

# Orange High School Renovations Orange County Schools

500 Orange High School Road  
Hillsborough, North Carolina

## CRA Associates, Inc.

100 Europa Drive, Suite 565, Chapel Hill, NC 27517 (919) 201-0077

## Architects and Civil Engineers

### RNM Consulting Engineers, Inc.

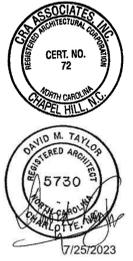
390 Main Street, Canton, NC 28716 (828) 492-0677

### Plumbing, Mechanical & Electrical Engineers

### Bennett & Pless

5340 Wade Park Boulevard, Suite 400, Raleigh, NC 27607 (919) 832-5587

### Structural Engineers



## Construction Document Review Set

June 15, 2023

### LIST OF DRAWINGS

- A0.0 Cover Sheet
- A0.1 Code Information Sheet
- A0.2 Construction Phase First Floor Life Safety Plan
- A0.3 Construction Phase Second Floor Life Safety Plan
- A0.4 Not Used
- A0.5 Accessibility Diagrams Sheet A
- A0.6 Accessibility Diagrams Sheet B

#### CIVIL

- C1.0 Existing Conditions Site Plan
- C1.1 Contractor Laydown & Staging Plan
- C1.2 Site Demolition Plan
- C2.0 Site Plan
- C3.0 Grading, Storm Drainage & Utility Plan
- C4.0 Erosion Control Plan

#### STRUCTURAL

- S0.0 General Notes & Abbreviations
- S2.1 Toilet Room Plans
- S2.2 Courtyard Foundation Plan
- S5.1 Foundation Sections and Details
- S5.2 Framing Sections and Details
- S5.3 Typical CMU Details

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- A1.1 Composite First Floor Plan
- A1.2 Composite Second Floor Plan
- D2.1 Enlarged First Floor Demolition Plan
- D2.2 Demolition Exterior Elevations
- A2.0 Courtyard Site Floor Plan
- A2.1 Enlarged First Floor Addition Plan
- A2.2 Enlarged Addition Reflected Ceiling Plan
- A2.3 Enlarged Addition Roof Plan
- A2.4 Toilet Addition Exterior Elevations
- A2.5 Toilet Addition Exterior Elevation and Sections
- A2.6 Toilet Addition Building Sections
- A2.7 Toilet Addition Interior Elevations
- A2.8 Existing Courtyard Exterior Elevations
- D3.1 Enlarged First Floor Demolition Plans
- D3.2 Enlarged Second Floor Demolition Plans
- D3.3 Enlarged Second Floor Demolition Plans
- A3.1 Enlarged First Floor Renovation Plans
- A3.2 Enlarged Second Floor Renovation Plans
- A3.3 Enlarged Second Floor Renovation Plans
- A3.4 Enlarged First Floor Interior Elevations
- A3.5 Enlarged First Floor Reno Ceiling Plans
- A3.6 Enlarged Second Floor Reno Ceiling Plans
- A3.7 Enlarged Second Floor Reno Ceiling Plans
- A5.1 Partition Schedule, Door Schedule and Details
- A5.2 Finish Schedule and Details

#### PLUMBING

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- P1.1 Overall Plumbing Demolition Plans
- P1.2 Overall New Plumbing Plans
- P1.3 Overall First Floor Plumbing Hot Water Piping
- P2.1 Enlarged First Floor Addition Plumbing Plans
- PD3.1 Enlarged Basement and First Floor Demolition Plans
- PD3.2 Enlarged Second Floor Plumbing Demolition Plans
- PD3.3 Enlarged Second Floor Plumbing Demolition Plans
- P3.1 Enlarged Basement and First Floor New Plumbing Plans
- P3.2 Enlarged Second Floor New Plumbing Plans
- P3.3 Enlarged Second Floor New Plumbing Plans

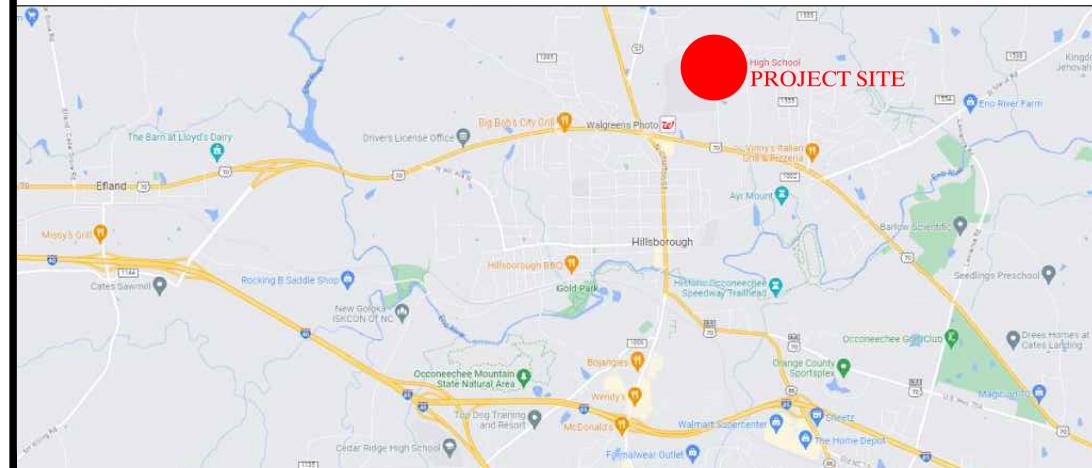
#### MECHANICAL

- M0.1 Mechanical Details, Notes & Specifications
- M0.2 Mechanical Details
- M0.3 Mechanical Details
- M1.1 Overall Mechanical Demolition Plan
- M1.2 Overall New Mechanical Plan
- M2.1 Enlarged First Floor New Mechanical Plan
- MD3.1 Enlarged Basement and First Floor Demo Plans
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- MD3.3 Enlarged Second Floor Mechanical Demo Plans
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- M3.3 Enlarged Second Floor New Mechanical Plans

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- E1.1 Overall Electrical Demolition Plan
- E1.2 Overall New Electrical Plan
- E2.0 Courtyard Electrical Plans
- E2.1 Enlarged First Floor New Electrical Plan
- ED3.1 Enlarged Basement and First Floor Demo Plans
- ED3.2 Enlarged Second Floor Electrical Demo Plans
- ED3.3 Enlarged Second Floor Electrical Demo Plans
- E3.1 Enlarged Basement and First Floor New Plans
- E3.2 Enlarged Second Floor New Electrical Plans
- E3.3 Enlarged Second Floor New Electrical Plans

### LOCATOR MAP



Orange High School  
Renovations and Addition  
Orange County Schools  
500 Orange High School Road  
Hillsborough, North Carolina



no. revisions

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drawn checked  
dml ket

Cover Sheet

sheet

A0.0

project no. 2231

date 6/15/23

**2018 APPENDIX B  
BUILDING CODE SUMMARY  
FOR ALL COMMERCIAL PROJECTS  
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)**  
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: Renovations of Orange High School  
Address: 500 Orange High School Road, Hillsborough, NC Zip Code 27278  
Owner/Authorized Agent: Patrick Florence, Phone #: (919) 251-1998, E-Mail: patrick.florence@orange.k12.nc.us  
Owned By:  City/County  Private  State  
Code Enforcement Jurisdiction:  City  County Orange  State

**LEAD DESIGN PROFESSIONAL:** David M. Taylor, AIA, CRA Associates, Inc.

DISCIPLINE	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	CRA Associates, Inc.	David Taylor, AIA	5730	(919) 201-0077	dtaylor@cra-ac.com
Civil	CRA Associates, Inc.	Mike Hammerley, PE	13350	(919) 401-8586	mhammer@cra-ac.com
Electrical	RNM Consulting Engineers	Scott Denton, PE	35223	(828) 492-0677	sdenton@rnm-engineers.com
Fire Alarm	RNM Consulting Engineers	Scott Denton, PE	35223	(828) 492-0677	sdenton@rnm-engineers.com
Plumbing	RNM Consulting Engineers	Mark McDowell, PE	24539	(828) 492-0677	mmcdowell@rnm-engineers.com
Mechanical	RNM Consulting Engineers	Jason Moody, PE	32224	(828) 492-0677	jmoody@rnm-engineers.com
Fire Protection	N/A	David McCarthy, PE	36923	(919) 832-5587	dmccarthy@benest-plex.com
Structural	Benest-Plex				
Retaining Walls >5' High					

**2018 NC CODE FOR:**  New Construction  Addition  Renovation  
 1<sup>st</sup> Time Interior Completion  
 Shell/Core  
 Phased Construction - Shell/Core  
 Renovation

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

**CONSTRUCTED:** (date) See A0.0 **ORIGINAL OCCUPANCY(S)** (Ch. 3): Education  
**RENOVATED:** (date) \_\_\_\_\_ **CURRENT OCCUPANCY(S)** (Ch. 3): Education  
**RISK CATEGORY (table 1604.5)** Current:  I  II  III  IV  
Proposed:  I  II  III  IV

**BASIC BUILDING DATA**  
Construction Type:  I-A  II-A  III-A  IV  V-A  
(check all that apply)  I-B  II-B  III-B  V-B  
Sprinklers:  No  Partial  Yes  NFPA 13  NFPA 13R  NFPA 13D  
Standpipes:  No  Yes Class  I  II  III  Wet  Dry  
Fire District:  No  Yes (Primary) **Flood Hazard Area:**  No  Yes  
Special Inspections Required:  No  Yes

2018 NC Administrative Code and Policies

Appendix B for Building

**Gross Building Area:**

FLOOR	TYPE OF CONST.	EXISTING (SF)	NEW (SF)	SUBTOTAL
<b>Main Building - Basement</b>				
	I-B	8,960 sf	0 sf	8,960 sf
		8,870 sf	0 sf	8,870 sf
		<b>17,830 sf</b>	<b>0 sf</b>	<b>17,830 sf</b>
<b>Main Building - First Floor</b>				
	I-B	47,466 sf	1,138 sf	47,466 sf
		15,370 sf	0 sf	15,370 sf
		3,290 sf	0 sf	3,290 sf
		2,455 sf	0 sf	2,455 sf
		2,680 sf	0 sf	2,680 sf
		<b>71,261 sf</b>	<b>1,138 sf</b>	<b>71,261 sf</b>
<b>Main Building - Second Floor</b>				
	I-B	41,400 sf	0 sf	41,400 sf
		15,370 sf	0 sf	15,370 sf
		3,084 sf	0 sf	3,084 sf
		<b>59,854 sf</b>	<b>0 sf</b>	<b>59,854 sf</b>
<b>Cultural Arts Wing (1977)</b>				
	II-B	16,480 sf	0 sf	16,480 sf
<b>Connector Building</b>				
	II-B	852 sf	0 sf	852 sf
		2,739 sf	0 sf	2,739 sf
		<b>3,591 sf</b>	<b>0 sf</b>	<b>3,591 sf</b>
<b>Wing 'D'</b>				
	II-B	15,540 sf	0 sf	15,540 sf
		8,370 sf	0 sf	8,370 sf
		<b>23,910 sf</b>	<b>0 sf</b>	<b>23,910 sf</b>
<b>Gymnasium Building</b>				
	II-B	24,330 sf	0 sf	24,330 sf
		8,480 sf	0 sf	8,480 sf
		<b>32,810 sf</b>	<b>0 sf</b>	<b>32,810 sf</b>
<b>Workforce Development Building</b>				
	I-B	9,045 sf	0 sf	9,045 sf
		2,370 sf	0 sf	2,370 sf
		<b>11,415 sf</b>	<b>0 sf</b>	<b>11,415 sf</b>
<b>Boiler Building (1962)</b>				
	I-B	3,034 sf	0 sf	3,034 sf
		1,138 sf	0 sf	1,138 sf
		<b>240,185 sf</b>	<b>1,138 sf</b>	<b>241,323 sf</b>

2018 NC Administrative Code and Policies

Appendix B for Building

**ALLOWABLE AREA**

**Primary Occupancy Classification:**  
 A-1  A-2  A-3  A-4  A-5  
 Educational  
 Factory  F-1 Moderate  F-2 Low  
 Hazardous  H-1 Detonate  H-2 Dehagrate  H-3 Combust  H-4 Health  H-5 HPM  
 Institutional  I-1 Condition  I-2 Condition  I-3 Condition  I-4  
 Mercantile  
 Residential  R-1  R-2  R-3  R-4  
 Storage  S-1 Moderate  S-2 Low  High-piled  
 Utility and Miscellaneous  Parking Garage  Open  Enclosed  Repair Garage

**Accessory 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: \_\_\_\_\_ 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.

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

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \dots \leq 1.00$$

2018 NC Administrative Code and Policies

Appendix B for Building

STORY NO.	DESCRIPTION AND USE	(A) BUILDING AREA PER STORY (ACTUAL)	(B) TABLE 503.5 AREA	(C) AREA FOR FRONTAGE INCREASE <sup>1</sup>	(D) AREA FOR SPRINKLER INCREASE <sup>2</sup>	(E) ALLOWABLE AREA OR UNLIMITED <sup>3</sup>	(F) MAXIMUM BUILDING AREA <sup>4</sup>
1	See A0.2						
2							

<sup>1</sup> 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 = 957 (F)  
 b. Total Building Perimeter = 957 (P)  
 c. Ratio (F/P) = 957/957 = 1 (F/P)  
 d. W = Minimum width of public way = 30 (W)  
 e. Percent of frontage increase  $I_1 = 100 [F/P - 0.25] \times W/30 = 75$  (%)  
<sup>2</sup> The sprinkler increase per Section 506.3 is as follows:  
 a. Multi-story building  $I_2 = 200$  percent  
 b. Single story building  $I_2 = 300$  percent  
<sup>3</sup> Unlimited area applicable under conditions of Section 507.  
<sup>4</sup> Maximum Building Area = total number of stories in the building x E (506.4).  
<sup>5</sup> The maximum area of open parking garages must comply with Table 406.3.5. The maximum area of air traffic control towers must comply with Table 412.1.2.

