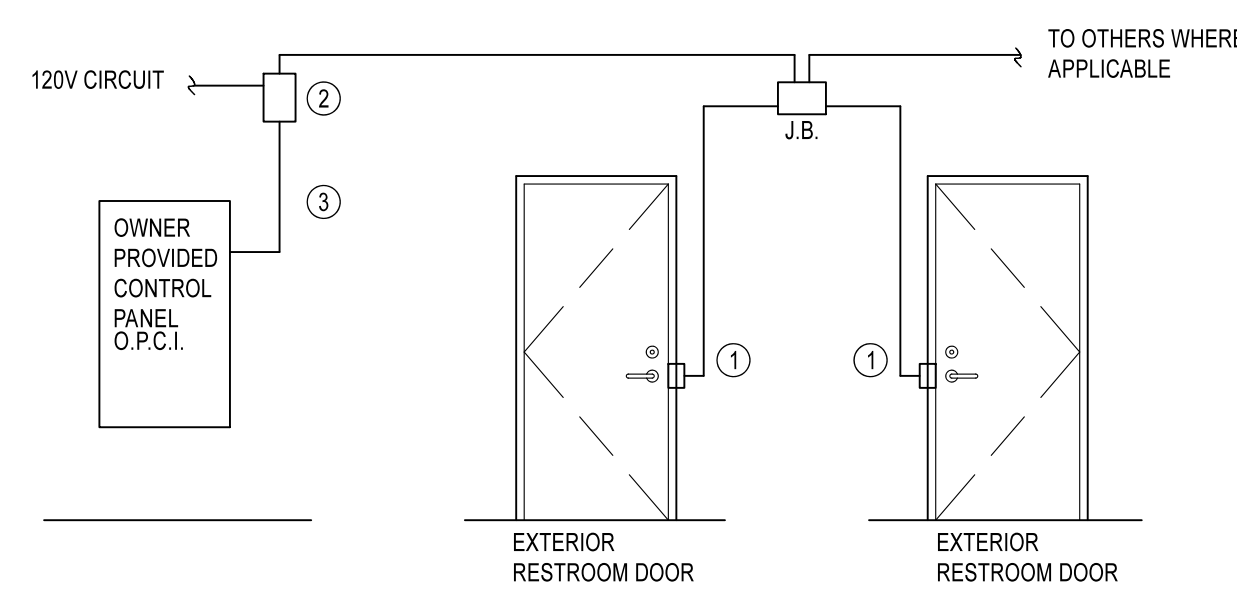
- CORE:** MEDECO INTERCHANGEABLE - TO MATCH OWNER'S LARGE FORMAT 7-PIN TO ACCEPT MEDECO INTERCHANGEABLE CORES. INTEGRATED STAINLESS STEEL TRIM WITH LOCKSET
- LOCKSET:** CLASSROOM FUNCTION. SINGLE CYLINDER FULL MORTISE. INSTITUTIONAL DUTY WITH ANSI-117.1 COMPLIANT WITHNELL ROUNDED PROFILE CAST STAINLESS STEEL LEVERS. LOCKABLE/ UNLOCKABLE WITH KEY FROM EXTERIOR. LATCH BOLT ALWAYS RETRACTS FROM INTERIOR (INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EGRESS). PROVIDE INTERIOR LOCKING TOGGLE ON MORTISE LOCKSET THAT IS RELEASED WHEN LEVER PUSHED. PROVIDE POWER, CONDUIT AND JUNCTION BOXES FOR OWNERS FUTURE DOOR ACCESS SYSTEM. SEE DIAGRAM BELOW.
- ESCUTCHEON:** INTEGRAL 2"x 8" MINIMUM SIZE. .050 STAINLESS STEEL BOTH SIDES OF DOOR
- HINGES:** HEAVY WEIGHT 5 KNUCKLE BALL BEARING STAINLESS STEEL (3) PER DOOR
- CLOSER:** VANDAL RESISTANT WITH CAST IRON BODY. FORGED PARALLEL ARMS AND POSITIVE STOP HOLD OPEN. METAL COVER. MOUNT ON INTERIOR SIDE OF DOOR
- THRESHOLD:** 8" WIDE INDUSTRIAL DUTY ALUMINUM (NPG 428E OR EQUAL) ANSI-117.1 COMPLIANT (VERIFY EPOXY FLOOR THICKNESS).
- KICK PLATE:** 12"x34" x .050 STAINLESS STEEL. MOUNT ON PUSH SIDE OF DOOR.
- DRIP CAP:** ALUMINUM MOUNTED TO FRAME EXTERIOR
- SWEEP:** ALUMINUM WITH NYLON BRISTLES
- SEALS:** ALUMINUM WITH HEAVY DUTY BULB TYPE SEALS
- ROOM SIGN:** CAST ALUMINUM RESTROOM NAME SIGN WITH CONTRASTING RAISED BOARDER AND TEXT MEETING THE ACCESSIBILITY REQUIREMENTS OF ANSI-117.1

HARDWARE SET 02:

- CORE:** MEDECO INTERCHANGEABLE - TO MATCH OWNER'S LARGE FORMAT 7-PIN TO ACCEPT MEDECO INTERCHANGEABLE CORES. INTEGRATED STAINLESS STEEL TRIM WITH LOCKSET
- LOCKSET:** STOREROOM FUNCTION. SINGLE CYLINDER FULL MORTISE. INSTITUTIONAL DUTY WITH ANSI-117.1 COMPLIANT CAST STAINLESS STEEL WITHNELL ROUNDED PROFILE LEVERS. ONLY LOCKABLE WITH KEY FROM EXTERIOR. EXTERIOR LEVER IS INOPERATIVE. LATCH BOLT ALWAYS RETRACTS FROM INTERIOR (INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EGRESS).
- HINGES:** HEAVY WEIGHT 5 KNUCKLE BALL BEARING STAINLESS STEEL (3) PER DOOR
- CLOSER:** VANDAL RESISTANT WITH CAST IRON BODY. FORGED PARALLEL ARMS AND HOLD OPEN. METAL COVER. MOUNT ON INTERIOR SIDE OF DOOR.
- WALL STOP:** INDUSTRIAL DUTY STAINLESS STEEL WALL MOUNT WITH RUBBER BUMPER
- THRESHOLD:** 8" WIDE INDUSTRIAL DUTY ALUMINUM (NPG 428E OR EQUAL) ANSI-117.1 COMPLIANT (VERIFY EPOXY FLOOR THICKNESS).
- KICK PLATE:** 12"x34" x .050 STAINLESS STEEL. MOUNT ON PUSH SIDE OF DOOR.
- DRIP CAP:** ALUMINUM MOUNTED TO FRAME EXTERIOR
- SWEEP:** ALUMINUM WITH NYLON BRISTLES
- SEALS:** ALUMINUM WITH HEAVY DUTY BULB TYPE SEALS
- ESCUTCHEONS:** 2-1/8" x 8" .050 STAINLESS STEEL. PROVIDE ON BOTH SIDES OF DOOR.

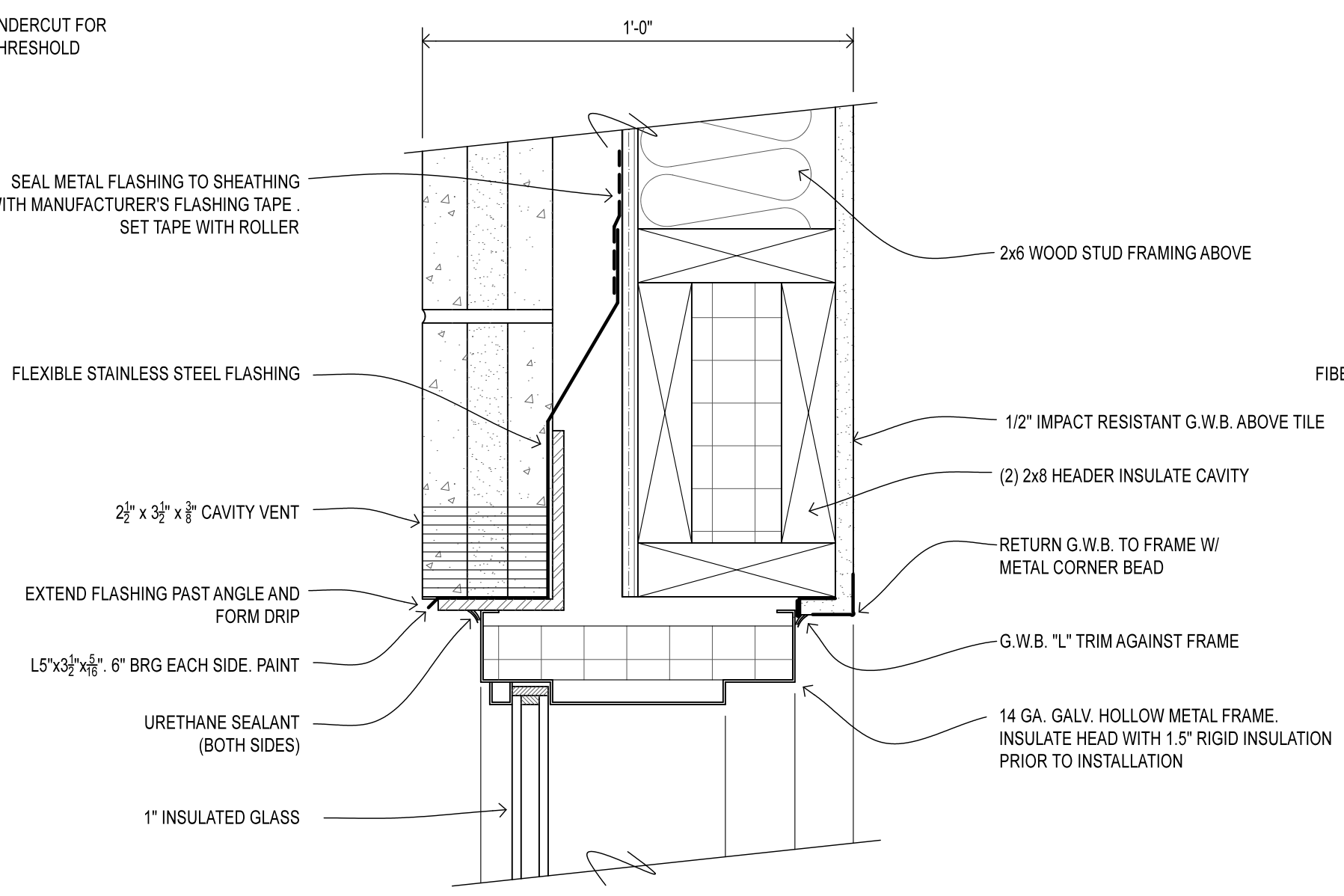
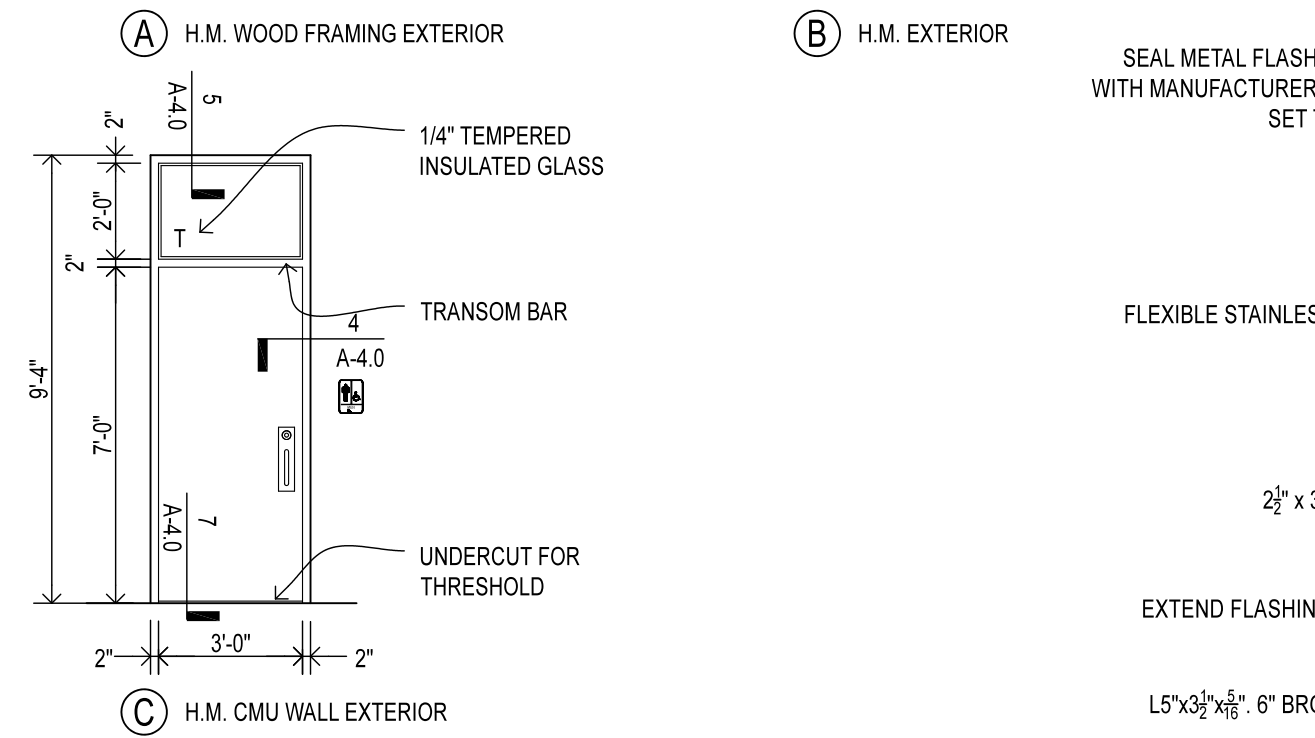
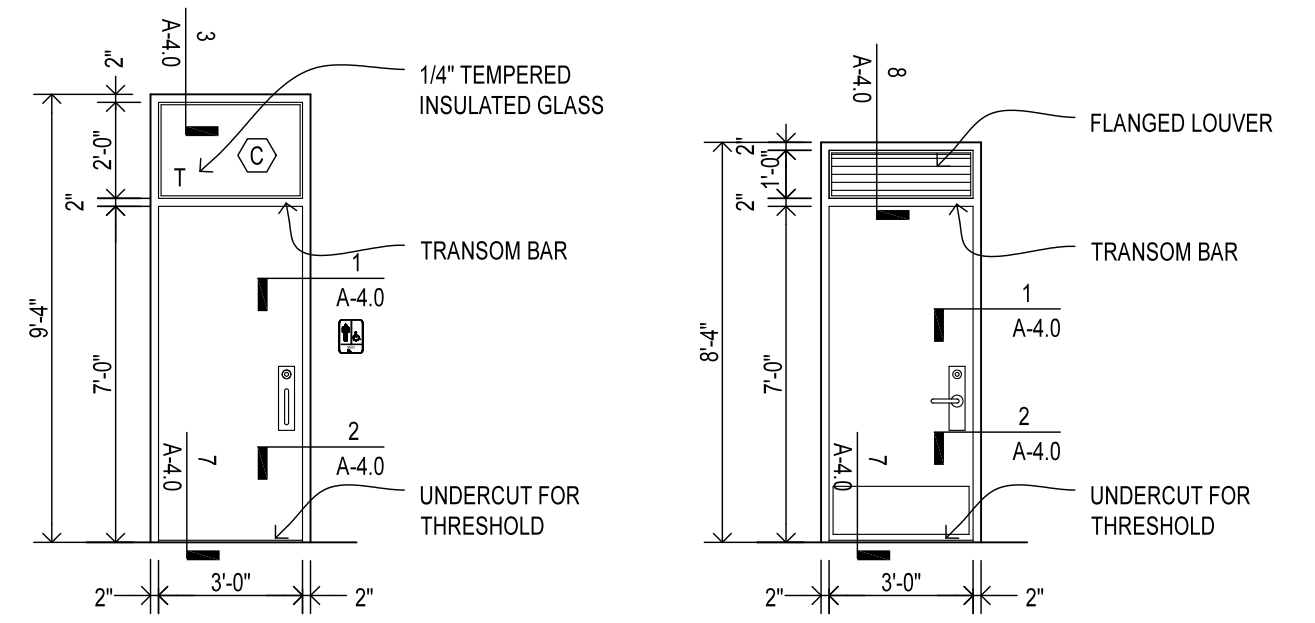
HARDWARE SET 03:

- DOOR:** 24"x24" 16GA METAL ACCESS DOOR. FULL LENGTH PIANO HINGE. KEY OPERATED. MORTISE PREPPED FOR REMOVABLE CORE LOCKSET
- CORE:** MEDECO INTERCHANGEABLE - TO MATCH OWNER'S LARGE FORMAT 7-PIN TO ACCEPT MEDECO INTERCHANGEABLE 7-PIN LARGE FORMAT CORE.

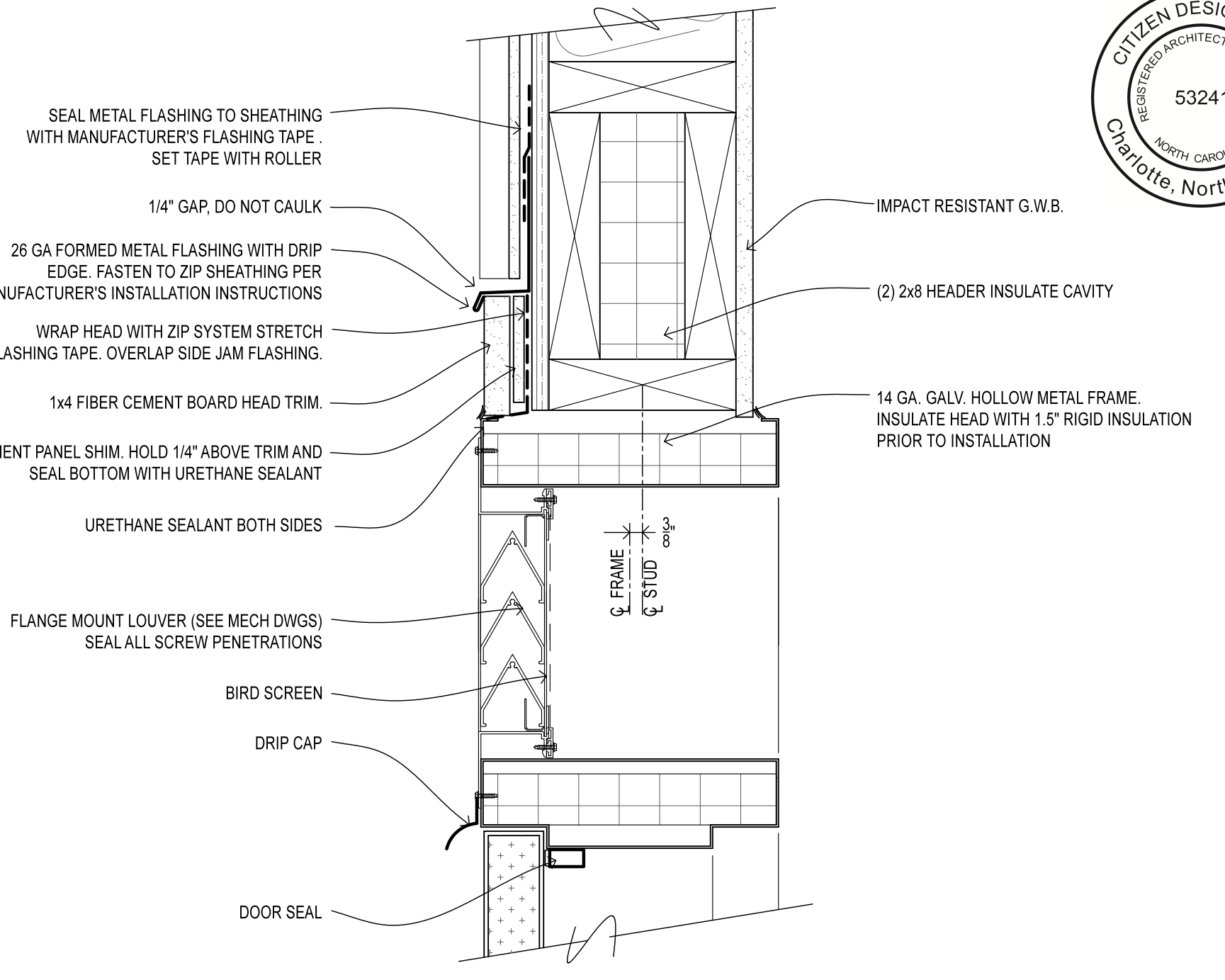


(FUTURE) DOOR ACCESS CONTROL SCHEMATIC (SEE ELECTRICAL DRAWINGS):

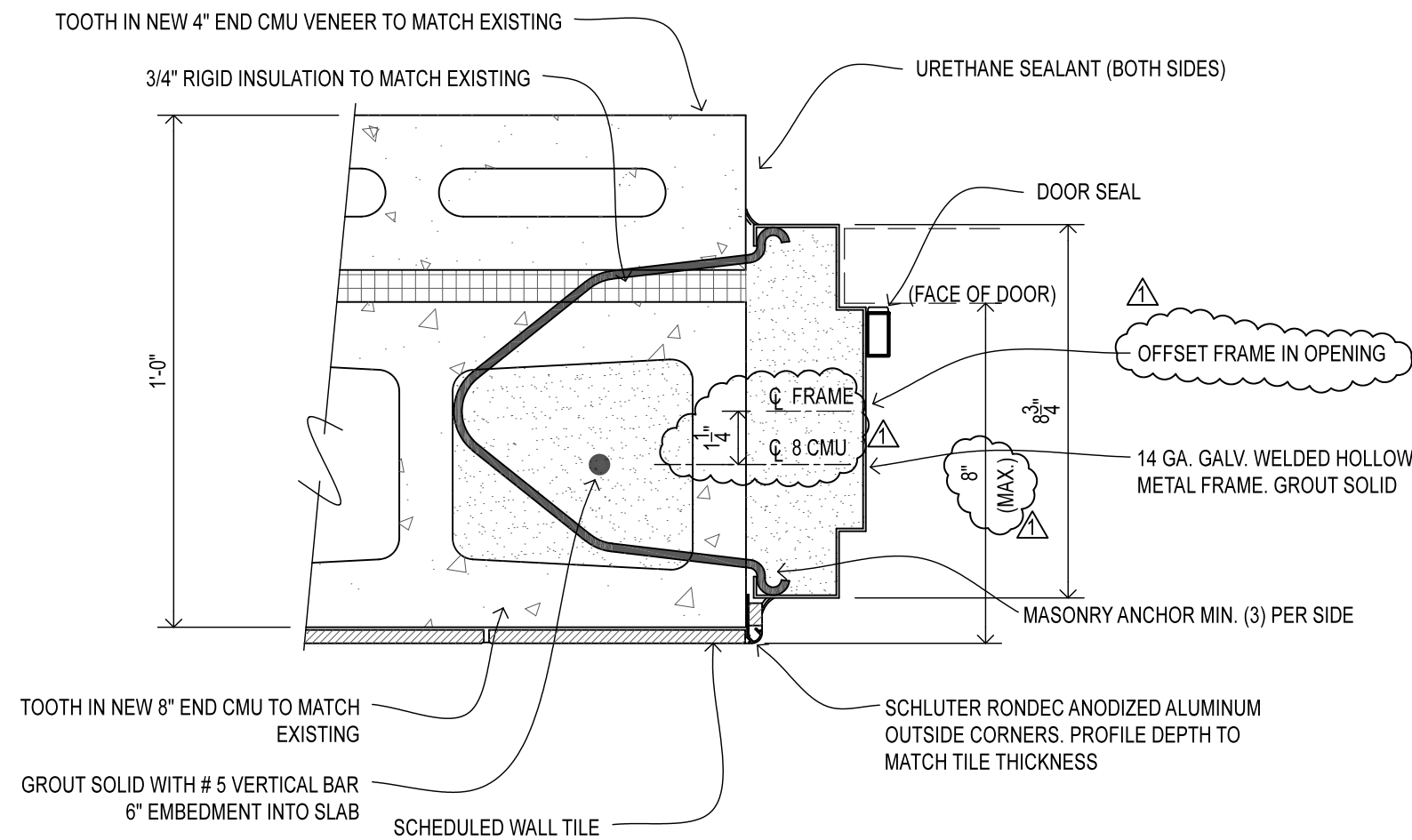
- PROVIDE POWER, CONDUIT AND JUNCTION BOXES TO ALL RESTROOM DOORS FOR FUTURE ELECTRONIC STRIKE (HES 1006-630, FAIL SAFE OPTION). STRIKE SHALL PREVENT ENTRY WHEN ACTIVATED AND ALLOW EXIT AT ALL TIMES. DOOR SHALL AUTOMATICALLY UNLOCK DUE TO LOSS OF POWER
- JUNCTION BOX FOR FUTURE 120V SINGLE POLE CONTACTOR/ RELAY WITH MANUAL SWITCH LOCATED AT ELECTRICAL PANELS.
- PROVIDE 3/4"Ø CONDUIT TO REMOTE CONTROL PANEL.



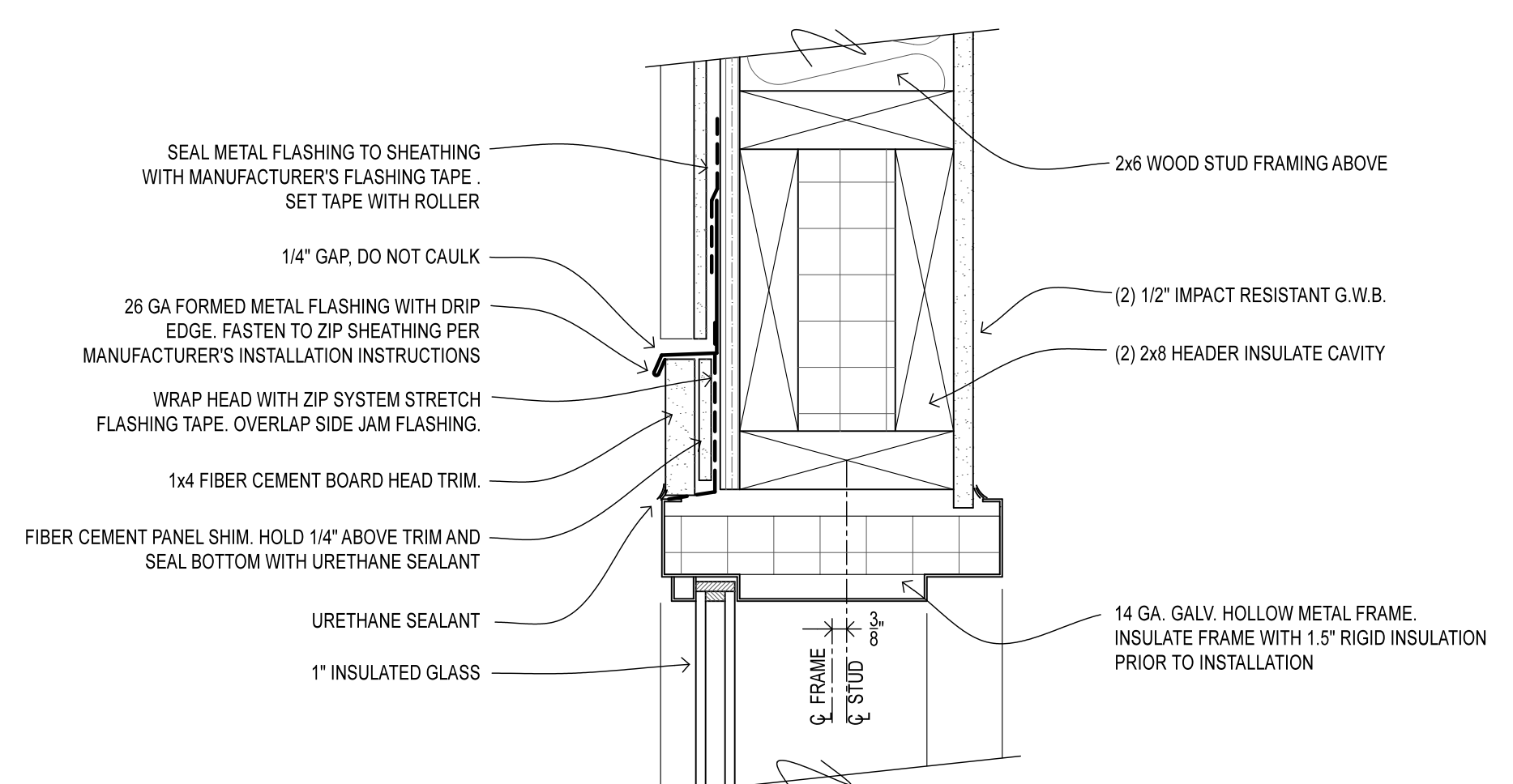
5 CMU/ WOOD DOOR HEAD WITH TRANSOM
A4.0 SCALE: 3"=1'-0"



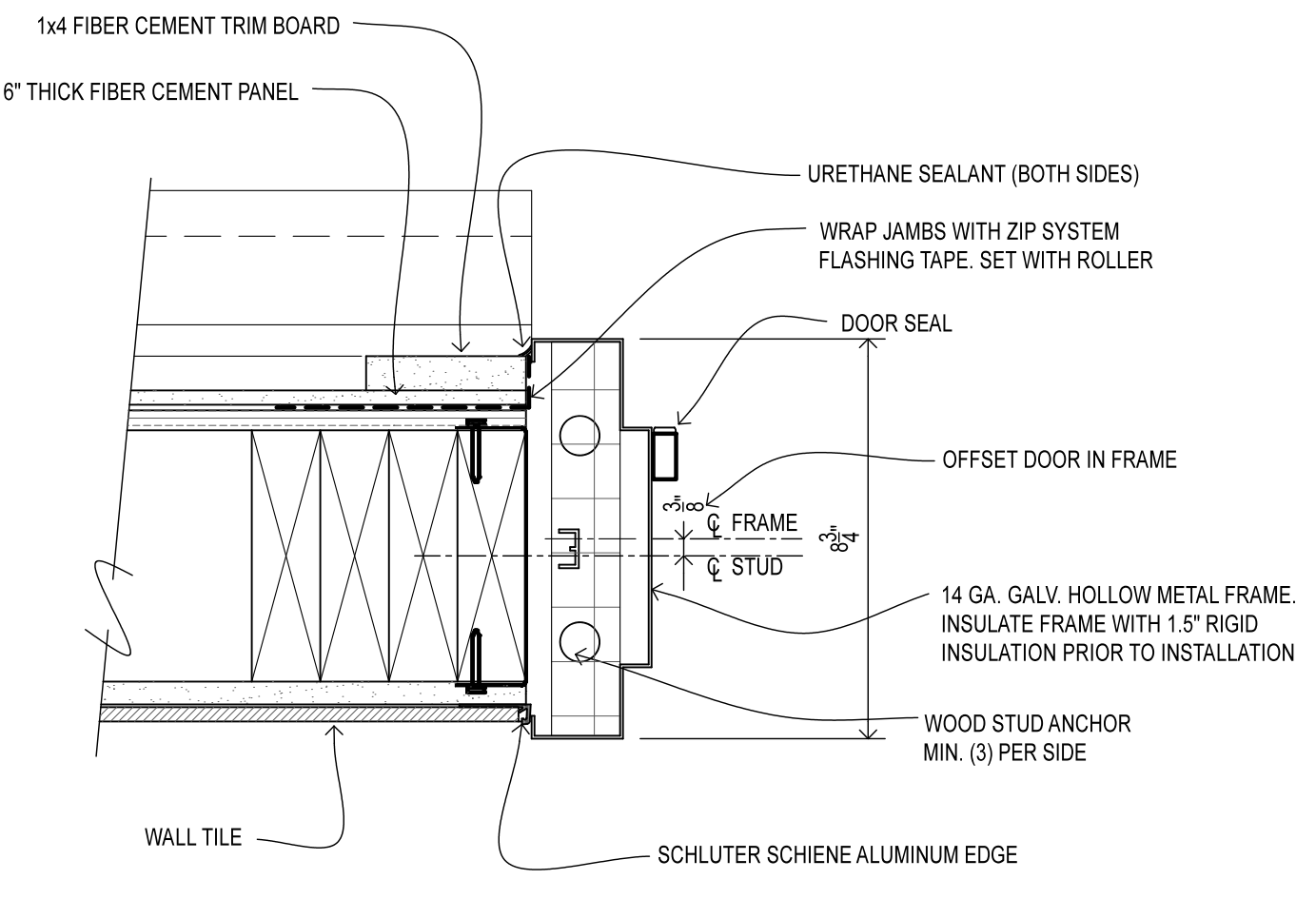
8 DOOR HEAD W/ LOUVER
A4.0 SCALE: 3"=1'-0"



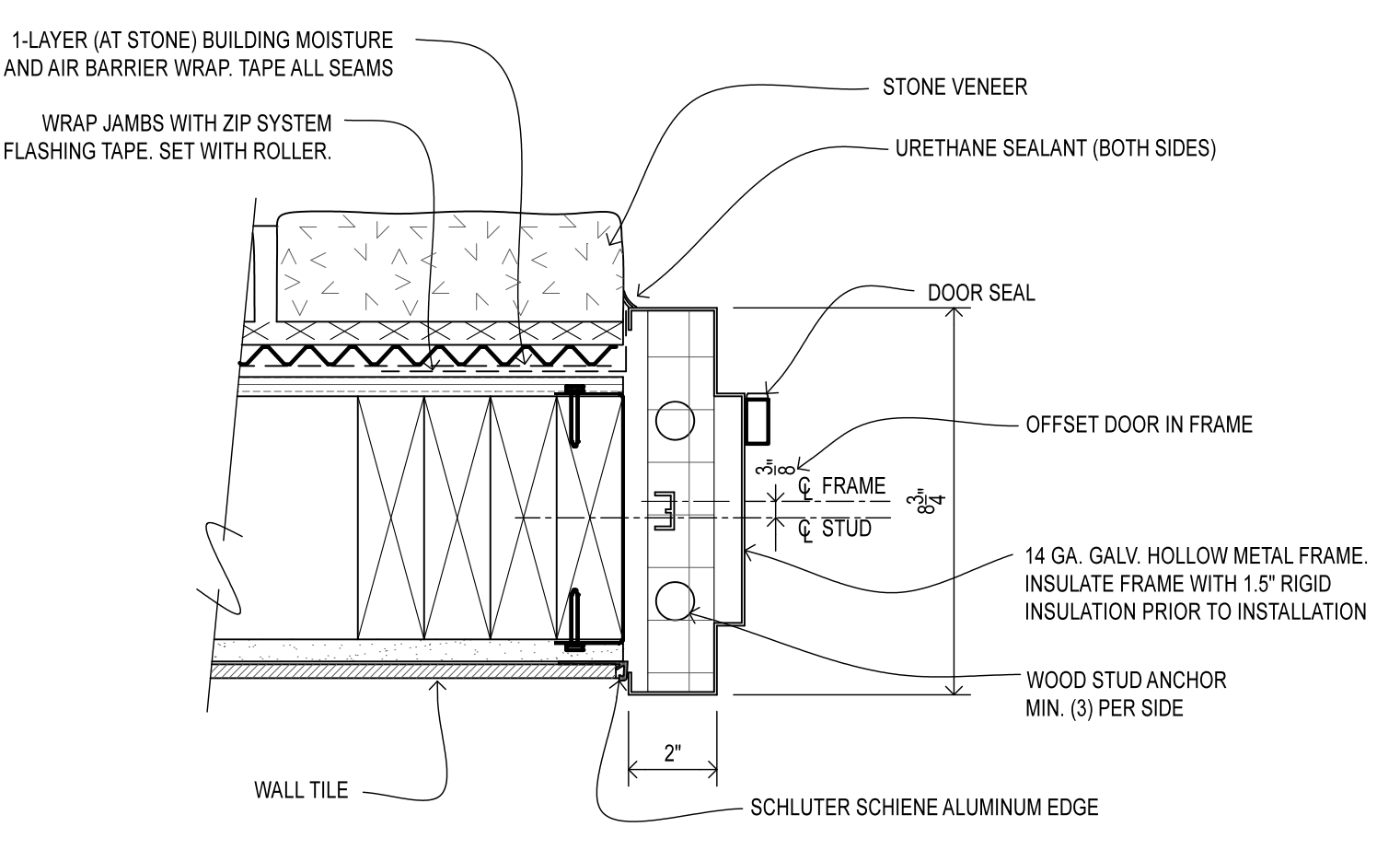
4 CMU DOOR JAMB
A4.0 SCALE: 3"=1'-0"