**ALLOWABLE HEIGHT**

ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	Typic IIA	Type IIA	
Building Height in Feet	65 feet	Feet = H + 20' = 85 feet	72 feet
Building Height in Stories	3 stories	Stories + 1 = 4 stories	3 stories

<sup>1</sup> Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4.  
<sup>2</sup> The maximum height of air traffic control towers must comply with Table 412.3.1  
<sup>3</sup> The maximum height of open parking garages must comply with Table 406.5.4

**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

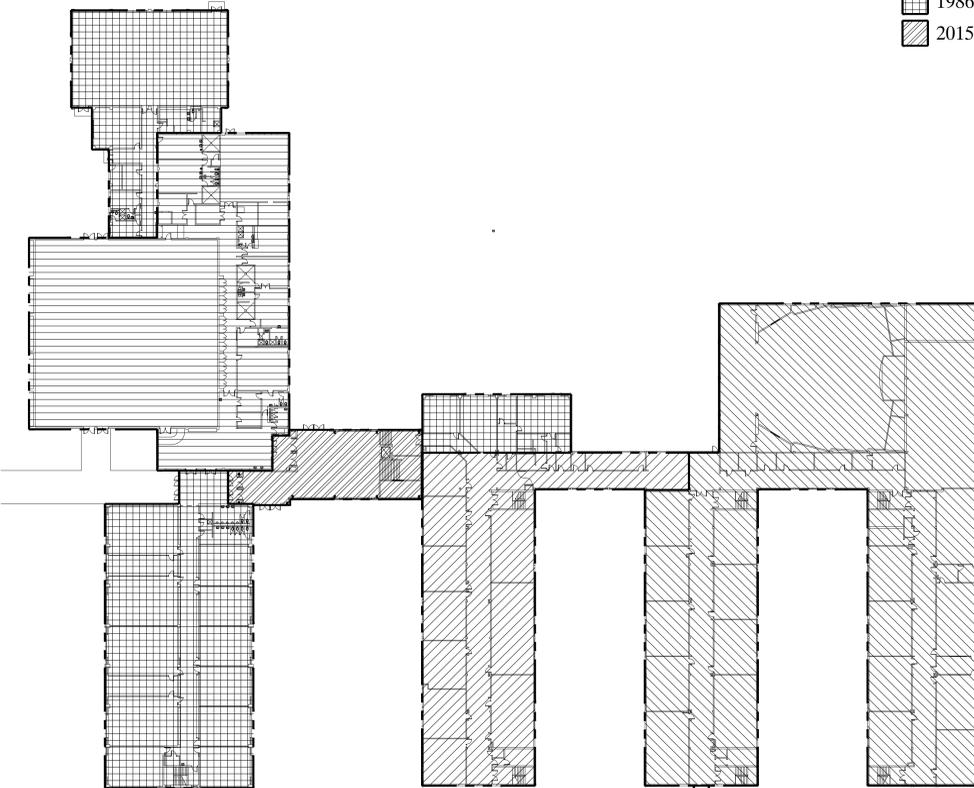
2018 NC Administrative Code and Policies

Appendix B for Building

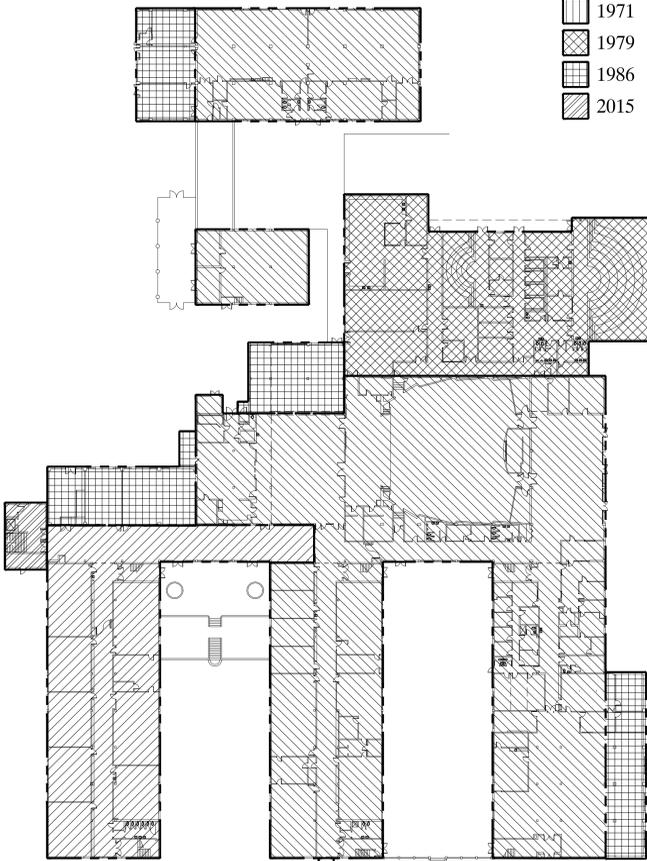
**CODE FLOOR PLANS**

-  1962
-  1969
-  1971
-  1979
-  1986
-  2015

-  1962
-  1969
-  1971
-  1979
-  1986
-  2015



SECOND FLOOR



FIRST FLOOR

**2018 NC Plumbing Code - Plumbing Fixture Calculations - Classrooms**

NCP TABLE 403.1 USE GROUP	NO. OF PERSONS		NO. OF UNITS		MALE W.C.		FEMALE W.C.		FEMALE U.R.		SINKS & TUBS		DRINK FOUNT.	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
Educational	1881	5050	840.5	840.5	31.35	31.35	9.405	37.62	NA	9.405	NA	NA	18.81	18.81
REQUIRED FIXTURES FOR MALES = 31														
REQUIRED FIXTURES FOR FEMALES = 38														
REQUIRED FIXTURES FOR ALL = 69														
SPACE/ROOM	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
Campus-wide Totals	25	25	30	30	41	41	26	26	0	26	0	0	0	0
PROVIDED FIXTURES FOR MALES = 25														
PROVIDED FIXTURES FOR FEMALES = 41														
PROVIDED FIXTURES FOR ALL = 66														

**2018 NC Plumbing Code - Occupancy Calculations - Classrooms**

NUMBER OF SPACES/ROOMS	SPACE/ROOM	ROOM AREA (GSF)	ROOM AREA (MSF)	NUMBER OF OCCUPANTS PER CLASSROOM	2009 NCP TABLE 403.1 CLASSIFICATION AND USE GROUP	NCP TABLE 1004.1.2 USE CATEGORY	OCCUPANT LOAD FACTOR (SP/PERSON)		NO. OF FIXED SEATS	NO. OF PEOPLE
							GROSS	NET		
57	Campus-wide Classrooms			33	Educational	Classroom				1881
					Educational					1881
<b>TOTAL OCCUPANTS</b>										<b>1881</b>

Note: The occupancy calculations below are based on Section 2902.6 of the North Carolina State Building Code.



222 cloister court chapel hill, nc 27514  
919.401.8586  
www.cra-ae.com



Orange High School  
Renovations and Addition  
Orange County Schools  
500 Orange High School Road  
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no. revisions

drawn: dm checked: kt  
Code Information Sheet

sheet **A0.1**

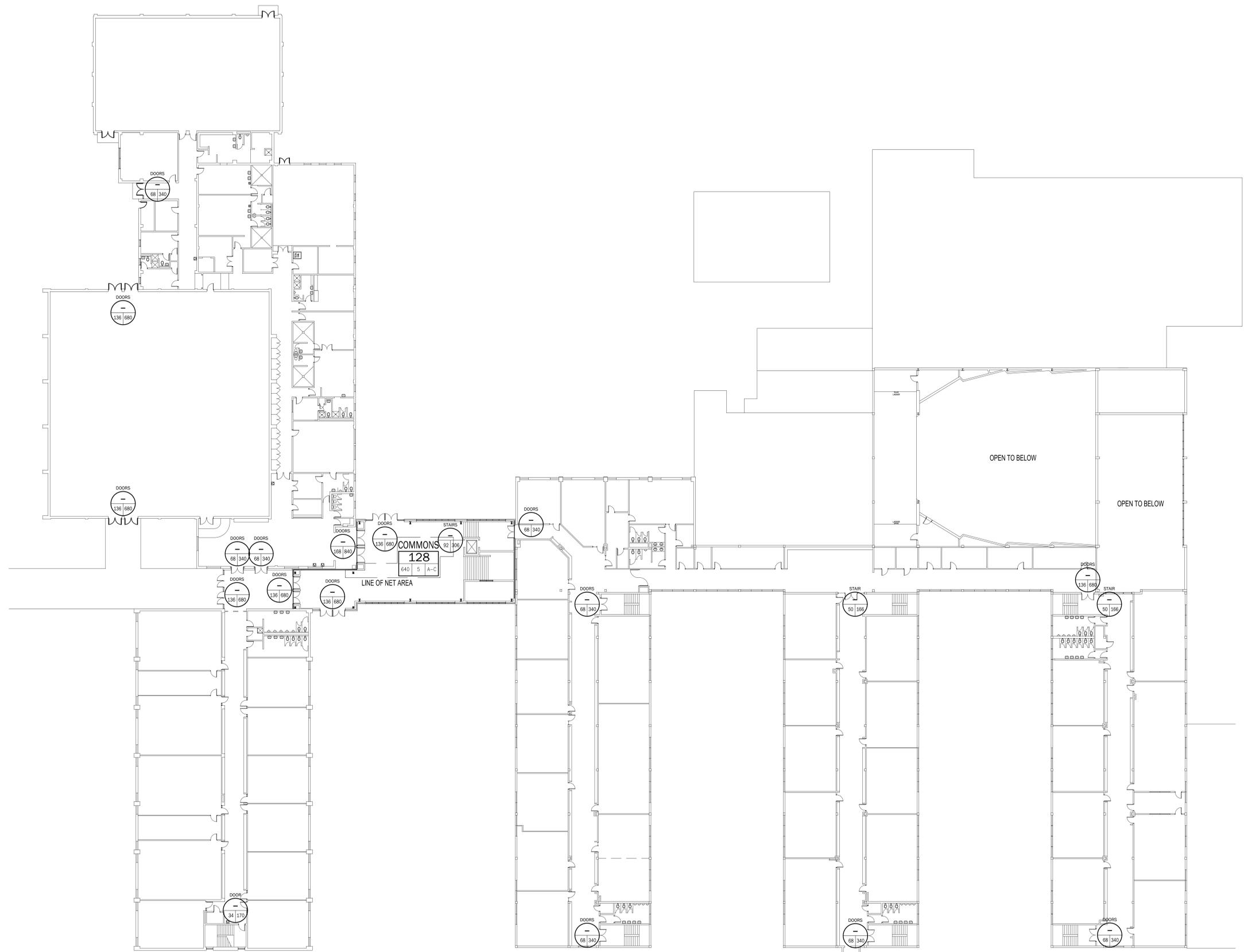
project no. 2231

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Construction Phase  
 Second Floor  
 Life Safety Plan

sheet  
**A0.3**

project no. 2231

date 6/15/23

1 Second Floor Life Safety Plan  
 A0.3 Scale: 1" = 20'-0"



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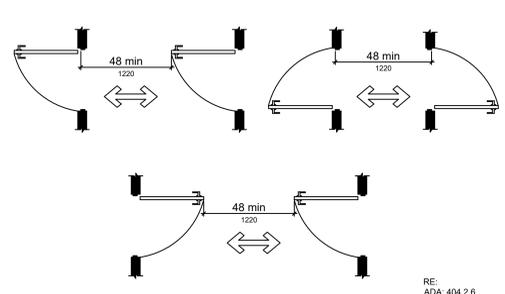
ADAAG  
Diagrams

sheet

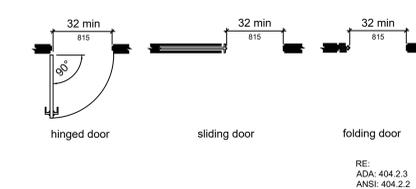
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project no. 2231

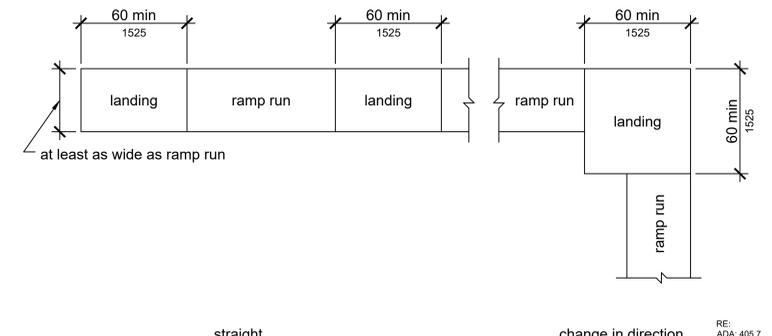
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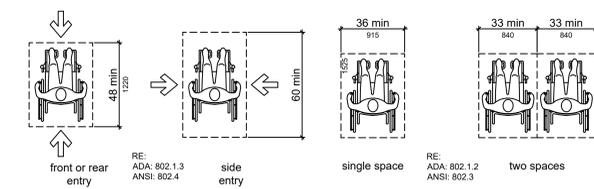
23 DOORS & GATES IN SERIES - DISTANCES  
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ANSI: 404.2.5



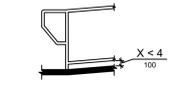
22 CLEAR WIDTH OF DOORWAYS  
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ANSI: 404.2.2



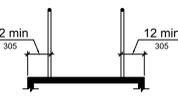
21 RAMP LANDINGS  
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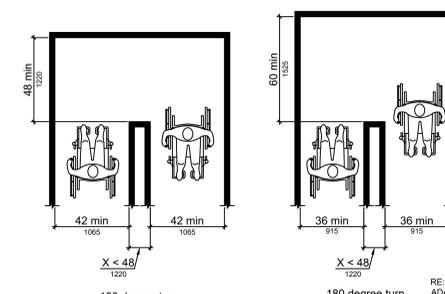
25 SIZE OF WHEELCHAIR SPACES  
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ANSI: 802.4



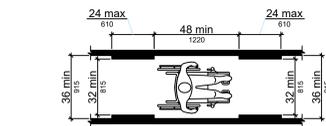
24 BARRIER EDGE PROTECTION  
NTS  
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ANSI:



20 EXTENDED FLOOR EDGE PROTECTION  
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ANSI: 405.9.1



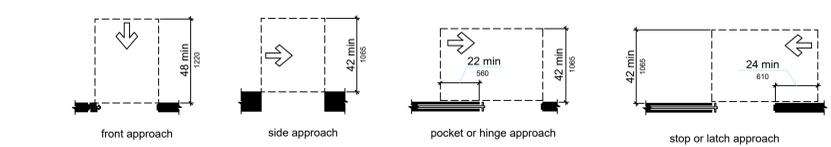
16 CLEAR WIDTH AT 180 DEGREE TURN  
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ANSI: 403.5.1



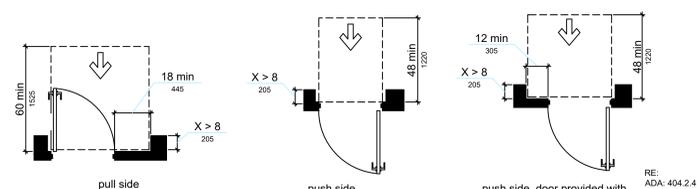
15 CLEAR WIDTH OF ACCESSIBLE ROUTE  
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ANSI: 403.5

NOTE: THE REQUIREMENTS SHOWN ON THIS SHEET SUPERSEDE ALL OTHER DRAWINGS. CONTRACTOR SHALL NOTIFY ARCHITECT OF DISCREPANCIES. ARCHITECT'S APPROVAL OF SHOP DRAWINGS DOES NOT ABSOLVE CONTRACTOR'S RESPONSIBILITY FOR ADA COMPLIANCE.

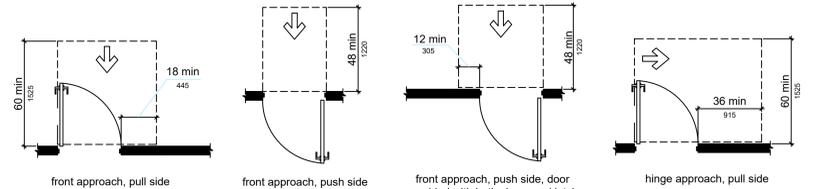
Convention	Description
36 915	dimension showing English units (in inches unless otherwise specified) above the line and SI units (in millimeters unless otherwise specified) below the line
6 150	dimension for small measurements
33-36 840-915	dimension showing a range with minimum - maximum
min	minimum
max	maximum
>	greater than
≥	greater than or equal to
<	less than
≤	less than or equal to
---	boundary of clear floor space or maneuvering clearance
— —	centerline
— — —	a permitted element or its extension
→	direction of travel or approach
— — —	a wall, floor, ceiling or other element cut in section or plan



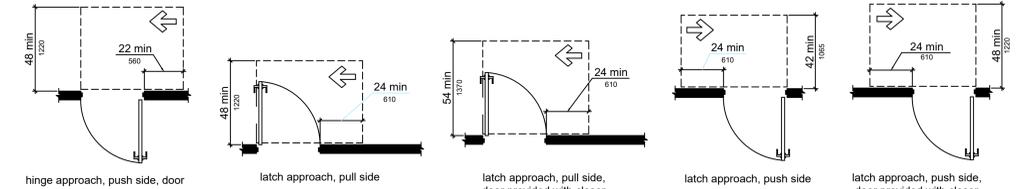
19 MANEUVERING CLEARANCES @ DOORWAYS W/O DOORS, SLIDING DOORS, GATES & FOLDING DOORS  
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ANSI:



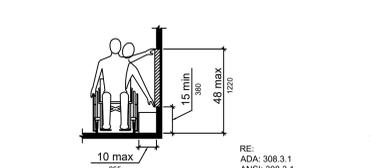
18 MANEUVERING CLEARANCES AT RECESSED DOORS & GATES  
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ANSI: 404.2.3.5



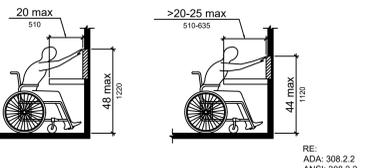
17 MANEUVERING CLEARANCES @ MANUAL SWINGING DOORS & GATES  
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ANSI: 404.2.3.2



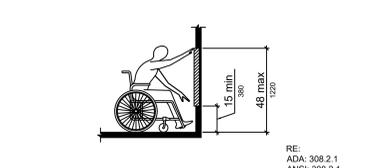
14 OBSTRUCTED HIGH SIDE REACH  
NTS



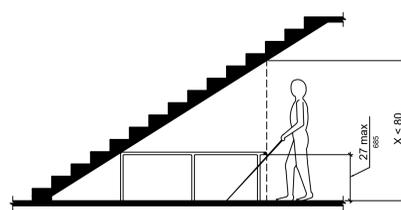
13 UNOBSTRUCTED SIDE REACH  
NTS  
RE: ADA: 308.3.2  
ANSI: 308.3.2



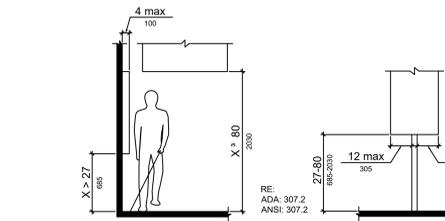
12 OBSTRUCTED HIGH FORWARD REACH  
NTS  
RE: ADA: 308.2.2  
ANSI: 308.2.2



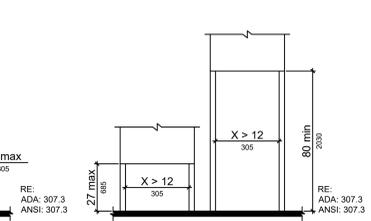
11 UNOBSTRUCTED FORWARD REACH  
NTS  
RE: ADA: 308.2.1  
ANSI: 308.2.1



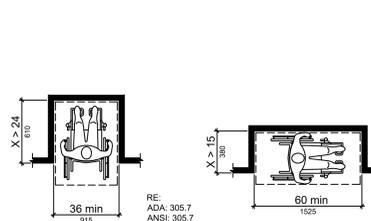
10 VERTICAL CLEARANCE  
NTS  
RE: ADA: 307.4  
ANSI: 307.4



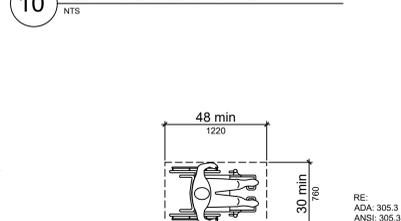
9 LIMITS OF PROTRUDING OBJECTS  
NTS  
RE: ADA: 307.2  
ANSI: 307.2



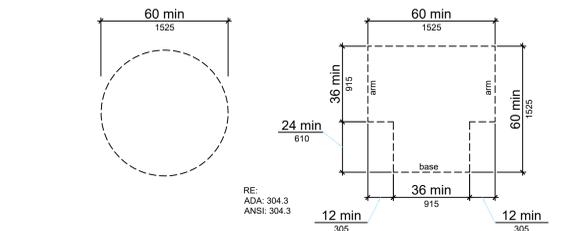
8 TOE CLEARANCES  
NTS  
RE: ADA: 306.2  
ANSI: 306.2



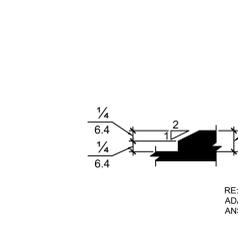
7 ALCOVE CLEARANCES  
NTS  
RE: ADA: 305.7  
ANSI: 305.7



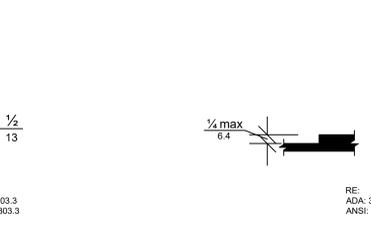
6 CLEAR FLOOR OR GROUND SPACE  
NTS  
RE: ADA: 305.3  
ANSI: 305.3



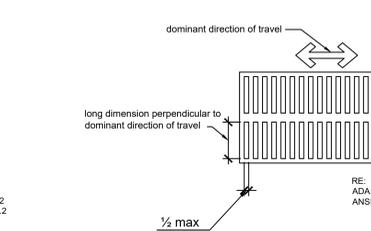
5 WHEELCHAIR TURNING SPACE  
NTS  
RE: ADA: 304.3  
ANSI: 304.3



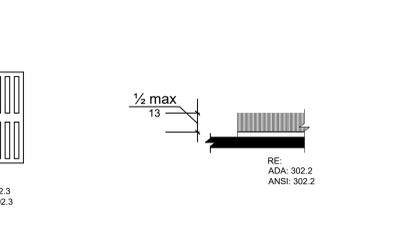
4 VERTICAL CHANGE IN LEVEL  
NTS  
RE: ADA: 303.3  
ANSI: 303.3



3 VERTICAL CHANGE IN LEVEL  
NTS  
RE: ADA: 303.2  
ANSI: 303.2



2 FLOOR SURFACE OPENINGS  
NTS  
RE: ADA: 302.3  
ANSI: 302.3



1 CARPET PILE HEIGHT  
NTS  
RE: ADA: 302.2  
ANSI: 302.2



no. revisions

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drawn gml checked kct

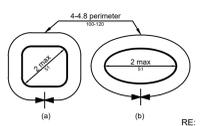
ADAAG Diagrams

sheet

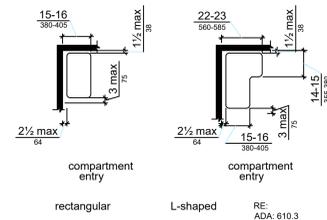
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project no. 2231

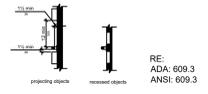
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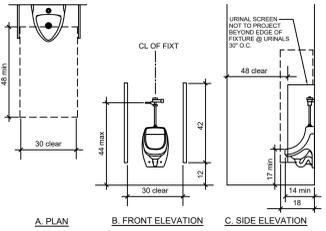
21 NON-CIRCULAR GRAB BAR SIZE  
NTS



20 SHOWER SEAT SIZE & LOCATION  
NTS

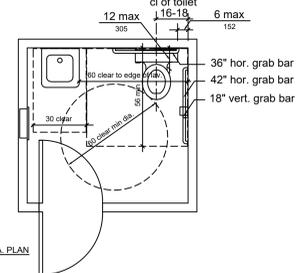


19 SPACING OF GRAB BARS  
NTS

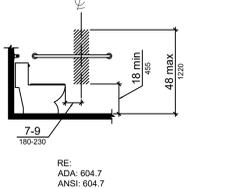


16 TRANSFER SHOWER COMPARTMENT  
NTS

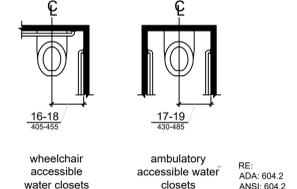
15 ACCESSIBLE URINAL  
NTS



14 SINGLE TOILET ROOM  
NTS



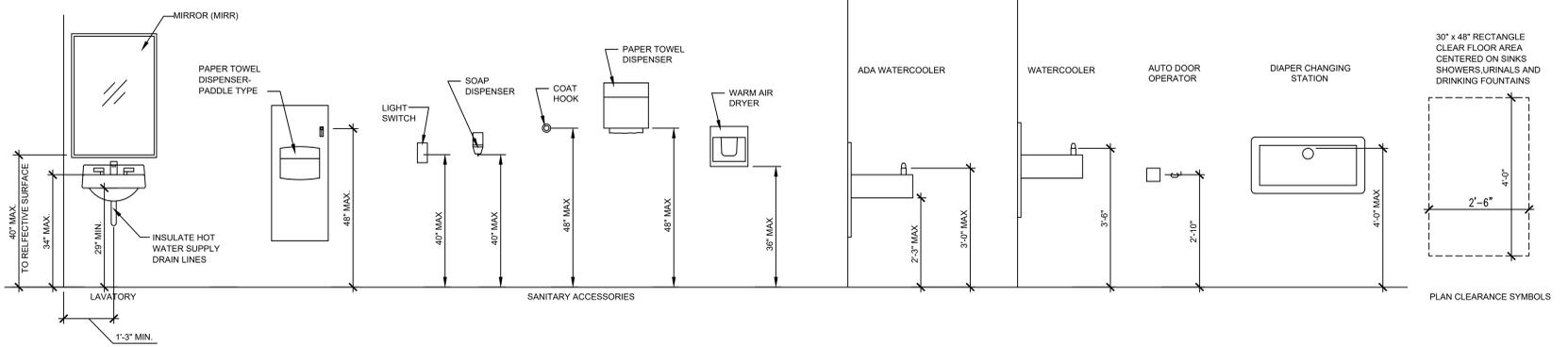
9 DISPENSER LOCATION  
NTS



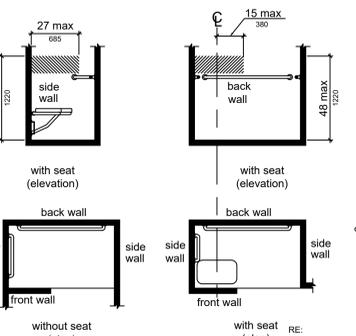
8 WATER CLOSET LOCATION  
NTS

NOTE: THE REQUIREMENTS SHOWN ON THIS SHEET SUPERSEDE ALL OTHER DRAWINGS. CONTRACTOR SHALL NOTIFY ARCHITECT OF DISCREPANCIES. ARCHITECT'S APPROVAL OF SHOP DRAWINGS DOES NOT ABSOLVE CONTRACTOR'S RESPONSIBILITY FOR ADA COMPLIANCE.