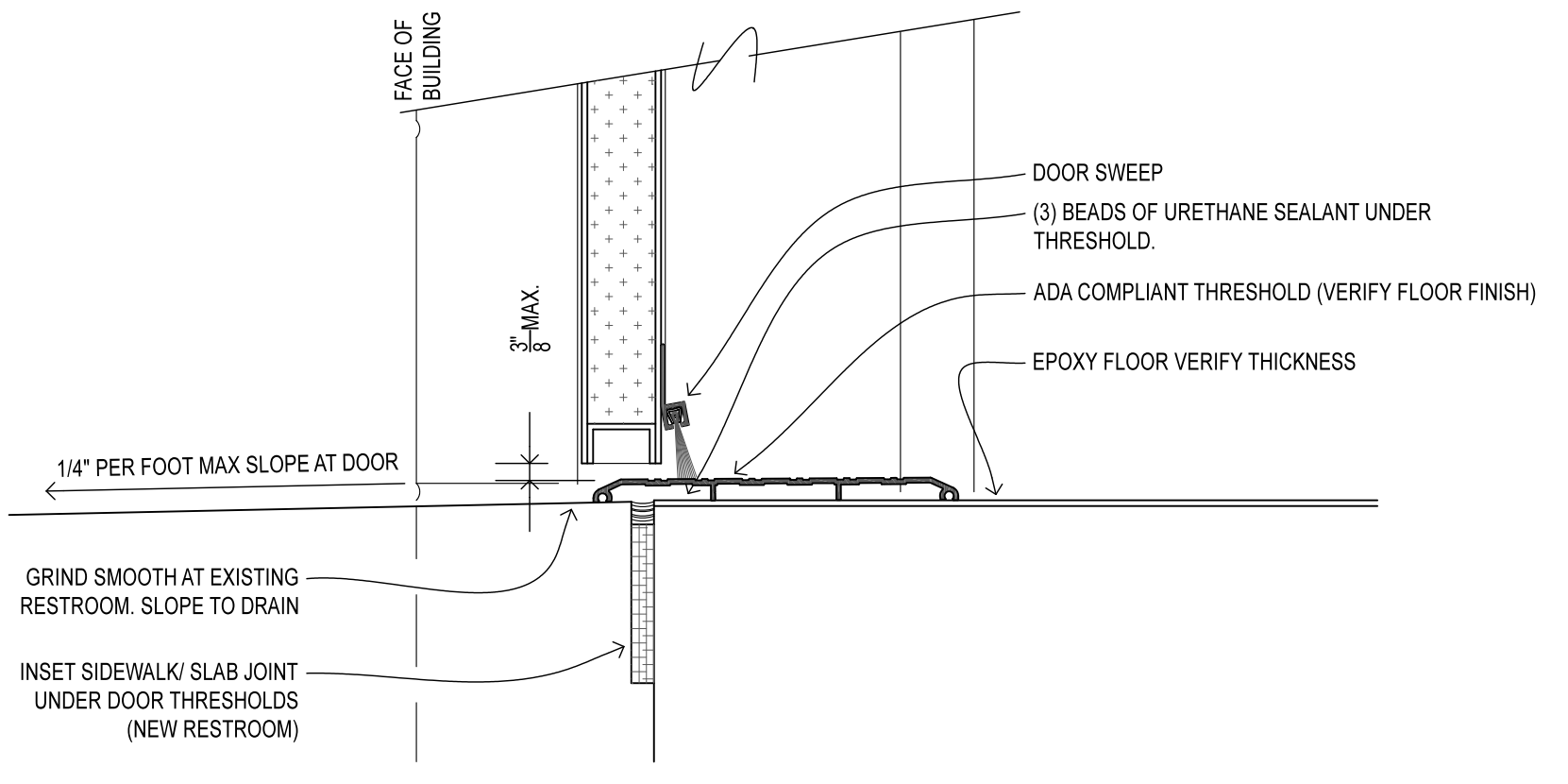
3 DOOR HEAD W/ GLASS TRANSOM
A4.0 SCALE: 3"=1'-0"



1 WOOD STUD UPPER DOOR JAMB
A4.0 SCALE: 3"=1'-0"

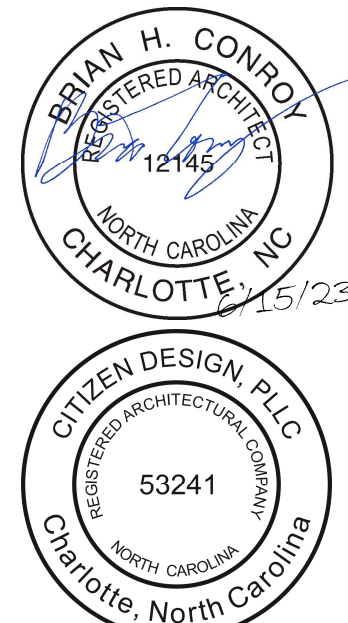


2 WOOD STUD LOWER DOOR JAMB
A4.0 SCALE: 3"=1'-0"



7 DOOR THRESHOLD
A4.0 SCALE: 3"=1'-0"

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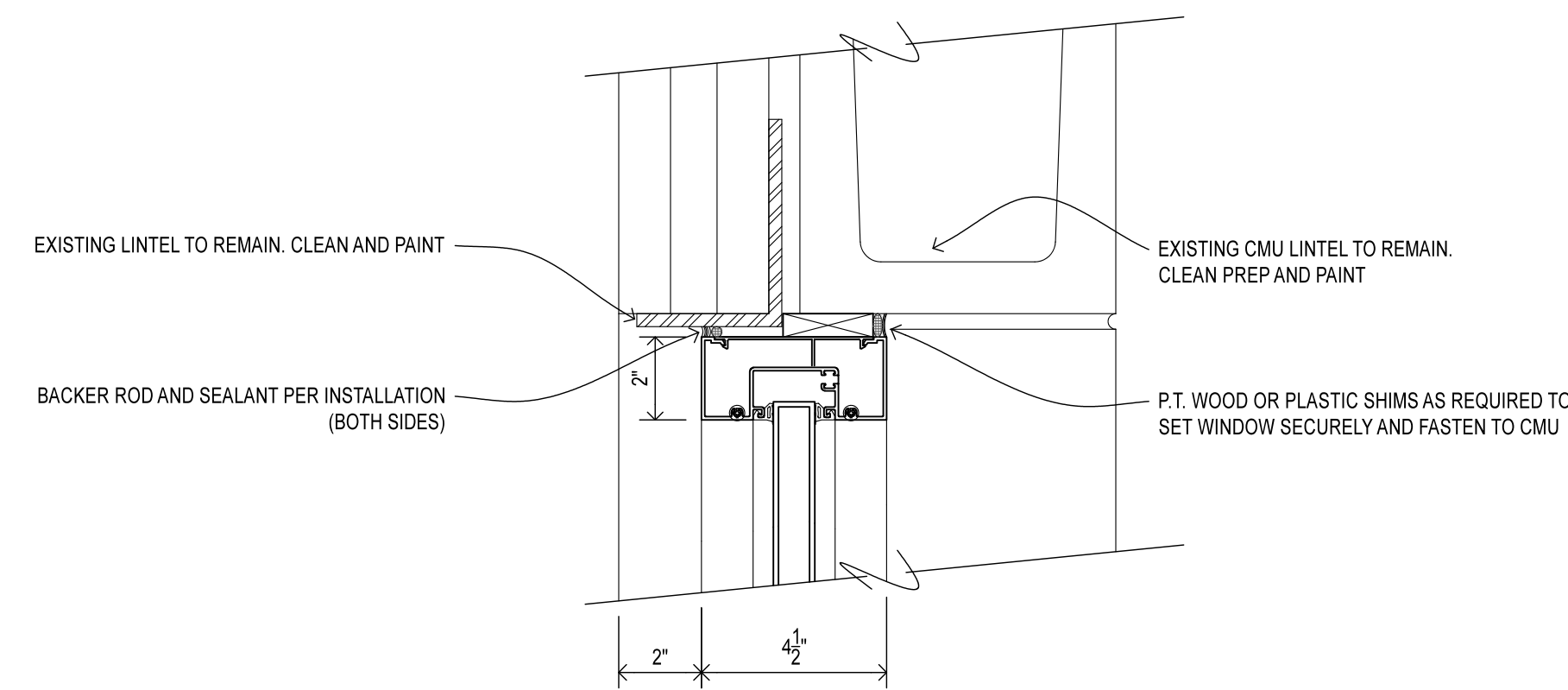
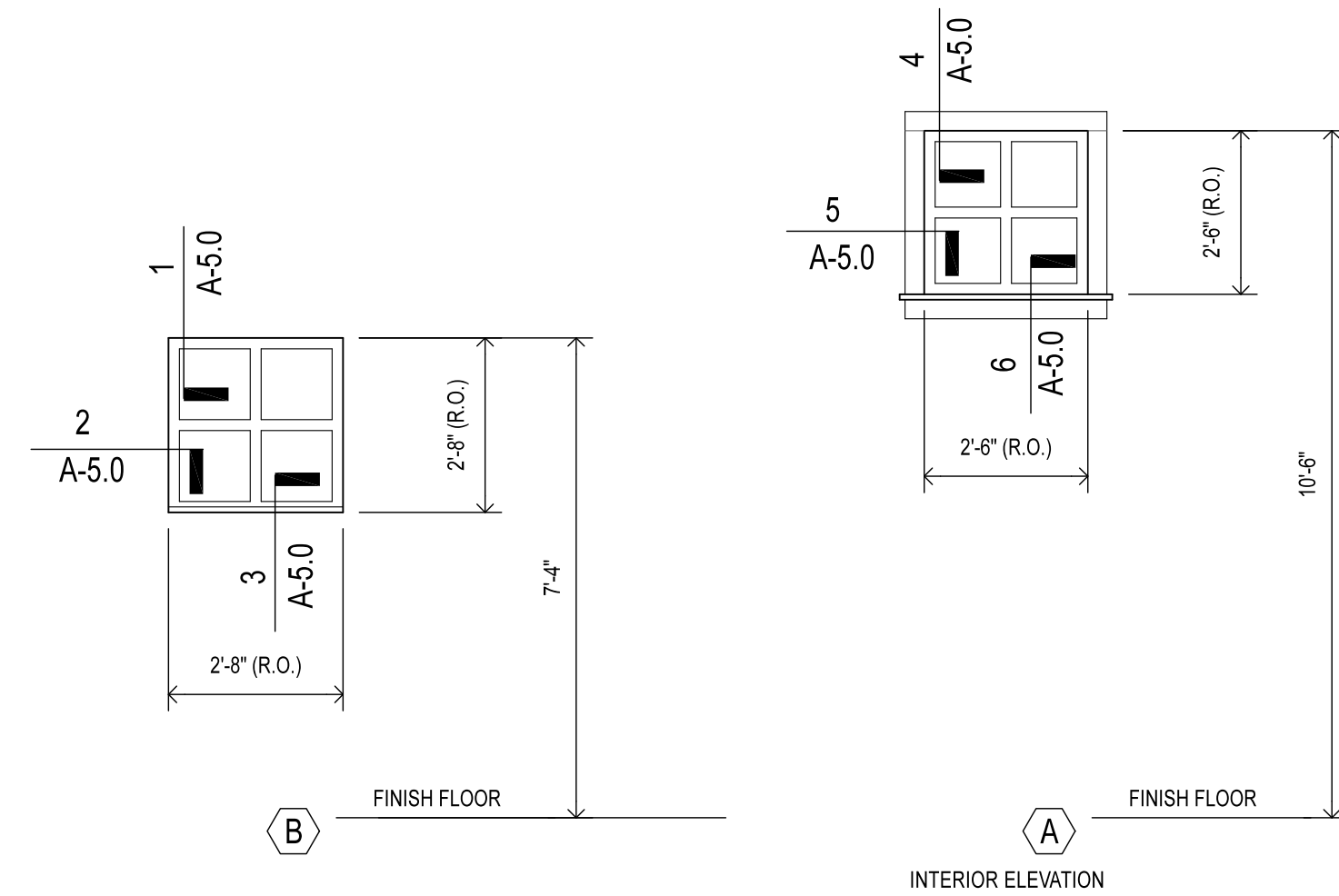
OWNER:

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5650 POPLAR TENT ROAD
CONCORD, NORTH CAROLINA

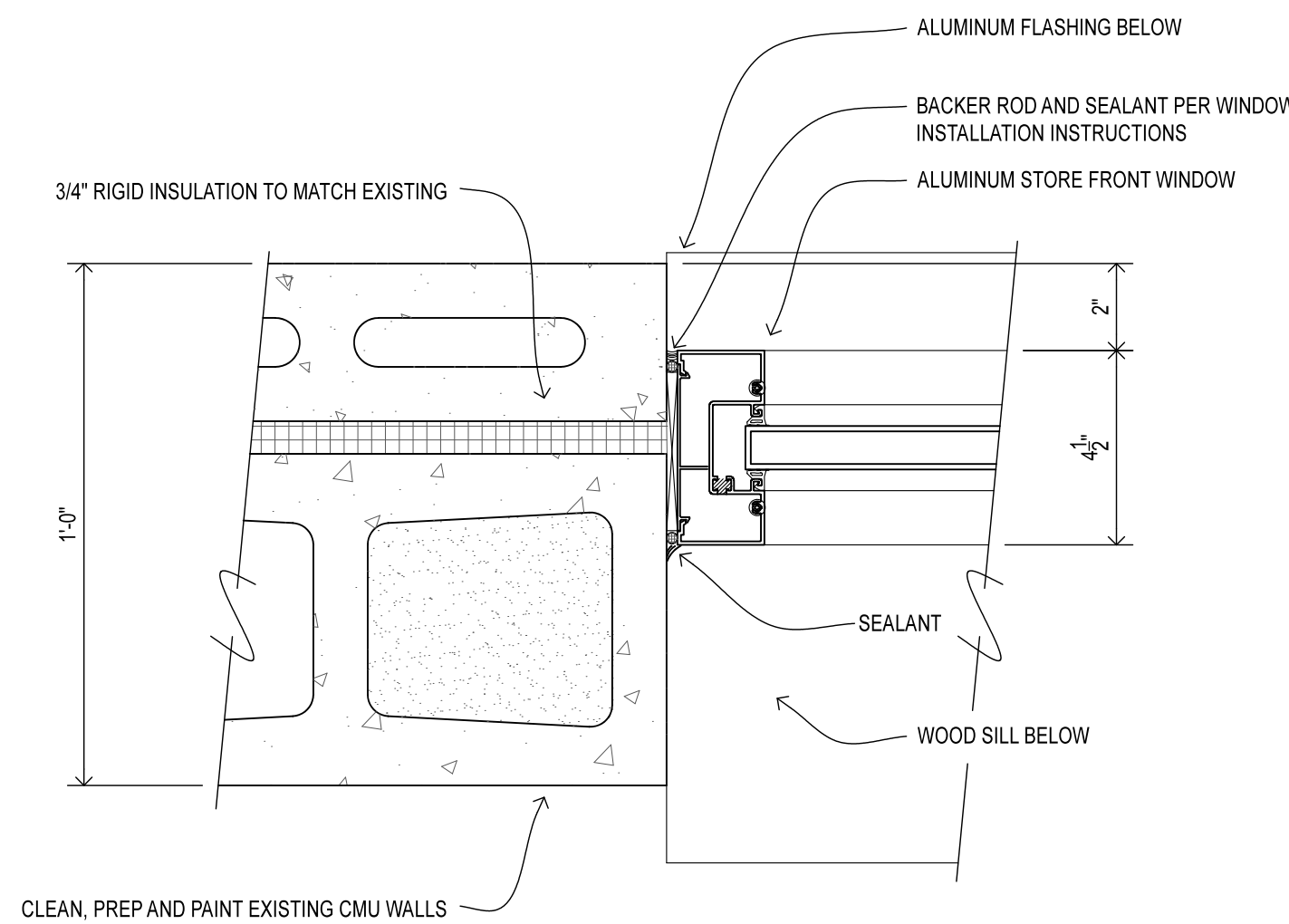
SCALE: AS NOTED
DATE: 05-04-23
SHEET NAME:
DOOR SCHEDULE AND DETAILS
SHEET NO:
A 4.0

| WINDOW SCHEDULE | | | | |
|-----------------|-------------------------------|----------|-------------|---|
| WINDOW TYPE | FRAME AND MULLIONS | MAX SHGC | MAX U VALUE | COMMENTS |
| (A) | 2"x4-1/2" ALUMINUM STOREFRONT | 0.33 | 0.45 | REHEED GLASS IN INTERIOR PANE 1" INSULATED GLAZING |
| (B) | 2"x4-1/2" ALUMINUM STOREFRONT | 0.33 | 0.45 | 1" INSULATED GLAZING |
| (C) | HOLLOW METAL DOOR TRANSOME | 0.33 | 0.45 | 1" INSULATED GLAZING TEMPERED, REEDED INTERIOR GLASS |

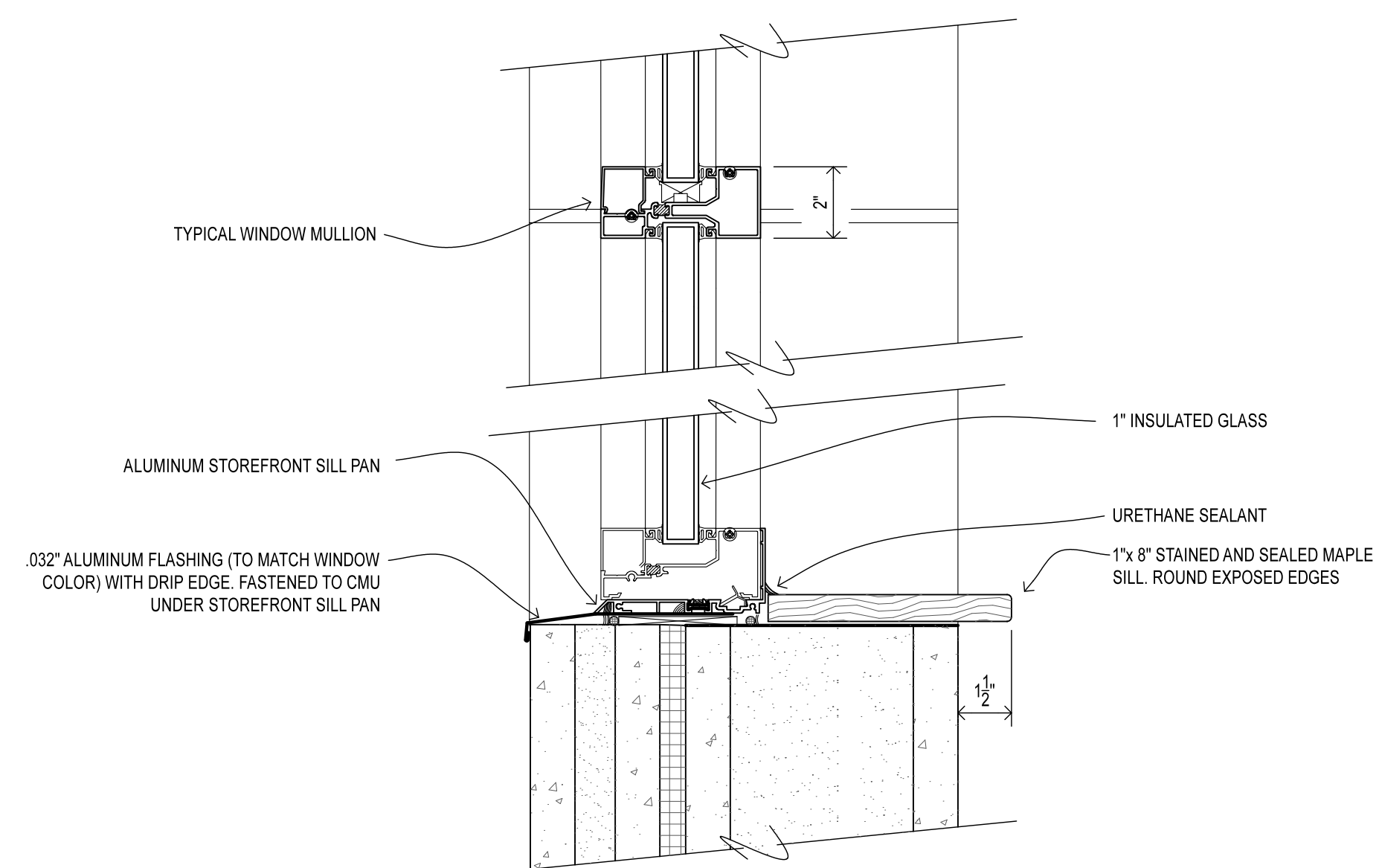
ALUMINUM STOREFRONT: THERMALLY BROKEN, SCREW SPLINED, BRONZE ANODIZED



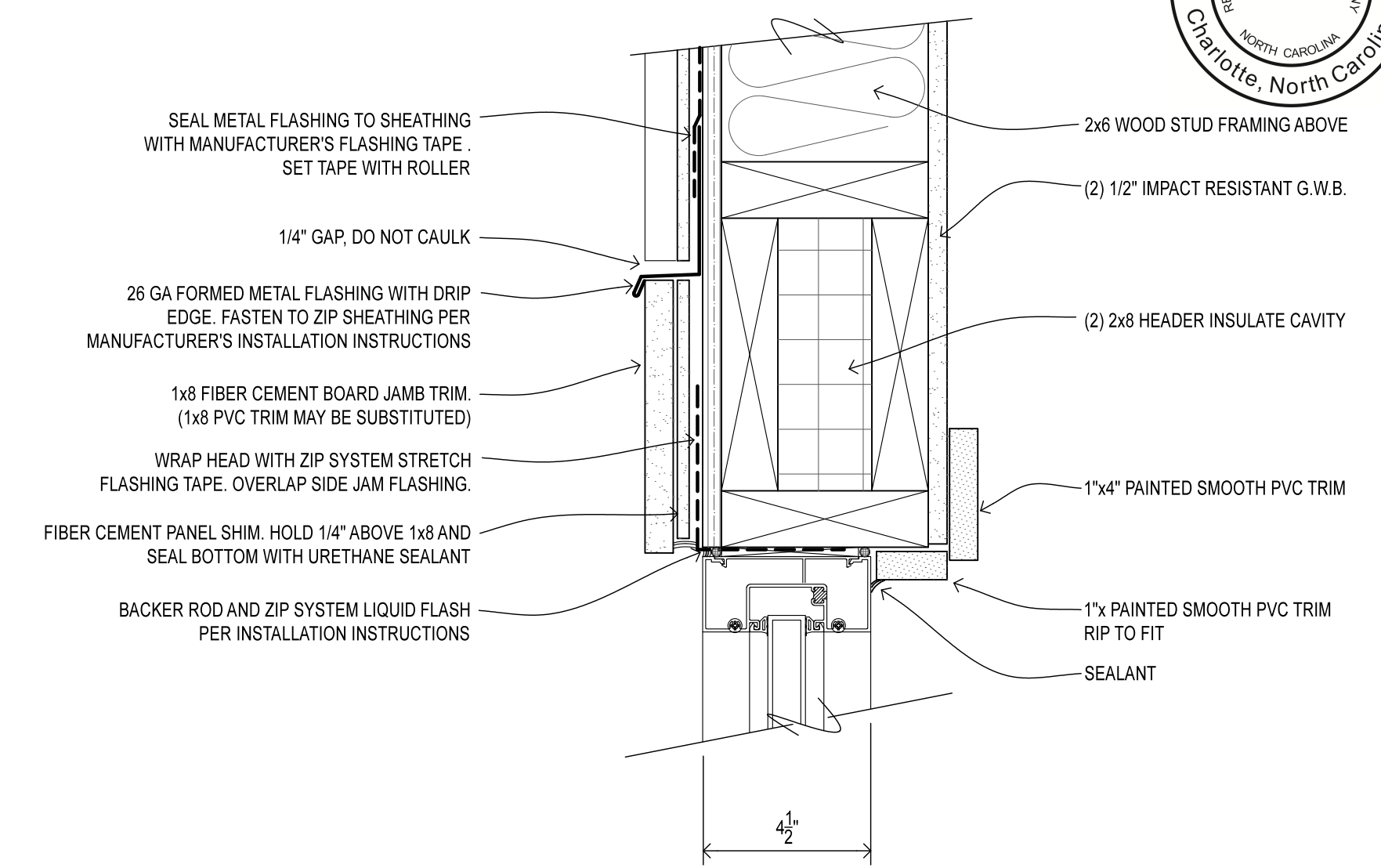
1 CMU WINDOW HEAD
A 5.0 SCALE: 3" = 1'-0"



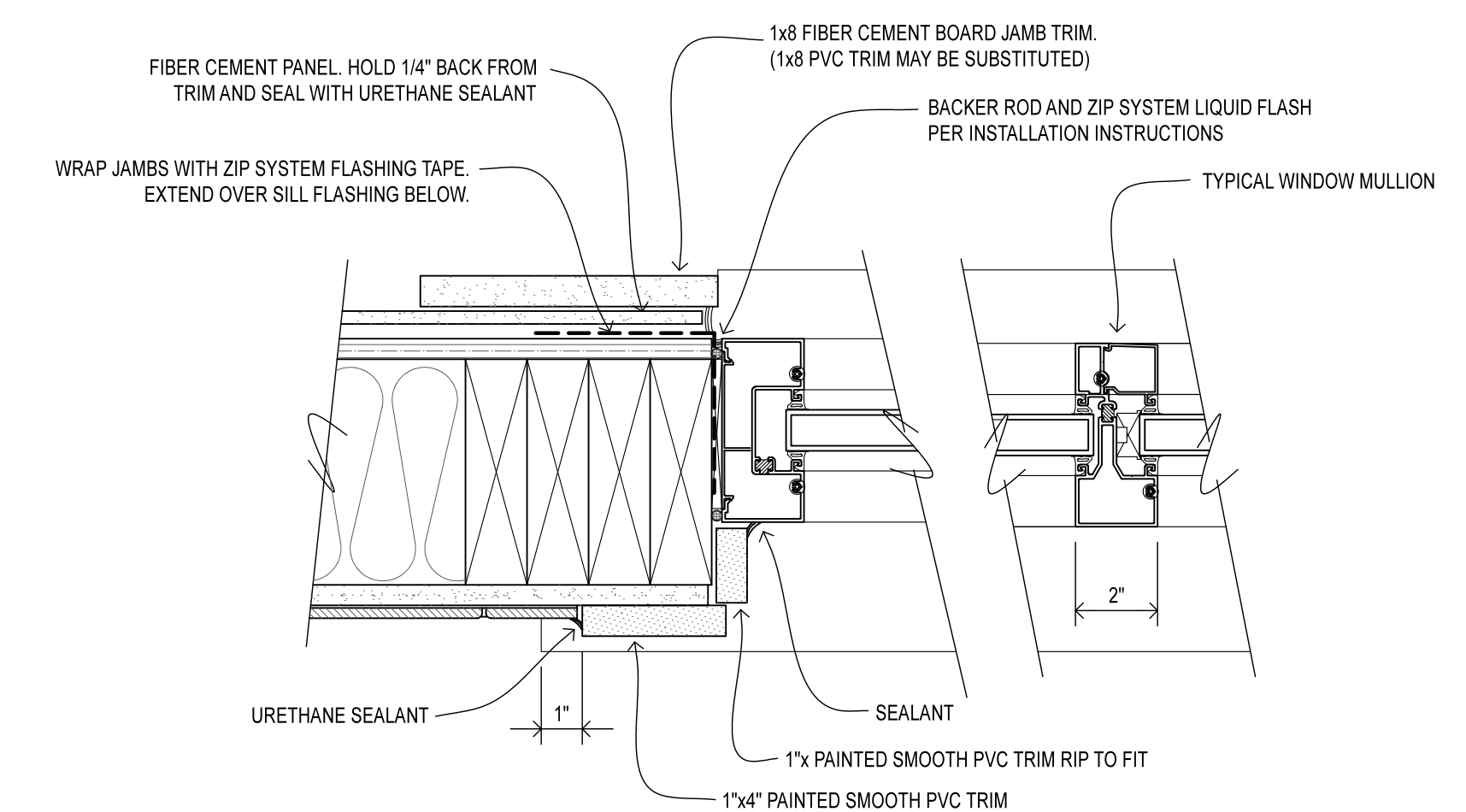
2 CMU WINDOW JAMB
A 5.0 SCALE: 3" = 1'-0"



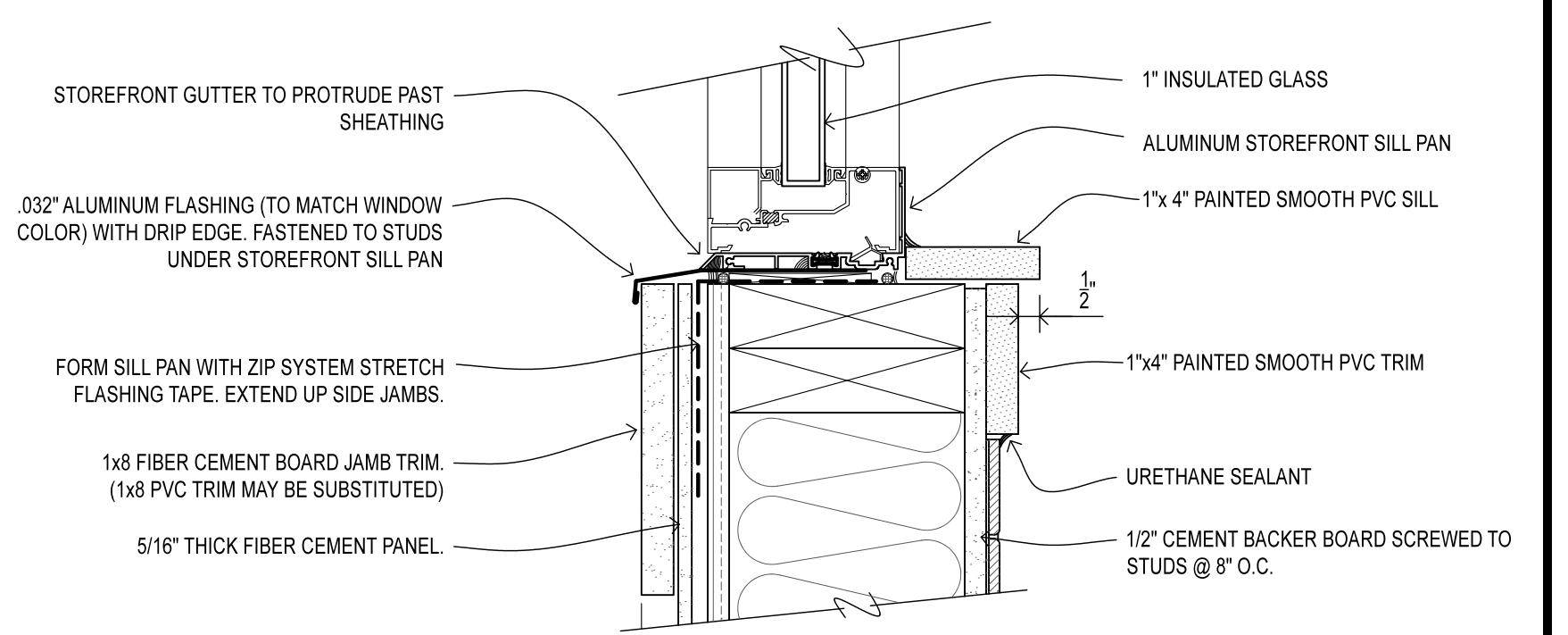
3 CMU WINDOW SILL
A 5.0 SCALE: 3" = 1'-0"



4 WINDOW HEAD
A 5.0 SCALE: 3" = 1'-0"



5 WINDOW JAMB
A 5.0 SCALE: 3" = 1'-0"



6 WINDOW SILL
A 5.0 SCALE: 3" = 1'-0"

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REVISIONS:
A ADDENDUM 1 06/15/23



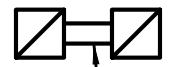





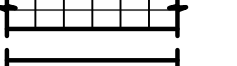
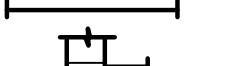
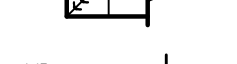
























CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

OWNER:

DORTON PARK
5650 POPLAR TENT ROAD
CONCORD, NORTH CAROLINA

SCALE: AS NOTED
DATE: 05-04-23
SHEET NAME:
WINDOW SCHEDULE AND DETAILS
SHEET NO:
A 5.0

MECHANICAL LEGEND

-  SUPPLY DIFFUSER
-  RETURN GRILLE
-  RA TRANSFER GRILLE
-  EF-1 EXHAUST FAN
-  THERMOSTATIC CONTROL
-  REMOTE TEMPERATURE SENSOR
-  CARBON MONOXIDE SENSOR
-  OCCUPANCY SENSOR
-  RECTANGULAR DUCT
-  FLEXIBLE DUCT
-  ROUND RIGID DUCT
-  TURNING VANES
-  VD VOLUME DAMPER
-  BDD BACKDRAFT DAMPER
-  SD SPLITTER DAMPER
-  FD FIRE DAMPER WITH 8x8 ACCESS DOOR
-  --- C --- CONDENSATE PIPING
-  (S) DUCT-MOUNTED SMOKE DETECTOR
-  \$ WALL SWITCH
-  AFF ABOVE FINISHED FLOOR
-  AHU AIR HANDLING UNIT
-  CC COOLING COIL
-  CFM CUBIC FEET PER MINUTE
-  COB COOLING-ONLY VAV BOX
-  CU CONDENSING UNIT
-  DF DUCT FURNACE
-  EA EXHAUST AIR
-  FPB FAN-POWERED VAV BOX
-  HP HEAT PUMP
-  RA RETURN AIR
-  RTU ROOFTOP UNIT (PACKAGED)
-  SA SUPPLY AIR
-  SP STATIC PRESSURE
-  3/4" DOOR UNDER CUT 3/4"
-  L DOOR LOUVER


MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

| | | |
|--|--|---|
| METHOD OF COMPLIANCE | PRESCRIPTIVE <input checked="" type="checkbox"/> | ENERGY COST BUDGET <input type="checkbox"/> |
| THERMAL ZONE | 3A | |
| EXTERIOR DESIGN CONDITIONS | WINTER DRY BULB 18°F SUMMER DRY BULB 94°F HDD65 3412 CDD65 1549 | |
| INTERIOR DESIGN CONDITIONS | WINTER DRY BULB 70°F SUMMER DRY BULB 74°F RELATIVE HUMIDITY 50% | |
| BUILDING HEATING LOAD | SPACE OR ZONE | CALCULATED LOAD (BTUH) |
| | NEW RESTROOM: FAMILY 1 | 8,208 BTUH |
| | NEW RESTROOM: FAMILY 2 | 8,208 BTUH |
| | NEW RESTROOM: JANITOR | 5,120 BTUH |
| | RENOVATED RESTROOM: FAMILY 1 | 8,208 BTUH |
| | RENOVATED RESTROOM: FAMILY 2 | 8,208 BTUH |
| | RENOVATED RESTROOM: FAMILY 3 | 8,208 BTUH |
| | RENOVATED RESTROOM: FAMILY 4 | 8,208 BTUH |
| | RENOVATED RESTROOM: MECH | 5,120 BTUH |
| | RENOVATED RESTROOM: OFFICE | NOT APPLICABLE |
| BUILDING COOLING LOAD | SPACE OR ZONE | CALCULATED LOAD (BTUH) |
| | NEW RESTROOM: FAMILY 1 | NOT APPLICABLE |
| | NEW RESTROOM: FAMILY 2 | NOT APPLICABLE |
| | NEW RESTROOM: JANITOR | NOT APPLICABLE |
| | RENOVATED RESTROOM: FAMILY 1 | NOT APPLICABLE |
| | RENOVATED RESTROOM: FAMILY 2 | NOT APPLICABLE |
| | RENOVATED RESTROOM: FAMILY 3 | NOT APPLICABLE |
| | RENOVATED RESTROOM: FAMILY 4 | NOT APPLICABLE |
| | RENOVATED RESTROOM: MECH | NOT APPLICABLE |
| | RENOVATED RESTROOM: OFFICE | NOT APPLICABLE |
| MECHANICAL SPACING CONDITIONING SYSTEM UNITARY | DESCRIPTION OF UNIT | ELECTRIC SPACE HEATERS |
| | HEATING EFFICIENCY | SEE SCHEDULE THIS SHEET |
| | COOLING EFFICIENCY | SEE SCHEDULE THIS SHEET |
| | HEAT OUTPUT OF UNIT | SEE SCHEDULE THIS SHEET |
| | COOLING OUTPUT OF UNIT | SEE SCHEDULE THIS SHEET |
| | BOILER TOTAL BOILER OUTPUT | NOT APPLICABLE |
| | CHILLER TOTAL CHILLER OUTPUT | NOT APPLICABLE |
| LIST EQUIPMENT EFFICIENCIES | NOT APPLICABLE | |
| EQUIPMENT SCHEDULES WITH MOTORS (MECHANICAL SYSTEMS) | MOTOR HORSEPOWER | SEE SCHEDULE THIS SHEET |
| | NUMBER OF PHASES | SEE SCHEDULE THIS SHEET |
| | MINIMUM EFFICIENCY | STANDARD WITH PACKAGED EQUIPMENT |
| | MOTOR TYPE | STANDARD WITH PACKAGED EQUIPMENT |
| | NUMBER OF POLES | STANDARD WITH PACKAGED EQUIPMENT |

MECHANICAL GENERAL NOTES

- DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATION OF DOORS, WINDOWS, CEILING CONFIGURATION, ETC.
- INSTALLATION OF ANY EQUIPMENT SHALL BE IN ACCORDANCE WITH APPROVED SHOP DRAWINGS. CONTRACTOR TO COORDINATE THE SHOP DRAWING INFORMATION WITH ALL OTHER TRADES. (EXAMPLE ROOFTOP UNITS PHYSICAL SIZE AND WEIGHT MUST BE COORDINATED WITH STRUCTURAL SYSTEMS THRU GENERAL CONTRACTOR, LIKEWISE ALL ELECTRICAL CHARACTERISTICS WILL REQUIRE COORDINATION THRU GENERAL CONTRACTOR WITH ELECTRICAL CONTRACTOR).
- ALL DUCTWORK SHALL BE SUPPORTED AS PER SMACNA STANDARDS.
- ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH THE WORK UNDER OTHER TRADES, TO AVOID INTERFERENCE.
- ALL RECTANGULAR AND ROUND DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH SMACNA STANDARDS. ALL SQUARE ELBOWS SHALL HAVE DOUBLE THICKNESS TURNING VANES.
- MECHANICAL CONTRACTOR SHALL BALANCE SYSTEM TO CFM'S INDICATED ON PLANS AND PROVIDE ARCHITECT WITH COMPLETE BALANCE REPORT.
- NEW FLEXIBLE DUCT SHALL BE INSULATED THERMAFLEX M-KE OR APPROVED EQUAL. MAXIMUM LENGTH OF FLEXIBLE DUCT SHALL BE 4'-0".
- LOCATE ALL TEMPERATURE SETTING DEVICES AND SWITCHES 4'-0" ABOVE FINISHED FLOOR, OR PER LOCAL ADA REQUIREMENTS. (INTEGRAL EXCLUDED).
- ALL DUCTWORK SPECIFIED OR NOTED TO BE LINED SHALL BE LINED WITH ONE INCH THICK DUCT LINER HAVING NOT LESS THAN A "K" VALUE OF 0.22 AT 75° F. MEAN TEMPERATURE WITH ONE SIDE COATED FACING AIR STREAM CONFORMING TO THE DUCT LINE MATERIALS STANDARD AHC-101 DATED 1975 OF THE NATIONAL INSULATION MANUFACTURERS ASSOCIATION. NOT APPLICABLE FOR EXHAUST.
- ALL DUCTWORK SPECIFIED OR NOTED TO BE LINED SHALL BE INCREASED IN SIZE TO ALLOW FOR LINER. DUCT DIMENSIONS SHOWN OR NOTED ON PLANS ARE INSIDE CLEAR.
- SPACE ABOVE CEILING TO BE USED AS RETURN AIR PLENUM WHERE DUCT IS NOT INDICATED ABOVE RETURN AIR GRILLES. DUCTS RETURNING AIR ABOVE CEILING SHALL BE OPEN END WITH BOXED EDGES.
- ANY DEVICE REQUIRING A THERMOSTAT FOR CONTROL SHALL BE FURNISHED WITH A THERMOSTAT WHETHER INDICATED ON THE DRAWINGS OR NOT. IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO FURNISH ALL THERMOSTATS, CONTROLS, ETC.
- ALL CUTTING, PATCHING OF SLAB, ROOF OR OTHER BUILDING COMPONENTS TO BE BY THE GENERAL CONTRACTOR.
- WHERE INDICATED, THERMOSTATS SHALL HAVE OPAQUE PLASTIC LOCKING GUARDS FURNISHED BY THERMOSTAT MANUFACTURER AS STANDARD ACCESSORY SIMILAR TO WHITE-ROGERS PLASTIC THERMOSTAT GUARDS.
- THE TOPS OF ALL SUPPLY AND RETURN AIR DISTRIBUTION ON A DUCTED RETURNED SYSTEM SHALL BE INSULATED WITH 1-1/2" THICK BATT INSULATION WITH VAPOR BARRIER.
- ALL PIPING, DUCTS, VENTS, ETC., EXTENDING THROUGH WALLS AND ROOF SHALL BE FLASHED AND COUNTERFLASHED IN A WATERPROOF MANNER.
- EXTEND ALL DRAIN LINES TO SPLASHBLOCK OR AS INDICATED, SO ROUTED AS TO AVOID INTERFERENCE WITH PASSAGEWAYS AND MAINTENANCE. DRAINS FROM AIR HANDLING UNITS SHALL BE TRAPPED. ALL DRAIN LINES SHALL BE INSULATED.
- ALL PIPING AND DUCTWORK INSULATION SHALL BE RUN CONTINUOUSLY THROUGH FLOORS AND PARTITIONS.
- ALL PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE SPECIFICATIONS AND FURTHER SUPPORTS OR HANGERS AS REQUIRED TO PREVENT THE WEIGHT OF PIPING BEING PLACED ON EQUIPMENT.
- ALL CONCRETE PADS UNDER MECHANICAL EQUIPMENT SHALL BE 4" THICK REINFORCED WITH 6x6 10/10 WIRE MESH BY MECHANICAL CONTRACTOR, UNLESS NOTED OTHERWISE. COORDINATE PAD LOCATIONS WITH GENERAL CONTRACTOR TO VERIFY KEY LOCATIONS.
- PROVIDE A DIELECTRIC FITTING BETWEEN FERROUS AND NON-FERROUS PIPING.
- FIRE DAMPERS SHALL BE INSTALLED WHERE SHOWN ON PLANS AND AT SLAB, WHERE DUCTS PASS THROUGH FLOORS.