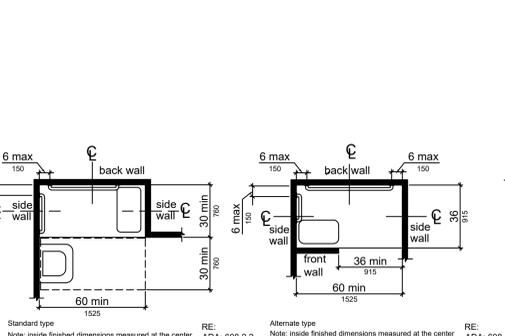
Convention	Description
36 915	dimension showing English units (in inches unless otherwise specified) above the line and SI units (in millimeters unless otherwise specified) below the line
6 150	dimension for small measurements
33-36 840-915	dimension showing a range with minimum - maximum
min	minimum
max	maximum
>	greater than
≥	greater than or equal to
<	less than
≤	less than or equal to
---	boundary of clear floor space or maneuvering clearance
—○—	centerline
— —	a permitted element or its extension
→	direction of travel or approach
— — —	a wall, floor, ceiling or other element cut in section or plan



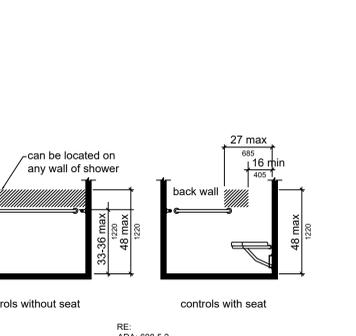
22 TOILET ROOM CLEARANCES & MOUNTING HEIGHTS  
NTS



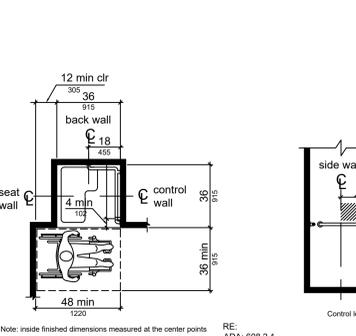
18 ALT. ROLL-IN SHOWER CONTROLS  
NTS



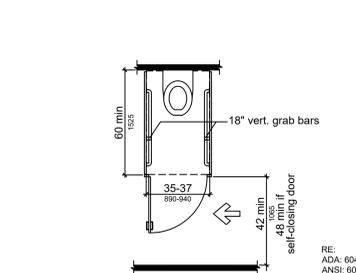
17 ROLL-IN SHOWER COMPARTMENT  
NTS



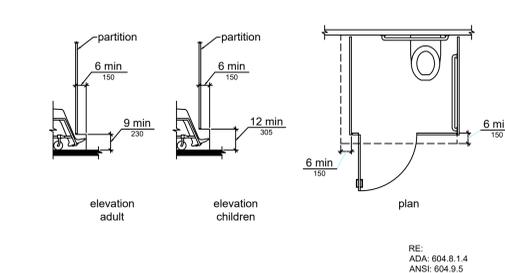
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NTS



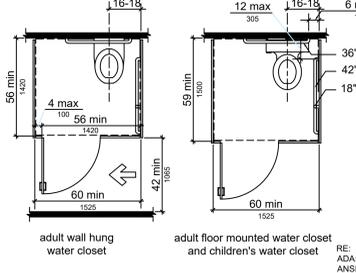
10 WATER CLOSET GRAB BARS  
NTS



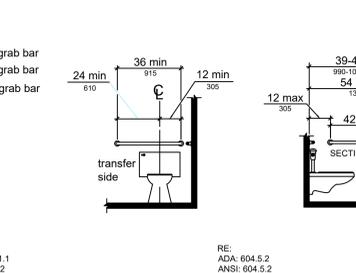
13 AMBULATORY W.C. COMPARTMENT  
NTS



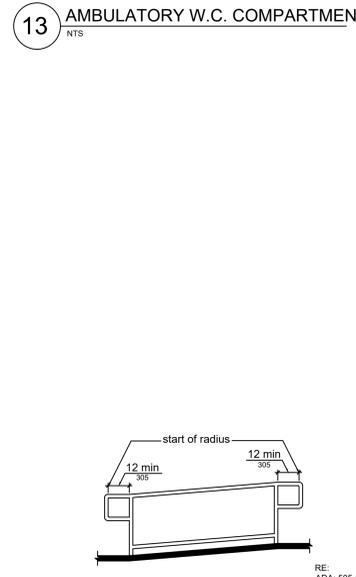
12 W/C ACCESS. COMPARTMENT TOE CLEARANCE  
NTS



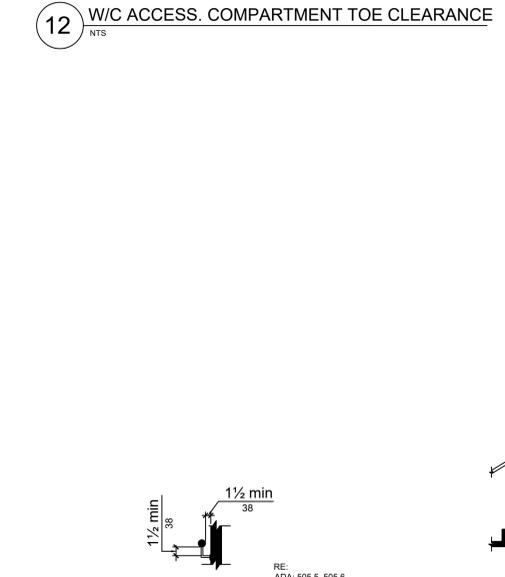
11 W/C ACCESSIBLE W.C. COMPARTMENT SIZE  
NTS



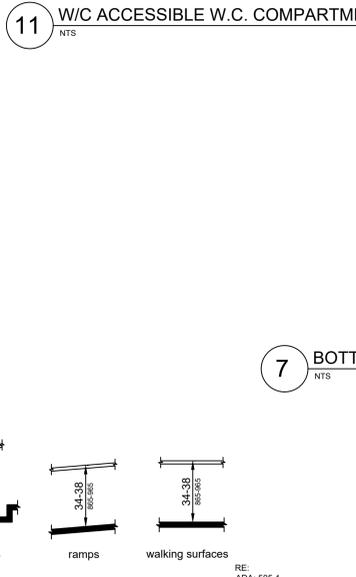
10 WATER CLOSET GRAB BARS  
NTS



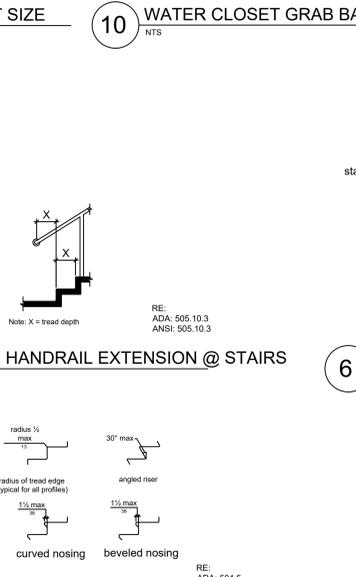
5 HANDRAIL EXTENSIONS @ RAMPS  
NTS



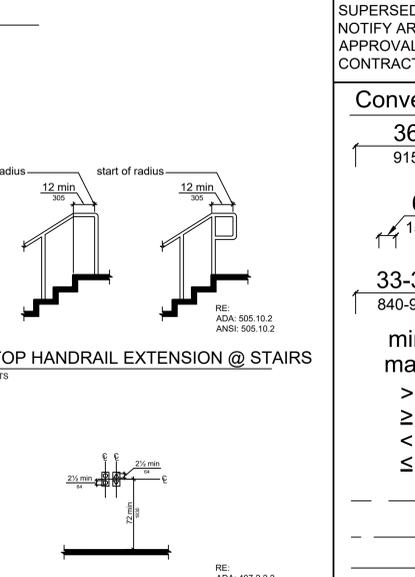
4 HANDRAIL CLEARANCE  
NTS



3 HANDRAIL HEIGHT  
NTS



7 BOTTOM HANDRAIL EXTENSION @ STAIRS  
NTS



6 TOP HANDRAIL EXTENSION @ STAIRS  
NTS

5 HANDRAIL EXTENSIONS @ RAMPS  
NTS

4 HANDRAIL CLEARANCE  
NTS

3 HANDRAIL HEIGHT  
NTS

7 BOTTOM HANDRAIL EXTENSION @ STAIRS  
NTS

6 TOP HANDRAIL EXTENSION @ STAIRS  
NTS

5 HANDRAIL EXTENSIONS @ RAMPS  
NTS

4 HANDRAIL CLEARANCE  
NTS

3 HANDRAIL HEIGHT  
NTS

7 BOTTOM HANDRAIL EXTENSION @ STAIRS  
NTS

6 TOP HANDRAIL EXTENSION @ STAIRS  
NTS

SURVEYOR'S CERTIFICATION

I, Jose L. Torres, certify that this project was completed under my direct and responsible charge from an actual survey made under my supervision; that this ground survey was performed at the 95 percent confidence level (2 sigma) to meet Federal Geographic Data Committee Standards; that the horizontal accuracy is 1:10,000+, that the vertical accuracy is 1:10,000+ and that the original data was obtained on March 3-6, 2023; that the survey was completed on March 14, 2023 and revised 5/23/2023; that contours shown meet the stated standard; all elevations are based on an assumed Finished Floor Elevation of 100.00.

DATE \_\_\_\_\_ JOSE L. TORRES, PLS L-3771

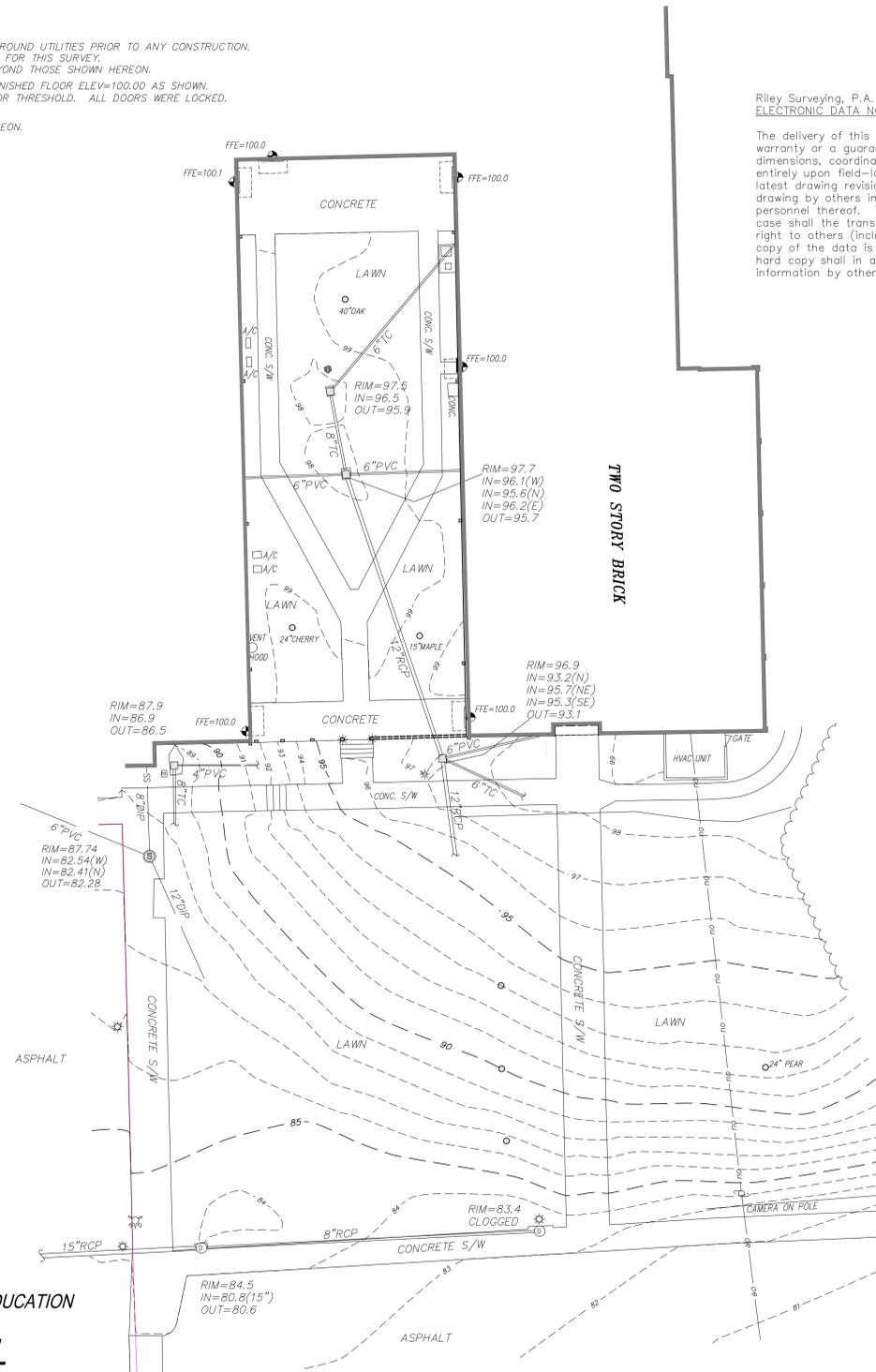
*This document originally issued and sealed by Jose L. Torres, L-3771, on March 15, 2023, Rev. 4/18/2023, Rev. 5/23/2023. This medium shall not be considered a certified document.*

NOTES

1. THIS IS NOT A BOUNDARY SURVEY.
2. CONTRACTORS TO FIELD VERIFY ALL UNDERGROUND UTILITIES PRIOR TO ANY CONSTRUCTION. UNDERGROUND UTILITIES WERE NOT MARKED FOR THIS SURVEY. THERE MAY BE UNDERGROUND UTILITIES BEYOND THOSE SHOWN HEREON.
3. VERTICAL DATUM BASED ON AN ASSUMED FINISHED FLOOR ELEV=100.00 AS SHOWN. FINISHED FLOOR ELEVATIONS TAKEN AT DOOR THRESHOLD. ALL DOORS WERE LOCKED.
4. RATIO OF PRECISION= 1:10,000+.
5. HORIZONTAL GROUND DISTANCES SHOWN HEREON.

Riley Surveying, P.A.  
ELECTRONIC DATA NOTICE

The delivery of this drawing in electronic format should not be construed to provide an express warranty or a guarantee to any owner, designer, surveyor, contractor, or other party that all dimensions, coordinates, measurements, notations, or other data is exact; nor that it is based entirely upon field-located or field-verified data; nor that it is complete or represents the latest drawing revision; nor that the intended or unintended uses or modifications of this drawing by others implies any review, oversight, or approval by Riley Surveying, P.A. or the personnel thereof. This data is provided for the convenience of the intended receiver; but in no case shall the transfer, delivery, or receipt of this electronic data be construed to provide any right to others (including the primary recipient) to rely fully upon the information. If a hard copy of the data is provided with the electronic data or under separate cover, the hard copy shall in all cases take precedence over the electronic data. Any use of this information by others will be at the sole risk and liability of the user.



LEGEND

- A/C AIR CONDITIONING UNIT
- CATCH BASIN
- SPECIMEN TREE(24" & LARGER DIA.)
- ⊙ FIRE HYDRANT
- FFINISHED FLOOR ELEVATION (SEE NOTE #3)
- ⊙ LAMP
- ⊙ ROOF DRAIN
- ⊙ SIGN
- ⊙ SANITARY SEWER MANHOLE
- ⊙ TRENCH DRAIN
- ⊙ POSSIBLE JUNCTION BOX
- ⊙ FIBER OPTIC HANDHOLE
- ⊙ LIGHT POLE
- ⊙ UTILITY POLE
- ⊙ STORM MANHOLE
- ⊙ CONNECTION NOT FOUND/SURVEYED
- ⊙ ROCK OUTCROP
- ⊙ CHAINLINK FENCE
- ⊙ BUILDING OVERHANG/CANOPY
- ⊙ SANITARY SEWER LINE
- ⊙ OVERHEAD UTILITY LINE
- ⊙ OVERHEAD ELECTRIC LINE
- ⊙ TREE LINE

GENERAL NOTES:

1. CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IF THERE IS ANY DISCREPANCY IN FIELD FROM THIS SURVEY INFORMATION.
2. EXISTING TREES SHALL BE PROTECTED BY FENCING FOR ENTIRE DURATION OF DEMOLITION AND CONSTRUCTION.
3. EXISTING UTILITIES THAT ARE TO REMAIN SHALL BE ADJUSTED TO BE FLUSH WITH GRADE.

**TOPOGRAPHIC SURVEY**  
PROPERTY OF ORANGE COUNTY BOARD OF EDUCATION  
A PORTION OF  
**ORANGE HIGH SCHOOL**  
500 ORANGE HIGH SCHOOL ROAD  
HILLSBOROUGH TOWNSHIP  
ORANGE COUNTY, NORTH CAROLINA

1 Existing Conditions Site Plan  
Scale: 1" = 20'-0"



SCALE 1" = 20'-0"  
20 10 0 20 40



222 cloister court  
chapel hill, nc 27514  
919.401.8586  
www.cra-ae.com



**Orange High School  
Renovations and Addition  
Orange County Schools**  
500 Orange High School Road  
Hillsborough, North Carolina



no. revisions

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drawn checked  
dlh dlh

Existing  
Conditions  
Site Plan

sheet

**C1.0**

project no. 2231

date 6/15/23

**TEMPORARY CONDITIONS LEGEND**

EXISTING	PROPOSED
	CONSTRUCTION ENTRANCE
	TEMPORARY PEDESTRIAN PATH
	CONSTRUCTION FENCE
	LIMITS OF CONSTRUCTION
	TREE PROTECTION FENCE
	SILT FENCE



**Orange High School  
 Renovations and Addition  
 Orange County Schools**  
 500 Orange High School Road  
 Hillsborough, North Carolina



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drawn checked  
 dh mh

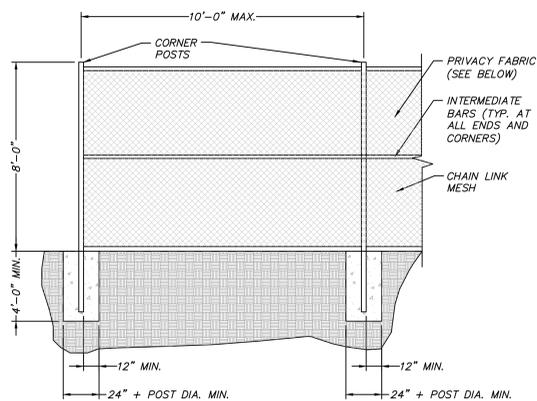
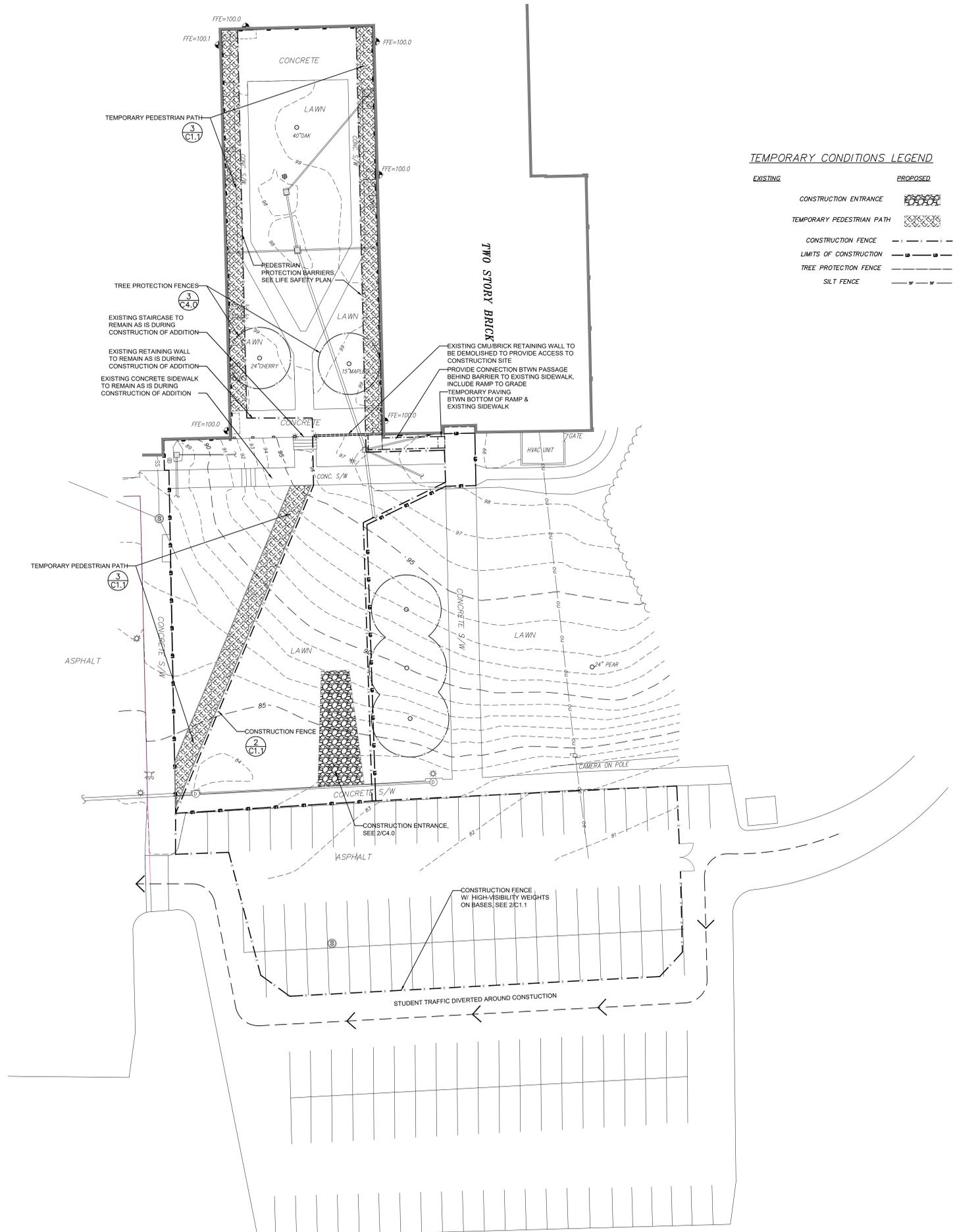
**Contractor  
 Laydown &  
 Staging Plan**

sheet

**C1.1**

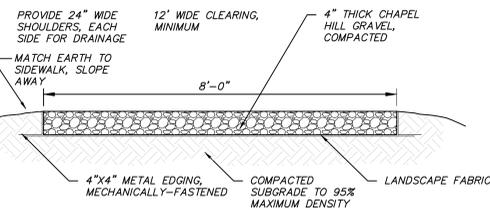
project no. 2231

date 6/15/23



**NOTES:**

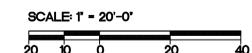
- 90% SCREENING PRIVACY/WINDSCREEN FABRIC TO BE INSTALLED UPON CONSTRUCTION FENCE. ANY SUBSTITUTION FOR PRIVACY/WINDSCREEN FABRIC PRODUCT MUST BE AUTHORIZED BY ENGINEER FOR APPROVED EQUAL.
- CORNER POSTS TO HAVE CEMENT FOUNDATIONS. LINE POSTS SHALL BE DRIVEN. POSTS OVER EXISTING PAVEMENT SHALL HAVE PEDESTAL BASE.
- WHERE FENCE IS INSTALLED ON EXISTING PAVING, IN PLACE OF CEMENT FOUNDATIONS, INSTALL FENCE PANELS W/ ANCHOR FRAMES AT BASE. PROVIDE HI-VISIBILITY, IMPACT-RESISTANT WEIGHTS ON BASE FRAMES.