ELECTRIC UNIT HEATER SCHEDULE

-  **EH-1 CEILING-MOUNTED FORCED AIR HEATER**
QMARK MODEL EFF4004, 2000 W, 240V/1φ, 14.4 AMPS, RECESS MOUNT, ROUGH-IN BOX, TAMPER-RESISTANT THERMOSTAT CONCEALED UNDER THE FACE PLATE, FAN DELAY, DISCONNECT SWITCH PROVIDED, PROVIDE CONTROL RELAY/TRANSFORMER AS REQUIRED.
 - EH-2 WALL-MOUNTED FORCED AIR HEATER**
QMARK MODEL LFK151, 1500 W, 120V/1φ, SURFACE MOUNT, INTEGRAL TAMPER-RESISTANT THERMOSTAT, FAN DELAY, DISCONNECT BY E.C.
- APPROVED HEATER EQUALS ARE: MARKELL AND CHROMALOX

FAN SCHEDULE

FAN EF-1 - RESTROOMS
GREENHECK MODEL CSP-B150 CEILING CABINET EXHAUST FAN DIRECT DRIVE
100 CFM @ 0.375" ESP; 129 WATTS; 768 FRPM; 120V/60/1φ; 0.4 SONES; WITH:
① ② ③ ④ ⑤ ⑥

FAN EF-2 - JANITOR
GREENHECK MODEL CSP-B150 CEILING CABINET EXHAUST FAN DIRECT DRIVE
100 CFM @ 0.375" ESP; 129 WATTS; 768 FRPM; 120V/60/1φ; 0.4 SONES; WITH:
① ② ③ ④ ⑤ ⑥

FAN EF-3 - RESTROOMS AND MAINTENANCE SHOP
GREENHECK MODEL CSP-A700 INLINE CABINET EXHAUST FAN DIRECT DRIVE
550 CFM @ 0.500" ESP; 368 WATTS; 906 FRPM; 120V/60/1φ; 2.5 SONES; WITH:
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ACCESSORIES:**
- ① BACKDRAFT DAMPER
 - ② DISCONNECT SWITCH
 - ③ VIBRATION ISOLATION
 - ④ ALUMINUM GRILLE
 - ⑤ OCCUPANCY SENSOR
 - ⑥ SPEED CONTROLLER
 - ⑦ FIVE OCCUPANCY SENSORS, ANY OF WHICH TRIGGERS FAN TO RUN.
 - ⑧ PROVIDE WITH ALL CAP MODEL WC-18x8.

APPROVED FAN EQUALS ARE: COOK AND PENNBARRY

LOUVER SCHEDULE

L-1 - EXHAUST LOUVER
RUSKIN MODEL ELF375DX - 36" WIDE x 12" TALL
ELF375DX IS A STATIONARY LOUVER, EXTRUDED ALUMINUM CONSTRUCTION. PROVIDE LOUVER TO MATCH WALL CONSTRUCTION TYPE.
300 CFM (TOTAL EXHAUST), 0.44 SF FREE AREA, 151 FPM INTAKE / EXHAUST VELOCITY, 0.001" PRESSURE DROP.
PROVIDE LOUVER TO FIT THE SPECIFIED DOOR FRAME (SEE ARCHITECTURAL PLANS). COORDINATE WITH GENERAL CONTRACTOR FOR INSTALLATION INTO DOOR FRAME.
PROVIDE LOUVER L-1 WITH: ① ② ③

L-2 - INTAKE LOUVER
RUSKIN MODEL ELF375DX - 18" WIDE x 18" TALL
ELF375DX IS A STATIONARY LOUVER, EXTRUDED ALUMINUM CONSTRUCTION. PROVIDE LOUVER TO MATCH WALL CONSTRUCTION TYPE.
300 CFM TOTAL EXHAUST, 0.97 SF FREE AREA, 310 FPM INTAKE VELOCITY, 0.015" PRESSURE DROP.
PROVIDE LOUVER L-2 WITH: ① ② ③

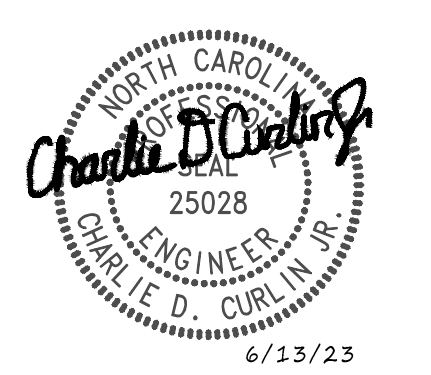
L-3 - INTAKE LOUVER
RUSKIN MODEL ELF375DX - 18" WIDE x 18" TALL
ELF375DX IS A STATIONARY LOUVER, EXTRUDED ALUMINUM CONSTRUCTION. PROVIDE LOUVER TO MATCH WALL CONSTRUCTION TYPE.
550 CFM, 0.97 SF FREE AREA, 568 FPM INTAKE VELOCITY, 0.05" PRESSURE DROP.
PROVIDE LOUVER L-3 WITH: ① ② ③

- ACCESSORIES:**
- ① INSECT SCREEN
 - ② KYMAR FINISH
 - ③ COLOR AS DIRECTED BY THE ARCHITECT

MECHANICAL DRAWING INDEX

- M0.1 MECHANICAL HVAC SCHEDULE AND NOTES
- M1.0 MECHANICAL HVAC PLANS AND NOTES

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www.shultzeg.com | SEG - 23-091
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Architecture • Planning • Staff

| | | |
|------------|------------|--------------------------|
| REVISIONS: | 06/13/2023 | MECHANICAL CLARIFICATION |
|------------|------------|--------------------------|

CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

OWNER:

DORTON PARK
5650 POPLAR TENT ROAD
CONCORD, NORTH CAROLINA

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

DATE: 4/26/2023

SHEET NAME:
MECHANICAL HVAC
SCHEDULES AND NOTES

SHEET NO:
M0.1



REVISIONS:

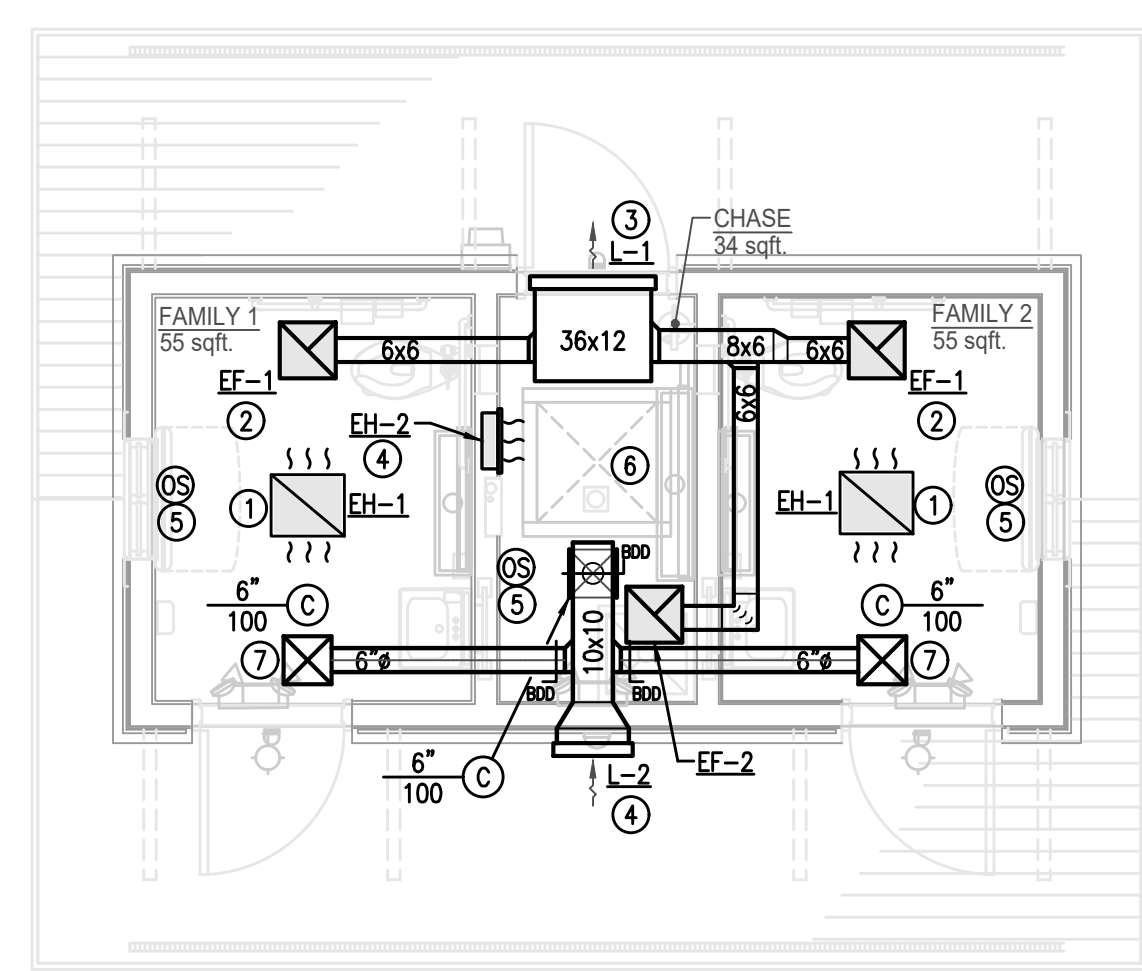
CITY OF CONCORD
 35 CABARRUS AVE. W
 CONCORD, NORTH CAROLINA

OWNER:

DORTON PARK
 5790 POPLAR TENT ROAD
 CONCORD, NORTH CAROLINA

SCALE: 1/4" = 1'-0"
 DATE: 4/26/2023
 SHEET NAME:
MECHANICAL HVAC PLAN AND DETAILS
 SHEET NO:
M1.0

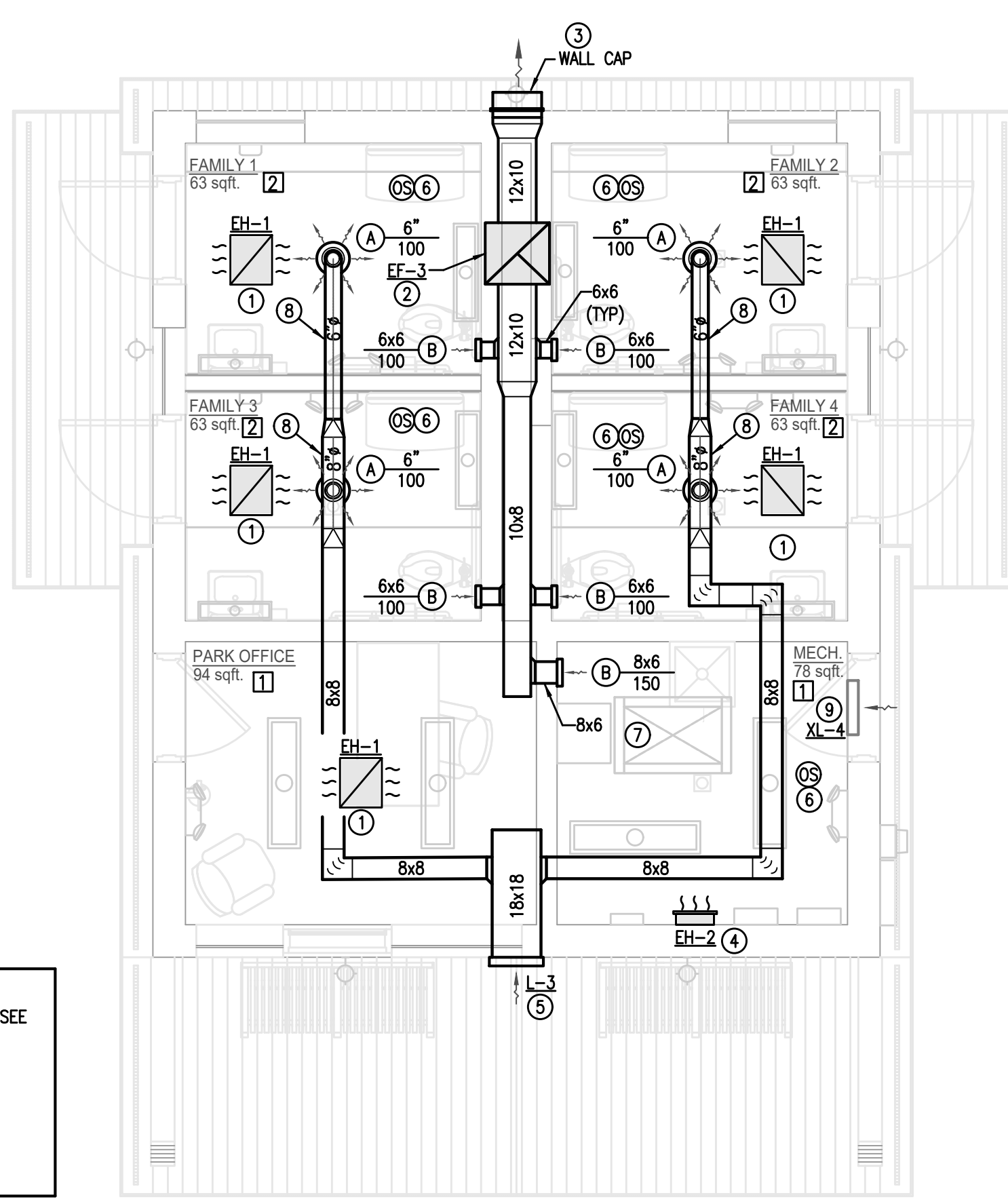
| KEYED NOTES | |
|-------------|---|
| KEY | NOTE |
| ① | RECESSED MOUNTED HEATER EH-1 IN CEILING |
| ② | CEILING CABINET EXHAUST FAN EF-1 |
| ③ | EXHAUST VIA WALL LOUVER L-1 ABOVE DOOR, WITH 36x12 PLENUM IN ATTIC. |
| ④ | MAKEUP FROM INTAKE WALL LOUVER L-2 HIGH ON WALL WITH OUTSIDE AIR DUCTED TO EACH ROOM. |
| ⑤ | OCCUPANCY SENSOR FOR EXHAUST FAN CONTROL - MOUNTED ON CEILING |
| ⑥ | COORDINATE MECHANICAL WITH ATTIC ACCESS TO AVOID CONFLICTS AND ALLOW FOR EQUIPMENT SERVICE. |
| ⑦ | ROUTE OUTSIDE AIR OVER AND DOWN TO DIFFUSER. |



1 MECHANICAL HVAC PLAN - NEW RESTROOM
 M1.0 SCALE: 1/4" = 1'-0"

NOTE:
 OUTSIDE AIR FOR OFFICE PROVIDED VIA OPERABLE WINDOW/DOOR. SEE NATURAL VENTILATION CALCULATION BELOW.

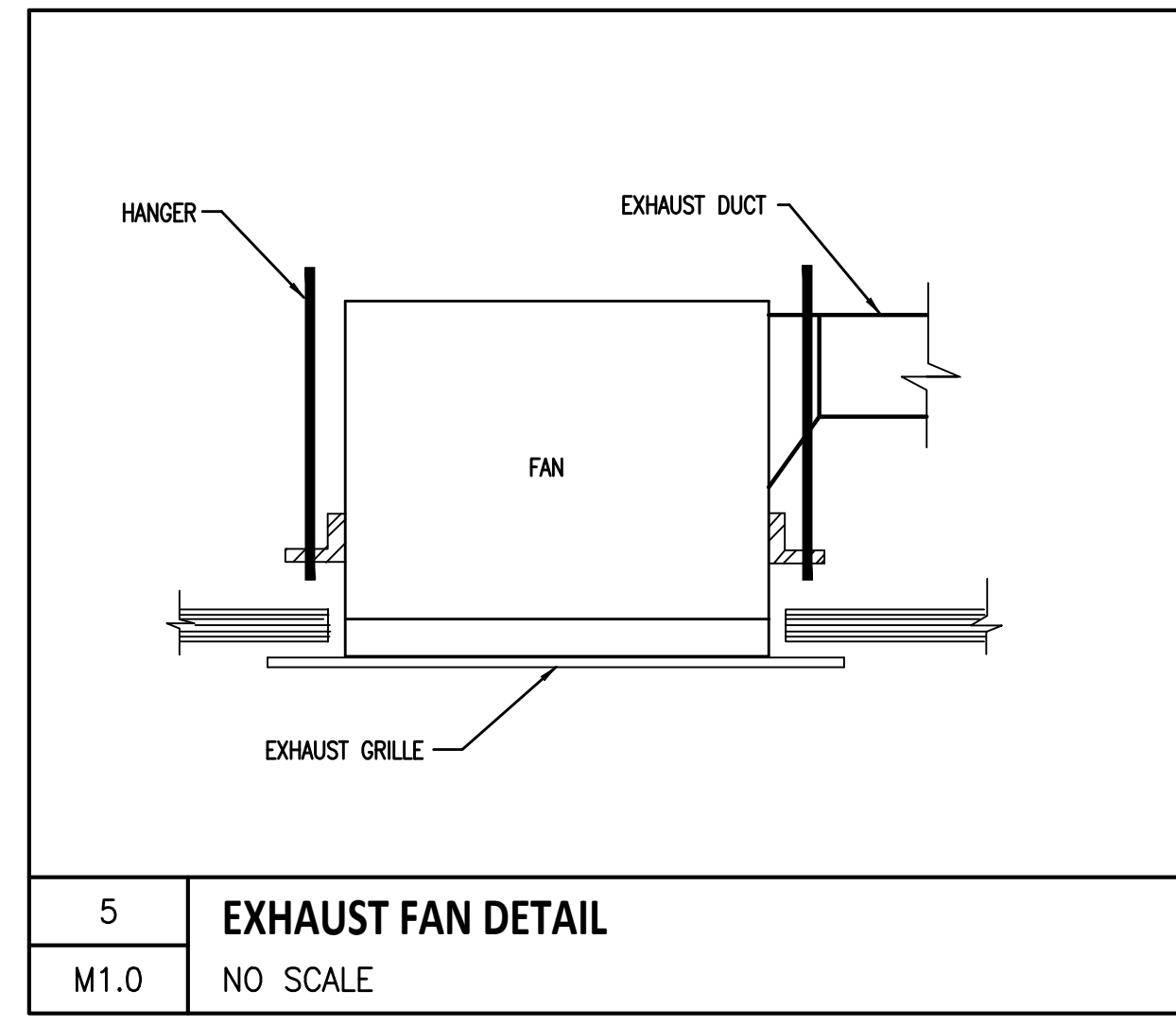
NATURAL VENTILATION CALCULATION
 AREA SQ. FT.: 95 SQ.FT.
 TOTAL OPERABLE AREA: 33 SQ.FT.
 % OPERABLE: 34.7%



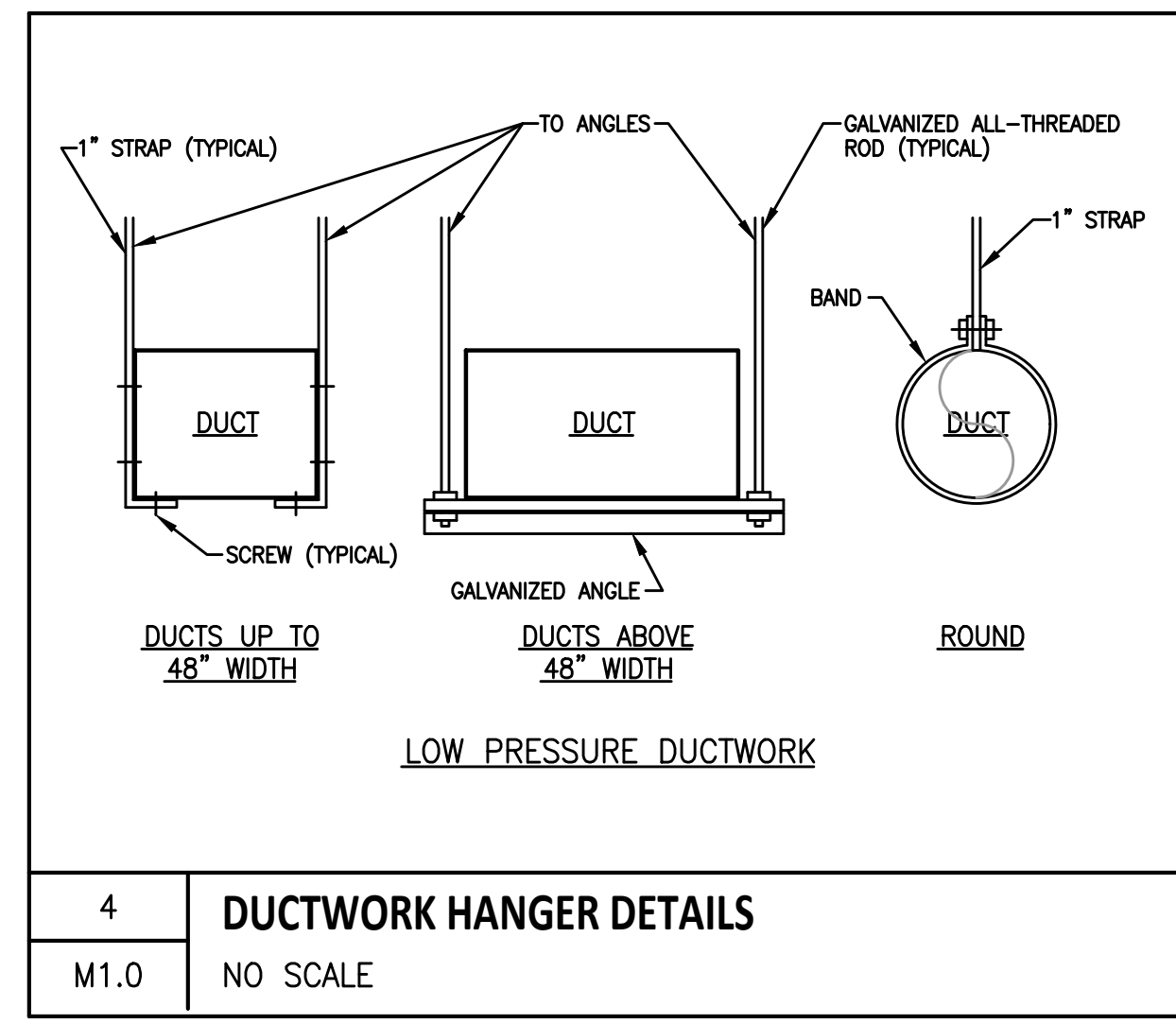
2 MECHANICAL HVAC PLAN - RENOVATED RESTROOM
 M1.0 SCALE: 1/4" = 1'-0"

| KEYED NOTES | |
|-------------|---|
| KEY | NOTE |
| ① | RECESSED MOUNTED HEATER EH-1 IN CEILING |
| ② | INLINE EXHAUST FAN EF-3. ALIGN THE FAN WITH THE ACCESS PANEL IN THE WALL OF THE FAMILY 1 RESTROOM SO THE FAN MAY BE SERVICED. |
| ③ | HOODED WALL CAP WC-1. SEE DETAIL 5 ON ARCHITECTURAL SHEET A2.0. |
| ④ | SURFACE MOUNT HEATER EH-2. |
| ⑤ | MAKEUP FROM INTAKE WALL LOUVER L-3 HIGH ON WALL WITH OUTSIDE AIR DUCTED TO EACH ROOM. SEE DETAIL 4 ON ARCHITECTURAL SHEET A2.0. |
| ⑥ | OCCUPANCY SENSOR FOR EXHAUST FAN CONTROL - MOUNTED ON CEILING |
| ⑦ | COORDINATE MECHANICAL WITH ATTIC ACCESS TO AVOID CONFLICTS AND ALLOW FOR EQUIPMENT SERVICE. |
| ⑧ | THIS DUCT IS EXPOSED SPIRAL DUCT. PAINT DUCT COLOR AS DIRECTED BY ARCHITECT. |
| ⑨ | EXISTING DOOR LOUVER TO REMAIN. |

| DEMOLITION KEYED NOTES: | |
|-------------------------|--|
| KEY | NOTE |
| ① | DEMOLISH EXISTING UNIT HEATERS, AND ANY HVAC SYSTEM CURRENTLY PRESENT. |
| ② | DEMOLISH EXHAUST FANS, HEATERS AND ALL ASSOCIATED DUCTWORK, CONTROLS, ETC. |



5 EXHAUST FAN DETAIL
 M1.0 NO SCALE

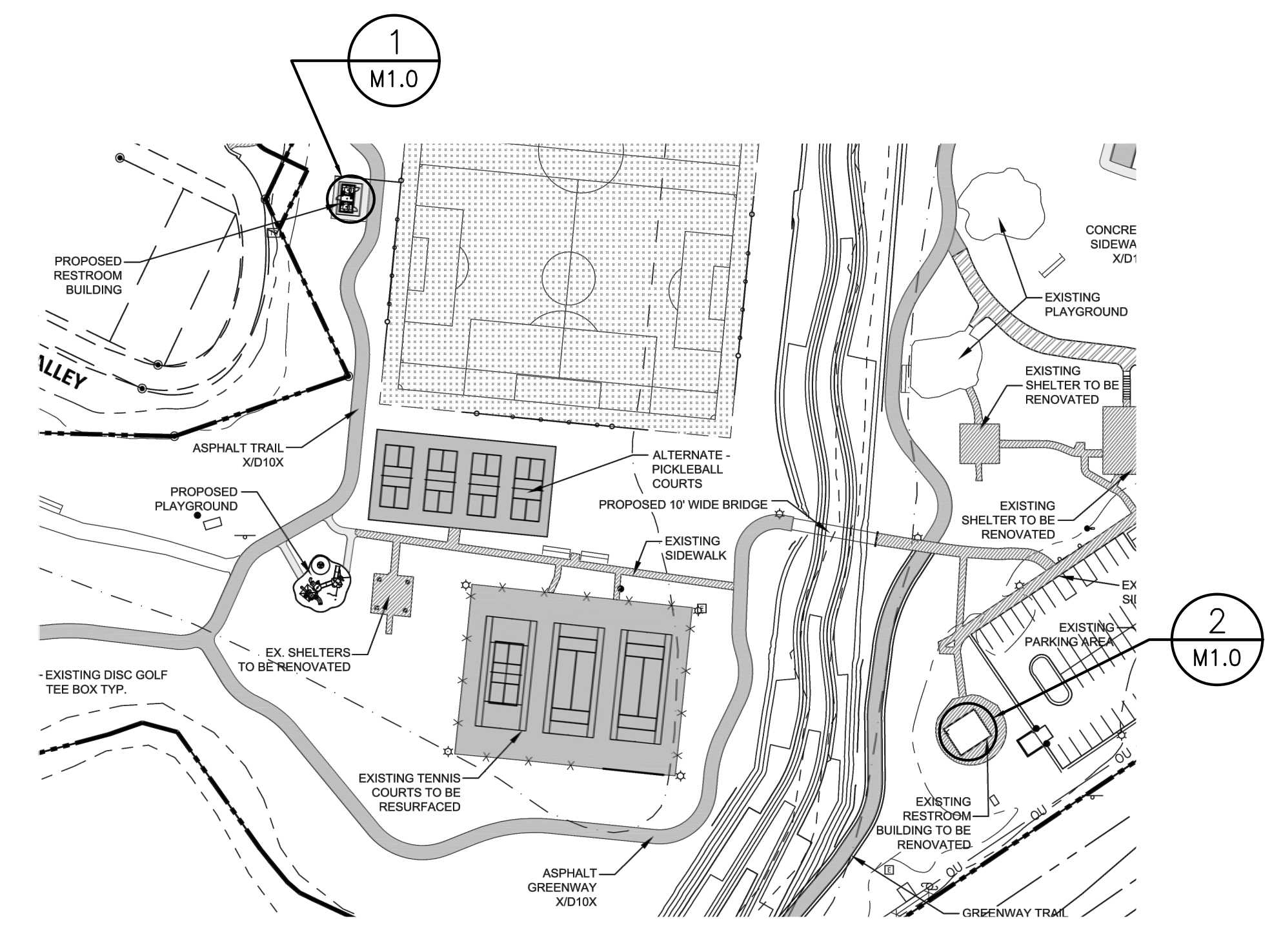


4 DUCTWORK HANGER DETAILS
 M1.0 NO SCALE

| DIFFUSER SCHEDULE | | | | | | | | | | | |
|-------------------|---------|----------|-----------|------------|---------|--------|----------|--------|--------------------|---|-------|
| TAG | SERVICE | CFM | NECK SIZE | FRAME TYPE | PATTERN | DAMPER | MATERIAL | FINISH | MFG & MODEL No. | TYPE | NOTES |
| (A) | SUPPLY | AS NOTED | AS NOTED | SURFACE | RADIAL | YES | STEEL | NOTE 2 | NAILOR MODEL 6300R | CIRCULAR DIFFUSER WITH CONTINUOUS ADJUSTMENT CORE | 1-3 |
| (B) | EXHAUST | AS NOTED | AS NOTED | SURFACE | NA | NO | STEEL | NOTE 2 | NAILOR MODEL 6155H | FIXED DEFLECTION EXHAUST GRILLE | 1-3 |
| (C) | SUPPLY | AS NOTED | AS NOTED | SURFACE | 4 WAY | YES | STEEL | NOTE 2 | NAILOR MODEL 6500 | 12x12 PANEL - LOUVER FACE | 1-3 |

NOTES:
 1. DIFFUSER DESIGNATIONS ON PLANS AS FOLLOWS:
 2. COLOR AS DIRECTED BY ARCHITECT
 3. AIR VOLUME BALANCE AND CONTROL SHALL BE ACCOMPLISHED VIA DAMPERS IN THE BRANCH DUCTS, NOT DAMPERS AT THE GRILLES.

DIFFUSER OR NECK SIZE: 12x12 (C) DIFFUSER TYPE AS NOTED ABOVE



3 KEY PLAN
 M1.0 NO SCALE

ELECTRICAL SPECIFICATIONS

SECTION 16100 ELECTRICAL SYSTEMS DESCRIPTIONS

- A. PROJECT INCLUDES**
- ELECTRICAL SYSTEMS FOR THE FOLLOWING APPLICATIONS: REFER TO INDIVIDUAL SPECIFICATION SECTIONS FOLLOWING FOR DETAILED REQUIREMENTS.
 - POWER AND DISTRIBUTION.
 - LIGHTING, INCLUDING EXIT AND EMERGENCY LIGHTING.
 - TELEPHONE.
 - POWER CONNECTIONS FOR HVAC, PLUMBING AND OWNER-PROVIDED EQUIPMENT.
- B. PRODUCTS**
- SYSTEMS, PRODUCTS, AND STANDARDS ARE LISTED IN INDIVIDUAL SPECIFICATION SECTIONS WHICH FOLLOW.
 - ALL MATERIALS, DEVICES, APPLIANCES, AND EQUIPMENT SHALL BE NEW AND LABEL LISTED BY AN APPROVED THIRD PARTY TESTING AGENCY APPROVED BY THIS STATE.**
- C. GENERAL PROJECT REQUIREMENTS**
- PROVIDE ALL WORK AND MATERIALS FOR THE INSTALLATION OF COMPLETE WIRING SYSTEMS AS SPECIFIED HEREIN AND SHOWN ON THE DRAWINGS.
 - ALL ELECTRICAL PERMITS AND INSPECTION FEES SHALL BE OBTAINED AND PAID FOR BY THE ELECTRICAL CONTRACTOR.
 - ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR ONE YEAR EFFECTIVE THE DAY THE PROJECT IS ACCEPTED BY THE OWNER.
 - ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE MOST RECENT ADOPTED VERSION OF THE N.F.P.A., NATIONAL ELECTRICAL CODE (N.E.C.), AND ALL APPLICABLE STATE AND LOCAL CODES.
 - ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CUTTING AND PATCHING FOR INSTALLATION OF ELECTRICAL WORK AND REPAIR ANY DAMAGE DONE.
 - SHOP DRAWINGS AND CATALOG DATA SHALL BE SUBMITTED FOR LIGHTING FIXTURES, PANELBOARDS, DISCONNECT SWITCHES, WIRING DEVICES AND MISCELLANEOUS MATERIALS. SHOP DRAWINGS SHALL BE SUBMITTED AS SPECIFIED IN ARCHITECTURAL SPECIFICATIONS, OR AT A MINIMUM, PROVIDE AN ELECTRONIC "PDF" FILE OF ALL SUBMITTAL MATERIALS.
 - PROVIDE ENGRAVED PHENOLIC NAMEPLATES FOR PANELBOARDS, WIRING TROUGH, MOTOR STARTERS AND DISCONNECT SWITCHES. LABELS SHALL BE WHITE LETTERS ON BLACK FIELD. NAMEPLATE SHALL INDICATE EQUIPMENT NAME, VOLTAGE AND CIRCUIT/FEEDER SERVING EQUIPMENT (WHERE APPLICABLE).
 - COORDINATE POWER SERVICE LOCATION AND REQUIREMENTS WITH LOCAL POWER COMPANY. MAKE PROVISIONS FOR METERING AS REQUIRED BY POWER COMPANY. IF REQUIRED, CONTRACTOR SHALL PROVIDE AND INSTALL CONCRETE SERVICE TRANSFORMER PAD PER POWER COMPANY REQUIREMENTS. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL REQUIREMENTS WITH THE LOCAL POWER COMPANY PRIOR TO SUBMISSION OF BID. ANY ADDITIONAL COSTS REQUIRED BY THE POWER COMPANY SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR AND SHALL BE INCLUDED IN THE BID.
 - ELECTRICAL CONTRACTOR SHALL TEST ALL WIRING FOR CONTINUITY AND GROUNDS PRIOR TO WIRING BEING ENERGIZED. FAULTY WIRING SHALL BE REPLACED.
 - ELECTRICAL CONTRACTOR SHALL CONNECT ALL HVAC, PLUMBING, AND OTHER CONTRACTOR OR OWNER FURNISHED EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS (UNLESS OTHERWISE NOTED). CONTROL WIRING FOR EQUIPMENT NOT PROVIDED BY THE ELECTRICAL CONTRACTOR, SHALL BE PROVIDED BY THE RESPECTIVE CONTRACTOR. COORDINATE WITH EQUIPMENT SHOP DRAWINGS AND EQUIPMENT CONTRACTOR FOR DISCONNECT SWITCH, CONDUIT, WIRING REQUIREMENTS, FUSE AND BREAKER SIZES, AND VOLTAGE REQUIREMENTS. ALL FINAL CONNECTIONS TO JUNCTION BOXES SHALL BE BY THE ELECTRICAL CONTRACTOR.
 - EACH BIDDER SHALL VISIT THE JOB SITE PRIOR TO BIDDING TO FAMILIARIZE HIMSELF/HERSELF WITH EXISTING CONDITIONS. FAILURE TO VISIT SITE SHALL NOT EXCUSE CONTRACTOR FROM PERFORMING REQUIRED WORK, NOR SHALL IT BE AN ACCEPTABLE REASON FOR REQUESTING ADDITIONS TO THE CONTRACT.
 - IF APPLICABLE, PROVIDE MIN. 24" HORIZONTAL SEPARATION BETWEEN BOXES INSTALLED IN OPPOSITE SIDES OF THE SAME FIRE-RATED WALL AS REQUIRED BY N.E.C. ART. 300.21
 - IF APPLICABLE, FIRE-STOPPING OF PENETRATIONS IN RATED WALLS AND FLOORS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE MOST RECENT, ADOPTED EDITION OF THE STATE BUILDING CODE USING APPROVED ASSEMBLIES SUCH AS THE FOLLOWING:
CONDUIT PENETRATIONS OF 1, 2 OR 4 HOUR GYPSBOARD WALLS - U.L. #W-1-1080.
CONDUIT PENETRATIONS OF 1 OR 2 HOUR CONCRETE WALLS OR FLOORS, OR BLOCK WALLS - U.L. #C-AJ-1044.
CONDUIT PENETRATIONS OF 4 HOUR CONCRETE WALLS OR FLOORS, OR BLOCK WALLS - U.L. #C-AJ-1044.
 - IF APPLICABLE, IN REQUIRED FIRE-RATED WALLS AND PARTITIONS, OPENINGS FOR INSTALLATION OF BOXES THAT ARE GREATER THAN 16 SQUARE INCHES SHALL BE PROTECTED AS REQUIRED BY A THIRD PARTY TESTING AGENCY APPROVED BY THIS STATE. COORDINATE CLOSELY WITH THE GENERAL CONTRACTOR TO INSURE THAT THE INTEGRITY OF THE RATING IS MAINTAINED.
 - IT IS THE RESPONSIBILITY OF ALL CONTRACTORS AND TRADES TO COORDINATE THE INSTALLATION OF THEIR WORK WITH THE INSTALLATION OF WORK BY ALL OTHER CONTRACTORS AND TRADES. THE REQUIREMENTS OF THESE DRAWINGS, GENERAL REQUIREMENTS AND ALL ITEMS OF THE CONTRACT DOCUMENTS ARE EQUALLY BINDING ON ALL CONTRACTORS AND TRADES. EACH CONTRACTOR IS REQUIRED TO MAINTAIN FULL SETS OF THE CONTRACT DOCUMENTS FOR HIS EMPLOYEES' USE, ON THE PROJECT, TO ASSURE THAT ALL WORK IS PROPERLY COORDINATED AND INSTALLED WITH THE WORK OF OTHER CONTRACTORS AND TRADES.
 - WHENEVER THERE ARE DISCREPANCIES BETWEEN DRAWINGS, OR BETWEEN THE DRAWINGS AND SPECIFICATIONS, OR CONFLICTS WITHIN THE SPECIFICATIONS AND/OR DRAWINGS, AND SUCH DISCREPANCY IS NOT CALLED TO THE ENGINEER'S ATTENTION IN TIME TO PERMIT CLARIFICATION BY ADDENDUM,

THE CONTRACTOR SHALL BASE HIS BID UPON PROVIDING THE BETTER QUALITY OR GREATER OF WORK OR MATERIAL CALLED FOR, SHALL SUBMIT A WRITTEN STATEMENT WITH HIS PROPOSAL NOTING SUCH DISCREPANCIES, AND SHALL SO FURNISH AND INSTALL SUCH BETTER QUALITY OR GREATER QUANTITY UNLESS OTHERWISE ORDERED IN WRITING.