**3 CHAPEL HILL GRAVEL PATHWAY**  
 SCALE: N.T.S.

**2 8' HIGH CONSTRUCTION FENCE**  
 SCALE: N.T.S. 0000/CML/SPECIFIC DETS-UNC/CONST-FENCEDWG

**1 Contractor Laydown & Staging Plan**  
 Scale: 1" = 20'-0"







Orange High School  
Renovations and Addition  
Orange County Schools  
500 Orange High School Road  
Hillsborough, North Carolina



no. revisions

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drawn (ml) checked (ml)

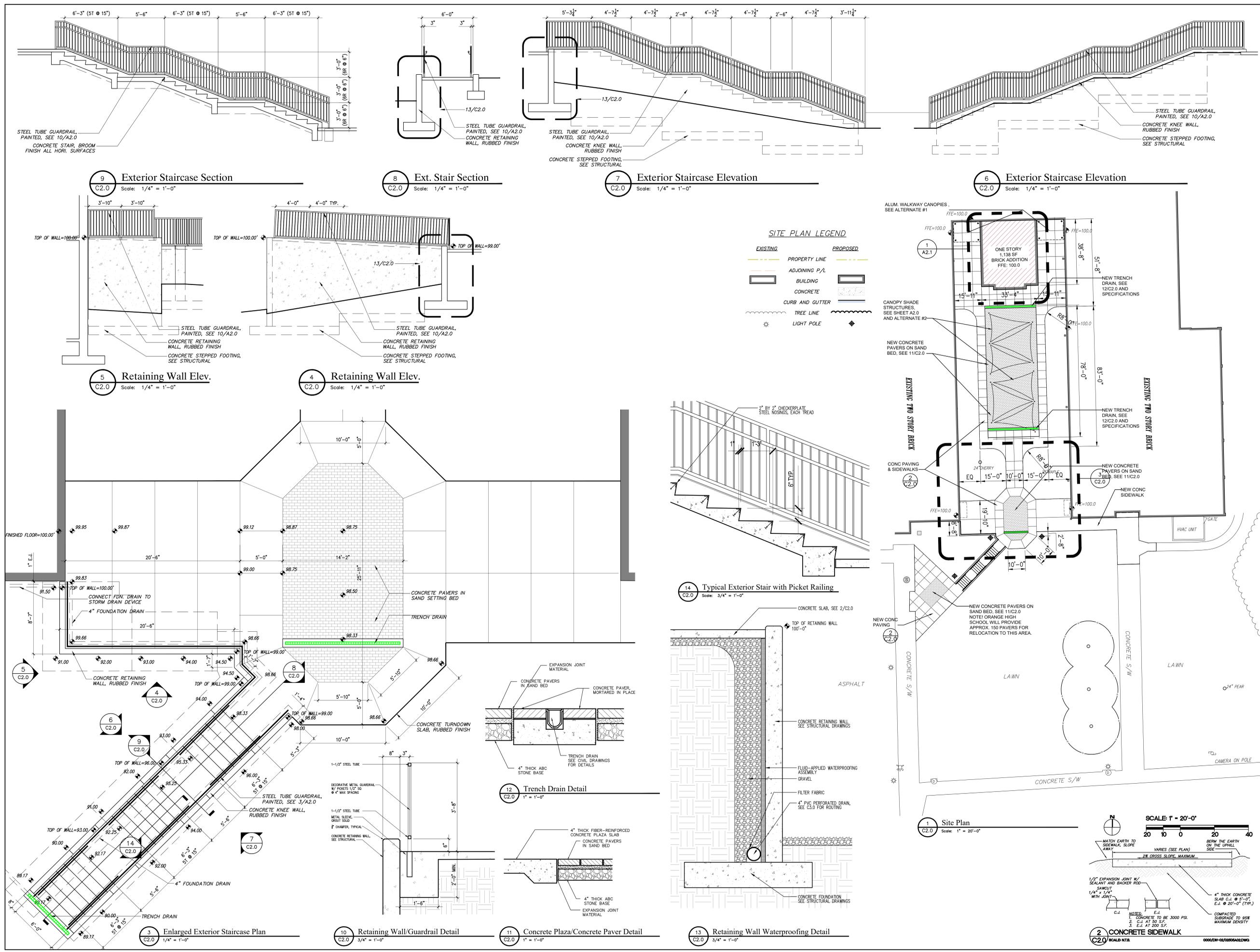
Site Plan

sheet

C2.0

project no. 2231

date 6/15/23





PERMANENT SEEDING FOR GENTLE SLOPES, AVERAGE SOIL, LOW MAINTENANCE SEEDING MIXTURE:  
 SPECIES RATE (LB/ACRE)  
 TALL FESCUE 250-250  
 RIVER GRASS 15  
 KY BLUEGRASS 30

SEEDING NOTES:  
 1. AFTER AUG. 15 USE UNSCARPED SERVICE SEED.  
 2. TO EXTEND SPRING SEEDING DATES WITH LIME ADD 15 LB/ACRE HULLED BENLADA GRASS. HOWEVER, AFTER MID-APR. IT IS PREFERABLE TO SEED TEMPORARY COVER.  
 3. PROVIDE NURSE CROP FOR INCORPORATION INTO PERMANENT SEEDING MIXTURE.

NURSE PLANTS:  
 BETWEEN MAY 1 AND AUG. 15, ADD 10 LB/ACRE GERMAN MILLET OR 15 LB/ACRE SUDAGRASS. PRIOR TO MAY 1 OR AFTER AUG. 15 ADD 40 LB/ACRE RYE (GRAN).

SEEDING DATES:  
 FALL: BEST: AUG. 20 - SEPT. 15  
 LATE WINTER: FEB. 15 - MAR. 21  
 POSSIBLE: AUG. 20 - SEPT. 25  
 FEB. 1 - APR. 15

FALL IS BEST FOR TALL FESCUE.  
 SOIL AMENDMENTS:  
 FOLLOW SOIL TESTS OR APPLY MINIMUM OF 2 TONS/ACRE WITH 3 TONS/ACRE IN CLAY SOILS OR PER SOILS TEST OF GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-20-20 FERTILIZER.

MULCH:  
 APPLY 4,000 LB/ACRE STRAW OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCH. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR ROWING OR BY CRIMPING WITH A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL. APPLY ASPHALT TACK AT A RATE OF 400 GAL/ACRE OR IF CRIMPING IS TO BE USED:  
 1. APPLY MULCH 2,000 LB/ACRE  
 2. CRIMP WITH MULCH ANCHORING TOOL  
 3. APPLY SECOND LAYER OF MULCH 2,000 LB/ACRE

MAINTENANCE:  
 RESEED IN THE SECOND YEAR UNLESS GROWTH IS FULLY ADEQUATE. RESEED, FERTILIZE, AND MULCH DAMAGED AREAS IMMEDIATELY.

**10 PERMANENT SEEDING**  
 C4.0 SCALE NTA

TEMPORARY SEEDING FOR SUMMER SEEDING MIXTURE:  
 SPECIES RATE (LB/ACRE)  
 GERMAN MILLET 10

IN THE PIEDMONT AND MOUNTAINS, A SMALL-STEMMED SUDAGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACRE.  
 SEEDING DATES:  
 MOUNTAINS: MAY 15 - AUG. 15  
 PIEDMONT: MAY - AUG.  
 COASTAL PLAINS: APR. 1 - AUG. 15

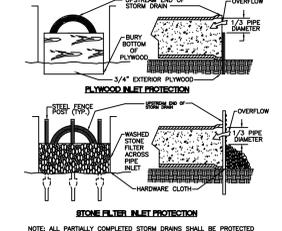
SOIL AMENDMENTS:  
 FOLLOW SOIL TESTS OR APPLY MINIMUM OF 2 TONS/ACRE WITH 3 TONS/ACRE IN CLAY SOILS OR PER SOILS TEST OF GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-20-20 FERTILIZER.

MULCH:  
 APPLY 4,000 LB/ACRE STRAW OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCH. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR ROWING OR BY CRIMPING WITH A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL. APPLY ASPHALT TACK AT A RATE OF 400 GAL/ACRE OR IF CRIMPING IS TO BE USED:  
 1. APPLY MULCH 2,000 LB/ACRE  
 2. CRIMP WITH MULCH ANCHORING TOOL  
 3. APPLY SECOND LAYER OF MULCH 2,000 LB/ACRE

**9 TEMPORARY SEEDING FOR SUMMER**  
 C4.0 SCALE NTA

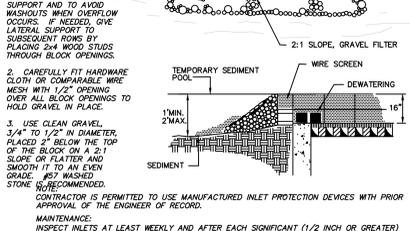
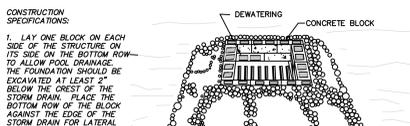
SEEDBED PREPARATION  
 1. CHISEL, COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS IF AVAILABLE.  
 2. RIP THE ENTIRE AREA TO 6 INCHES DEPTH.  
 3. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.  
 4. APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE BELOW).  
 5. CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM REASONABLY UNIFORM SEEDBED IS PREPARED 4 TO 6 INCHES DEEP.  
 6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.  
 7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.  
 8. INSPECT ALL SEEDING AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON. IF POSSIBLE, IF STAND SHOULD BE OVER 60% DAMAGED, RE-ESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.  
 9. CONSULT CONSERVATION INSPECTOR ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.  
 \* SEE SEASONAL APPLICATION SCHEDULE \*

**8 SEEDBED PREPARATION**  
 C4.0 SCALE NTA



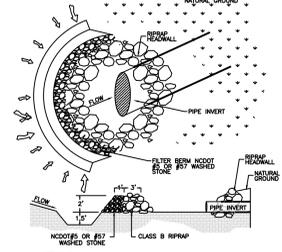
NOTE: ALL PARTIALLY COMPLETED STORM DRAINS SHALL BE PROTECTED AT THE END OF EACH DAY IN ACCORDANCE WITH THESE DETAILS.

**7 PIPE INSTALLATION PROTECTION (PLYWOOD AND STONE)**  
 C4.0 SCALE NTA



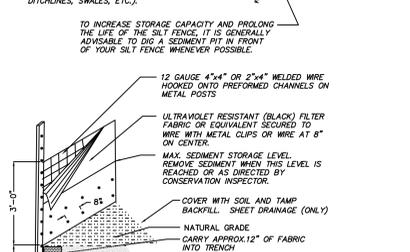
CONTRACTOR IS PERMITTED TO USE MANUFACTURED INLET PROTECTION DEVICES WITH PRIOR APPROVAL OF THE ENGINEER OF RECORD.

**6 BLOCK AND GRAVEL DROP INLET PROTECTION**  
 C4.0 SCALE NTA



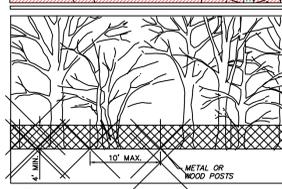
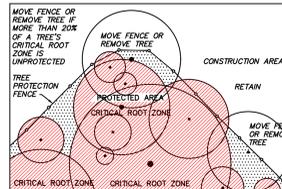
MAINTENANCE:  
 INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE DURING SEDIMENT REMOVAL. REPLACE STONES AS NEEDED.

**5 ROCK PIPE INLET PROTECTION**  
 C4.0 SCALE NTA

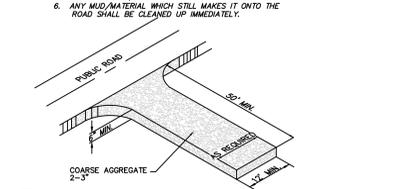
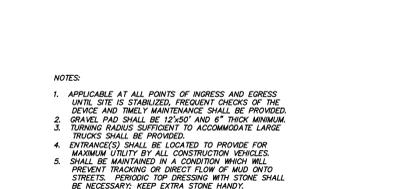


CONTRACTOR IS PERMITTED TO USE MANUFACTURED INLET PROTECTION DEVICES WITH PRIOR APPROVAL OF THE ENGINEER OF RECORD.