17. CONTRACTOR SHALL ASSUME FULL LIABILITY FOR ANY WORK, EQUIPMENT AND MATERIALS PURCHASED AND/OR INSTALLED THAT ARE IN DISCREPANCY, IF IT IS NOT FIRST BROUGHT TO THE ATTENTION OF THE ENGINEER, IN WRITING, FOR CLARIFICATION. IF NOT BROUGHT TO THE ENGINEER'S ATTENTION, CONTRACTOR SHALL PAY FOR ANY EQUIPMENT, MATERIALS AND WORK THAT MUST BE REPLACED

SECTION 16110 RACEWAYS AND BOXES

- A. PROJECT INCLUDES**
- ELECTRICAL CONDUIT, TUBING, SURFACE RACEWAYS, BOXES, AND CABINETS FOR ELECTRICAL POWER AND SIGNAL DISTRIBUTION.
- B. PRODUCTS**
- WIRING METHODS:**
 - CONCEALED OR EXPOSED INDOOR WIRING: ZINC-COATED ELECTRICAL METALLIC TUBING FOR SIZES 1/2" THROUGH 4", INTERMEDIATE STEEL CONDUIT FOR SIZES LARGER THAN 4".
 - EXPOSED OUTDOOR WIRING: RIGID OR INTERMEDIATE STEEL CONDUIT.
 - CONCEALED OUTDOOR WIRING: INTERMEDIATE STEEL CONDUIT OR SCHEDULE 80 OR 40 PVC.
 - UNDERGROUND WIRING, SINGLE RUN: SCHEDULE 80 OR 40 PVC.
 - UNDERGROUND WIRING, GROUPED: SCHEDULE 80 OR 40 PVC.
 - CONNECTION TO EQUIPMENT: FLEXIBLE METAL CONDUIT, LIQUIDTIGHT AT EXTERIOR OR IN DAMP LOCATIONS.
 - FITTINGS FOR ELECTRICAL METALLIC TUBING SHALL BE HEXAGONAL GALVANIZED STEEL, CLAND TYPE, COMPRESSION OR SET-SCREW TYPE AND THREADLESS.
 - RACEWAY ACCESSORY MATERIALS:
 - CONDUIT BODIES: SHALL COMPLY WITH N.E.C. REQUIREMENTS.
 - SURFACE RACEWAYS, METALLIC: GALVANIZED STEEL, WITH SNAP-ON COVERS AND IVORY ENAMEL FINISH. SURFACE RACEWAY MAY ONLY BE USED WITH PRIOR, WRITTEN APPROVAL FROM OWNER, ARCHITECT AND ENGINEER.
 - ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL WIRES AND NYLON BUSHINGS AT BOTH ENDS.
 - BOXES AND FITTINGS:
 - CABINET BOXES: CODE GAUGE GALVANIZED SHEET METAL, NEMA 1 -INDOORS, NEMA 3R -OUTDOORS OR IN DAMP LOCATIONS.
 - PULL AND JUNCTION BOXES: CODE GAUGE GALVANIZED SHEET METAL, NEMA 1 -INDOORS, NEMA 3R -OUTDOORS OR IN DAMP LOCATIONS.
 - METAL OUTLET, DEVICE AND SMALL WIRING BOXES: SHALL COMPLY WITH UL 514A.
 - CONDUIT RUN THROUGH BUILDING EXPANSION JOINTS SHALL HAVE APPROPRIATE CONDUIT EXPANSION FITTINGS.
- C. EXECUTION**
- PROPERLY SUPPORT ALL CONDUITS WITH STRAPS AND CLAMPS PER THE MOST RECENT, ADOPTED EDITIONS OF THE N.E.C. AND STATE BUILDING CODE. RUN ALL CONDUITS PARALLEL OR PERPENDICULAR TO BUILDING WALLS/SURFACES.
 - MINIMUM CONDUIT SIZE ABOVE SLAB/GRADE SHALL BE 1/2", MINIMUM CONDUIT SIZE IN OR BELOW FLOOR SLAB SHALL BE 3/4".
 - RACEWAY PENETRATIONS THROUGH FLOOR SLABS AND FIRE-RATED WALLS SHALL BE FILLED WITH IMPERVIOUS, NON-SHRINK GROUT SUFFICIENTLY TIGHT TO PREVENT THE TRANSFER OF SMOKE, FIRE, WATER, AND DUST. ROOF PENETRATIONS SHALL BE WITHIN THE EQUIPMENT CURB. CONDUITS INSTALLED UNDERGROUND OR IN CONCRETE SHALL HAVE JOINTS MADE WATER-TIGHT BY USING A POLYETRA-FLUOROETHYLENE TAPE. ALL METALLIC UNDERGROUND CONDUITS SHALL BE THOROUGHLY COATED WITH TWO COATS OF ASPHALTUM OR BITUMASTIC.
 - PROVIDE PULLWIRES IN ALL EMPTY CONDUITS.

SECTION 16120 WIRES AND CABLES

- A. PROJECT INCLUDES**
- WIRES, CABLES, AND CONNECTORS FOR POWER, LIGHTING, SIGNAL, CONTROL, AND RELATED SYSTEMS RATED 600 VOLTS AND LESS.
- B. PRODUCTS**
- WIRE COMPONENTS:**
 - CONDUCTORS FOR POWER AND LIGHTING CIRCUITS: SOLID CONDUCTORS FOR SIZES #14 AWG THROUGH #8 AWG, STRANDED CONDUCTORS FOR #6 AWG AND LARGER.
 - CONDUCTOR MATERIAL: COPPER.
 - INSULATION: THHN/THWN.
 - JACKETS: FACTORY-APPLIED NYLON OR PVC, COLOR CODED: "BLACK/RED/BLUE/WHITE" FOR "A", "B" AND "C" PHASES, NEUTRAL, RESPECTIVELY FOR 120/208-VOLT SYSTEM. BRANCH CIRCUIT CONDUCTORS: SHALL NOT BE SMALLER THAN #12 AWG. CONTROL WIRING MAY BE #14 AWG.
 - NEUTRAL CONDUCTORS: #10 AWG MINIMUM FOR ALL MULTIWIRE BRANCH CIRCUITS.
 - "MC" TYPE CABLE WITH INTEGRAL, GREEN, INSULATED GROUND CONDUCTOR; MAY ONLY BE UTILIZED WHERE CONCEALED TO SERVE BRANCH CIRCUITS SIZED #8 AWG OR SMALLER NOT BE USED AND WHERE ALLOWED BY N.E.C.
 - WIRING TO LIGHTING FIXTURES SHALL BE AS REQUIRED BY U.L. LABEL.
 - CABLES:
 - PORTABLE CORD FOR FLEXIBLE PENDANT LEADS TO OUTLETS AND EQUIPMENT: UL TYPE S.
 - CONTROL/SIGNAL TRANSMISSION MEDIA: TWISTED PAIR TYPE.
 - CONNECTORS: UL LISTED SOLDERLESS METAL CONNECTORS WITH APPROPRIATE TEMPERATURE RATINGS.

SECTION 16140 WIRING DEVICES

- A. PROJECT INCLUDES**
- WIRING DEVICES FOR ELECTRICAL SERVICE.

- B. PRODUCTS**
- WIRING DEVICES AND COMPONENTS:**
 - RECEPTACLES: 20-AMP DUPLEX (HUBBELL #5362, OR APPROVED EQUIVALENT).
 - GROUND-FAULT INTERRUPTER (GFI) RECEPTACLES: FEED-THRU TYPE GROUND-FAULT CIRCUIT INTERRUPTER WITH INTEGRAL DUPLEX RECEPTACLES. (HUBBELL #GF-5362, OR APPROVED EQUIVALENT).
 - ISOLATED GROUND RECEPTACLES: LISTED AND LABELED, EQUIPMENT GROUNDING CONTACTS INTEGRAL TO RECEPTACLE CONSTRUCTION.
 - PLUGS AND PLUG CONNECTOR: AS SPECIFIED ON DRAWINGS. SNAP SWITCHES: SINGLE-POLE, 20 AMPERE (HUBBELL #1221, OR APPROVED EQUIVALENT), THREE-WAY, 20 AMPERE (HUBBELL #1223, OR APPROVED EQUIVALENT).
 - WALL PLATES: SINGLE AND COMBINATION TYPES, STAINLESS STEEL, UNLESS OTHERWISE NOTED ON DRAWINGS.
 - TELEPHONE/POWER SERVICE POLES: COMBINATION TELEPHONE AND POWER POLES WITH APPROPRIATE CEILING AND FLOOR TRIM PLATES AND METAL DIVIDER BETWEEN POWER AND TELE/DATA COMPARTMENTS.
 - COLOR OF ALL DEVICES AND COVERPLATES TO BE STAINLESS STEEL UNLESS OTHERWISE NOTED ON DRAWINGS.
 - ALL 125V AND 250V NON-LOCKING TYPE RECEPTACLES SHALL BE TAMPER RESISTANT TYPE UNLESS PERMITTED OTHERWISE BY NEC 408.12.
 - ALL 125V AND 250V RECEPTACLES LOCATED WITHIN 6' OF WATER SOURCES AND OUTDOORS SHALL BE WEATHER RESISTANT TYPE WITH THE LISTING "WR" ON FACE OF RECEPTACLE.
- C. EXECUTION**
- DUPLEX RECEPTACLES SHALL BE 20-AMP, UNLESS NOTED OTHERWISE.
 - DEVICE/OUTLET BOXES SHALL NOT BE MOUNTED BACK-TO-BACK IN WALLS.
 - WEATHERPROOF COVERS SHALL PROTECT THE OUTLET WHILE IN USE. EQUIVALENT TO LEVITON #M5999. COVERS SHALL BE EXTRA DEEP, METALLIC WITH OUTLET MOUNTED IN HORIZONTAL ORIENTATION.

SECTION 16400 SERVICE AND DISTRIBUTION

- A. PROJECT MAY INCLUDE**
- ELECTRICAL SERVICE AND DISTRIBUTION INCLUDING SERVICE ENTRANCE, GROUNDING, PANELBOARDS, OVERCURRENT PROTECTIVE DEVICES AND DISCONNECT SWITCHES.
- B. PRODUCTS**
- GROUNDING:**
 - GROUNDING EQUIPMENT: COPPER CONDUCTORS, N.E.C. APPROVED CONNECTORS.
 - GROUNDING ELECTRODES: COPPER-CLAD STEEL GROUND RODS.
 - GROUNDING SYSTEM: SHALL COMPLY WITH N.E.C. ARTICLE 250.
 - SERVICE GROUND IMPEDANCE SHALL BE MEASURED, AND SHALL BE 5 OHMS OR LESS. IF UPON MEASUREMENT, SERVICE GROUND READING EXCEEDS 5 OHMS, THEN ADDITIONAL GROUND RODS SHALL BE DRIVEN TO REDUCE READING TO 5 OHMS OR LESS. NOTIFY ENGINEER OF FINAL SERVICE GROUND MEASUREMENT.
 - PANELBOARDS:
 - PANELBOARDS: WITH OVERCURRENT PROTECTIVE DEVICES, DEAD-FRONT SAFETY ENCLOSURE SUITABLE FOR USE (20" WIDE MINIMUM WITH 4" WIRING GUTTERS AT TOP, SIDES, AND BOTTOM), COPPER BUS, MECHANICAL TYPE MAIN AND NEUTRAL LUGS.
 - PANELBOARD TYPE: LIGHTING AND APPLIANCE BRANCH CIRCUIT PANELBOARDS, BOLT ON CIRCUIT BREAKERS.
 - SERIES RATING IS NOT ALLOWED FOR ALL NEW PANELBOARDS, CIRCUIT BREAKERS AND DEVICES.
 - ACCEPTABLE MANUFACTURERS: SQUARE D, SIEMENS, G.E. OR CUTLER-HAMMER.
 - DISCONNECT SWITCHES:
 - HEAVY-DUTY TYPE.
 - NEMA 1 ENCLOSURE - INDOORS, NEMA 3R ENCLOSURE - OUTDOORS AND WET AREAS.
 - FUSED OR NON-FUSED AS INDICATED ON DRAWINGS.
 - FUSED SWITCHES SHALL HAVE REACTION-TYPE FUSE CLIPS.
 - ALL DISCONNECTS SHALL BE HEAVY-DUTY RATED, AND SHALL HAVE A MECHANICAL INTERLOCK TO PREVENT THE DOOR FROM BEING OPENED, WITHOUT DEFEATING THE INTERLOCK. THE MECHANICAL INTERLOCK SHALL ALSO PREVENT ACTIVATING THE SWITCH WHEN THE DOOR IS OPEN. THE MECHANICAL INTERLOCK SHALL BE DE-FEATABLE BY A SPECIAL TOOL, AND SHALL BE UL LISTED AS PART OF THE DISCONNECT.
 - ACCEPTABLE MANUFACTURERS: SQUARE D, SIEMENS, G.E. OR CUTLER-HAMMER.
 - OVERCURRENT PROTECTIVE DEVICES:
 - OVERCURRENT PROTECTIVE DEVICES: INTEGRAL TO PANELBOARDS.
 - FUSIBLE SWITCHES: RATING AS INDICATED ON DRAWINGS AND SUITABLE FOR USE.
 - MOLDED CASE CIRCUIT BREAKERS: BOLT-ON TYPE, AUTOMATIC THERMAL MAGNETIC TYPE CALIBRATED FOR 40-DEGREES C, OR AMBIENT COMPENSATION.
 - ACCEPTABLE MANUFACTURERS: SQUARE D, SIEMENS, G.E. OR CUTLER-HAMMER.
 - FUSES:
 - SIZES INDICATED ON DRAWINGS.
 - CLASS R-5, TIME DELAY, UNLESS OTHERWISE NOTED.
 - A SET OF 3 SPARE FUSES OF EACH SIZE AND TYPE SHALL BE FURNISHED TO THE OWNER.
 - ACCEPTABLE MANUFACTURERS: BUSSMAN, GOULD SHAMMUT OR LITTLE FUSE.
- C. EXECUTION**
- ALL MULTI-CIRCUIT HOMERUNS SHALL BE PROTECTED WITH A MULTI-POLE, SIMULTANEOUS-TRIP CIRCUIT BREAKER PER N.E.C. 210-4B.
 - ALL TERMINATION'S ON ELECTRICAL GEAR/EQUIPMENT (i.e. PANELBOARDS, DISCONNECT SWITCHES, etc.) SHALL HAVE DUAL RATED 60-DEGREE / 75-DEGREE LUGS/TERMINALS.
 - PROVIDE A COMPLETE PANEL DIRECTORY FOR EACH PANEL. DIRECTORY SHALL BE TYPE WRITTEN FOR ALL CIRCUITS.
 - ALL SPARE BREAKER HANDLES SHALL BE IN THE OFF POSITION.

SECTION 16515 INTERIOR AND EXTERIOR LIGHTING

- A. PROJECT INCLUDES**
- INTERIOR AND EXTERIOR LIGHTING FIXTURES, LAMPS, BALLASTS, EMERGENCY LIGHTING UNITS, EXIT SIGNS AND ACCESSORIES.
- B. PRODUCTS**
- INTERIOR AND EXTERIOR LIGHTING COMPONENTS (SEE "LIGHT FIXTURE SCHEDULE"):
 - EXIT SIGNS: L.E.D., SELF-POWERED NI-CAD BATTERY TYPE, MIN 90 MINUTE CAPACITY.
 - EMERGENCY LIGHTING UNITS: L.E.D. LAMPS, INTEGRAL, NI-CAD BATTERY, MIN. 90 MINUTE CAPACITY.
 - ACRYLIC LENS: A-12, 125" MINIMUM.
 - L.E.D. LAMPS SHALL BE MINIMUM OF 85 CRI, 3500 KELVIN IN INTERIOR LIGHT FIXTURES AND 5000 KELVIN IN EXTERIOR LIGHT FIXTURES, UNLESS NOTED OTHERWISE ON LIGHT FIXTURE SCHEDULE.
 - LAY-IN FIXTURES SHALL BE SUSPENDED FROM BUILDING STRUCTURE WITH MINIMUM OF ONE WIRE AT EACH CORNER. FIXTURES SHALL ALSO BE ATTACHED TO GRID SYSTEM WITH EARTHQUAKE CLIPS. DO NOT SUPPORT FIXTURES FROM CEILING GRID.
 - SEE ARCHITECTURAL "REFLECTED CEILING PLANS" OR ELECTRICAL LIGHTING PLANS FOR EXACT LOCATIONS OF ALL LIGHT FIXTURES.
 - COORDINATE LIGHT FIXTURE MOUNTING METHODS WITH ARCHITECTURAL FINISHES PRIOR TO ORDERING MATERIAL. COORDINATE FIXTURE TYPE AND TRIM WITH CEILING CONSTRUCTION.
 - DOWNLIGHTS INSTALLED AT INACCESSIBLE CEILINGS SHALL HAVE BOTTOM ACCESS LISTING.
 - COORDINATE LIGHT FIXTURE VOLTAGE WITH VOLTAGE OF LIGHTING CIRCUIT SERVING LIGHT FIXTURE.
 - CONNECT ALL BATTERY UNITS IN EXIT AND EMERGENCY EGRESS LIGHT FIXTURES TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHING UNLESS NOTED OTHERWISE.
 - LIGHTING FIXTURES INDICATED TO BE INSTALLED IN WET OR DAMP LOCATIONS SHALL BE UL LISTED AND LABELED "WET" OR "DAMP" ACCORDINGLY.
 - IN COMPLIANCE WITH THE ENERGY CONSERVATION CODE, ALL RECESSED LIGHT FIXTURES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE IC-RATED AND LABELED FOR MEETING ASTM E 283. THESE FIXTURES SHALL BE SEALED WITH A GASKET OR CAULK BETWEEN THE HOUSING AND THE INTERIOR WALL OR CEILING COVERING.
 - CATALOG NUMBERS GIVEN ON PLANS OR IN SPECIFICATIONS DENOTE MINIMUM QUALITY AND PERFORMANCE REQUIRED. APPROVED EQUIVALENT EQUIPMENT BY OTHER MANUFACTURERS IS ACCEPTABLE.

END OF SPECIFICATIONS

ELECTRICAL SYMBOL SCHEDULE

| SYMBOL | DESCRIPTION |
|--------|--|
| | CONDUIT RUN CONCEALED IN CEILING OR IN WALL. |
| | CONDUIT RUN CONCEALED IN FLOOR OR BELOW SLAB/GRADE. |
| | CONDUIT RUN EXPOSED ON SURFACE. |
| | CIRCUIT HOME RUN. NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. |
| | CONDUIT WITH BUSHING AND CAP. |
| | 120/208 VOLT DISTRIBUTION OR BRANCH CIRCUIT PANELBOARD. |
| | FLUSH OR SURFACE-MOUNTED JUNCTION BOX. |
| | POWER |
| | DUPLEX, GROUNDING TYPE, 120 VOLT, 20 AMP, RECEPTACLE WITH COVERPLATE. PROVIDE #12 GREEN GROUND JUMPER. MOUNT 18" A.F.F. TO CENTER UNLESS OTHERWISE SHOWN. |
| | SAME AS DUPLEX RECEPTACLE ABOVE EXCEPT MOUNTED ABOVE COUNTERTOP BACKSPLASH, OR AT 46" A.F.F. TO CENTER WHERE THERE IS NO ASSOCIATED CASEWORK. |
| | SAME AS DUPLEX RECEPTACLE ABOVE EXCEPT MOUNTED IN WEATHERPROOF ENCLOSURE WITH COVER THAT IS WEATHER-RESISTANT WHILE RECEPTACLE IS IN USE. |
| | SAME AS DUPLEX RECEPTACLE ABOVE EXCEPT GROUND-FAULT INTERRUPTING TYPE. |
| | SPECIAL EQUIPMENT CONNECTION SYMBOL. SUBSCRIPT DENOTES EQUIPMENT DESIGNATION. REFER TO EQUIPMENT CONNECTION SCHEDULE(S) FOR EQUIPMENT AND CONNECTION INFORMATION. |
| | SINGLE POLE, 120/277 VOLT, 20 AMP, RECESSED WALL SWITCH WITH PLATE. MOUNT 46" A.F.F. TO CENTER. |
| | THREE WAY, 120/277 VOLT, 20 AMP, RECESSED WALL SWITCH WITH PLATE. MOUNT 46" A.F.F. TO CENTER. |
| | FOUR WAY, 120/277 VOLT, 20 AMP, RECESSED WALL SWITCH WITH PLATE. MOUNT 46" A.F.F. TO CENTER. |
| | OCCUPANCY SENSOR WALL SWITCH, 120/277-VOLT, 1000W, RECESSED WALL-MOUNTED SENSOR WITH COVERPLATE. DUAL TECHNOLOGY PASSIVE INFRARED/ULTRASONIC TECHNOLOGY. AUTOMATIC ON, 30-SEC TO 30-MIN TIME DELAY ADJUSTMENT TO TURN LIGHTS OFF. HUBBELL LIGHTHAWK SERIES, OR APPROVED EQUIVALENT BY LEVITON OR WATT-STOPPER. |
| | CEILING-MOUNTED OCCUPANCY SENSOR, LINE-VOLTAGE, 1000 SO FT, SEMI-RECESSED SENSOR WITH COVERPLATE. DUAL TECHNOLOGY PASSIVE INFRARED/ULTRASONIC TECHNOLOGY. AUTOMATIC ON, 30-SEC TO 30-MIN TIME DELAY ADJUSTMENT TO TURN LIGHTS OFF. WHITE COLOR. SENSOR TO BE EQUIPPED WITH AUXILIARY RELAY FOR INDEPENDENT CONTROL EXHAUST FAN. HUBBELL OR APPROVED EQUIVALENT BY LEVITON OR WATT-STOPPER. |
| | LED LIGHTING FIXTURE. LETTER INDICATES TYPE. SEE LIGHT FIXTURE SCHEDULE. |
| | LED LIGHTING FIXTURE WITH EMERGENCY BATTERY BALLAST LETTER INDICATES TYPE. |
| | CEILING OR WALL MOUNTED EMERGENCY BATTERY PACK. SEE LIGHT FIXTURE SCHEDULE. |
| | LED STRIP/INDUSTRIAL. LETTER INDICATES TYPE. SEE LIGHT FIXTURE SCHEDULE. |
| | LED LIGHTING FIXTURE CEILING OR WALL MOUNTED RESPECTIVELY. LETTER INDICATES TYPE. SEE LIGHT FIXTURE SCHEDULE. |
| | EXIT SIGN WITH BATTERY NUMBER OF FACES AND ARROWS AS INDICATED ON DRAWINGS. LETTERS INDICATE TYPE. SEE LIGHT FIXTURE SCHEDULE. |

**2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL
COMMERCIAL PROJECTS (ELECTRICAL DESIGN)**

ELECTRICAL SYSTEM AND EQUIPMENT

METHOD OF COMPLIANCE

ENERGY CODE: PRESCRIPTIVE PERFORMANCE
ASHRAE 90.1: PRESCRIPTIVE PERFORMANCE

LIGHTING SCHEDULE

| | |
|---|-----------------------|
| LAMP TYPE REQUIRED IN FIXTURE | N.A. |
| NUMBER OF LAMPS IN FIXTURE | |
| BALLAST TYPE USED IN FIXTURE | |
| NUMBER OF BALLASTS IN FIXTURE | |
| TOTAL INTERIOR WATTAGE SPECIFIED VS. ALLOWED (BUILDING CORRIDORS) | 1201W. VS. 2132W. |
| TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED (TRADABLE) | 168.0 LUMENS PER WATT |
| TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED (NON-TRADABLE) | N.A. |

ADDITIONAL EFFICIENCY PACKAGE OPTIONS

C406.2 MORE EFFICIENT HVAC EQUIPMENT PERFORMANCE
 C406.3 REDUCED LIGHTING POWER DENSITY
 C406.4 ENHANCED DIGITAL LIGHTING CONTROLS
 C406.5 ON-SITE RENEWABLE ENERGY
 C406.6 DEDICATED OUTDOOR AIR SYSTEM
 C406.7 REDUCED ENERGY USE IN SERVICE WATER HEATING

| ELECTRICAL SHEET INDEX | |
|------------------------|---|
| E0.1 | ELECTRICAL SPECIFICATIONS AND SCHEDULES |
| E1.0 | ELECTRICAL PLANS AND NOTES - RESTROOMS |
| E1.1 | ELECTRICAL PLANS AND NOTES - SHELTERS |
| E2.0 | ELECTRICAL POWER RISER DIAGRAM AND PANEL SCHEDULE |

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6/15/23

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Architecture • Planning • Staff

| REVISIONS | DATE | DESCRIPTION |
|-----------|------------|----------------------|
| 1 | 06/15/2023 | ELECTRICAL REVISIONS |

CITY OF CONCORD

35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

OWNER:

DORTON PARK

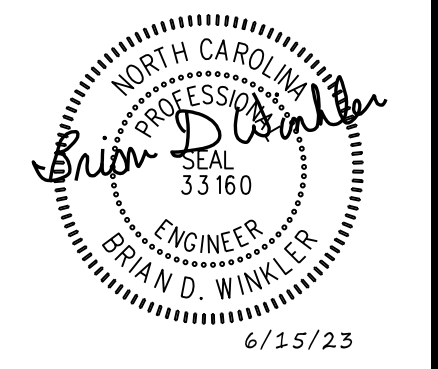
5650 POPLAR TENT ROAD
CONCORD, NORTH CAROLINA

SCALE: NOT TO SCALE

DATE: 5/23/2023

SHEET NAME:
ELECTRICAL SPECIFICATIONS AND SCHEDULES

SHEET NO.
E0.1



REVISIONS:

| | |
|------------|----------------------|
| 06/15/2023 | ELECTRICAL REVISIONS |
|------------|----------------------|

RELOCATE EXISTING OVERHEAD DATA LINE ON BUILDING TO UNDERGROUND CONDUIT. ROUTE CONDUIT UNDERGROUND TO PARK OFFICE. COORDINATE WITH OWNER PRIOR TO ROUGH-IN.

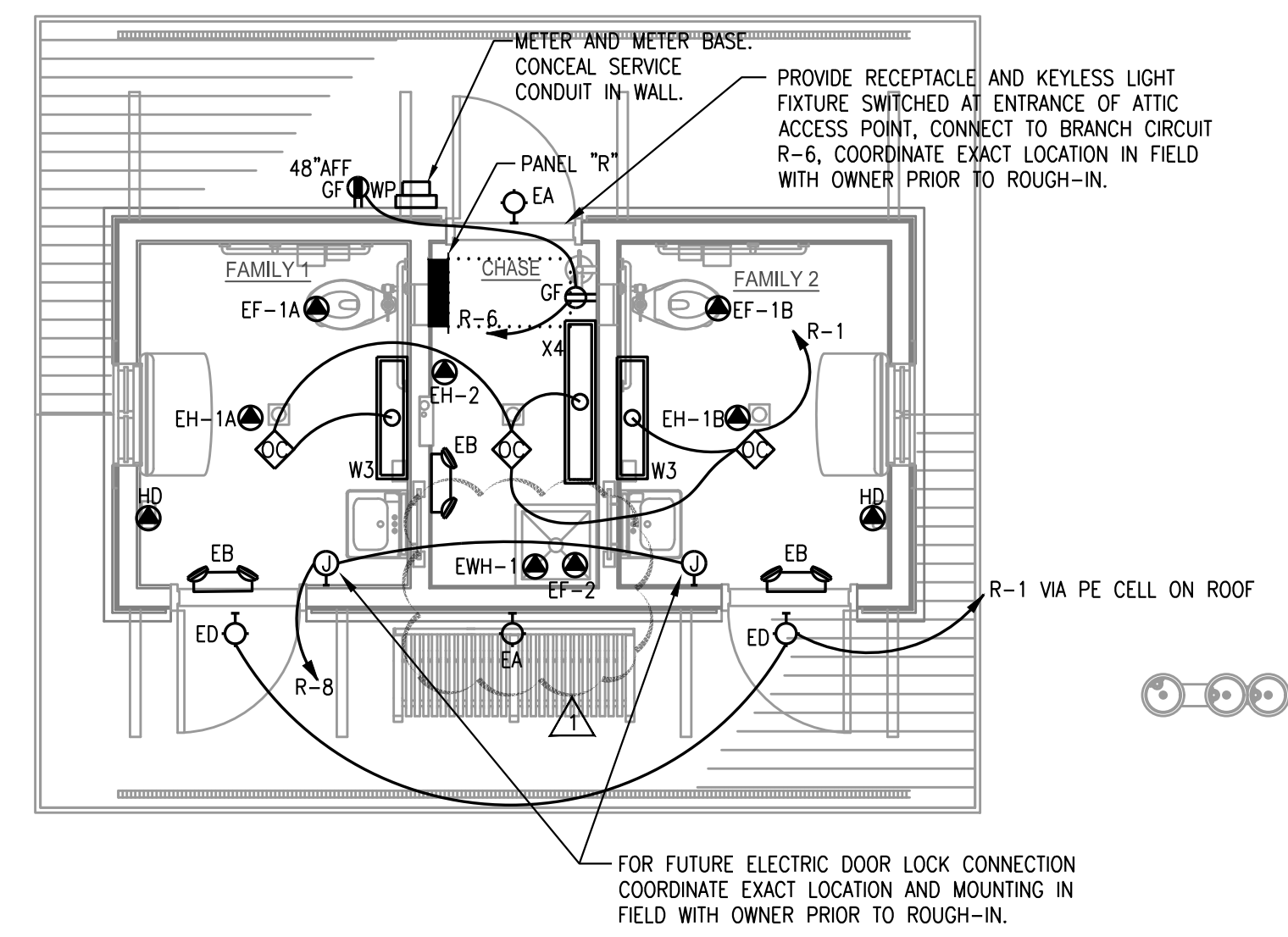
FOR FUTURE ELECTRIC DOOR LOCK CONNECTION COORDINATE EXACT LOCATION AND MOUNTING IN FIELD WITH OWNER PRIOR TO ROUGH-IN.

FOR FUTURE ELECTRIC DOOR LOCK CONNECTION COORDINATE EXACT LOCATION AND MOUNTING IN FIELD WITH OWNER PRIOR TO ROUGH-IN.

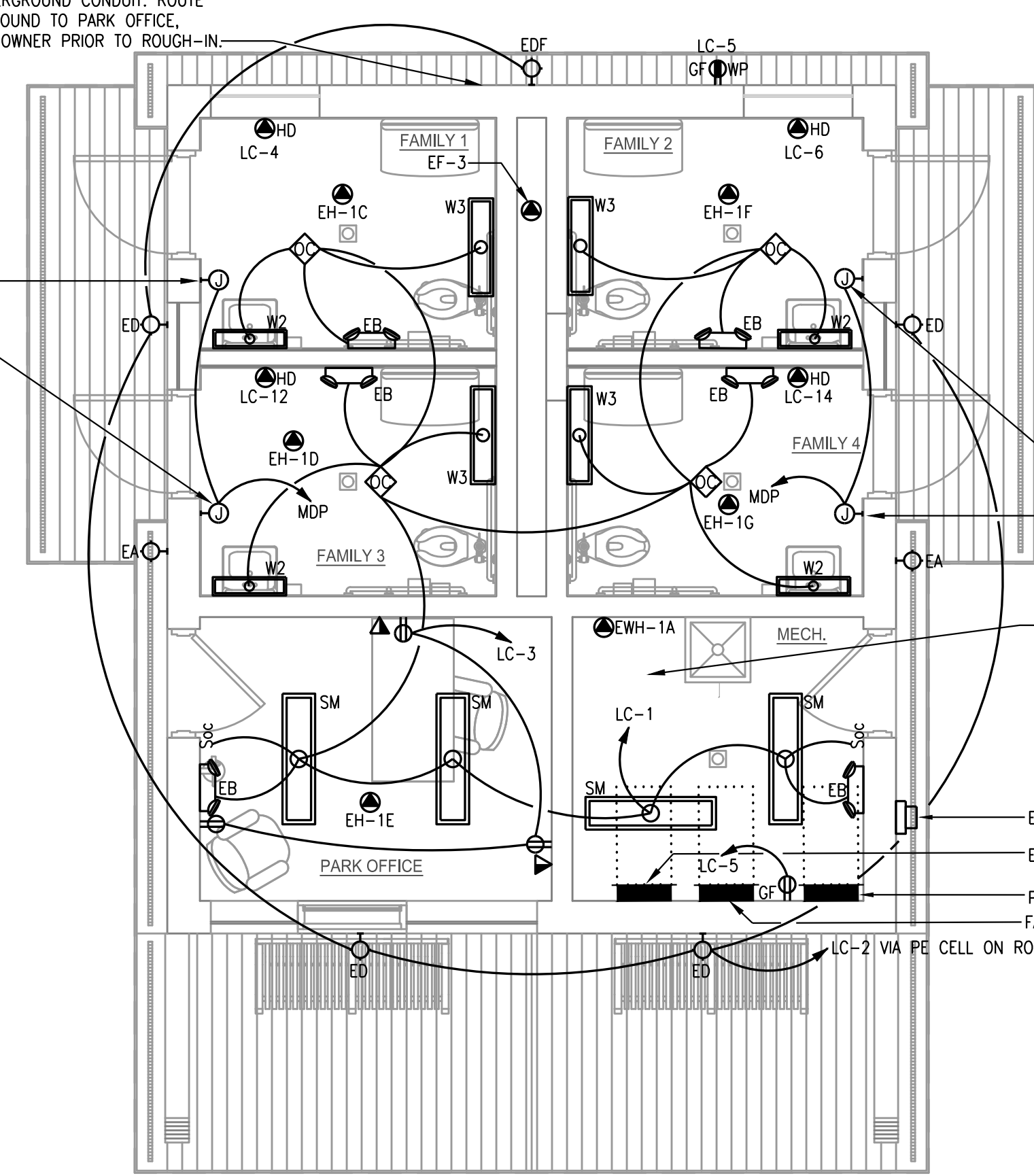
PROVIDE RECEPTACLE AND KEYLESS LIGHT FIXTURE SWITCHED AT ENTRANCE OF ATTIC ACCESS POINT, CONNECT TO BRANCH CIRCUIT MDP-37, COORDINATE EXACT LOCATION IN FIELD WITH OWNER PRIOR TO ROUGH-IN.

EXISTING METER AND METER BASE.
 EXISTING PANEL "LC" CONCESSION
 PANEL "MDP"
 FAN CONTROL PANEL.
 LC-2 VIA PE CELL ON ROOF.

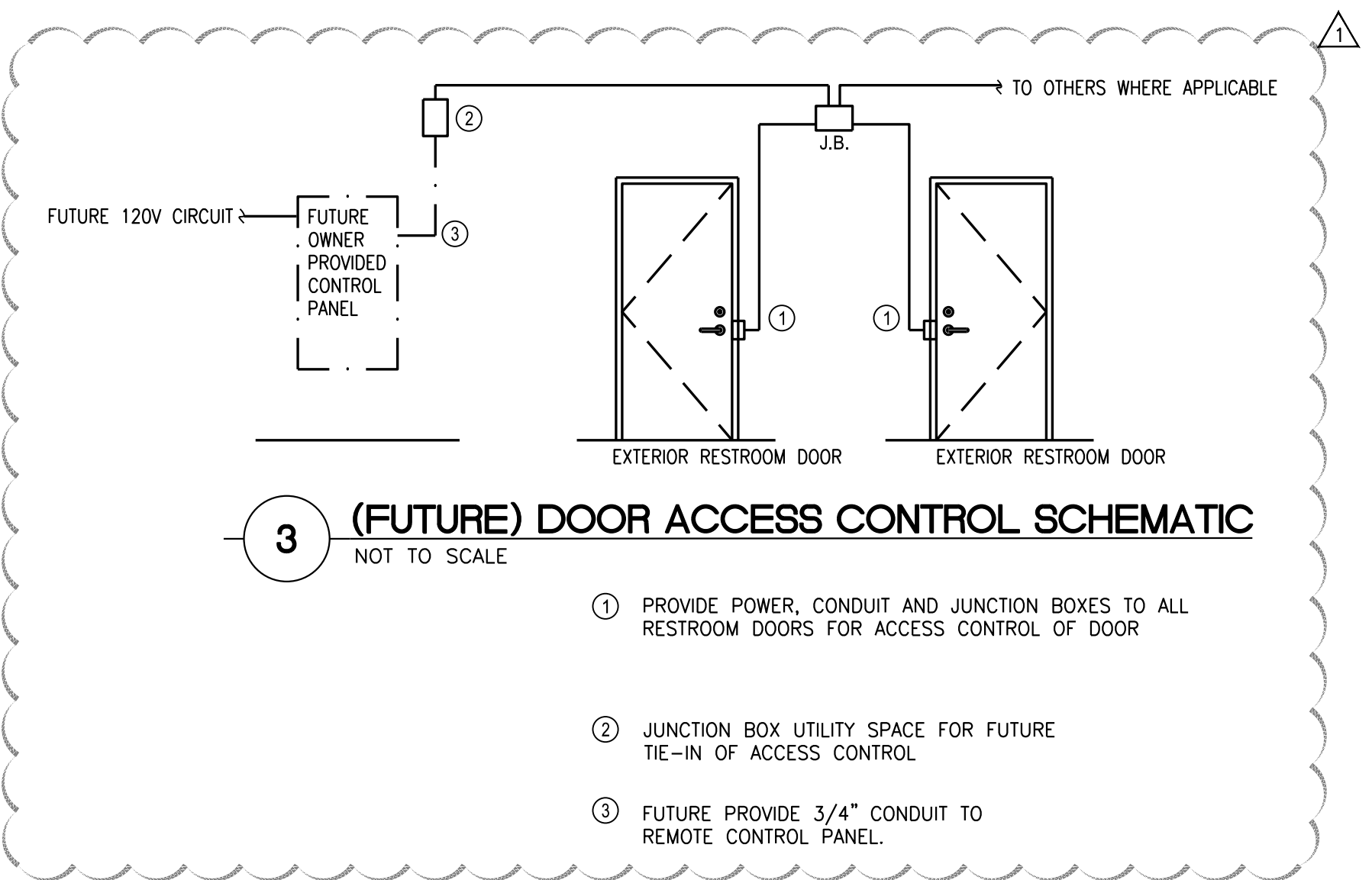
CIRCUIT ASSIGNMENTS MODIFIED ON THIS PLAN



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



2 ELECTRICAL PLAN - RENOVATED RESTROOM
 SCALE: 1/4" = 1'-0"

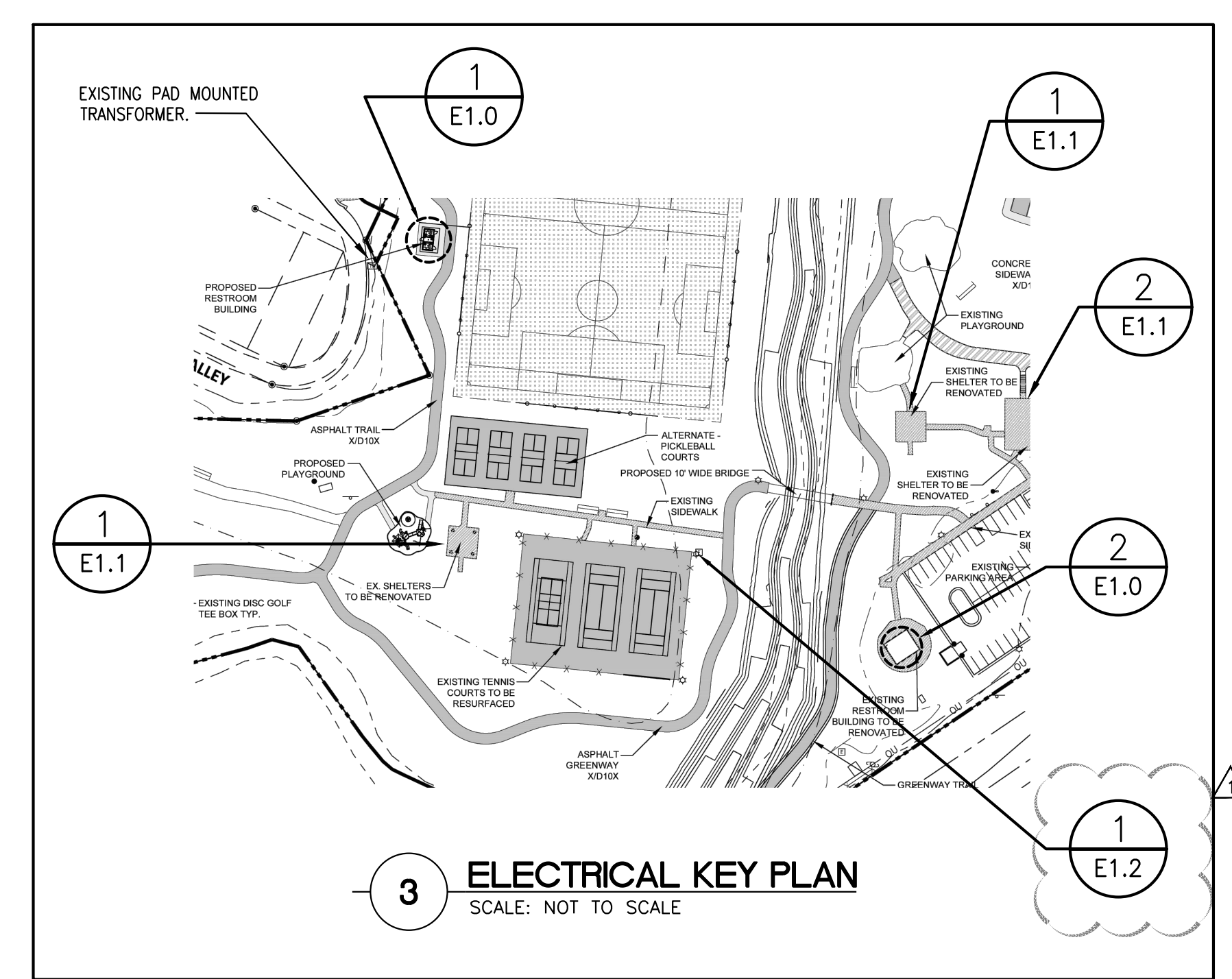


3 (FUTURE) DOOR ACCESS CONTROL SCHEMATIC
 NOT TO SCALE

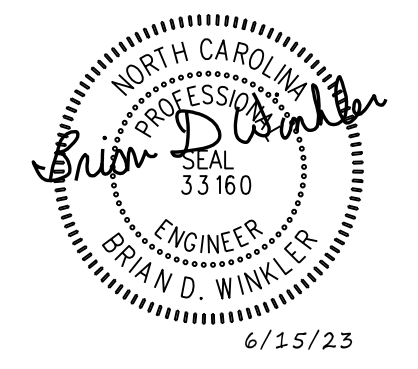
- 1 PROVIDE POWER, CONDUIT AND JUNCTION BOXES TO ALL RESTROOM DOORS FOR ACCESS CONTROL OF DOOR
- 2 JUNCTION BOX UTILITY SPACE FOR FUTURE TIE-IN OF ACCESS CONTROL
- 3 FUTURE PROVIDE 3/4" CONDUIT TO REMOTE CONTROL PANEL

| LIGHT FIXTURE SCHEDULE | | | | | | |
|------------------------|--|----------------|------|-------|------------------|---|
| EB | DESCRIPTION: EMERGENCY BATTERY PACK LIGHT FIXTURE, POLYCARBONATE HOUSING WITH WHITE FINISH, (2)-LIGHT HEADS, INTEGRAL BATTERY. | LAMP INFO: LED | NO.: | TYPE: | BALLAST TYPE: NA | NOTE(S): MOUNT AT 8'-0" NOTE 2 |
| EA | DESCRIPTION: EXTERIOR EMERGENCY LED EGRESS FIXTURE, EQUIP WITH 90 MIN. BATTERY PACK, DARK BROZNE FINISH, WET LOCATION LISTED, PHOTOCELL CONTROL. | LAMP INFO: LED | NO.: | TYPE: | BALLAST TYPE: NA | NOTE(S): MOUNT PER ARCH. ELEVATIONS FOR MTC |
| ED | DESCRIPTION: LED UP/DOWN SCONCE, BLACK FINISH WET LOCATION LISTED | LAMP INFO: LED | NO.: | TYPE: | BALLAST TYPE: NA | NOTE(S): SEE ARCH. ELEVATIONS FOR MTC |
| EDF | DESCRIPTION: LED WALL PACK, BLACK FINISH, FORWARD THROW OPTICS, WET LOCATION LISTED | LAMP INFO: LED | NO.: | TYPE: | BALLAST TYPE: NA | NOTE(S): SEE ARCH. ELEVATIONS FOR MTC |
| SM | DESCRIPTION: 4" SURFACE MOUNTED LIGHT, ST SERIES STEEL HOUSING WITH WHITE POLYESTER POWDER COAT. | LAMP INFO: LED | NO.: | TYPE: | BALLAST TYPE: NA | NOTE(S): SURFACE MOUNT TO CEILING |
| SN | DESCRIPTION: 4" LED STRIP LIGHT, FIBERGLASS HOUSING WITH WHITE FINISH VANDAL RESISTANT SURFACE MOUNTED. | LAMP INFO: LED | NO.: | TYPE: | BALLAST TYPE: NA | NOTE(S): CEILING SURFACE MOUNTING |
| W2 | DESCRIPTION: 2" LED WALL BRACKET, STEEL HOUSING WITH WHITE ENAMEL FINISH, EQUIP WITH OCC. SENSOR | LAMP INFO: LED | NO.: | TYPE: | BALLAST TYPE: NA | NOTE(S): MOUNT AT 7'-4" A.F.F. |
| W3 | DESCRIPTION: 3" LED WALL BRACKET, STEEL HOUSING WITH WHITE ENAMEL FINISH, EQUIP WITH OCC. SENSOR | LAMP INFO: LED | NO.: | TYPE: | BALLAST TYPE: NA | NOTE(S): MOUNT AT 9'-0" A.F.F. |
| X4 | DESCRIPTION: 4" LED WALL BRACKET, STEEL HOUSING WITH WHITE ENAMEL FINISH | LAMP INFO: LED | NO.: | TYPE: | BALLAST TYPE: NA | NOTE(S): MOUNT AT 8'-6" A.F.F. |

| LIGHT FIXTURE SCHEDULE NOTES | | | | | | |
|------------------------------|--|--|--|--|--|--|
| 1. | VOLTAGES OF LIGHT FIXTURES SHALL BE COORDINATED WITH LIGHTING CIRCUIT TO WHICH FIXTURE IS CONNECTED. | | | | | |
| 2. | ALL EMERGENCY LIGHTS, EXIT SIGNS AND NIGHT LIGHTS SHALL BE CONNECTED TO THE UNSWITCHED LEG OF THE NEAREST LIGHTING CIRCUIT SERVING THAT SAME AREA/ROOM. | | | | | |
| 3. | COORDINATE MOUNTING REQUIREMENTS OF ALL FIXTURES WITH ARCHITECTURAL PLANS AND FINISH SCHEDULES. | | | | | |
| 4. | FLANGES AND TRIMS SHALL MATCH CEILING TYPES. | | | | | |
| 5. | PROVIDE WITH APPROPRIATE CHAIN MOUNTING KITS AND MOUNT SO THAT BOTTOM OF FIXTURES ARE AT 8'-6" A.F.F. FIELD COORDINATE LOCATIONS OF FIXTURES WITH EQUIPMENT IN ROOM TO BEST ILLUMINATE ROOM. | | | | | |



3 ELECTRICAL KEY PLAN
 SCALE: NOT TO SCALE



REVISIONS:

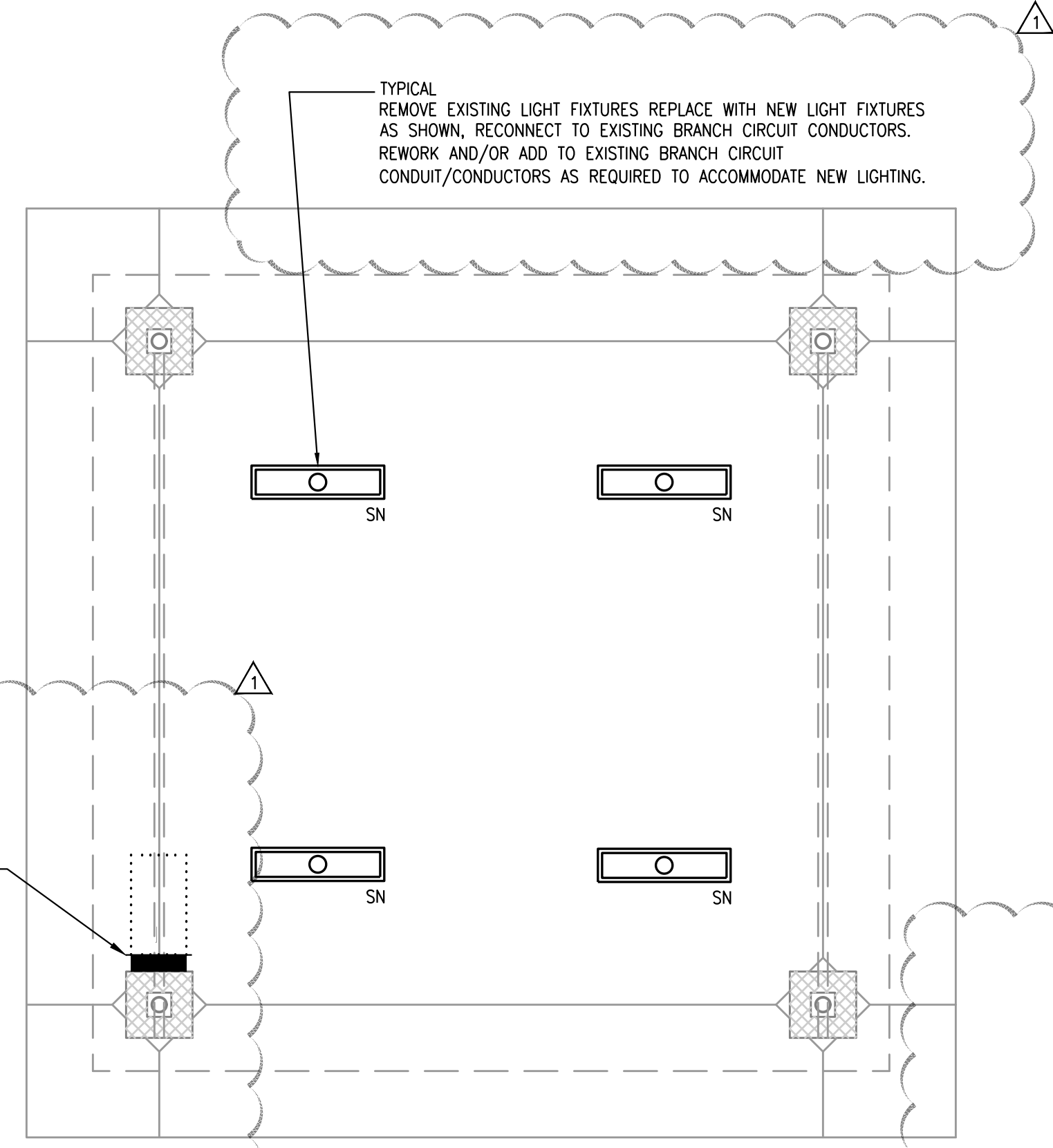
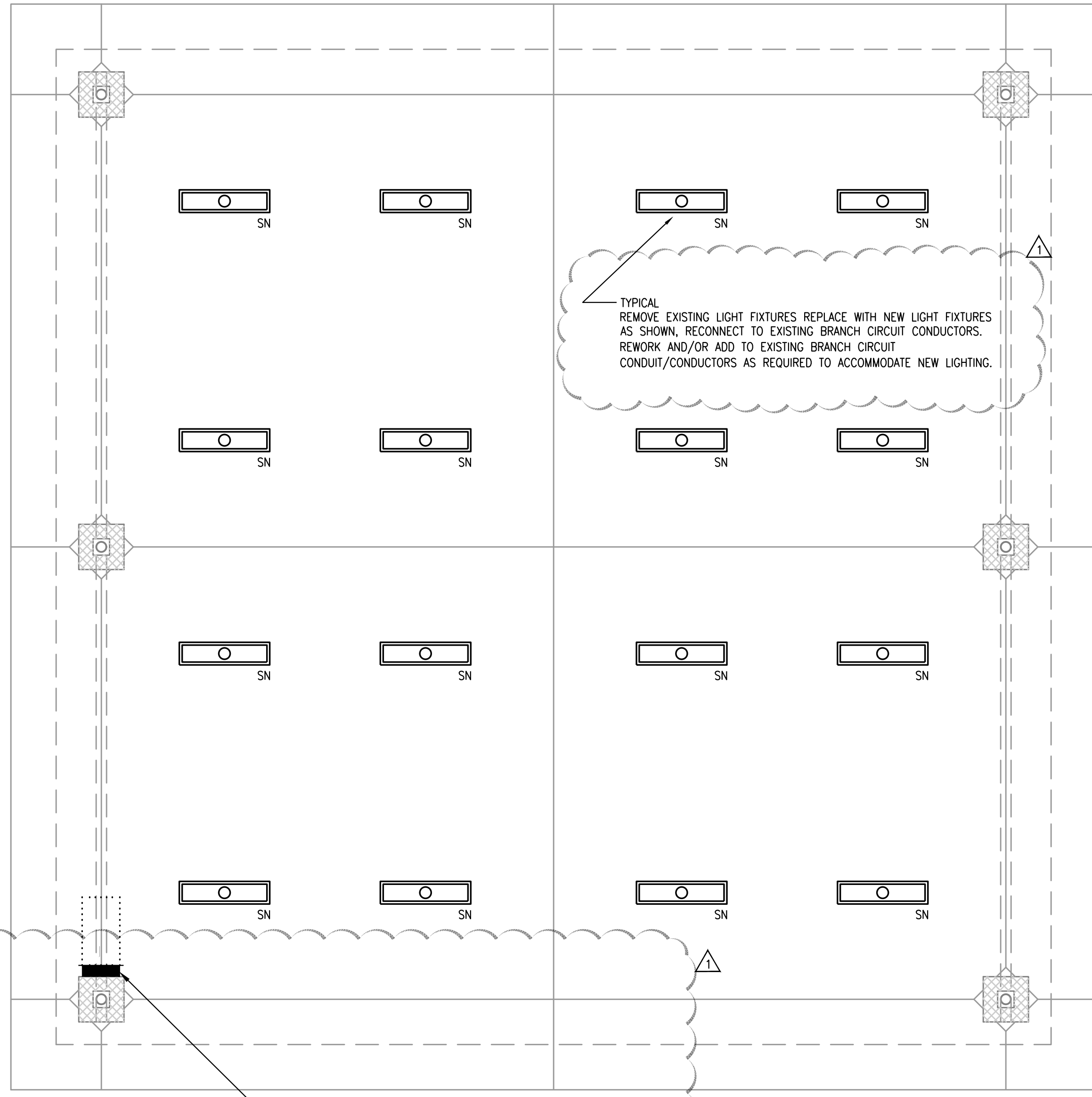
| | | |
|---|------------|----------------------|
| △ | 06/15/2023 | ELECTRICAL REVISIONS |
|---|------------|----------------------|

CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

DORTON PARK
5650 POPLAR TENT ROAD
CONCORD, NORTH CAROLINA

SCALE: 1/4" = 1'-0"
DATE: 5/23/2023
SHEET NAME:
ELECTRICAL PLANS
AND NOTES -
SHELTERS

SHEET NO:
E1.1



RELOCATE EXISTING PANEL AND OUTLET TO NEW COLUMN FACE.
REMOVE EXISTING TIMER AND TIMER OUTLET BOX.
RAISE PANEL AND EXTEND EXISTING CONDUIT AND CONDUCTORS TO NEW PANEL LOCATION. THE BOTTOM OF THE RELOCATED ELECTRICAL EQUIPMENT SHALL BE NO LESS THAN 5'-4" AFF.
REPLACE EXISTING GFCI RECEPTACLE AND OUTLET BOX WITH NEW. NEW OUTLET BOX SHALL BE METAL TYPE INCLUDING METAL COVER.

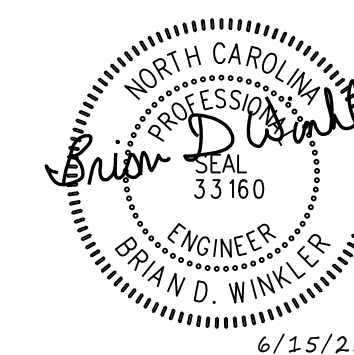
GENERAL NOTES:
DISCONNECT AND REMOVE EXISTING TIMER SWITCH AT EACH SHELTER. EXISTING LIGHTING CIRCUIT TO BE CONTROLLED BY PHOTOELECTRIC SWITCH AT TOP OF COLUMN. ENSURE PHOTOELECTRIC SWITCH IS IN GOOD OPERATING CONDITION. PROVIDE/REPLACE IF MISSING OR FAULTY. RE-WORK ANY EXISTING ELECTRICAL CONSTRUCTION AS REQUIRED TO ACCOMMODATE NEW WORK AT THE SHELTER.

FOR ALL UN-USED OPENINGS AT ANY AFFECTED ELECTRICAL ENCLOSURES PROVIDE LISTED PLUGS PER NEC 110.

RELOCATE EXISTING PANEL AND OUTLET TO NEW COLUMN FACE.
REMOVE EXISTING TIMER AND TIME OUTLET BOX.
RAISE PANEL AND EXTEND EXISTING CONDUIT AND CONDUCTORS TO NEW PANEL LOCATION. THE BOTTOM OF THE RELOCATED ELECTRICAL EQUIPMENT SHALL BE NO LESS THAN 5'-4" AFF.
REPLACE EXISTING GFCI RECEPTACLE AND OUTLET BOX WITH NEW. NEW OUTLET BOX SHALL BE METAL TYPE INCLUDING METAL COVER.

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

2 ELECTRICAL PLAN - LARGE SHELTER
SCALE: 1/4" = 1'-0"



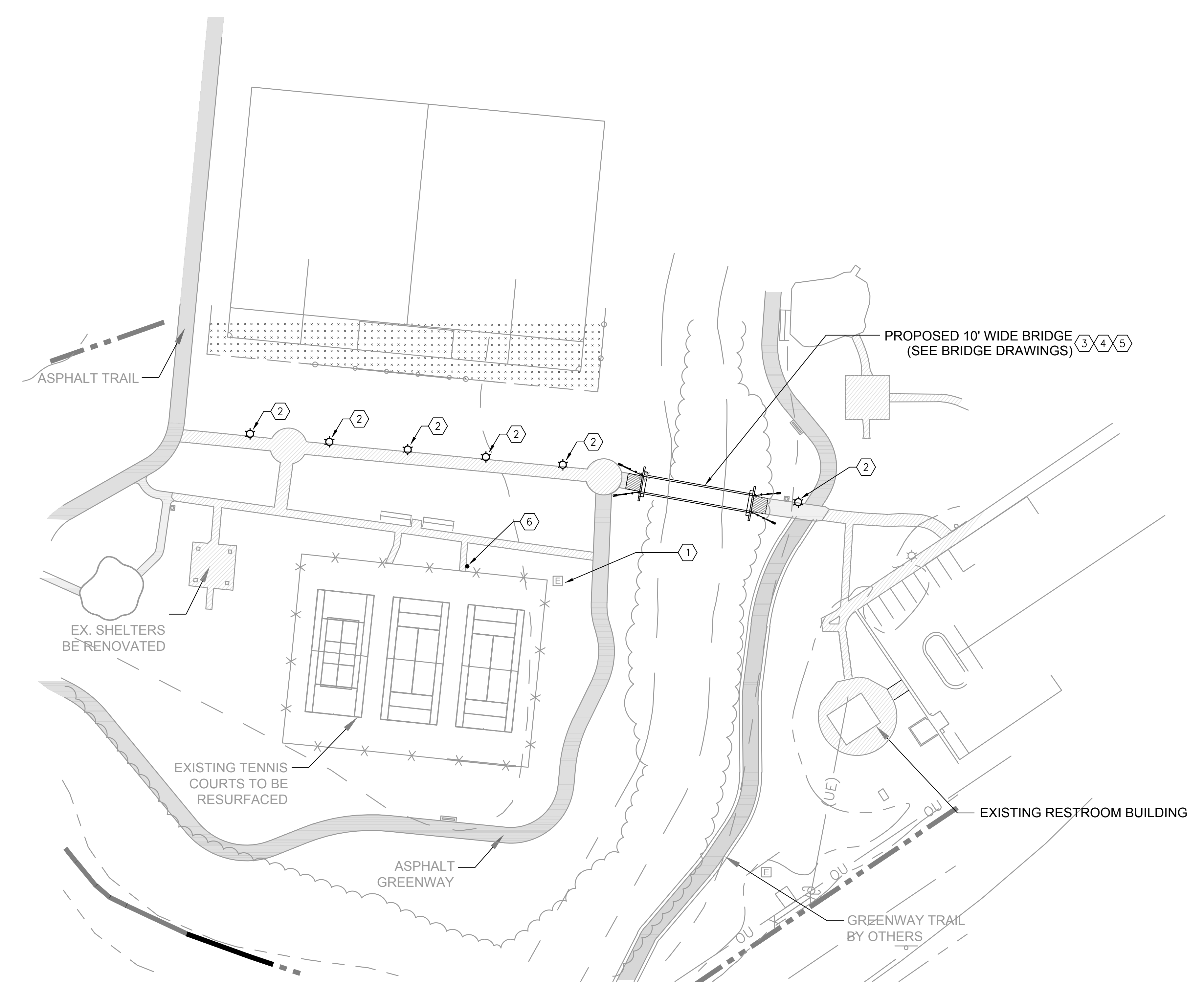
REVISIONS:

| | | |
|---|------------|----------------------|
| △ | 06/15/2023 | ELECTRICAL REVISIONS |
|---|------------|----------------------|

OWNER:
CITY OF CONCORD
 35 CABARRUS AVE. W
 CONCORD, NORTH CAROLINA

DORTON PARK
 5650 POPLAR TENT ROAD
 CONCORD, NORTH CAROLINA

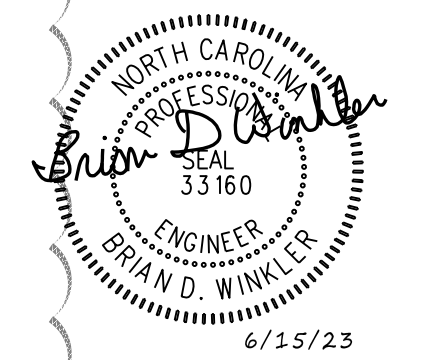
SCALE: 1/4" = 1'-0"
 DATE: 5/23/2023
 SHEET NAME:
**ELECTRICAL PLANS
 AND NOTES -
 SHELTERS**
 SHEET NO:
E1.2



1 PARTIAL SITE PLAN - ELECTRICAL
 SCALE: 1" = 40'-0"

ELECTRICAL NOTES

- EXISTING ELECTRICAL EQUIPMENT ADJACENT TO TENNIS COURT AFFECTED BY NEW WORK. ELECTRICAL EQUIPMENT IS TO BE ELEVATED/RAISED UP TO KEEP OUT OF THE FLOODPLAIN. COORDINATE WITH GC FOR EARTHWORK TO RELOCATE ELECTRICAL EQUIPMENT TO NEW ELEVATED MOUND. INCLUDE ALL WORK AND PROVIDE AS REQUIRED TO RAISE ELECTRICAL EQUIPMENT/STRUCTURE TO NEW MOUND. SPLICES OR JOINTS ARE NOT ALLOWED FOR ANY AFFECTED WIRING WITHIN THE FLOODPLAIN. PROVIDE IN-GROUND PULL BOXES WITH VEHICLE RATED COVERS AT THE NEAREST POINT ALONG FEEDER PATH ABOVE THE FLOODPLAIN. PROVIDE ACCORDINGLY. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION OF IN-GROUND PULL BOXES.
- DISCONNECT AND REMOVE EXISTING RECEPTACLE AT PEDESTRIAN LIGHT. REMOVE ASSOCIATED WIRING BACK TO SOURCE. ANY SPLICED CONNECTIONS IN THE POLE SHALL BE MADE WATER TIGHT, PROVIDE ACCORDINGLY.
- EXISTING BRIDGE TO BE MODIFIED. RE-WORK EXISTING ELECTRICAL FEEDERS TO ACCOMMODATE NEW BRIDGE WORK.
- ALL EXISTING AND NEW FEEDER AND BRANCH CIRCUIT CONDUITS/CONDUCTORS CROSSING THE STREAM AREA SHALL BE ROUTED UNDER NEW BRIDGE. ATTACH CONDUITS TO BOTTOM BEAM OF BRIDGE PER BRIDGE DRAWING INSTRUCTIONS PRIOR TO ROUGHING. COORDINATE AS REQUIRED. THE FEEDER AND BRANCH CIRCUITS SHALL BE EXPOSED AT THE BOTTOM OF BRIDGE, ONCE THEY ACROSS THE STREAM CONTINUE UNDERGROUND TO THEIR INTENDED DESIGNATION.
- PROVIDE ADDITIONAL 3/4" AND 1-1/4" SPARE CONDUITS WITH PULL STRINGS UNDER BRIDGE. TERMINATE CONDUITS TO AN IN-GROUND PULL BOX ON EITHER SIDE OF THE BRIDGE FOR FUTURE TIE-IN POINT. AT EACH PULL BOX, STUB ADDITIONAL CONDUITS TO FACILITATE TIE-IN. PULL BOXES SHALL BE A MINIMUM OF 15' FROM THE BRIDGE CONSTRUCTION.
- REPLACE EXISTING MOMENTARY SWITCH WITH NEW WATER-TIGHT TYPE. RE-WORK CONNECTIONS TO BE WATER TIGHT, PROVIDE ACCORDINGLY.



PANEL MDP

MAIN TYPE: MAIN BREAKER VOLTAGE (L-L): 208 PHASE: 3
 AMPERE RATING: 400 VOLTAGE (L-N): 120 WIRE: 4
 LUG OPTIONS: EXISTING PANEL, VERIFY EXISTING AIC RATING BUS RTG (AMPS): 400 MIN. KAIC: EXIST
 REMARKS: MOUNTING: SURFACE

| CCT BRKR | NO. | AMPS | P | LOAD DESCRIPTION | NOTE | WIRE SIZE | LOAD KVA | PHASE | LOAD KVA | WIRE SIZE | LOAD DESCRIPTION | P | AMPS | NO. |
|----------|-----|------|---|-------------------------|------|-----------|----------|-------|----------|-----------|----------------------|---|------|-----|
| | | | | | | | | A B C | | | | | | |
| | 1 | | | PANEL "F" | | | 7.9 | 8.1 | 0.2 | EX | PANEL "LA" | 2 | 40 | 2 |
| | 3 | 100 | 3 | TENNIS COURT | | | 7.9 | 8.1 | 0.2 | EX | PICNIC PANEL | 2 | 40 | 4 |
| | 5 | | | | | | 7.9 | 8.1 | 0.2 | EX | PANEL "LB" | 2 | 40 | 6 |
| | 7 | 20 | 2 | (EH-1C) ELECTRIC HEATER | | 12 | 1.0 | 1.3 | 0.3 | EX | MAINTENANCE BUILDING | 2 | 40 | 8 |
| | 11 | 20 | 2 | (EH-1D) ELECTRIC HEATER | | 12 | 1.0 | 1.6 | 0.6 | EX | PANEL "LC" | 2 | 40 | 10 |
| | 15 | 20 | 1 | PARKING LOT LIGHTS | | 12 | 1.0 | 2.2 | 1.2 | EX | SHELTER A | 2 | 40 | 12 |
| | 17 | 20 | 1 | PARKING LOT LIGHTS | | 12 | 1.0 | 0.7 | 0.2 | EX | PANEL "LC" | 2 | 40 | 14 |
| | 19 | 20 | 1 | EXISTING | | 12 | 1.0 | 7.7 | 6.8 | EX | SHELTER B | 2 | 100 | 16 |
| | 21 | 40 | 2 | EXISTING | | 12 | 3.0 | 3.0 | 6.7 | 2 | SPACE ONLY | | | 22 |
| | | | | | | | 19.3 | 13.4 | 19.7 | | | | | |

| NEC ARTICLE 220 LOAD CATEGORY: | CONN KVA | DEMD FACT | DEMD KVA | NEC ARTICLE 220 LOAD CATEGORY: | DEMD KVA | DEMD FACT | DEMD KVA |
|--------------------------------|----------|-----------|----------|--------------------------------|----------|-----------|----------|
| TOTAL INTERIOR LIGHTS | 2.3 | 1.25 | 2.9 | MISC. HVAC S | 0.0 | 1.00 | 0.0 |
| I ENERGY CODE REQ'D. | 2.3 | | | MOTORS M | 0.0 | 1.00 | 0.0 |
| N NON-EMER. CODE REQ'D. | 0.0 | | | LARGEST MOTOR LM | 0.0 | 0.25 | 0.0 |
| E EXTERIOR LIGHTS | 25.1 | 1.25 | 31.4 | WATER HEATERS W | 2.5 | 1.00 | 2.5 |
| R RECEPTACLES (FIRST 10) | 1.2 | 1.00 | 1.2 | ELEVATORS L | 0.0 | 1.00 | 0.0 |
| (REMAINDER) | 0.0 | 0.50 | 0.0 | KITCHEN EQUIPMENT K | 0.0 | 1.00 | 0.0 |
| P HVAC PACKAGED UNITS | 0.0 | 1.00 | 0.0 | NO. OF UNITS OF EQUIP. | 0 | | |
| H HEAT PUMPS / COND. UNITS | 0.0 | 1.00 | 0.0 | COMPUTER LOADS O | 0.0 | 1.25 | 0.0 |
| A AIR HANDLING UNITS | 0.4 | 1.00 | 0.4 | SHOP EQUIPMENT Q | 0.0 | 1.00 | 0.0 |
| D CHILLER / COOLING TOWER | 0.0 | 1.00 | 0.0 | MISC. LOADS C | 12.8 | 1.00 | 12.8 |
| T ELECTRIC HEAT | 8.0 | 1.00 | 8.0 | SYSTEM FURNITURE Z | 0.0 | 1.00 | 0.0 |
| V VAV BOXES / FAN BOXES | 0.0 | 1.00 | 0.0 | | | | |

NOTE: A PROVIDE GFI BREAKER
 B PANEL SHALL BE UL SERVICE ENTRANCE RATED.