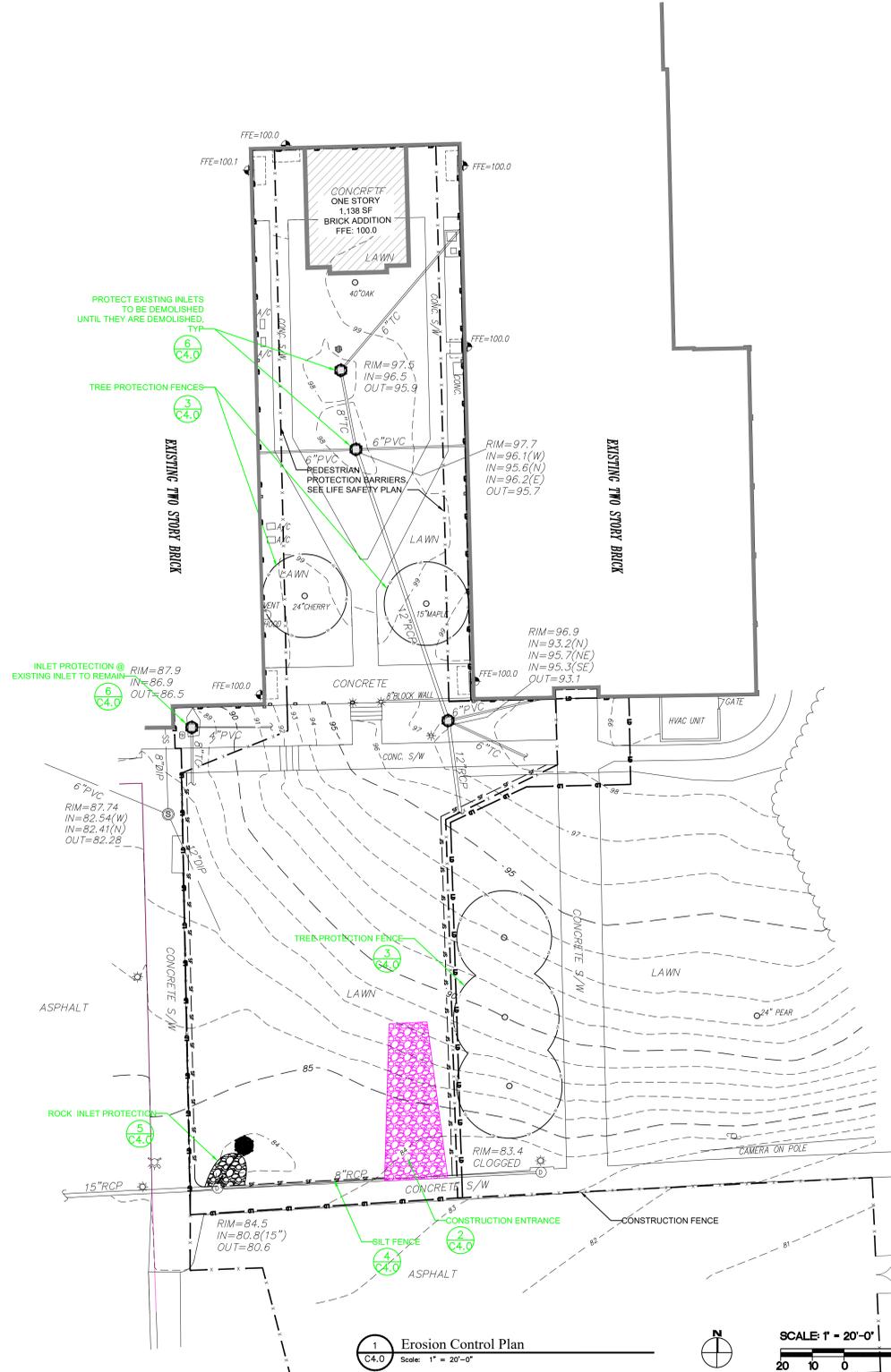
**4 SILT FENCE DETAIL**  
 C4.0 SCALE NTA



**3 TREE PROTECTION FENCING**  
 C4.0 SCALE NTA



**2 TEMPORARY CONSTRUCTION ENTRANCE/EXIT**  
 C4.0 SCALE NTA



TOTAL DENUDED AREA: 26,955 SQ. FT.  
 0.62 ACRE

**EROSION CONTROL PLAN LEGEND**

EXISTING	PROPOSED
95	95
94	94
CONSTRUCTION ENTRANCE	CONSTRUCTION ENTRANCE
LIMITS OF CONSTRUCTION	LIMITS OF CONSTRUCTION
TREE PROTECTION FENCE	TREE PROTECTION FENCE
SILT FENCE	SILT FENCE
TREE LINE	TREE LINE
SILT FENCE OUTLET	SILT FENCE OUTLET
STONE	STONE
DROP INLET PROTECTION	DROP INLET PROTECTION

- EROSION CONTROL CONSTRUCTION SEQUENCE:**  
 ALL WORK SHALL CONFORM TO COUNTY REQUIREMENTS
- NOTIFY ORANGE COUNTY EROSION CONTROL OFFICE AT LEAST 72 HOURS PRIOR TO COMMENCING THE LAND DISTURBING ACTIVITY.
  - HOLD THE PRE-CONSTRUCTION MEETING WITH ENGINEER OF RECORD AND COUNTY INSPECTOR. PROVIDE ESC COORDINATOR'S NAME AND PHONE NUMBER (MICHAEL HAMMERSLEY, 919-201-2284).
  - THE SITE SHALL BE INSPECTED, AT MINIMUM WEEKLY AND FOLLOWING SIGNIFICANT RAINS OF 0.5"/24 HOURS OR GREATER. REPORTS SHALL BE GENERATED FOR ALL INSPECTIONS AND ACTIONS USING STORMWATER INSPECTION FORM NCG010000-LAND DISTURBING ACTIVITIES.
  - AN APPROVED COPY OF THE EROSION AND SEDIMENT CONTROL PLAN WITH PLACARD AND APPROVAL LETTER AND A COPY OF THE PERMIT SHALL BE KEPT ON SITE UNTIL CLOSE OF THE PROJECT.
  - INSTALL A RAIN GAUGE ON SITE.
  - GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).
  - INSTALL PERIMETER PROTECTION (SILT FENCE, TREE PROTECTION, INLET PROTECTION, ETC.).
  - INSTALL INLET PROTECTION AROUND EXISTING INLETS.
  - INSTALL THE NEW STORM DRAINAGE PIPES.
  - MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH COUNTY STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
  - INSPECT AND MAINTAIN ALL SEDIMENT & EROSION CONTROL MEASURES AFTER EACH 1/2" OR GREATER STORM EVENT.
  - ALL SEDIMENT MUST BE CLEANED UP USING DRY METHODS (IE NO WASHING SEDIMENT OFF ROADWAYS).
  - COVER AREAS BEFORE MAJOR STORM EVENTS.
  - STABILIZE ALL AREAS WITHIN 7 DAYS OF REACHING FINAL GRADE.
  - INACTIVE AREAS SHALL BE STABILIZED/PROVIDED WITH GROUND COVER WITHIN 7 DAYS.
  - SEED OR SOO ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 14 DAYS.
  - REQUEST INSPECTION FROM ENGINEER OF RECORD. REMOVE TEMPORARY DEVICES UPON ENGINEER'S APPROVAL. CONTRACTOR IS RESPONSIBLE FOR ALL INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SYSTEMS.
  - RESEED ALL DISTURBED AREAS.
  - FOR ANY QUESTIONS WHICH COME UP DURING THE CONSTRUCTION CONTACT MICHAEL HAMMERSLEY AT 919-201-2284.

Scale: 1" = 20'-0"  
 20 10 0 20 40



222 cloister court  
 chapel hill, nc 27514  
 919.401.8586  
 www.cra-ae.com



Orange High School  
 Renovations and Addition  
 Orange County Schools  
 500 Orange High School Road  
 Hillsborough, North Carolina



no. revisions

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drawn checked  
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Erosion Control Plan

sheet

C4.0

project no. 2231

date 6/15/23



222 cloister court  
chapel hill, nc  
27514  
919.401.8586  
www.cra-ae.com

bennett & pless  
INC STRUCTURAL ENGINEERS  
5430 Wade Park Boulevard, Suite 400  
Raleigh, North Carolina 27607  
919.841.8587  
NC License #F-1155



ORANGE HIGH SCHOOL  
RENOVATION AND ADDITION  
ORANGE COUNTY SCHOOLS  
500 Orange High School Road  
Hillsborough, North Carolina



no. revisions

1 7/25/2023 ISSUED FOR BID

no. revisions

drawn checked

GENERAL  
NOTES &  
ABBREVIATIONS  
sheet

S0.0

project no. 2122

date 5/25/23

# STRUCTURAL ABBREVIATIONS

#	DATA FOR PLAN NOTES	JST	JOIST
@	AND	JT	JOINT
°	DEGREE	AT	
Ø	DIAMETER	K	KIP (THOUSAND POUNDS)
Ø	DIAMETER	KSI	KIPS PER SQUARE INCH
#	NUMBER/POUND	L	ANGLE
AB	ANCHOR BOLT	LAT	LATERAL
AESS	ARCHITECTURAL EXPOSED	LBS	POUND
AFF	ARCHITECTURAL FINISH	LF	LATERAL FRAME
AHU	AIR HANDLING UNIT	LFT	LINEAR FOOT
AL	ALTERNATE	LG	LONG
ANC	ANCHOR	LGHF	LONG LEG MECHANICAL FRAMING
ANCH	ANCHOR	LLH	LONG LEG HORIZONTAL
APPROX	APPROXIMATE	LLV	LONG LEG VERTICAL
ARCH	ARCHITECTURAL/ARCHITECTURAL	LON	LONG
ARCH	AS SHOWN	LSH	LONG SLOTTED HOLES
AS	AS SHOWN	LVL	LAMINATED VENEER LUMBER
BB	BOND BEAM	LVS	LONG VERTICAL SLOT
B/B	BACK TO BACK	MAT'L	MATERIAL
BLDG	BUILDING LINE	MCC	MOMENT CONNECTION
BLDG	BUILDING	MAS	MASONRY
BLK	BLOCK	MAX	MAXIMUM
BM	BEAM	MECH	MECHANICAL
BF	BOTTOM OF	M/E	Mechanical, Electrical, Plumbing
BOT	BOTTOM	MEZZ	MEZZANINE
BR	BRICK	MFR	MANUFACTURER
BRK	BRICK	MID	MIDDLE
BSMT	BASEMENT	MILS	THOUSANDTH OF AN INCH
BT	BUTTON	MIN	MINIMUM
BTWN	BETWEEN	MISC	MISCELLANEOUS
BUR	BUILT-UP ROOF	ML	MASONRY LINTEL
B/W	BOTH WAYS	MO	MASONRY OPENING
B'ND	BOND	MON	MOMENT
BY	BY	MTL	METAL
CC	CHANNEL	MUL	UNSCHEDED MASONRY LINTEL
CANT	CANTILEVER	MW	MASONRY WALL
CD	CLEAR COVER	NA	NOT APPLICABLE
CFO	COMPOSITE FORM DECK	NIC	NOT IN CONTRACT
CL	CLEAR	NS	NEAR SIDE
CIP	CAST-IN-PLACE	NTS	NOT TO SCALE
CJ	CONSTRUCTION JOINT	OAE	OR APPROVED EQUAL
CLG	CEILING	OC	ON CENTER
CLR	CLEAR	OC	ON CENTER
CL	CLEAR	OD	OUTSIDE DIAMETER
CMU	CONCRETE MASONRY UNIT	OP	OPPOSITE HAND
COL	COLUMN	OUT	OUT TO OUT
CON	CONCRETE	OPNG	OPENING
CONN	CONNECTION	OSF	OUTSIDE FACE
CONST	CONSTRUCTION	PAF	POWDER ACTUATED FASTENERS
CONT	CONTINUOUS	PC	PRECAST
CONTR	CONTRACTOR	PCF	POUNDS PER CUBIC FOOT
COORD	COORDINATE	PE	PRECAST
CNR	CORNER	PEMB	PRE-ENGINEERED METAL BUILDING
CWI	CERTIFIED WELDING INSPECTOR	PERP	PERPENDICULAR
DBE	DECK BEARING ELEVATION	PERF	PERFORATED
DEM	DEMO	PH	PENTHOUSE
DEMOL	DEMOLITION	PL	PLATE
DIA	DIAMETER	PLYWD	PLYWOOD
DIAG	DIAGONAL	PREFAB	PRE-FABRICATED
DIAPHR	DIAPHRAGM	PROJ	PROJECTION
DIAM	DIAMETER	PSF	POUND PER SQUARE FOOT
DL	DEAD LOAD	PSI	POUNDS PER SQUARE INCH
DN	DOWN	PT	POINT
DL	DOUBLE TEE - PRECAST	R	RISER
DTL	DETAIL(S)	RAD	RADIUS
DWL	DRAWING	RD	ROOF DRAIN
DWG	DRAWING	REBAR	REINFORCING BAR
EA	EACH	REF	REFERENCE
EBA	EPOXY BONDED ANCHOR	RENF	REINFORCING/REINFORCED
EE	EACH END	REQD	REQUIRED
EE	EACH END	REQT	REQUIREMENT(S)
EJ	EXPANSION JOINT	RTU	ROOF TOP UNIT
ELEV	ELEVATION	SCHED	SCHEDULE
EMB	EMBEDDED/EMBEDDED	SECT	SECTION
EP CT	EPOXY COATED	SHT	SHEET/SHEATING
EO	EDGE OF	SIMLAR	SIMILAR
EOD	EDGE OF DECK	SJ	SAWN JOINT
EOS	EDGE OF SLAB	SL	SLOPE
EO	EQUAL	SOG	EXCAVATION SHORING SYSTEM
EQUIP	EQUIPMENT	SPA	SPACES/SPACING
EXP	EXPANSION	SPEC	SPECIFICATION
EXT	EXTERIOR	SQ	SQUARE
EXT	EXTERIOR	SS	STAINLESS STEEL
FAS	FASTENER(S)	STD	STANDARD
FF	FLOOR DRAIN	STFF	STIFFENER
FD	FINISH FLOOR	STL	STEEL
FIN	FINISH	STRUC	STRUCTURAL
FLR	FLOOR	SYM	SYMMETRICAL
FNDN	FOUNDATION	T&B	TOP AND BOTTOM
FO	FACE OF	T&G	TONGUE & GROOVE
FOC	FACE OF CONCRETE	TESS	TEMPORARY EXCAVATION
FOS	FACE OF STEEL	THK	THICKNESS
FS	FACE SIDE	THK	THICKNESS
FT	FOOT OR FEET	THD	THREAD(S)
FTG	FOOTING	TI	TOP OF
FUT	FUTURE	TS	TUBE STEEL
FV	FIELD VERIFY	TD	TURN DOWN
G	GENERAL	TYP	TYPICAL
GALV	GALVANIZED	UNO	UNLESS NOTED OTHERWISE
GEN	GENERAL	UNCHED	UNCHED
GR	GRINDLINE	UT	UTILITIES
GN	GENERAL NOTE(S)	VERT	VERTICAL
GR	GRIND SMOOTH	W	WITH
HCA	HEADED CONCRETE ANCHOR	WO	WOOD
HCC	HOLLOW CORE	WF	WIDE FLANGE
HCG	HOT DIPPED GALVANIZED	W/O	WITHOUT
HK	HOK	WP	WORK POINT
HK	HOK	WT	WEIGHT
HORIZ	HORIZONTAL	WTR	WATER TABLE
HSS	HOLLOW STRUCTURAL STEEL	WWP	WELDED WIRE REINFORCEMENT
HT	HEIGHT	WS	WATERSTOP
ID	INSIDE DIAMETER		
IN	INCH		
INT	INTERIOR	XB	X-BRACING
INV	INVERT/INVERTED		
ISF	INSIDE FACE		

ULTIMATE WIND LOADS ON COMPONENTS AND CLADDING (PSF)				
WALLS	ZONE	EFFECTIVE WIND AREA (FT <sup>2</sup> )		
		A ≤ 10	A = 50	A ≥ 100
CORNER	CORNER	+39	+33	+30
	OTHER	+32	+29	+27
ROOFS	CORNER	+53	+40	+34
	OTHER	+53	+40	+34
PARAPETS	CORNER	+32	+30	+29
	OTHER	+34	+28	+25
CORNER & EDGE ZONES EXTEND 6'-6" FROM BLDG EDGES	CORNER	+39	+33	+30
	OTHER	+32	+29	+27

MULTIPLY PRESSURES BY 0.6 FOR NOMINAL VALUES.