CONNECTED KVA: 52.3
 CONNECTED AMPS: 145
 DEMAND AMPS: 164

PANEL R

MAIN TYPE: MAIN BREAKER VOLTAGE (L-L): 208 PHASE: 3
 AMPERE RATING: 200 VOLTAGE (L-N): 120 WIRE: 4
 LUG OPTIONS: NEW PANEL BUS RTG (AMPS): 200 MIN. KAIC: 18
 REMARKS: MOUNTING: SURFACE

| CCT BRKR | NO. | AMPS | P | LOAD DESCRIPTION | NOTE | WIRE SIZE | LOAD KVA | PHASE | LOAD KVA | WIRE SIZE | LOAD DESCRIPTION | P | AMPS | NO. |
|----------|-----|------|---|-------------------------|------|-----------|----------|-------|----------|-----------|-------------------------|---|------|-----|
| | | | | | | | | A B C | | | | | | |
| | 1 | 20 | 1 | LIGHTING | | 12 | 0.4 | 1.7 | 1.3 | 12 | (EWH-1) WATER HEATER | 2 | 15 | 2 |
| | 3 | 15 | 1 | (EF-1A) EXHAUST FAN | | 12 | 0.1 | | 1.3 | | RECEPTACLE | 1 | 20 | 6 |
| | 5 | 15 | 1 | (EF-1B) EXHAUST FAN | | 12 | 0.1 | | 0.3 | 0.2 | FUTURE ELEC. DOOR LOCKS | 1 | 20 | 8 |
| | 7 | 15 | 1 | (EF-2) EXHAUST FAN | | 12 | 0.1 | 0.6 | 0.5 | 12 | SPARE | 1 | 20 | 10 |
| | 9 | 15 | 2 | (EH-1A) ELECTRIC HEATER | | 12 | 1.0 | | | | SPARE | 1 | 20 | 12 |
| | 13 | 15 | 2 | (EH-1B) ELECTRIC HEATER | | 12 | 1.0 | 1.0 | | | SPARE | 1 | 20 | 14 |
| | 17 | 15 | 2 | (EH-2) ELECTRIC HEATER | | 12 | 1.0 | 1.0 | | | SPACE ONLY | 1 | 20 | 16 |
| | 21 | | | SPACE ONLY | | | | | | | SPACE ONLY | | | 20 |
| | 23 | | | SPACE ONLY | | | | | | | SPACE ONLY | | | 22 |
| | 25 | | | SPACE ONLY | | | | | | | SPACE ONLY | | | 24 |
| | 27 | | | SPACE ONLY | | | | | | | SPACE ONLY | | | 26 |
| | 29 | | | SPACE ONLY | | | | | | | SPACE ONLY | | | 28 |
| | 31 | | | SPACE ONLY | | | | | | | SPACE ONLY | | | 30 |
| | 33 | | | SPACE ONLY | | | | | | | SPACE ONLY | | | 32 |
| | 35 | | | SPACE ONLY | | | | | | | SPACE ONLY | | | 34 |
| | 37 | | | SPACE ONLY | | | | | | | SPACE ONLY | | | 36 |
| | 39 | | | SPACE ONLY | | | | | | | SPACE ONLY | | | 38 |
| | 41 | | | SPACE ONLY | | | | | | | SPACE ONLY | | | 40 |
| | | | | | | | 4.3 | 3.4 | 2.3 | | | | | |

| NEC ARTICLE 220 LOAD CATEGORY: | CONN KVA | DEMD FACT | DEMD KVA | NEC ARTICLE 220 LOAD CATEGORY: | DEMD KVA | DEMD FACT | DEMD KVA |
|--------------------------------|----------|-----------|----------|--------------------------------|----------|-----------|----------|
| TOTAL INTERIOR LIGHTS | 0.4 | 1.25 | 0.5 | MISC. HVAC S | 0.0 | 1.00 | 0.0 |
| I ENERGY CODE REQ'D. | 0.4 | | | MOTORS M | 0.0 | 1.00 | 0.4 |
| N NON-EMER. CODE REQ'D. | 0.0 | | | LARGEST MOTOR LM | 0.0 | 0.25 | 0.0 |
| E EXTERIOR LIGHTS | 0.0 | 1.25 | 0.0 | WATER HEATERS W | 2.6 | 1.00 | 2.6 |
| R RECEPTACLES (FIRST 10) | 0.2 | 1.00 | 0.2 | ELEVATORS L | 0.0 | 1.00 | 0.0 |
| (REMAINDER) | 0.0 | 0.50 | 0.0 | KITCHEN EQUIPMENT K | 0.0 | 1.00 | 0.0 |
| P HVAC PACKAGED UNITS | 0.0 | 1.00 | 0.0 | NO. OF UNITS OF EQUIP. | 0 | | |
| H HEAT PUMPS / COND. UNITS | 0.0 | 1.00 | 0.0 | COMPUTER LOADS O | 0.0 | 1.25 | 0.0 |
| A AIR HANDLING UNITS | 0.0 | 1.00 | 0.0 | SHOP EQUIPMENT Q | 0.0 | 1.00 | 0.0 |
| D CHILLER / COOLING TOWER | 0.0 | 1.00 | 0.0 | MISC. LOADS C | 0.5 | 1.00 | 0.5 |
| T ELECTRIC HEAT | 6.0 | 1.00 | 6.0 | SYSTEM FURNITURE Z | 0.0 | 1.00 | 0.0 |
| V VAV BOXES / FAN BOXES | 0.0 | 1.00 | 0.0 | | | | |

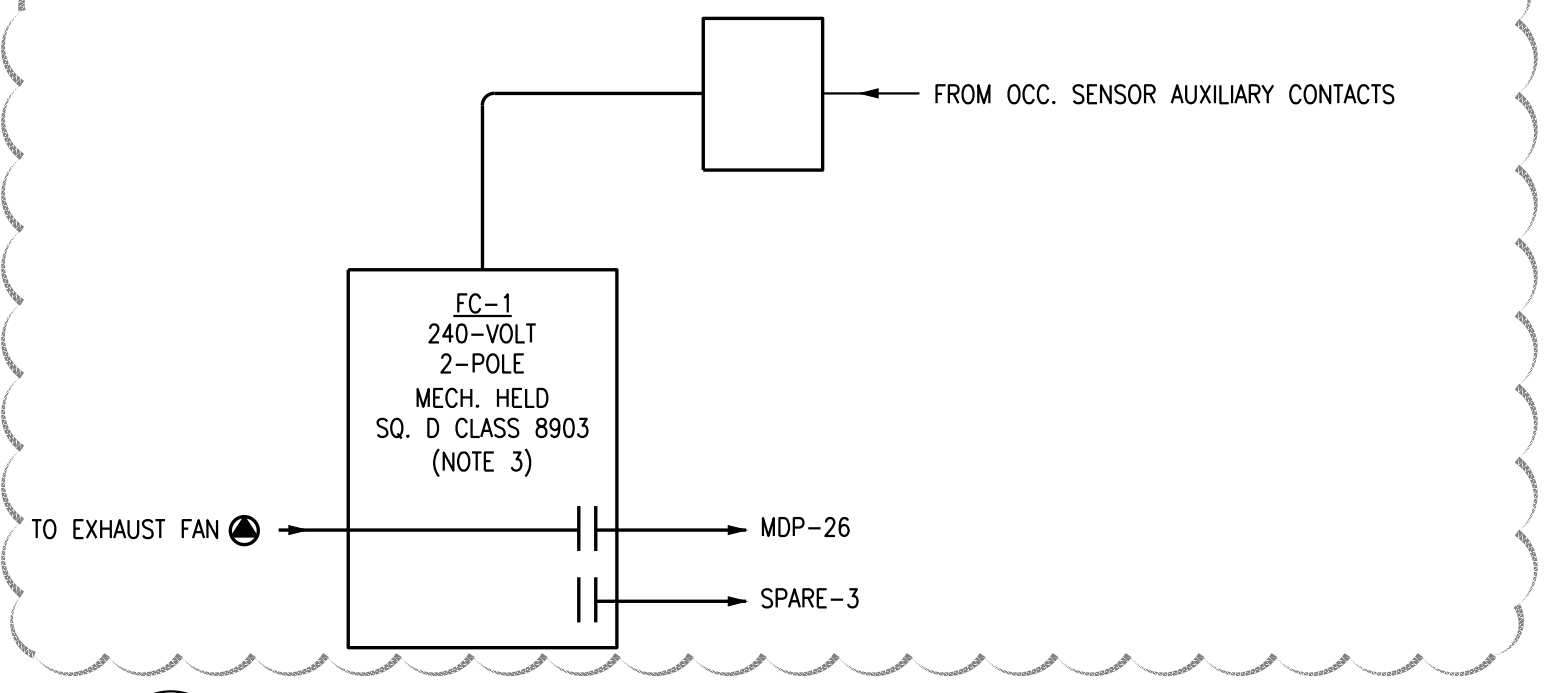
NOTE: A PANEL SHALL BE UL SERVICE ENTRANCE RATED.

CONNECTED KVA: 10.1
 CONNECTED AMPS: 28
 DEMAND AMPS: 28

EQUIPMENT SCHEDULE

| CONNECTION DESIGNATION | LOAD DESCRIPTION | VOLTS | PH | LOAD INFORMATION | | | | | | DISCONNECT INFORMATION | | | | | | CONNECTION NOTES | CONNECTION DESIGNATION |
|------------------------|------------------|-------|----|------------------|------|-----|----|-------------|-----------------|------------------------|------|---------------|-----------|---------------------|----------------|------------------|------------------------|
| | | | | HP | LOAD | FLA | KA | MOC | FURN BY | INSTALLED BY | TYPE | SWITCH RATING | POLE | FUSE OR TRIP RATING | NEMA ENCL TYPE | | |
| EWH-1 | WATER HEATER | 208V | - | 25 | KVA | 12 | 15 | ELEC. CNTR. | ELEC. CNTR. | NON-FUSED | 30 | 2 | 1 | R-2 | EWH-1 | | |
| EWH-1A | WATER HEATER | 208V | - | 25 | KVA | 12 | 15 | ELEC. CNTR. | ELEC. CNTR. | NON-FUSED | 30 | 2 | 1 | LC-4 | EWH-1A | | |
| EH-1A | ELECTRIC HEATER | 208V | - | 20 | KVA | 9.6 | 15 | ELEC. CNTR. | ELEC. CNTR. | FUSED | 30 | 2 | F.P.N. | R-9 | EH-1A | | |
| EH-1B | ELECTRIC HEATER | 208V | - | 20 | KVA | 9.6 | 15 | ELEC. CNTR. | ELEC. CNTR. | FUSED | 30 | 2 | F.P.N. | R-13 | EH-1B | | |
| EF-1A | EXHAUST FAN | 120V | - | 0.1 | KVA | 1.0 | 15 | ELEC. CNTR. | MFR. RTD SWITCH | - | 1 | 1 | R-3 | EF-1A | | | |
| EF-1B | EXHAUST FAN | 120V | - | 0.1 | KVA | 1.0 | 15 | ELEC. CNTR. | MFR. RTD SWITCH | - | 1 | 1 | R-5 | EF-1B | | | |
| EF-2 | EXHAUST FAN | 120V | - | 0.1 | KVA | 1.0 | 15 | ELEC. CNTR. | MFR. RTD SWITCH | - | 1 | 1 | R-7 | EF-2 | | | |
| EH-1C | ELECTRIC HEATER | 208V | - | 20 | KVA | 9.6 | 15 | ELEC. CNTR. | ELEC. CNTR. | FUSED | 30 | 2 | F.P.N. | R-17 | EH-1C | | |
| EH-1D | ELECTRIC HEATER | 208V | - | 20 | KVA | 9.6 | 15 | ELEC. CNTR. | ELEC. CNTR. | FUSED | 30 | 2 | F.P.N. | MDP-7 | EH-1D | | |
| EH-1E | ELECTRIC HEATER | 208V | - | 20 | KVA | 9.6 | 15 | ELEC. CNTR. | ELEC. CNTR. | FUSED | 30 | 2 | F.P.N. | MDP-11 | EH-1E | | |
| EH-1F | ELECTRIC HEATER | 208V | - | 20 | KVA | 9.6 | 15 | ELEC. CNTR. | ELEC. CNTR. | FUSED | 30 | 2 | F.P.N. | LC-6 | EH-1F | | |
| EF-3 | EXHAUST FAN | 120V | - | 0.4 | KVA | 3 | 15 | ELEC. CNTR. | MFR. RTD SWITCH | - | 1 | 1 | MDP-26 | EF-3 | | | |
| HD | HAND DRYER | 120V | - | 1.2 | KVA | 9.6 | 20 | ELEC. CNTR. | ELEC. CNTR. | - | 1 | 1 | SEE PLANS | HD | | | |
| HD | HAND DRYER | 120V | - | 1.2 | KVA | 9.6 | 20 | ELEC. CNTR. | ELEC. CNTR. | - | 1 | 1 | SEE PLANS | HD | | | |
| HD | HAND DRYER | 120V | - | 1.2 | KVA | 9.6 | 20 | ELEC. CNTR. | ELEC. CNTR. | - | 1 | 1 | SEE PLANS | HD | | | |

NOTE: 1. PROVIDE A SINGLE POLE MOTOR RATED, TOGGLE SWITCH WITH OVERLOAD HEATERS SIZED PER EQUIPMENT NAMEPLATE, TO SERVE AS LOCAL DISCONNECT SWITCH. PROVIDE WEATHERPROOF ENCLOSURE WHERE LOCATED OUTDOORS.
 2. WIRE TO "LINE" SIDE OF INTEGRAL, N.E.C. COMPLIANT DISCONNECT SWITCH PROVIDED WITH UNIT.
 3. POWER FOR INDOOR WIRING SHALL BE SIZED FROM RESPECTIVE OUTDOOR CONDENSING UNIT. EXTEND POWER CIRCUIT FROM CONDENSING UNIT TO LINE SIDE OF INTEGRAL, N.E.C. COMPLIANT DISCONNECT SWITCH PROVIDED IN AIR HANDLING UNIT BY MANUFACTURER. FIELD VERIFY CONNECTIONS TO EQUIPMENT WITH MECH. CONTRACTOR PRIOR TO ROUGH-IN.
 4. OVERCURRENT DEVICES/INSTALLERS TO ENSURE FULL COORDINATION. ANY CHANGES REQUIRED SHALL BE MADE PRIOR TO ORDERING MATERIALS AND SHALL BE INSTALLED AT THE COST OF THE PERSON AND/OR COMPANY MAKING THE CHANGES.

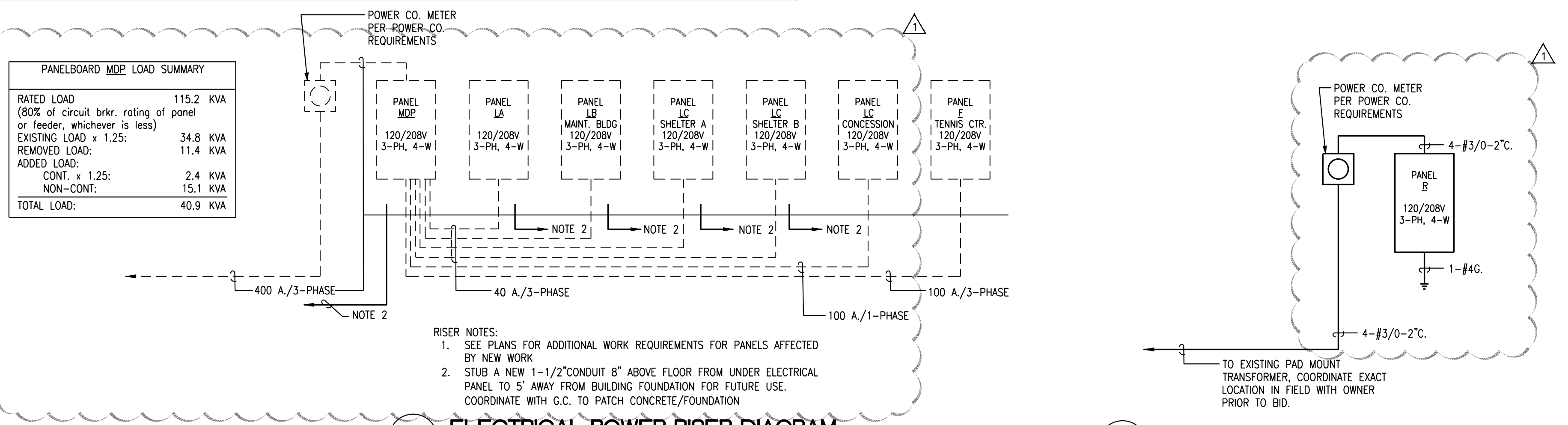


3 EXHAUST FAN CONTACTOR CONTROL DIAGRAM
 SCALE: N.T.S.

- NOTES:
1. PROVIDE LABEL ON EACH CONTACTOR INDICATING CIRCUITS WIRED THRU THIS CONTACTOR AND CIRCUIT NUMBERS
 2. CIRCUIT MDP-26 FOR LIGHTING CONTROLS.
 3. PROVIDE ALL MECHANICALLY-HELD CONTACTORS WITH S.P.D.T. PILOT RELAY.
 4. CONTACTOR TO PROVIDE AUTOMATIC CONTROL OF EXHAUST FAN EF-1. UPON ACTIVATION OF ANY OCCUPANCY SENSOR DEVICE THE EXHAUST FAN SHALL BE ENERGIZED AND TURNED ON UPON DEACTIVATION OF SENSOR THE FAN SHALL BE TURNED OFF.

POWER RISER DIAGRAM NOTES:

1. ALL EQUIPMENT AND FEEDERS SHOWN DASHED ARE EXISTING TO REMAIN, UNLESS NOTED OTHERWISE.
2. ALL NEW WIRE SHALL BE THHN/THWN COPPER.
3. SERIES RATING OF NEW EQUIPMENT IS NOT ALLOWED.
4. ALL NEW MULTI-CIRCUIT HOMERUNS SHALL BE PROTECTED WITH A MULTI-POLE, SIMULTANEOUS-TRIP CIRCUIT BREAKER PER N.E.C. 210.4B.
5. A.I.C. RATINGS SHOWN ON PANELBOARD SCHEDULES ARE THE MINIMUM ALLOWED RATINGS. A.I.C. RATINGS OF ALL NEW PANELBOARDS SHALL EQUAL OR EXCEED THE FAULT CURRENT INDICATED ON THE RISER DIAGRAM OR PANELBOARD SCHEDULES.
6. UNLESS NOTED OTHERWISE, PROVIDE GREEN EQUIPMENT GROUNDING CONDUCTOR IN ALL NEW CIRCUITS. GROUNDING CONDUCTORS SHALL BE SIZED PER N.E.C. ARTICLE 250.
7. ALL TERMINATIONS ON NEW ELECTRICAL GEAR/EQUIPMENT (i.e. PANELBOARDS, DISCONNECT SWITCHES, etc.) SHALL HAVE DUAL RATED 60-DEGREE / 75-DEGREE LUGS/TERMINALS.
8. PROVIDE APPROPRIATE ARC-FLASH HAZARD LABELING ON ALL NEW ELECTRICAL GEAR INDICATING HAZARD LEVEL PRESENT.
9. IN THE EXISTING GEAR, THE A.I.C. RATING OF ANY NEW CIRCUIT BREAKERS OR ELECTRICAL EQUIPMENT SHALL EQUAL OR EXCEED RATINGS OF EXISTING PANELBOARDS/EQUIPMENT TO WHICH THEY ARE TO BE CONNECTED.
10. EXISTING CONDITIONS WERE DETERMINED FROM LIMITED SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY ARCHITECT/ENGINEER IMMEDIATELY OF ANY IRRECONCILABLE CONFLICTS.
11. CONTRACTOR SHALL FIELD VERIFY LOADING AND CIRCUIT BREAKER AVAILABILITY ON EXISTING PANELBOARDS THAT ARE TO BE AFFECTED BY THIS PROJECT, PRIOR TO BEGINNING CONSTRUCTION. AT THE COMPLETION OF PROJECT, AFTER OWNER HAS OCCUPIED THE BUILDING/SPACE, CONTRACTOR SHALL ONCE AGAIN VERIFY LOADING OF AFFECTED PANELBOARDS TO CONFIRM THAT NO PANELBOARD/FEEDER/TRANSFORMER IS BEING OVERLOADED BY THIS WORK.



PANELBOARD MDP LOAD SUMMARY

| | |
|--|-----------|
| RATED LOAD (80% of circuit brkr. rating of panel or feeder, whichever is less) | 115.2 KVA |
| EXISTING LOAD x 1.25: | 34.8 KVA |
| REMOVED LOAD: | 11.4 KVA |
| ADDED LOAD: | 2.4 KVA |
| NON-CONT: | 15.1 KVA |
| TOTAL LOAD: | 40.9 KVA |

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

2 ELECTRICAL POWER RISER DIAGRAM
 SCALE: 1/4" = 1'-0"

PLUMBING GENERAL NOTES

GENERAL REQUIREMENTS:

- PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE NORTH CAROLINA STATE PLUMBING CODE AND WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
- GENERAL AND SPECIAL CONDITIONS ARE HEREBY MADE AN INTEGRAL PART OF THE PLUMBING SPECIFICATIONS INsofar AS THE GENERAL AND SPECIAL CONDITIONS ARE APPLICABLE TO THE PLUMBING WORK, UNLESS OTHERWISE SPECIFIED.
- SCOPE: PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED FOR THE COMPLETION AND OPERATION OF ALL PLUMBING SYSTEMS IN ACCORDANCE WITH ALL APPLICABLE CODES.
- PERMITS: APPLY AND PAY FOR ALL NECESSARY PERMITS, FEES AND INSPECTIONS REQUIRED BY ANY PUBLIC AUTHORITY HAVING JURISDICTION. ACREAGE CHARGES, FACILITIES CHARGES AND BOND PROPERTY ASSESSMENTS ARE NOT TO BE CONSTRUED TO BE A PART OF THIS CONTRACT.
- WARRANTY: PROVIDE A ONE YEAR WARRANTY, FROM THE DATE OF ACCEPTANCE OF WORK BY THE OWNER, FOR ALL PLUMBING MATERIALS AND EQUIPMENT.
- COORDINATE ALL PLUMBING PIPING LOCATIONS, ROUGH-IN LOCATIONS AND EQUIPMENT LOCATIONS WITH OTHER TRADES TO AVOID CONFLICTS AND INTERFERENCES. FINAL PIPING AND EQUIPMENT LOCATIONS SHALL BE A CODE COMPLIANT INSTALLATION FOR ALL TRADES.
- CUT WALLS, FLOORS AND CEILINGS AS REQUIRED FOR INSTALLATION OF PLUMBING WORK. ALL CUTTING SHALL BE HELD TO A MINIMUM. PATCH AND FINISH SURFACES TO MATCH ADJOINING SURFACES.
- PLUMBING PLANS SHALL NOT BE SCALED. REFERENCE THE ARCHITECTURAL PLANS FOR ALL LOCATIONS OF PLUMBING FIXTURES, WALLS, DOORS, WINDOWS, ETC.
- PLUMBING PIPING SHALL BE LOCATED CONCEALED IN WALLS, PARTITIONS OR ABOVE CEILINGS UNLESS NOTED OTHERWISE. PLUMBING PIPING IN EXPOSED AREAS SHALL BE RUN TIGHT TO UNDERSIDE OF STRUCTURE.
- PLUMBING PIPING, VENTS, ETC. EXTENDING THROUGH EXTERIOR WALLS AND/OR THE ROOF SHALL BE FLASHED AND COUNTER FLASHED IN A WATERPROOF MANNER. COORDINATE FLASHING WITH THE GENERAL CONTRACTOR.
- DO NOT INSTALL PLUMBING PIPING IN AREAS SUBJECT TO FREEZING TEMPERATURES. INSTALL PLUMBING PIPING SHOWN IN EXTERIOR WALLS ON THE CONDITIONED SIDE OF THE WALL INSULATION.
- PROVIDE NON-CONDUCTING DIELECTRIC UNIONS WHENEVER CONNECTING DISSIMILAR METALS.
- ATTACH HANGERS TO STRUCTURE.
- PROVIDE ACCESS DOORS FOR VALVES, WATER HAMMER ARRESTORS, TRAP PRIMERS, ETC. CONCEALED IN MASONRY WALLS, GYBOARD WALLS AND/OR CEILINGS THAT WILL REQUIRE MAINTENANCE ACCESS.
- PLUMBING SYSTEMS INCLUDE, BUT ARE NOT LIMITED TO: PLUMBING FIXTURES AND EQUIPMENT, FIRE STOPPING, SEISMIC BRACING, PIPE IDENTIFICATION, DOMESTIC WATER SYSTEM, SANITARY WASTE AND VENT SYSTEM, STORM DRAIN SYSTEM, NATURAL GAS SYSTEM

PLUMBING FIXTURES AND EQUIPMENT:

- PROVIDE COMPLETE PLUMBING FIXTURES AND EQUIPMENT. INCLUDE SUPPLIES, STOPS, VALVES, FAUCETS, DRAINS, TRAPS, TAIL PIECES, ESCUTCHEONS, ETC.
- PLUMBING FIXTURES AND EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS.
- THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SUBSTITUTIONS TO SPECIFIED PLUMBING FIXTURES AND EQUIPMENT INCLUDING BUT NOT LIMITED TO: PROVIDING MAINTENANCE ACCESS CLEARANCE, PIPING, ELECTRICAL, REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, ETC. AND ANY MODIFICATIONS TO ASSOCIATED MECHANICAL, ELECTRICAL OR PLUMBING SYSTEMS REQUIRED BY THE EQUIPMENT'S INSTALLATION INSTRUCTIONS. ALL COSTS ASSOCIATED WITH SUBSTITUTIONS SHALL BE INCLUDED IN THE ORIGINAL BASE BID.

FIRE STOPPING:

- FIRE STOP ALL PENETRATIONS, BY PIPING OR CONDUITS, OF FIRE RATED WALLS, FLOORS AND PARTITIONS. PROVIDE A DEVICE(S) OR SYSTEM(S) WHICH HAS BEEN TESTED AND LISTED AS COMPLYING WITH ASTM E-814 AND INSTALL IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING. PROVIDE A DEVICE(S) OR SYSTEM(S) WITH AN "F" RATING EQUAL TO THE RATING OF THE ASSEMBLY BEING PENETRATED. REFER TO ARCHITECTURAL PLANS FOR WALL AND FLOOR TYPES.

PIPE IDENTIFICATION:

- PIPE IDENTIFICATION SHALL MATCH THE FACILITY'S EXISTING STANDARD. IF NO STANDARD EXISTS, THEN THE PIPE IDENTIFICATION SHALL BE IN ACCORDANCE WITH ANSI A13.1.
- PROVIDE PIPING LABELS FOR ALL PLUMBING PIPING. PIPING LABELS SHALL BE ACRYLIC FACED, WRAP-AROUND TYPE. EACH LABEL SHALL INDICATE THE PIPING CONTENTS, DIRECTION OF FLOW AND SHALL BEAR THE MANUFACTURER'S STANDARD COLOR FOR THE SERVICE INDICATED.

WATER SYSTEM DRAIN DOWN

TYPICAL STEPS TO DRAIN A WATER SYSTEM

NOTE - SOME STEPS MAY NOT BE NECESSARY DEPENDING ON EQUIPMENT INSTALLED. THIS LIST IS PROVIDED AS AN EXAMPLE. PC SHALL USE INDUSTRY APPROVED METHODS, AND SHALL PROVIDE ANY VALVES, FITTINGS, OR OTHER APPURTENANCES NECESSARY TO ACHIEVE DRAIN-DOWN FOR FREEZE PROTECTION.

- TURN OFF ELECTRICITY TO THE WATER PUMP SYSTEM
- TURN OFF ELECTRICITY TO WATER HEATER IF ELECTRIC OR TURN OFF GAS SUPPLY IF THE WATER HEATER IS GAS-FIRED.
- SHUT OFF WATER SYSTEMS BY SHUTTING THE VALVE ON THE MUNICIPAL WATER.
- DRAIN THE PRESSURE TANK
- OPEN ALL FAUCETS
- DISCONNECT HOSES FROM EXTERIOR FAUCETS
- OPEN DRAIN VALVE CLOSEST TO THE MAIN SHUT-OFF VALVE SO WATER WILL DRAIN OUT TO CLEAR THE SHUT-OFF VALVE
- DRAIN HOLDING TANK
- FLUSH ALL TOILETS AND DIP ALL WATER OUT OF THE FLUSH TANK (OR PUMP IT OUT USING A HAND BILGE PUMP)
- DRAIN ALL FLEXIBLE SPRAY HOSES IN SHOWERS AND SINKS
- OPEN DIVERTER VALVE TO SHOWER HEAD SO WATER DRAINS OUT
- DRAIN WATER SOFTENERS SO WATER WILL DRAIN BACK FROM SOFT WATER PIPES AND CONTROLS. (BRINE TANK PROBABLY WILL NOT FREEZE)
- DRAIN ANY OTHER WATER TREATMENT EQUIPMENT - SUCH AS FILTERS
- DRAIN WATER HEATERS
- BLOW OUT ANY REMAINING WATER FROM THE SYSTEM USING AN AIR COMPRESSOR.

PLUMBING MATERIAL SPECIFICATIONS

DOMESTIC WATER PIPING:

- DOMESTIC WATER PIPING AND JOINTS **BELOW GRADE**: PROVIDE TYPE "K" SOFT ANNEALED SEAMLESS COPPER TUBING (ASTM B 88) WITH NO JOINTS FOR PIPING 2 1/2" AND SMALLER.
 - DOMESTIC WATER PIPING AND JOINTS **ABOVE GRADE**: PROVIDE TYPE "L" HARD DRAWN SEAMLESS COPPER TUBING (ASTM B 88) AND CAST COPPER ALLOY FITTINGS (ASME B16.18). JOINTS 1" AND SMALLER SHALL BE LEAD FREE 95-5 TIN/SILVER SOLDER JOINTS (ASTM B 32), JOINTS 1 1/4" AND LARGER SHALL BE BCUP SILVER/PHOSPHORUS/COPPER BRAZED JOINTS (AWS A5.8) OR PROVIDE COPPER PIPE AND FITTINGS AS SPECIFIED ABOVE EXCEPT WITH GROOVED ENDS (ASTM B 88, ASME B16.18) AND JOINTS UTILIZING GROOVED MECHANICAL COUPLINGS MEETING (ASTM F1476).
 - STERILIZE THE DOMESTIC WATER SYSTEM IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION'S SPECIFICATIONS AND LOCAL HEALTH DEPARTMENT REGULATIONS.
 - INSULATE DOMESTIC WATER PIPING ABOVE GRADE (EXCEPT EXPOSED CONNECTIONS TO PLUMBING FIXTURES) WITH GLASS FIBER INSULATION HAVING A VAPOR BARRIER AND JACKET. PIPE INSULATION SHALL HAVE A CONDUCTIVITY NOT EXCEEDING 0.27 BTU/H x SQ. FT. FOLLOW SCHEDULE BELOW:
- | SERVICE TYPE | PIPE SIZES | INSULATION THICKNESS |
|----------------------------------|---------------|----------------------|
| DOMESTIC HOT WATER & CIRCULATION | 1/2" - 1 1/4" | 1" |
| DOMESTIC COLD WATER | 1/2" - 1 1/4" | 3/2" |
| DOMESTIC COLD WATER | 1 1/2" - 4" | 1" |
- INSULATE DOMESTIC WATER PIPING INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES ARE REQUIRED TO MEET A FLAME-SPREAD RATING OF 25 OR LESS AND A SMOKE-DEVELOPED RATING OF 50 OR LESS, AS TESTED BY ASTM E84 (NFPA 255) METHOD AND SHALL BE PLENUM RATED.
 - PROVIDE FULL PORT, BALL TYPE SHUT-OFF VALVES AND INSTALL IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS.
 - PROTECT COPPER PIPING AGAINST CONTACT WITH DISSIMILAR METALS. ALL HANGERS, SUPPORTS, ANCHORS AND CLIPS SHALL BE COPPER OR COPPER PLATED. WHERE COPPER PIPING IS CARRIED ON TRAPEZE HANGERS WITH OTHER PIPING, PROVIDE A PERMANENT ELECTROLYTIC ISOLATION MATERIAL TO PREVENT CONTACT WITH DISSIMILAR OTHER METALS.
 - PROTECT COPPER PIPING AGAINST CONTACT WITH ALL MASONRY. WHERE COPPER IS SLEEVED THROUGH MASONRY, PROVIDE COPPER OR RED BRASS SLEEVES. WHERE COPPER MUST BE CONCEALED IN OR AGAINST MASONRY PARTITIONS, PROVIDE A HEAVY COATING OF ASPHALTIC ENAMEL ON THE COPPER PIPING AND 15# ASPHALT SATURATED FELT BETWEEN THE PIPING AND THE MASONRY PARTITION.
 - DOMESTIC WATER PIPING SHALL BE SLOPED FOR DRAINAGE WITH DRAIN VALVES INSTALLED AT LOW POINTS.

SANITARY WASTE / VENT AND STORM PIPING:

- SANITARY WASTE AND STORM DRAIN PIPING **BELOW GRADE**: PROVIDE SERVICE WEIGHT CAST IRON HUB AND SPIGOT PIPE (ASTM A 74) WITH COMPRESSION JOINTS (CISPI HSN) AND NEOPRENE GASKETS (ASTM C 564) OR NO-HUB PIPE AND FITTINGS (CISPI 301) WITH NEOPRENE GASKET/STAINLESS STEEL CLAMP JOINTS (CISPI 310), OR SOLID CORE SCHEDULE 40 PVC (ASTM-2665).
- SANITARY WASTE/VENT PIPING AND STORM DRAIN PIPING **ABOVE GRADE**: PROVIDE SERVICE WEIGHT CAST IRON NO-HUB PIPE AND FITTINGS (CISPI 301) WITH NEOPRENE GASKET AND STAINLESS STEEL CLAMP JOINTS (CISPI 310), OR SOLID CORE SCHEDULE 40 PVC (ASTM-2665).
- SLOPE SANITARY WASTE AND STORM DRAIN PIPING AT 1/4" PER FOOT MINIMUM FOR PIPING 2 1/2" AND SMALLER AND 1/8" PER FOOT MINIMUM FOR PIPING 3" AND LARGER UNLESS NOTED OTHERWISE. SLOPE ALL KITCHEN WASTE PIPING AT 1/4" PER FOOT MINIMUM. COORDINATE ALL INVERT ELEVATIONS PRIOR TO CONSTRUCTION.
- PROVIDE CLEAN-OUTS AT THE BASE OF SANITARY WASTE STACKS AND STORM DRAIN RISERS AND AT EVERY TURN IN PIPING IN EXCESS OF 45' AND NO FURTHER THAN 100'-0" APART IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS.
- PROVIDE FLOOR CLEANOUTS WITH TOPS DESIGNED TO MATCH SPECIFIC FLOOR FINISHES SUCH AS CARPET, TILE, ETC. YARD CLEANOUTS SHALL BE PROVIDED IN AN 18"x18"x6" CONCRETE PAD.
- WHERE WASTE PIPING IS EXPOSED IN REST ROOM AREAS, PROVIDE CHROME PLATED BRASS PIPING, REMOVABLE P-TRAPS, MATCHING STOPS AND ESCUTCHEONS FOR ALL LAVATORIES.
- INSULATE ROOF DRAIN BODIES AND HORIZONTAL PRIMARY AND SECONDARY STORM DRAIN PIPING ABOVE GRADE WITH 1" THICK GLASS FIBER INSULATION WITH VAPOR BARRIER AND JACKET.
- PIPING INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES ARE REQUIRED TO MEET A FLAME-SPREAD RATING OF 25 OR LESS AND A SMOKE-DEVELOPED RATING OF 50 OR LESS, AS TESTED BY ASTM E84 (NFPA 255) METHOD AND SHALL BE PLENUM RATED..

CUTTING AND PATCHING:

- ALL CUTTING AND PATCHING OF SLAB, ROOF, OR OTHER BUILDING COMPONENTS TO BE BY THE GENERAL CONTRACTOR.

PLUMBING FIXTURE CONNECTION SCHEDULE

| LABEL | FIXTURE NAME | COLD WATER | HOT WATER | WASTE | VENT |
|-------|----------------------------|------------|-----------|--------|--------|
| P-1A | WATER CLOSET (ADA) | 1" | --- | 4" | 2" |
| P-2A | LAVATORY - WALL HUNG (ADA) | 1/2" | 1/2" | 1-1/2" | 1-1/2" |
| P-3 | JANITOR SERVICE SINK | 1/2" | 1/2" | 3" | 1-1/2" |
| WH | WALL HYDRANT | 3/4" | --- | --- | --- |
| HB | HOSE BIBB | --- | 3/4" | --- | --- |

WATER HEATER

EWH-1 - ELECTRIC WATER HEATER

A.O SMITH DEL 20, 20 GALLON CAPACITY, 2.5 KW @ 208V, 1#, 10.0 GPH RECOVERY @54°F RISE. 22 INCHES TALL, 22 INCHES IN DIAMETER. TOTAL WEIGHT IS 73 LBS (TANK) + 167 LBS (WATER) = 240 LBS TOTAL. WATER HEATERS SHALL HAVE COMBINATION TEMPERATURE AND PRESSURE RELIEF VALVE, MAGNESIUM ANODE, GLASS-LINED, 5 YEAR WARRANTY ON TANK, STANDARD WARRANTY ON ACCESSORIES; SEE PLANS FOR SIZES. PROVIDE A 2 GALLON BLADDER TYPE EXPANSION TANK ON WATER HEATERS ABOVE 3 GALLON STORAGE.

PLUMBING DRAWING INDEX

- P0.1 PLUMBING SCHEDULES AND NOTES
- P0.2 PLUMBING DETAILS
- P1.0 SOCCER RESTROOM PLUMBING PLANS
- P2.0 EXISTING RESTROOM PLUMBING RENOVATION PLANS

PLUMBING MATERIAL SCHEDULES

SHOP DRAWINGS

- SHOP DRAWINGS SHALL BE SUBMITTED ON THE FOLLOWING ITEMS: CLEANOUTS, DRAINS, PLUMBING FIXTURES, BRASS, TRIM, FIXTURE CARRIERS, DOMESTIC WASTE AND VENT PIPING ABOVE GRADE, DOMESTIC WASTE PIPING BELOW GRADE, COUPLINGS AND DOMESTIC WATER PIPING.

CLEANOUTS - CAST IRON PIPE

- EXPOSED PIPE (INSIDE SPACES AND CEILING PLENUMS): CAST IRON CLEANOUT TEE WITH BRASS PLUG.
- IN WALLS: (WCO) CAST IRON FERRULE, CENTER TAPPED BRONZE PLUG WITH STAINLESS STEEL COVER NOT TO EXCEED 8" IN DIAMETER WADE W-8550/W-8480R, EQUAL: ZURN Z-1440-1.
- IN VINYL COMPOSITION AND QUARRY TILE FLOORS: (FCO) SATIN NIKALOY SCORATED COVER AND RIN, CLEANOUT PLUG WITH LEAD SEAL, CAST IRON BODY, CAULKED OUTLET AND LEVELING SCREWS. WADE W-6000S, EQUAL: ZURN Z-1400T.
- IN CARPET FLOORS: (FCO) SAME AS FOR TILE FLOORS ABOVE PLUS CARPET MARKER.
- OUTDOOR OR GRADE CLEANOUTS: (GCO) TRACTOR GRATE, NIKALOY SCORATED COVER, C.O. PLUG WITH LEAD SEAL, CAST IRON BODY, CAULKED OUTLET AND ADJUSTABLE HEAD. SET IN 18"x18"x6" CONCRETE PAD. WADE W-6000Z-1, EQUAL: ZURN ZN-1400-HD.
- ALL CLEANOUTS SHALL BE OF THE SAME NOMINAL SIZE AS THE PIPE UP TO 4" PIPES AND SHALL BE IN 4" IN SIZE FOR LARGER PIPING.

DRAINS - ALL FLOOR DRAINS TO HAVE TRAP PRIMERS PER LOCAL CODE

- ALL FLOOR DRAINS EXCEPT WHERE INSTALLED IN SLAB-ON-GRADE SHALL BE FLASHED WITH 24"x24", 3 LB. PER SQ. FT. SHEET LEAD EMBEDDED IN FLOOR CONSTRUCTION.

PLUMBING FIXTURES - GENERAL

- ALL LIKE FIXTURES AND TRIM SHALL BE OF ONE MANUFACTURER.
- PROVIDE STOPS ON WATER SUPPLIES TO ALL PLUMBING FIXTURES, INCLUDING FIXTURES NOT FURNISHED UNDER THIS SECTION OF THE WORK, AND ALL WALL HYDRANTS. STOPS ON LAVATORY SUPPLIES SHALL BE CHROME PLATED.
- PLUMBING FIXTURES SHALL BE AMERICAN STANDARD, KOHLER OR CRANE. FLUSH VALVES TO BE ZURN OR EQUAL BY SLOAN.
- ALL FIXTURES SHALL BE GRADE "A". NAME AND TRADEMARK OF MANUFACTURER SHALL BE PRINTED OR PRESSED ON ALL FIXTURES AND A LABEL WHICH CANNOT BE REMOVED WITHOUT DESTROYING IT, CONTAINING THE MANUFACTURER'S NAME OR TRADEMARK AND THE QUALITY OR CLASS OF THE FIXTURE. SHALL BE AFFIXED TO ALL FIXTURES AND NOT REMOVED UNTIL AFTER THE WORK HAS BEEN ACCEPTED.
- EACH WALL HUNG FIXTURE SHALL BE HUNG BY MEANS OF WALL HANGERS, WHICH SHALL BE ANCHORED TO THE PARTITIONS BY MEANS OF 3/8 INCH TOGGLE BOLTS.

PLUMBING FIXTURES - CONNECTIONS

THE FOLLOWING MATERIALS SHALL BE USED TO CONNECT EACH PLUMBING FIXTURE TO THE DRAINAGE SYSTEM:

- WATER CLOSET: (CONNECTION INCLUDED IN FIXTURE CARRIER).
- LAVATORY: COPPER DW DRAINAGE PIPE WITH WROUGHT COPPER DW DRAINAGE FITTINGS. (EXPOSED CHROME PLATED). PROVIDE WHITE ADA INSULATION KITS ON ALL ADA AND GROUP LAVATORIES, TRUEBRO, INC., HANDI LAV-GUARD OR EQUAL.

PLUMBING FIXTURES - EXECUTION

- ALL SUPPLIES AND WASTE CONNECTIONS AND FIXTURE ANCHORING SHALL BE FIRMLY SECURED INSIDE WALL AND CHASES. SHOULD ANY SUPPAGE BE DETECTED DURING OR AFTER INSTALLATION, THE PLUMBING SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE CORRECTION. NO PORTION OF THE WATER PIPING MAY HAVE DISSIMILAR METALS SECURING IT.
- NO LAVATORY PIPE WILL BE PERMITTED IN ANY PORTION OF THE WATER SYSTEM WHERE RIGID SCREWED PIPE IS REQUIRED. USE RED BRASS.
- ALL WALL RUNOUTS TO FIXTURES SHALL BE SECURED INSIDE PLUMBING CHASE TO RIGID BUILDING STRUCTURE OR TO RIGID PLUMBING DRAINAGE PIPING.
- FILL VOID UNDER FAUCETS ON LAVATORIES AND SINKS WITH PLUMBER'S PUTTY TO PREVENT WATER FROM DRAINING THROUGH FIXTURE HOLES.
- CAULK FIXTURES TO WALL.

NOTE:

SOME OF THE FIXTURES LISTED ABOVE MAY NOT BE USED ON THIS PROJECT - SEE PLANS FOR EXACT FIXTURES USED.

PLUMBING FIXTURE SCHEDULE

P-1A - WATER CLOSET (FLOOR MOUNTED, ADA COMPLIANT)

KOHLER K-96057-B; 1.6 GPF, ELONGATED BOWL, SIPHON JET, VITREOUS CHINA; ZURN Z-6000-WS1-YBYC FLUSH VALVE MOUNTED 11" ABOVE WATER CLOSET; CHURCH 9500CT OPEN FRONT SEAT, WHITE SOLID PLASTIC;

P-2A - LAVATORY (ADA COMPLIANT)

KOHLER K-2867; 20"x18" ENAMELED CAST IRON, WALL HUNG LAVATORY, CHICAGO FAUCETS MODEL 802-665ABOP DECY-MOUNTED 4" FIXED CENTERS HOT AND COLD WATER MECHANICALLY METERED MIXING SINK; FAUCET: CHROME-PLATED SOLID BRASS CONSTRUCTION. 2.2 GPM PRESSURE COMPENSATING AERATOR. 1.75" METAL, VANDAL-PROOF PUSH HANDLES WITH BLUE AND RED INDEX BUTTONS. MVP CSEL-CLOSING, AUTO-TIMED METERING CARTRIDGE, ADJUSTABLE RUN TIME 2-15 SECONDS. PUSH TO OPEN, 0.20 GALLONS PER CYCLE. PROVIDE GRID DRAIN. PROVIDE MOUNTING HEIGHT REQUIRED FOR HANDICAPPED. PROVIDE FLOOR CARRIER WITH CONCEALED HORIZONTAL ARMS EQUAL TO ZURN Z1231EZ. COORDINATE ANCHOR BOLT REQUIREMENTS WITH KOHLER INSTALLATION DATA. INSTALL WITH STAINLESS STEEL FASTENING HARDWARE.

P-3 - JANITOR'S MOP SERVICE BASIN

FIAT TSB-100, 24"x24"x12" TERRAZZO BASIN WITH 3" CAST BRASS DRAIN AND STAINLESS STEEL STRAINER; SERVICE FAUCET #830-AA WITH VACUUM BREAKER; INTEGRAL STOPS; #832-AA-30" HOSE AND HOSE BRACKET. MUST BE INSTALLED ON A 1/2" LAYER OF MORTAR.

WH - WALL HYDRANT

MIFAB SERIES MHY-20 ENCASED, NON-FREEZE WALL HYDRANT. CONTRACTOR SHALL ORDER THE LENGTH AS NEEDED. ASSE 1019-B CERTIFIED EXPOSED-TYPE, SELF DRAINING, NON-FREEZE WALL HYDRANT WITH ASSE 1011 APPROVED ANTI-SIPHON AND VANDAL-RESISTANT INTEGRAL VACUUM BREAKER WITH 3/4" MALE HOSE CONNECTION. HYDRANT IS ASSEMBLED COMPLETE WITH NEOPRENE PLUNGER FLOW AND DRAIN CONTROL, HARDENED BRONZE OPERATING STEM, DRAIN PORT WITH HEXAGON NUT, HEAVY DUTY CASING, 360° SWIVEL INLET CONNECTION, HEAVY DUTY CHROME PLATED BRONZE CASTING, POLISHED CHROME FACE PLATE AND SATIN NICKEL BRONZE BOX WITH HINGED LOCKING COVER. OPERATING KEY INCLUDED.

HB - HOSE BIBB

ZURN Z-1341-PC-LK; WALL FAUCET WITH INTEGRAL BREAKER, POLISHED CHROME FINISH, 3/4" SWEAT INLET, PROVIDE WITH CHROME-PLATED ROUGH CAST BRONZE BOX WITH HINGED COVER AND LOOSE KEY. CONNECT TO HOT WATER.

DF - DRINKING FOUNTAIN WITH DOG BOWL

MURDOCK MODEL WITH DOG BOWL: GRM45-JF1-PF, BARRIER FREE BI-LEVEL PEDESTAL MOUNTED DRINKING FOUNTAIN, 18 GAGE, 304 STAINLESS STEEL (PAINTED GREEN), CORROSION AND SCRATCH RESISTANT FINISH.

ACCEPTABLE MANUFACTURERS ARE:

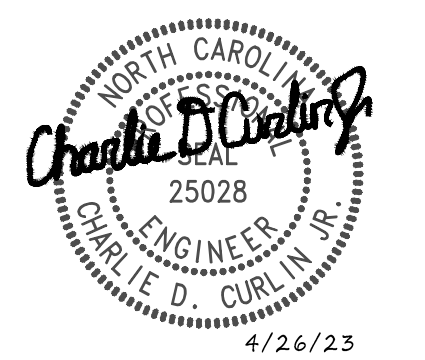
ELJER: AMERICAN STANDARD, KOHLER
ZURN INTERCEPTOR: J.R. SMITH, ROCKFORD
ZURN DRAINS AND HYDRANTS: J.R. SMITH, WATTS

STERN-WILLIAMS: FIAT, CRANE
FALCON: AMERICAN STANDARD, KOHLER
MIFAB: ZURN, WOODFORD

FIAT: FLORESTONE

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4/26/23

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CONCORD, NORTH CAROLINA

OWNER:

DORTON PARK
5790 POPLAR TENT ROAD
CONCORD, NORTH CAROLINA

SCALE: NONE

DATE: 4/26/2023

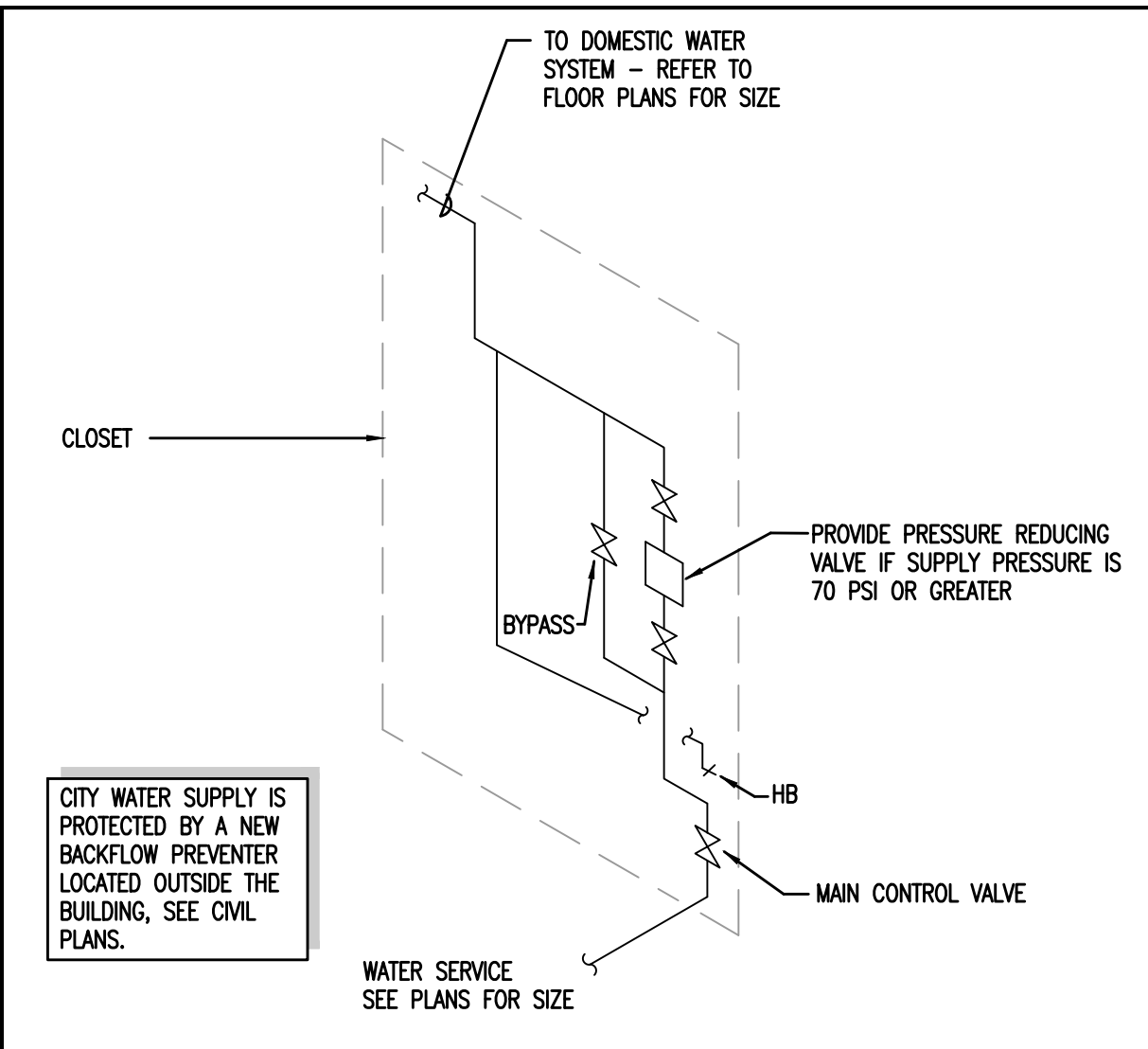
SHEET NAME:
PLUMBING
SCHEDULES
AND NOTES

SHEET NO:
P0.1

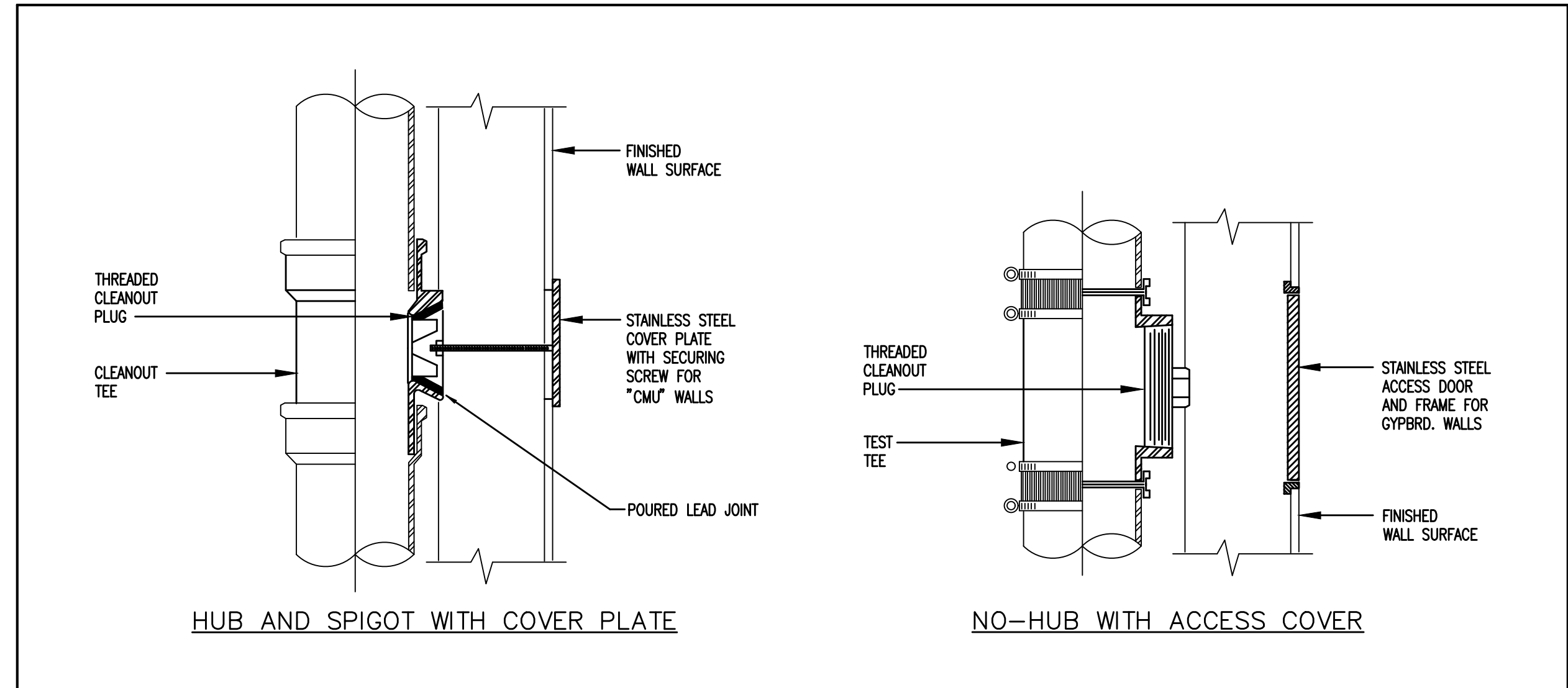


REVISIONS:

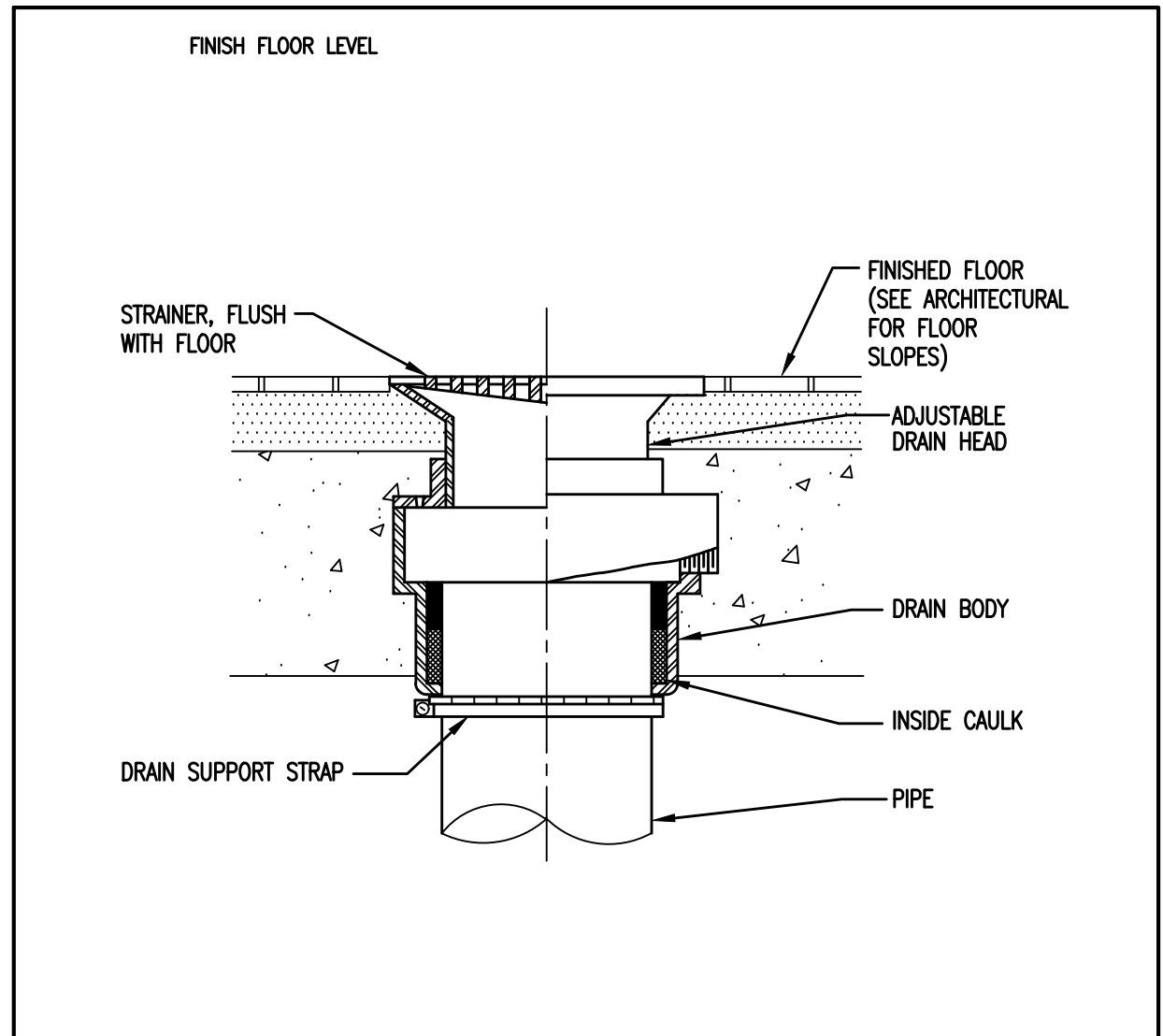
OWNER:



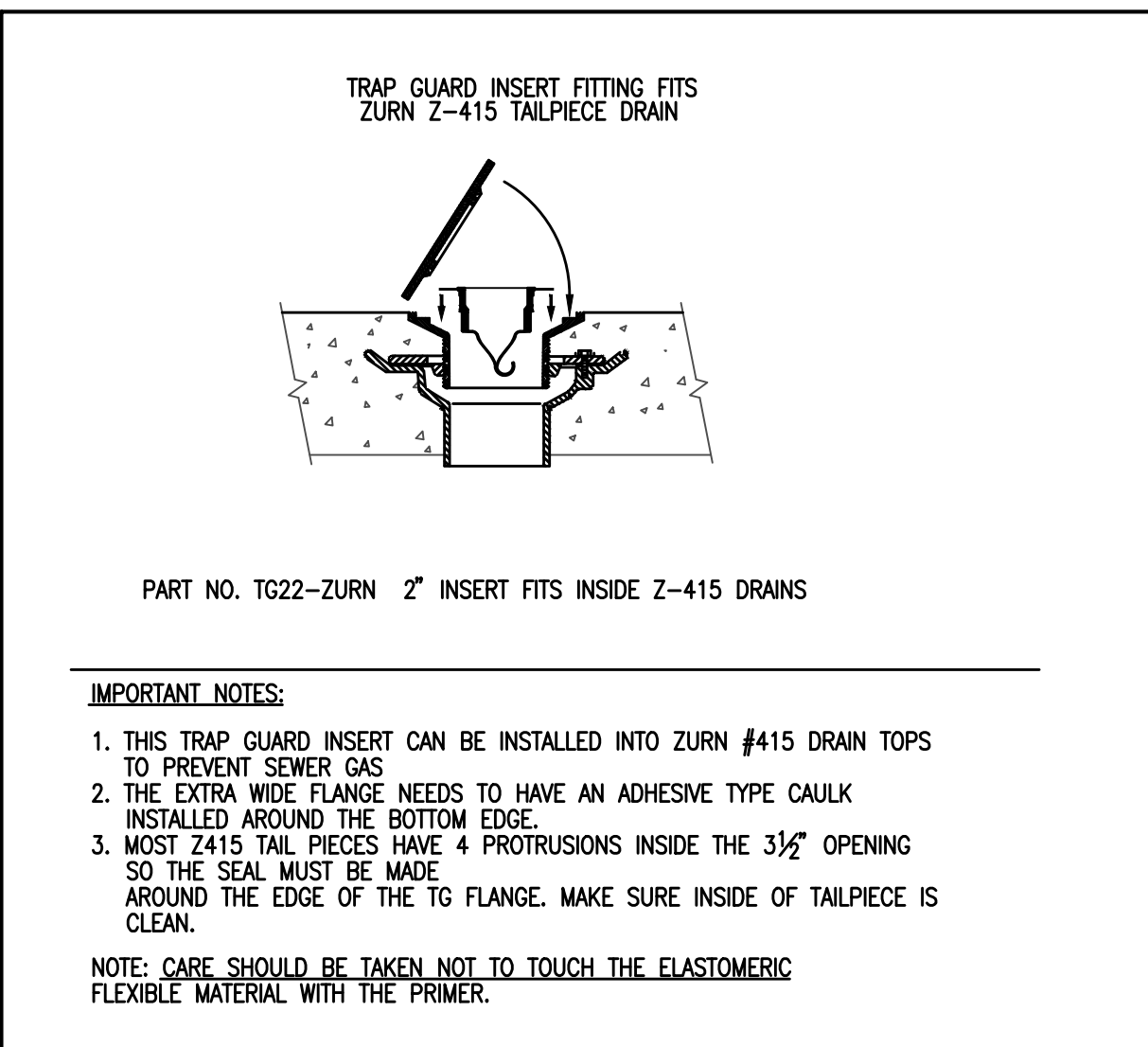
1 **TYPICAL BUILDING WATER SERVICE RISER**
 P0.2 NO SCALE



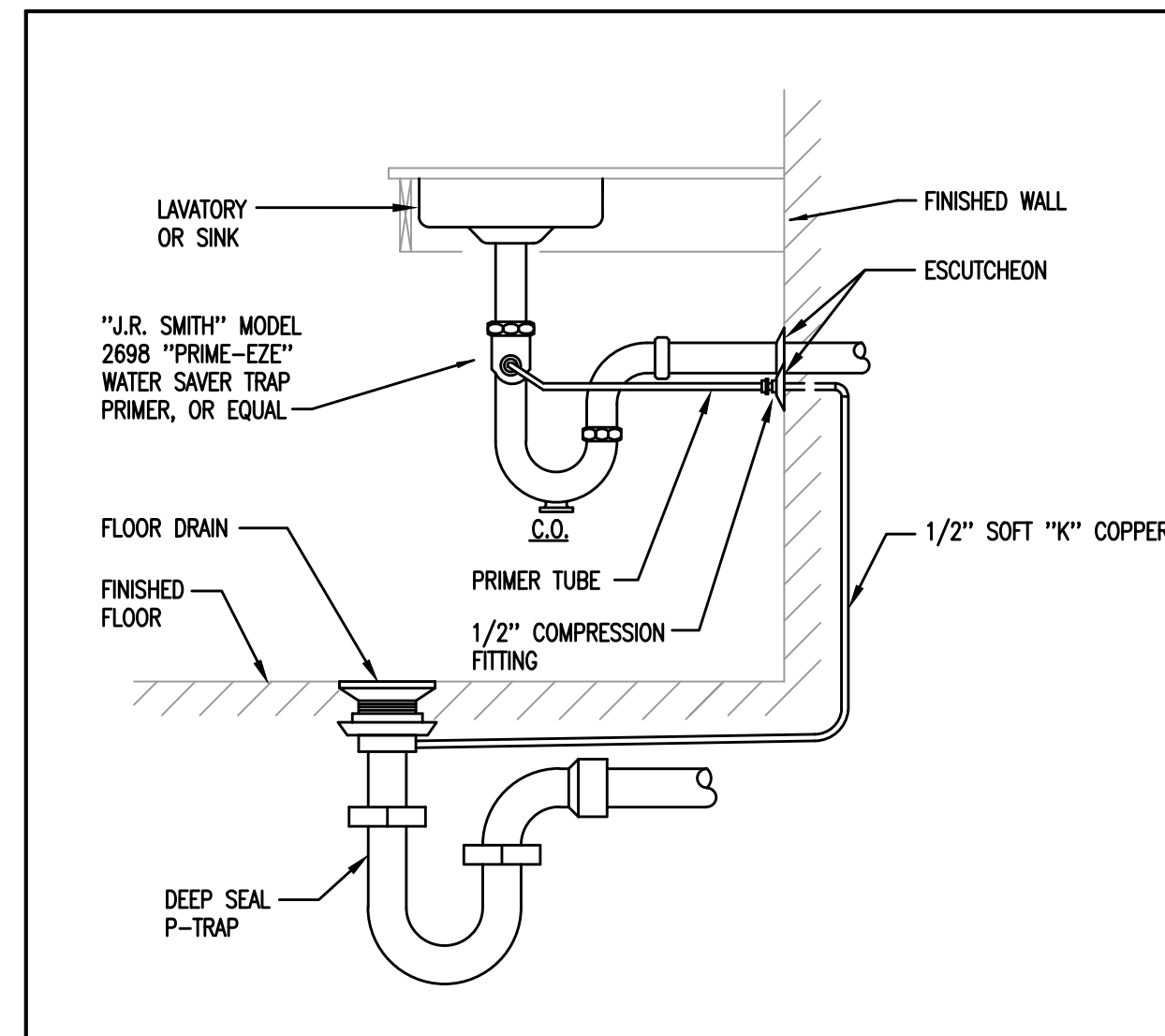
2 **WALL CLEANOUTS**
 P0.2 NO SCALE



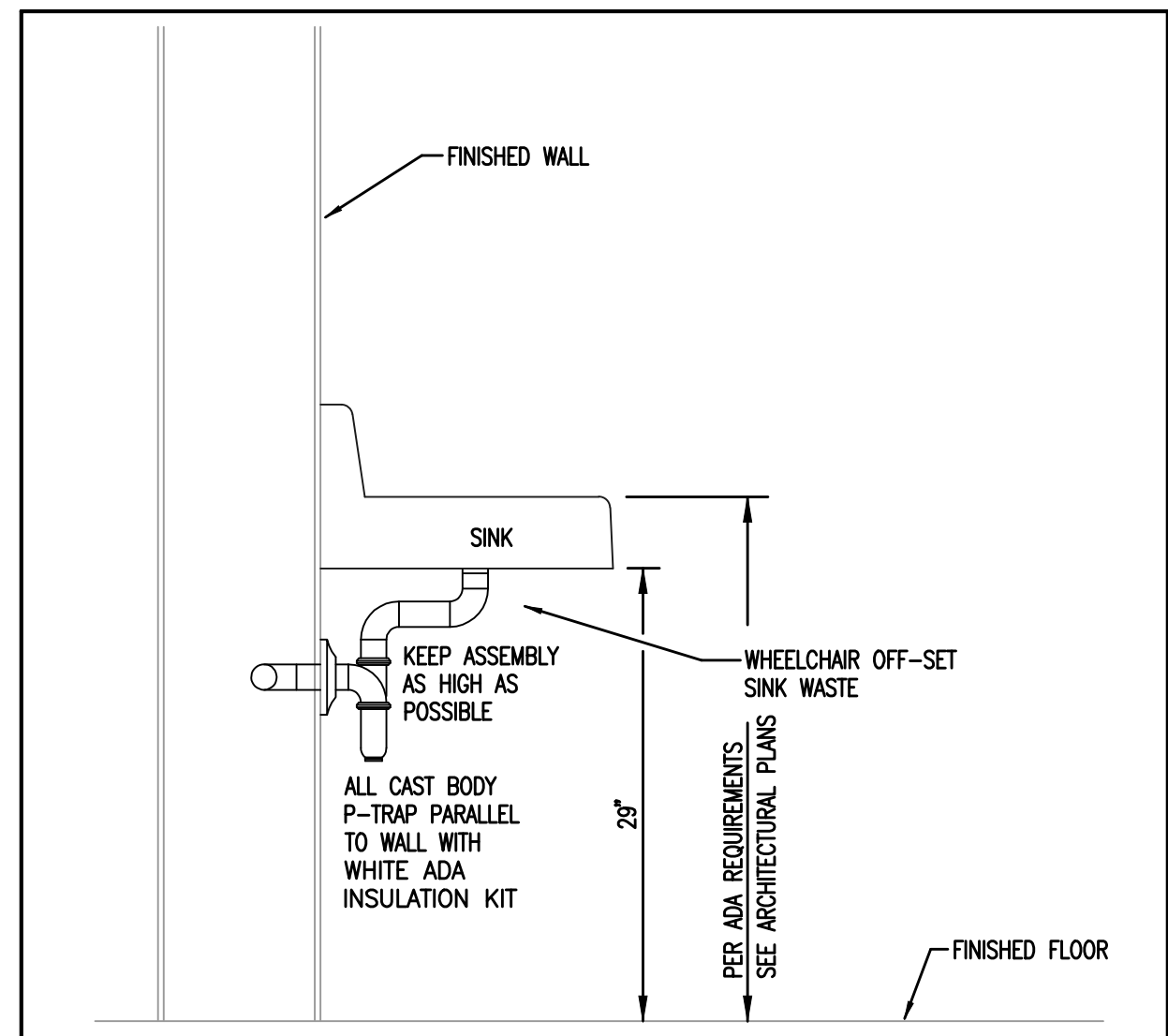
3 **FLOOR DRAIN**
 P0.2 NO SCALE



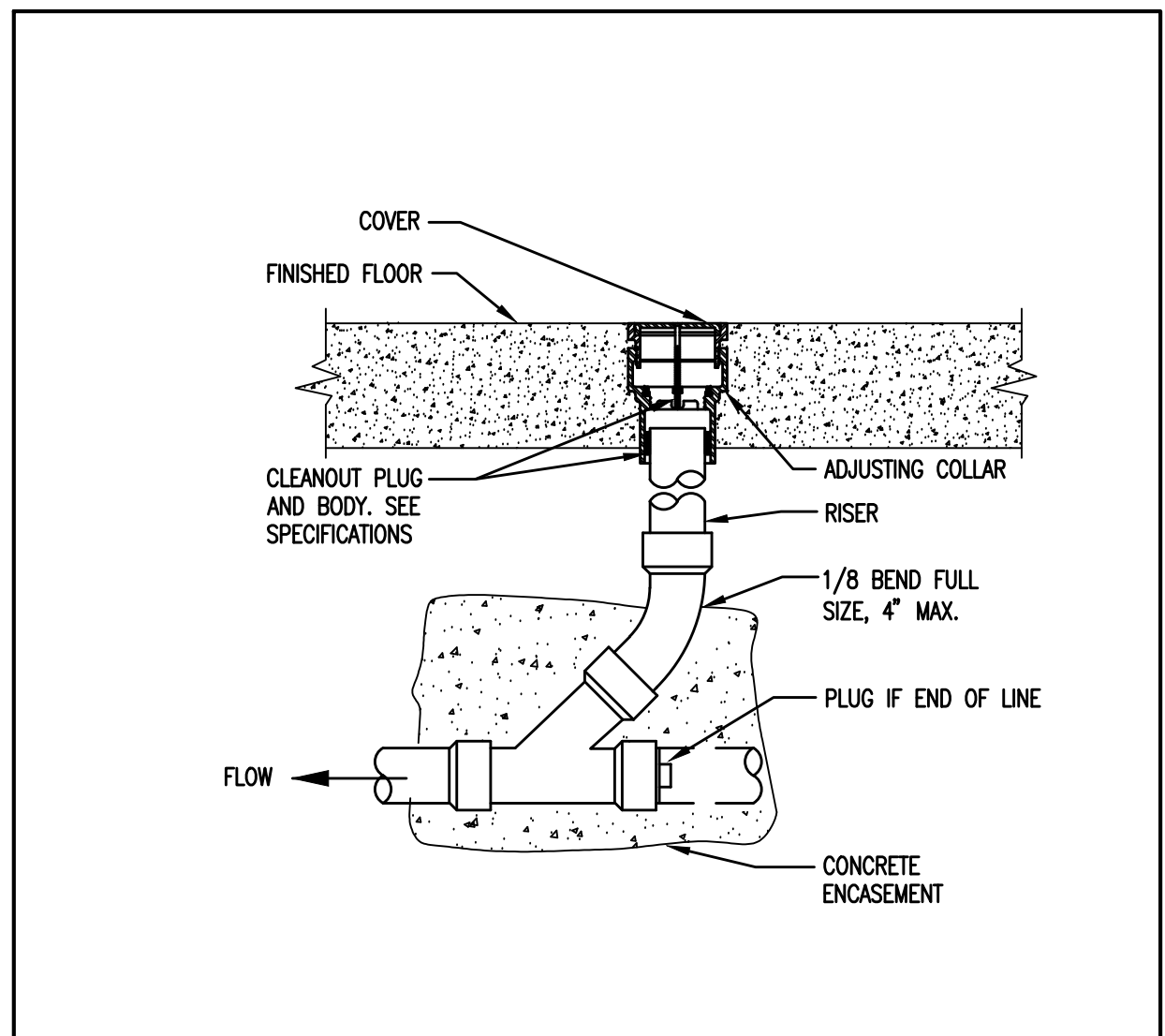
4 **TRAP GUARD INSERT FOR FLOOR DRAINS**
 P0.2 NO SCALE



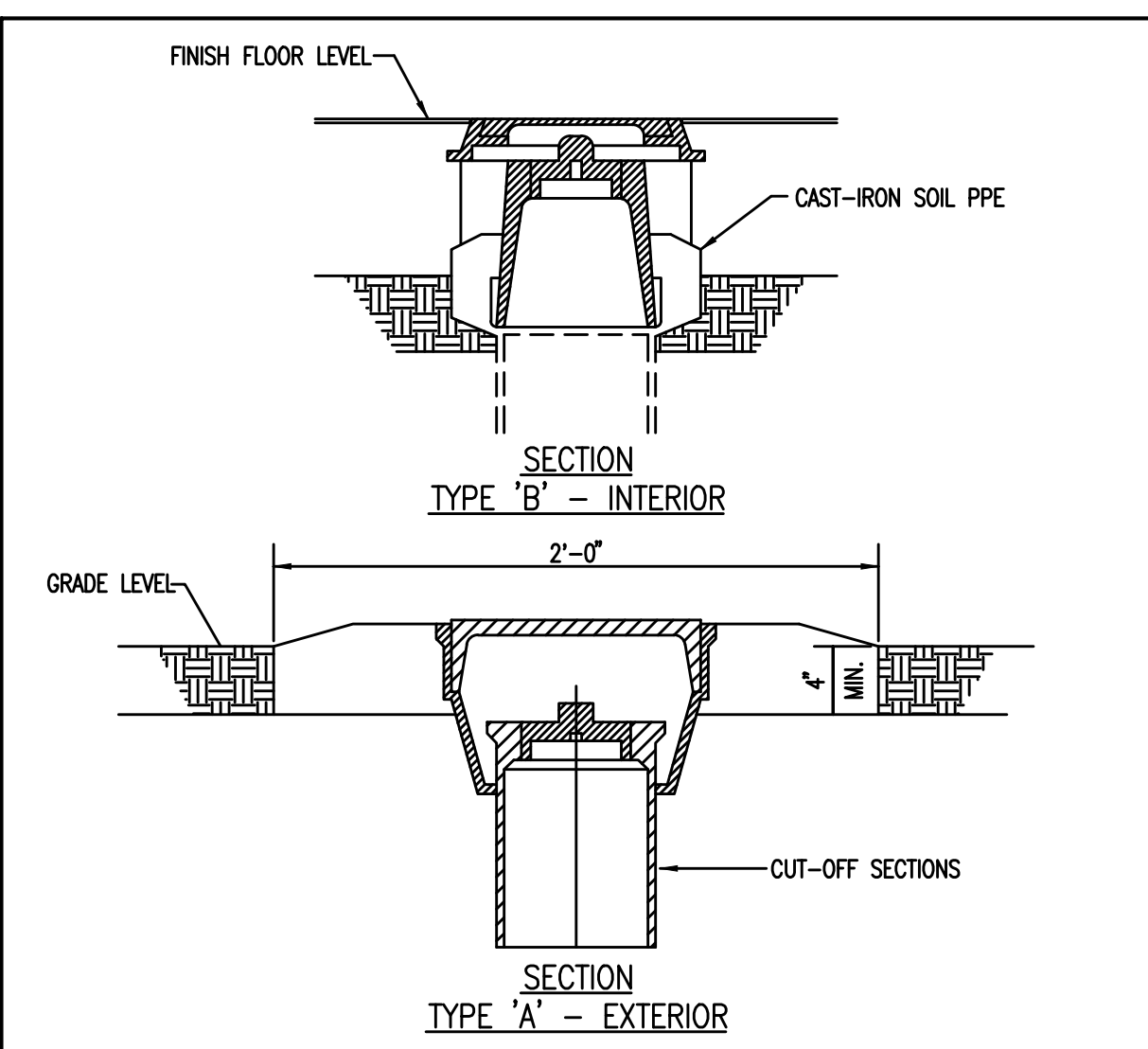
5 **TRAP PRIMER**
 P0.2 NO SCALE



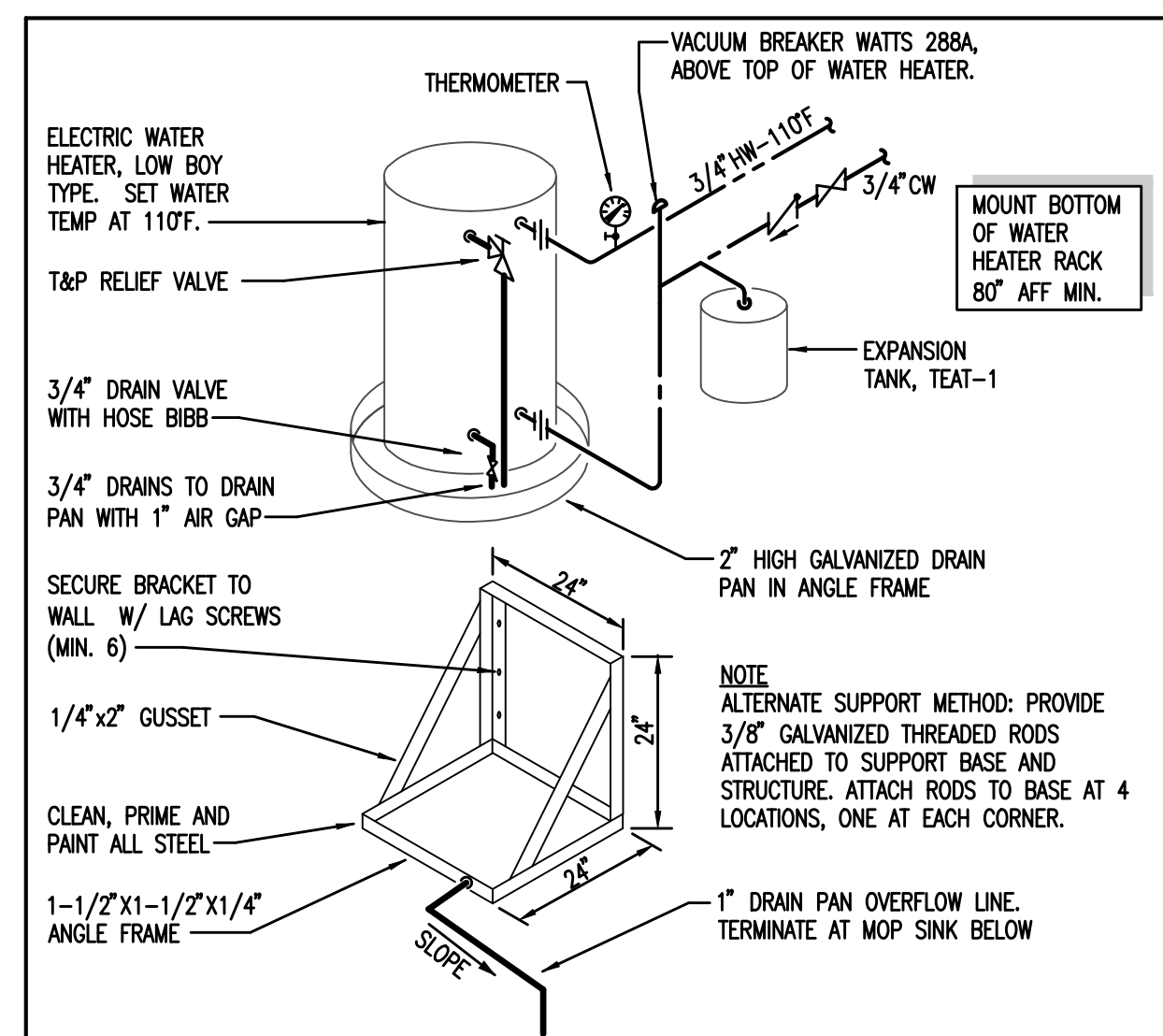
6 **SINK OFFSET WASTE FOR ADA**
 P0.2 NO SCALE



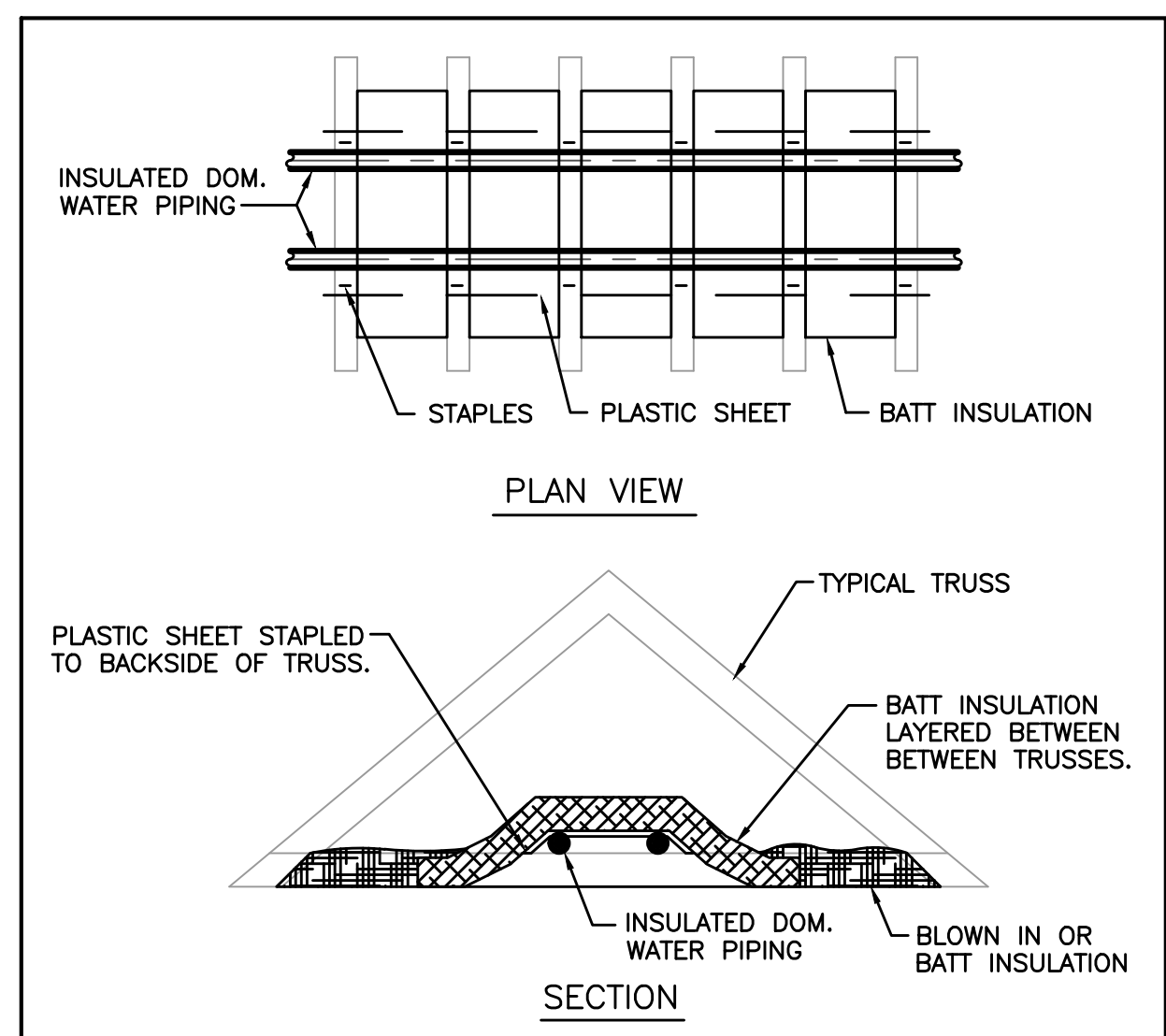
7 **FLOOR CLEANOUT**
 P0.2 NO SCALE



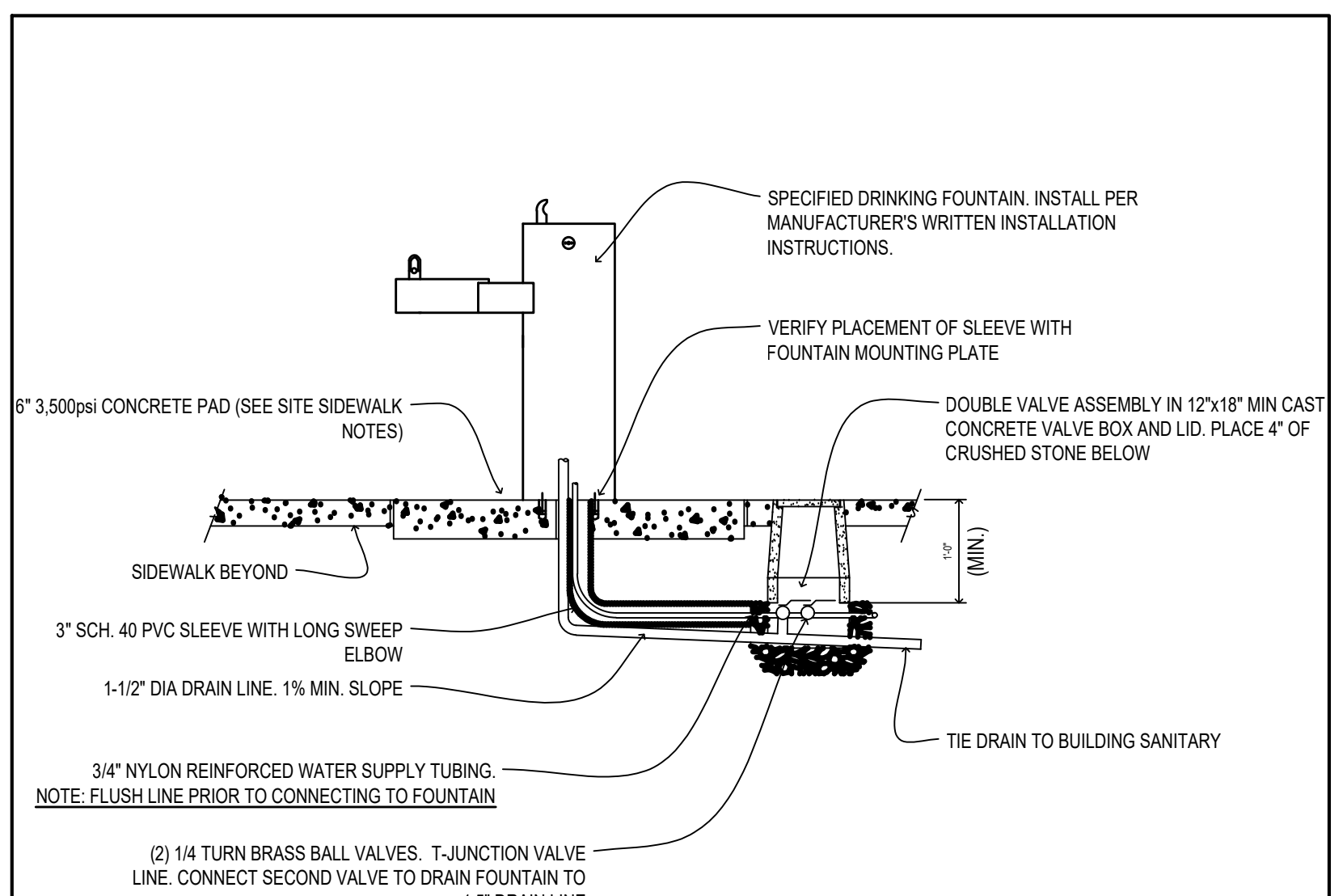
8 **CLEANOUT CAP**
 P0.2 NO SCALE



9 **EHW-1 - ELECTRIC WATER HEATER**
 P0.2 NO SCALE



10 **FREEZE PROTECTION OF PIPING IN ATTIC**
 P0.2 NO SCALE



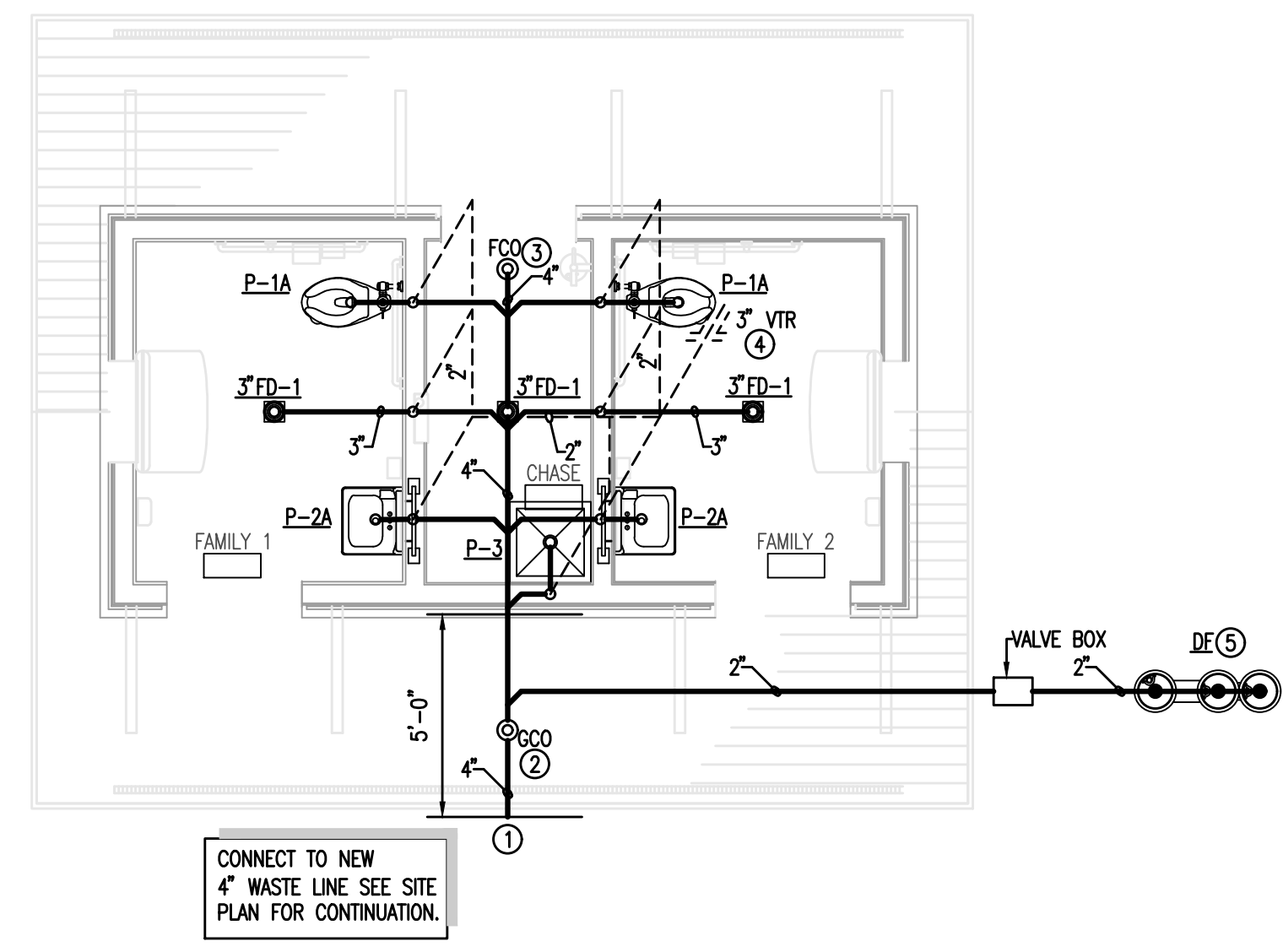
11 **DF - DRINKING FOUNTAIN DETAIL**
 P0.2 NO SCALE



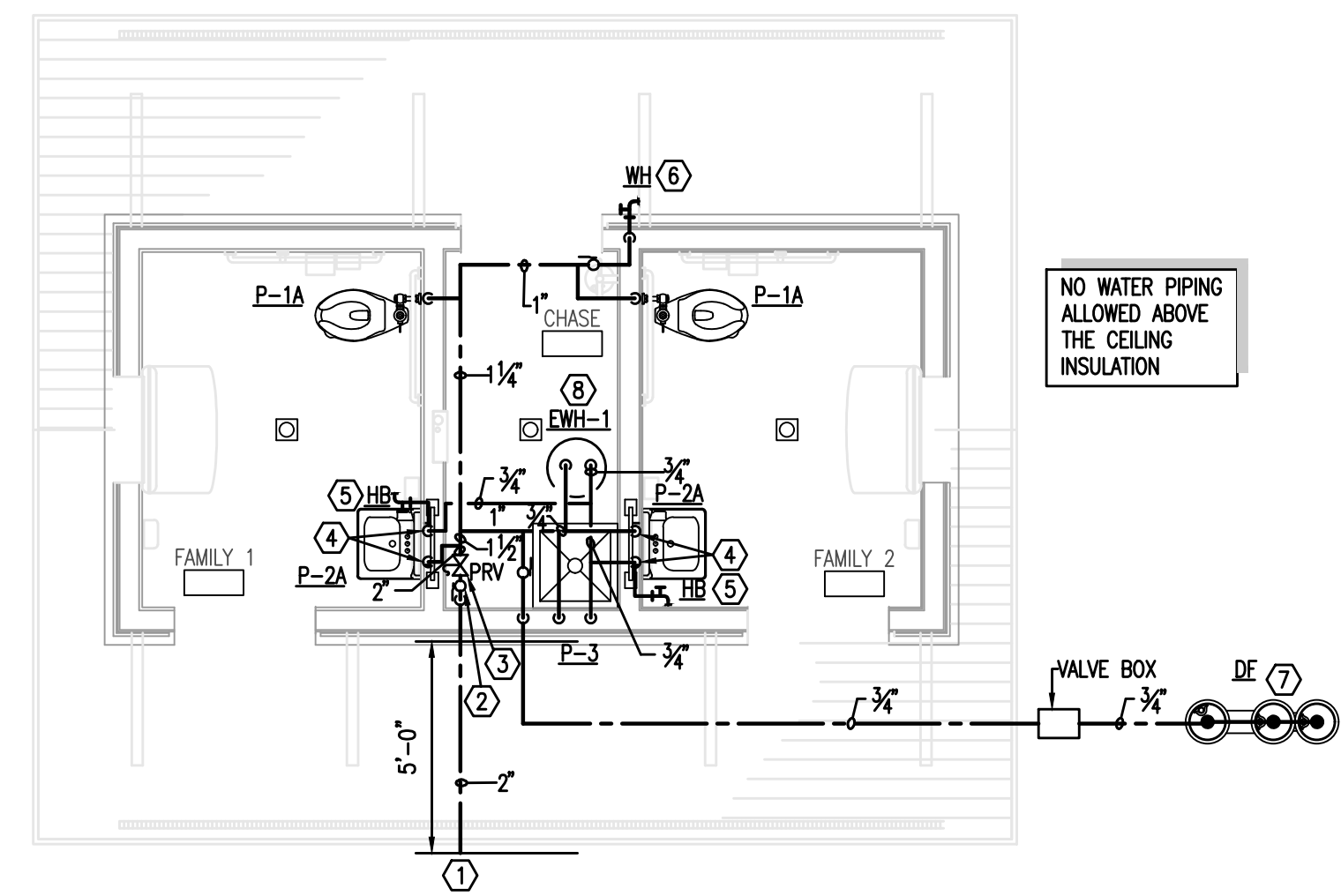
| PLUMBING LEGEND | |
|-----------------|---|
| ----- | COLD WATER PIPING (CW) |
| ----- | COLD WATER PIPING BENEATH FLOOR |
| ----- | EXISTING COLD WATER PIPING (CWX) |
| ----- | HOT WATER PIPING (HW) |
| ----- | HOT WATER RECIRC PIPING (HWR) |
| ----- | EXISTING HOT WATER PIPING (HWX) |
| ----- | EXISTING HOT WATER RECIRC PIPING (HWRX) |
| ----- | VENT PIPING (V) |
| ----- | EXISTING VENT PIPING (VX) |
| ----- | WASTE PIPING (W) |
| ----- | EXISTING WASTE PIPING (WX) |
| ----- | GREASE WASTE (GW) |
| ----- | NEW GAS PIPING (G) |
| ----- | EXISTING GAS PIPING (GX) |
| FCO | BRASS/FLOOR CLEAN OUT |
| YCO | YARD (GRADE) CLEAN OUT |
| ----- | VENT THRU ROOF (VTR) |
| ----- | AIR ADMITTANCE VALVE (AAV) |
| ----- | SHUTOFF VALVE |
| ----- | PRESSURE-REDUCING VALVE |
| ● | CONNECT NEW TO EXISTING |
| ● | POINT OF DEMOLITION |
| ----- | DEMOLISH PIPE OR FIXTURE |
| AAV | AIR ADMITTANCE VALVE (STUDOR VENT) |
| AFF | ABOVE FINISH FLOOR |
| CO | CLEANOUT |
| XCO | EXISTING CLEANOUT |
| FCO | FLOOR CLEANOUT |
| XFCO | EXISTING FLOOR CLEANOUT |
| FD | FLOOR DRAIN (ROUND OR RECTANGULAR) |
| XFD | EXISTING FLOOR DRAIN (ROUND OR RECT) |
| FS | FLOOR SINK |
| XFS | EXISTING FLOOR SINK |
| VTR | VENT THROUGH ROOF |
| XVTR | EXISTING VENT THROUGH ROOF |
| GT | GREASE TRAP (INTERCEPTOR) |
| XGT | EXISTING GREASE TRAP (INTERCEPTOR) |

| KEYED NOTES - WASTE PIPING | |
|----------------------------|---|
| KEY | NOTE |
| ① | NEW 4" SANITARY WASTE LINE THAT SERVES THE RESTROOM BUILDING. SEE SITE PLAN FOR GENERAL LOCATION INFORMATION. INVERT = -4.0' BFF. |
| ② | NEW GRADE (SANITARY) CLEANOUT |
| ③ | NEW FLOOR (SANITARY) CLEANOUT |
| ④ | 3" VENT THROUGH THE ROOF. |
| ⑤ | NEW 2" WASTE PIPING INSTALLED FROM REMOTE DRINKING FOUNTAIN (DF). SEE DETAIL 11/PO.2. |

| KEYED NOTES - WATER PIPING | |
|----------------------------|---|
| KEY | NOTE |
| ① | NEW 2" DOMESTIC WATER PIPE TO SERVE THE RESTROOM BUILDING. SEE CIVIL FOR CONTINUATION. |
| ② | 2" DOMESTIC WATER RISER WITH SHUTOFF VALVE IN RISE AND PRESSURE REDUCING VALVE UPSTREAM OF ALL FIXTURES. |
| ③ | NEW FULL PORT DOMESTIC WATER SHUTOFF VALVE. |
| ④ | 3/4" HW & 1/2" CW LINES DOWN IN WALL TO FIXTURE (TYPICAL). |
| ⑤ | HOSE BIBB FOR RESTROOM CLEANUP - CONNECT TO HOT WATER LINE. |
| ⑥ | INSTALL WALL HYDRANT ABOVE THE STONE SILL WITH ENOUGH CLEARANCE TO CONNECT A HOSE. |
| ⑦ | NEW 3/4" DOMESTIC WATER PIPE BELOW GRADE TO SERVE REMOTE WATER FOUNTAIN. SEE DETAIL 11/PO.2. |
| ⑧ | NEW ELECTRIC WATER HEATER INSTALLED ABOVE MOP SINK. LOCATION SHOWN ON DRAWING FOR CLARITY ONLY. 3/4" CW IN, 3/4" HW OUT & 1" DISCHARGE TO MOP SINK. |



2 PLUMBING WASTE PLAN
 P1.0 SCALE: 1/4" = 1'-0"
 SEE CONNECTION SCHEDULES FOR RUNOUT SIZES TO FIXTURES



1 PLUMBING WATER PLAN
 P1.0 SCALE: 1/4" = 1'-0"
 NO WATER PIPING ALLOWED ABOVE THE CEILING INSULATION
 SEE CONNECTION SCHEDULES FOR RUNOUT SIZES TO FIXTURES

REVISIONS:

CITY OF CONCORD
 35 CABARRIUS AVE. W
 CONCORD, NORTH CAROLINA

OWNER:

DORTON PARK
 5790 POPLAR TENT ROAD
 CONCORD, NORTH CAROLINA

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

DATE: 4/26/2023

SHEET NAME:
 SOCCER RESTROOM PLUMBING PLANS

SHEET NO:
P1.0

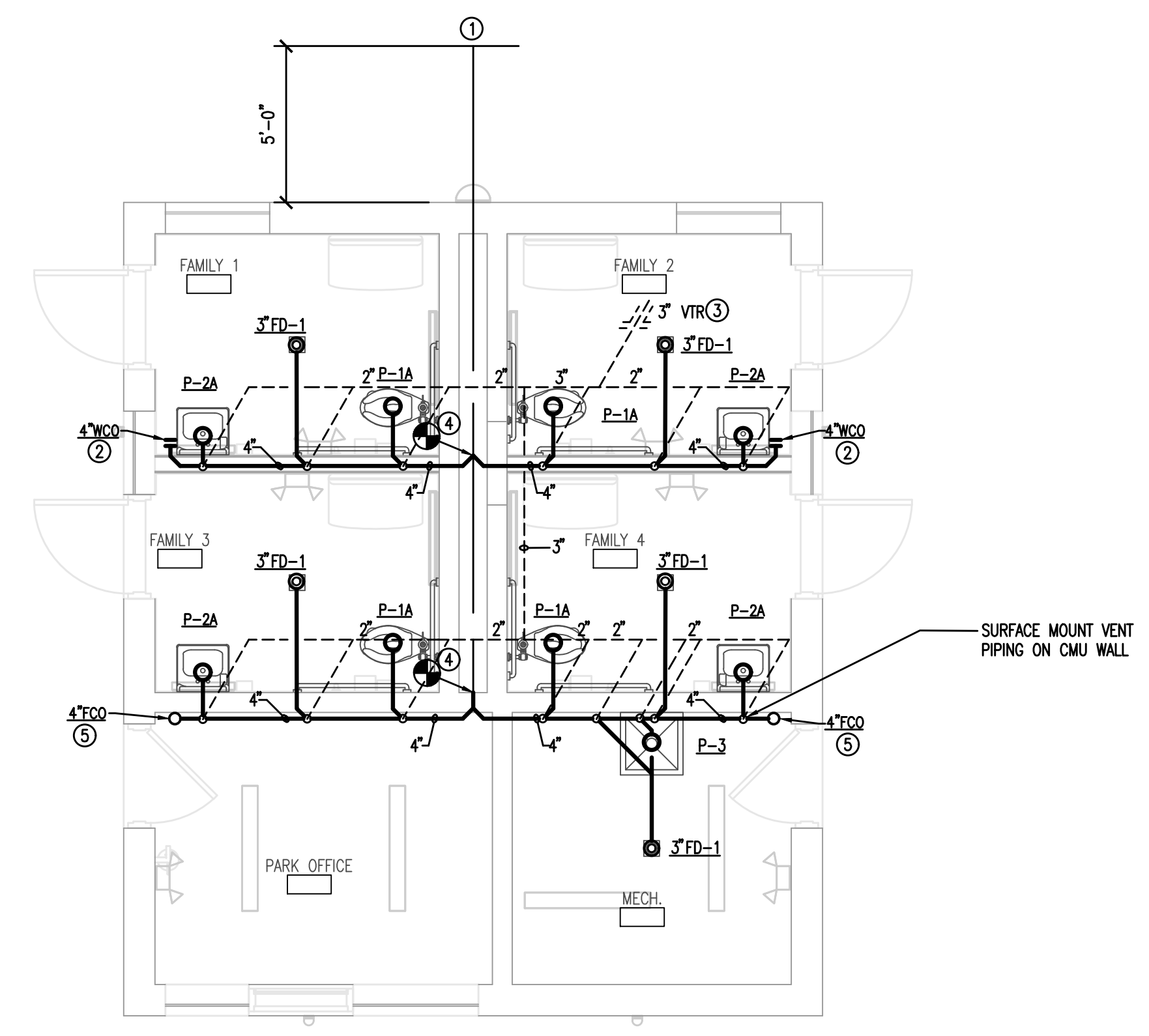


PLUMBING LEGEND

| | |
|------|---|
| --- | COLD WATER PIPING (CW) |
| --- | COLD WATER PIPING BENEATH FLOOR |
| --- | EXISTING COLD WATER PIPING (CWX) |
| --- | HOT WATER PIPING (HW) |
| --- | HOT WATER RECIRC PIPING (HWR) |
| --- | EXISTING HOT WATER PIPING (HWX) |
| --- | EXISTING HOT WATER RECIRC PIPING (HWRX) |
| --- | VENT PIPING (V) |
| --- | EXISTING VENT PIPING (VX) |
| W | WASTE PIPING (W) |
| XW | EXISTING WASTE PIPING (WX) |
| CW | GREASE WASTE (CW) |
| G | NEW GAS PIPING (G) |
| XG | EXISTING GAS PIPING (XG) |
| FCO | BRASS/FLOOR CLEAN OUT |
| YCO | YARD (GRADE) CLEAN OUT |
| VTR | VENT THRU ROOF (VTR) |
| AAV | AIR ADMITTANCE VALVE (AAV) |
| SV | SHUTOFF VALVE |
| PRV | PRESSURE-REDUCING VALVE |
| ● | CONNECT NEW TO EXISTING |
| ● | POINT OF DEMOLITION |
| --- | DEMOLISH PIPE OR FIXTURE |
| AAV | AIR ADMITTANCE VALVE (STUDOR VENT) |
| AFF | ABOVE FINISH FLOOR |
| CO | CLEANOUT |
| XCO | EXISTING CLEANOUT |
| FCO | FLOOR CLEANOUT |
| XFCO | EXISTING FLOOR CLEANOUT |
| FD | FLOOR DRAIN (ROUND OR RECTANGULAR) |
| XFD | EXISTING FLOOR DRAIN (ROUND OR RECT) |
| FS | FLOOR SINK |
| XFS | EXISTING FLOOR SINK |
| VTR | VENT THROUGH ROOF |
| XVTR | EXISTING VENT THROUGH ROOF |
| GT | GREASE TRAP (INTERCEPTOR) |
| XGT | EXISTING GREASE TRAP (INTERCEPTOR) |

KEYED NOTES - WASTE PIPING

| KEY | NOTE |
|-----|--|
| ① | EXISTING 4" SANITARY WASTE LINE THAT SERVES THE RESTROOM BUILDING. SEE SITE PLAN FOR GENERAL LOCATION INFORMATION. |
| ② | NEW WALL (SANITARY) CLEANOUT |
| ③ | 3" VENT THROUGH THE ROOF. |
| ④ | CONNECT NEW 4" WASTE PIPING TO EXISTING WASTE PIPING SERVING BUILDING AT THIS LOCATION. |
| ⑤ | NEW FLOOR (SANITARY) CLEANOUT |



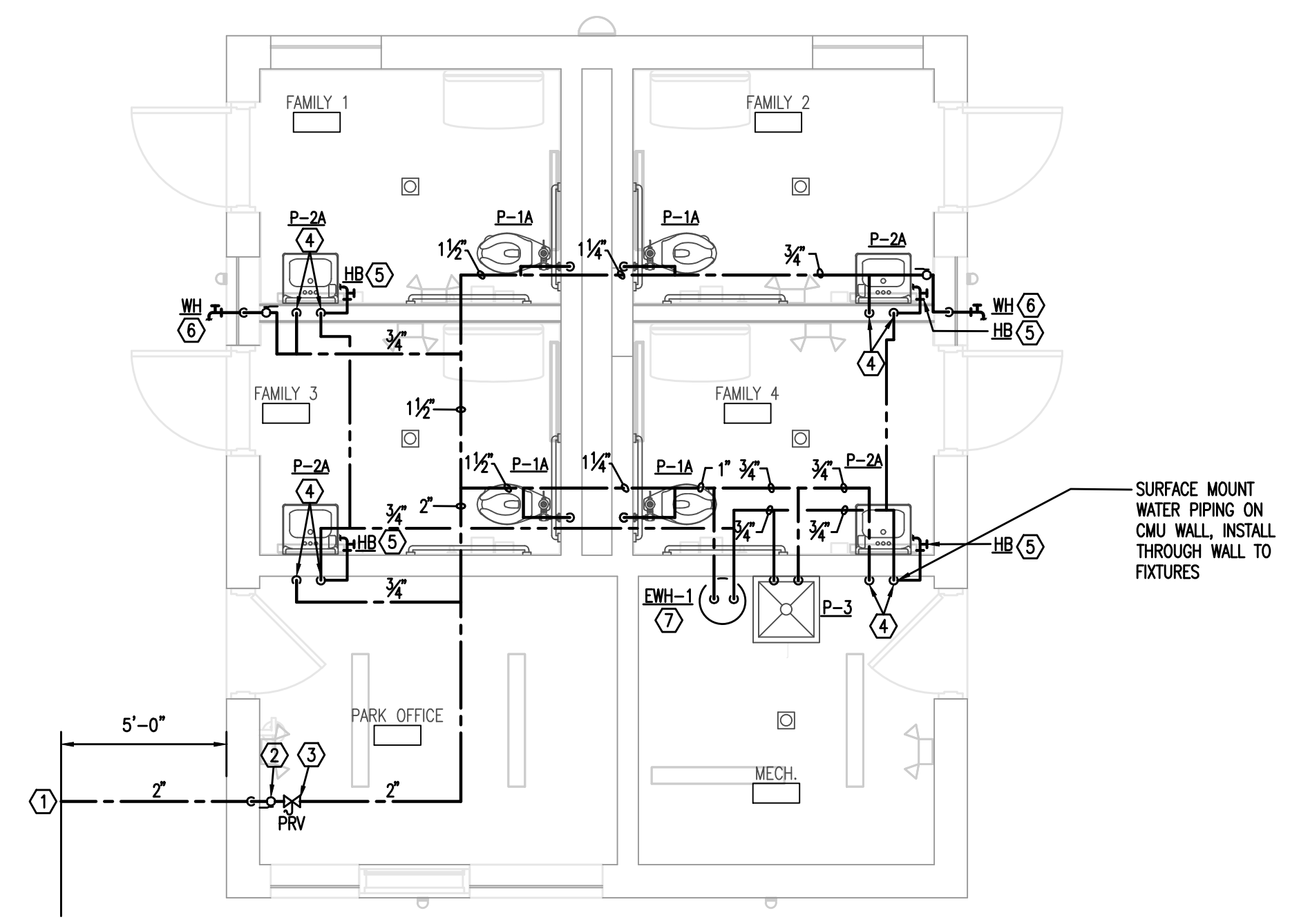
2 PLUMBING WASTE PLAN
 P2.0 SCALE: 1/4" = 1'-0"

SEE CONNECTION SCHEDULES FOR RUNOUT SIZES TO FIXTURES

DEMOLITION NOTE: ALL EXISTING FIXTURES AND FLOOR DRAINS TO BE REMOVED IN THE DEMOLITION STAGE. WASTE, WATER AND VENT PIPING TO BE REMOVED BACK TO THE RESPECTIVE MAINS AND CAPPED.

KEYED NOTES - WATER PIPING

| KEY | NOTE |
|-----|---|
| ① | NEW 2" DOMESTIC WATER PIPE REPLACED FROM EXISTING WATER VALVE BOX. SEE SITE FOR CONTINUATION. |
| ② | 2" DOMESTIC WATER RISER WITH SHUTOFF VALVE IN RISE AND PRESSURE REDUCING VALVE UPSTREAM OF ALL FIXTURES. |
| ③ | NEW FULL PORT DOMESTIC WATER SHUTOFF VALVE. |
| ④ | 3/4" HW & 1/2" CW LINES DOWN IN WALL TO FIXTURE (TYPICAL). |
| ⑤ | HOSE BIBB FOR RESTROOM CLEANUP - CONNECT TO HOT WATER LINE. |
| ⑥ | INSTALL WALL HYDRANT 48" AFF. |
| ⑦ | NEW ELECTRIC WATER HEATER INSTALLED ABOVE MOP SINK. LOCATION SHOWN ON DRAWING FOR CLARITY ONLY. 3/4" CW IN, 3/4" HW OUT & 1" DISCHARGE TO MOP SINK. |



1 PLUMBING WATER PLAN
 P2.0 SCALE: 1/4" = 1'-0"

SEE CONNECTION SCHEDULES FOR RUNOUT SIZES TO FIXTURES

DEMOLITION NOTE: ALL EXISTING FIXTURES TO BE REMOVED IN THE DEMOLITION STAGE. WASTE, WATER AND VENT PIPING TO BE REMOVED BACK TO THE RESPECTIVE MAINS AND CAPPED.

REVISIONS:

CITY OF CONCORD
 35 CABARRIUS AVE. W
 CONCORD, NORTH CAROLINA

OWNER:

DORTON PARK
 5790 POPLAR TENT ROAD
 CONCORD, NORTH CAROLINA

SCALE: 1/4" = 1'-0"
 DATE: 4/26/2023

SHEET NAME:
 EXISTING RESTROOM
 PLUMBING RENOVATION
 PLANS

SHEET NO:
P2.0