## GENERAL:

- PROVIDE CONSTRUCTION CONFORMING TO THE 2015 INTERNATIONAL BUILDING CODE REFERENCE TO LATEST EDITIONS OF OTHER STANDARDS. SPECIFICATIONS OR CODES SHALL MEET THE LATEST STANDARD OR CODE PUBLISHED AND ADOPTED BY THE LISTED BUILDING CODE.
- ALL MATERIALS AND INSPECTIONS ARE REQUIRED PER CHAPTER 17 OF THE 2015 INTERNATIONAL BUILDING CODE. REFER TO THE PROJECT STATEMENT OF SPECIAL INSPECTIONS FOR REQUIRED TESTS AND INSPECTIONS.
- BACK FILLING WALLS
- STRUCTURAL DRAWINGS INDICATE TYPICAL AND CERTAIN SPECIFIC CONDITIONS ONLY. SUBMITTED SHOP DRAWINGS DETAIL ALL CONDITIONS IN ACCORDANCE WITH SPECIFIED STANDARDS AND THE SPECIFIC REQUIREMENTS OF THIS PROJECT AS INDICATED ON THE DRAWINGS.
- COORDINATE THE STRUCTURAL CONSTRUCTION DOCUMENTS WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, CIVIL AND ALL OTHER CONSULTANTS. NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD IN WRITING OF ANY CONTACT AND/OR OMISSION. REPORT ANY CONTACTS IMMEDIATELY. THE STRUCTIST REQUIREMENT SHALL GOVERN UNLESS OTHERWISE DECIDED BY THE DESIGN TEAM.
- COORDINATE AND VERIFY FLOOR AND ROOF OPENINGS SIZES AND LOCATIONS SHOWN WITH ARCHITECTURAL MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS. FOR ADDITIONAL OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS REFER TO THE ARCHITECTURAL AND MECHANICAL DRAWINGS. OBTAIN WRITTEN APPROVAL OF ADDITIONAL OPENINGS LARGER THAN 12" X 12" FROM THE STRUCTURAL ENGINEER OF RECORD.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS AND ALL OTHER MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION.
- COORDINATE THE BUILDING ORIENTATION WITH THE ARCHITECTURAL DRAWINGS.
- CONCRETE SHOP DRAWINGS FOR CONSTRUCTION OF EACH BUILDING COMPONENT NOT DESIGNED BY THE DESIGN TEAM OF RECORD AND NOT SPECIFIED ON THE PROJECT CONSTRUCTION DOCUMENTS SHALL BE SEALED AND SIGNED BY A PROFESSIONAL ENGINEER IN THE STATE WHERE THE PROJECT IS LOCATED AND SHALL BE MADE AVAILABLE AT THE JOB SITE.
- UNO, FIREPROOFING REQUIREMENTS, METHODS AND MATERIALS FOR STRUCTURAL MEMBERS ARE NOT SHOWN ON STRUCTURAL DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
- ALL REACTIONS AND FORCES SHOWN ON THE DRAWINGS ARE SERVICE LOADS (ASD COMBINATION). REFER TO THE ARCHITECT FOR DIMENSIONS NOT SHOWN.
- DO NOT SCALE OFF OF DRAWINGS, ASK ARCHITECT FOR DIMENSIONS NOT SHOWN.

## DESIGN LOADS

1. LIVE LOADS	UNIFORM
SLAB-ON-GROUND	100 PSF
ROOF	20 PSF
2. WIND DESIGN DATA	
ULTIMATE WIND SPEED, V <sub>ult</sub>	= 120 MPH
NOMINAL DESIGN WIND SPEED, V <sub>50</sub>	= 93
RISK CATEGORY	= III
WIND EXPOSURE	= B
INTERNAL PRESSURE COEFFICIENT	= ±0.18
COMPONENTS AND CLADDING PRESSURES	= SEE TABLE
3. ROOF SNOW LOADINGS	
GROUND SNOW LOAD (P <sub>g</sub> )	= 15 PSF
FLAT-ROOF SNOW LOAD (P <sub>f</sub> )	= 18.5 PSF
PROVIDE FACTOR (C <sub>e</sub> )	= 1.0
SNOW LOAD IMPORTANCE FACTOR (I <sub>s</sub> )	= 1.1
THERMAL FACTOR (C <sub>t</sub> )	= 1.0
4. SEISMIC DESIGN DATA	
SEISMIC IMPORTANCE FACTOR (I <sub>s</sub> )	= 1.25
MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS	
(S <sub>s</sub> )	= 0.153
(S <sub>1</sub> )	= 0.076
SITE CLASS	= D (UNIMBURIED)
DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS	
(S <sub>ds</sub> )	= 0.183
(S <sub>d1</sub> )	= 0.122
SEISMIC DESIGN CATEGORY	= B
BASIC SEISMIC FORCE RESISTING SYSTEM	
(A) BEARING WALL SYSTEM	
(B) INTERMEDIATE REINFORCED MASONRY SHEAR WALLS	
DESIGN BASE SHEAR	= 8.5 K SEISMIC
REDUCTION COEFFICIENT (C <sub>s</sub> )	= 0.658
RESPONSE MODIFICATION COEFFICIENT (R)	= 3.5
PROCEDURE USED	= (A) EQUIVALENT LATERAL FORCE

## EXISTING CONDITIONS:

- RENOVATION OF EXISTING STRUCTURES REQUIRES THOROUGH COORDINATION OF THE CONTRACT DOCUMENTS WITH EXISTING CONDITIONS. THE CONTRACTOR MUST VERIFY ALL RELEVANT EXISTING CONDITIONS, DIMENSIONS AND DETAILS PRIOR TO BEGINNING CONSTRUCTION. REPORT ANY VARIATIONS FROM EXISTING CONDITIONS SHOWN ON THE CONTRACT DOCUMENTS TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD FOR REVIEW OF THE DESIGN AND POSSIBLE REVISION OF THE CONTRACT DOCUMENTS.
- THE NATURE OF STRUCTURAL DEMOLITION AND STABILIZATION IS INHERENTLY UNCERTAIN. THE EXACT CONDITION AND CAPACITY OF EACH STRUCTURAL ELEMENT ANCHOR BEING REMOVED PRIOR TO THE COMMENCEMENT OF WORK. AS A RESULT, IT IS IMPERATIVE TO REPORT ANY DISCREPANCIES BETWEEN THE CONTRACT DOCUMENTS AND ACTUAL FIELD CONDITIONS, AS WELL AS ANY ELEMENT OF QUESTIONABLE EXISTING INTEGRITY (INCLUDING, BUT NOT LIMITED TO, THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD FOR REVIEW.
- NO ATTEMPT HAS BEEN MADE TO DEFINE EACH SPECIFIC STRUCTURAL ELEMENT THAT MUST BE REMOVED, ENHANCED OR REPLACED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW THE CONDITION OF INDIVIDUAL ELEMENTS, TO DETERMINE WHICH ELEMENTS CAN BE SALVAGED, WHICH ELEMENTS MUST BE REPLACED AND WHICH ELEMENTS ARE QUESTIONABLE. THE CONTRACTOR SHOULD CONSULT WITH THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD TO DETERMINE THE APPROPRIATE PROCEDURE FOR HANDLING ELEMENTS IN QUESTIONABLE CONDITION.
- THE DIMENSIONS AND ELEVATIONS SHOWN FOR THE EXISTING CONSTRUCTION ARE NOT AS-BUILT DIMENSIONS BUT WERE OBTAINED FROM FIELD MEASUREMENTS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND MEMBER SIZES AS REQUIRED PRIOR TO BEGINNING CONSTRUCTION, FABRICATION, ETC.
- CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS NOT TO DISTURB OR UNDERMINE ANY EXISTING BUILDING FOUNDATIONS OR STRUCTURE AND SHALL PROVIDE SHORING AS REQUIRED.
- IN AREAS WHERE UNDERMINING OF EXISTING BUILDING FOUNDATION OR STRUCTURE IS REQUIRED BY THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL PROVIDE UNDERPINNING AND/OR SHORING AS REQUIRED TO SUPPORT THE EXISTING BUILDING FOUNDATIONS AND STRUCTURES. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SIGNED AND SEALED CALCULATIONS FOR APPROVAL PRIOR TO CONSTRUCTION. DESIGN SHALL BE COORDINATED WITH GEOTECHNICAL ENGINEERS REPORT AND RECOMMENDATIONS.

## SHOP DRAWINGS

- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS THAT ADEQUATELY DEPICT THE STRUCTURAL ELEMENTS AND CONNECTIONS SHOWN IN THE CONTRACT DOCUMENTS. STRUCTURAL DRAWINGS INDICATE TYPICAL AND CERTAIN CONDITIONS ONLY. SHOP DRAWINGS SHALL DETAIL ALL CONDITIONS IN ACCORDANCE WITH SPECIFIED STANDARDS AND SPECIFIC REQUIREMENTS OF THIS PROJECT.
- REVIEW OF SUBMITTALS AND SHOP DRAWINGS BY THE ARCHITECT/ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS.
- SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT OF THE CONTRACT DOCUMENTS ONLY. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF QUANTITIES, LENGTHS, ELEVATIONS, DIMENSIONS, ETC.
- SHOP DRAWINGS SUBMITTED ELECTRONICALLY SHALL BE REVIEWED FOR END REACTION IN ADDITION TO ANY AXIAL FORCES LISTED ON THE STRUCTURAL DRAWINGS, WHERE APPLICABLE. FORCES SHALL BE CONSIDERED TO ACT SIMULTANEOUSLY.
- ALL MOMENT CONNECTIONS SHALL DEVELOP THE FULL MOMENT CAPACITY OF THE BEAM, UNO.
- ALL BRACING CONNECTIONS SHALL DEVELOP THE TENSION/COMPRESSION FORCES NOTED ON THE DRAWINGS, IF THE FORCE IS NOT NOTED ON DRAWINGS, THE BRACING CONNECTION SHALL DEVELOP THE ALLOWABLE TENSION FORCE FOR THE MEMBER. ALL CONNECTIONS SHALL BE DESIGNED AND DETAILED SO THAT ALL FORCE COMPONENTS WILL BE TRANSMITTED DIRECTLY TO THE CENTER OF GRAVITY OF INTERSECTING MEMBERS. WHERE THIS IS NOT POSSIBLE, CONNECTIONS SHALL BE DESIGNED FOR ALL RESULTING ECCENTRICITIES.
- WELDING PROCEDURES SHALL CONFIRM TO THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY'S (AWS) STRUCTURAL WELDING CODES AND SHALL BE PERFORMED BY CERTIFIED WELDERS.
- WELDS SHOWN ON THE DRAWINGS ARE THE MINIMUM REQUIRED BY DESIGN. MINIMUM WELD SIZES SHALL BE 3/16". ALL STIFFENER PLATES, ANGLES, ETC. WHERE SHOWN IN CONTACT WITH OTHER STEEL MEMBERS TO BE CONNECTED WITH 3/16" FILLER WELD ALL AROUND, UNO.
- FABRICATION SHOP DRAWING SHALL REFLECT WELDS IN ACCORDANCE WITH AWS REQUIREMENTS. SHOP DRAWINGS SHALL DETAIL ALL SHOP AND FIELD WELDS. SHOP AND FIELD WELD SHOWN ON DRAWINGS FOR CONCEPT. GENERAL CONTRACTOR SHALL COORDINATE WELDING SEQUENCE REQUIREMENTS, UNO.

## FOUNDATION:

- PRESUMPTIVE SOIL BEARING CAPACITY IS 1500PSF. BEAR ALL FOOTINGS ON ORIGINAL, UNDISTURBED SOIL OR STRUCTURAL FILL.
- COORDINATE TOP OF FOOTING ELEVATIONS WITH THE REQUIREMENTS OF OTHER TRADES (PLUMBING, ELECTRICAL, ETC.).
- LOCATE TOP OF INTERIOR FOOTING ELEVATIONS 2'-0" BELOW FINISHED FLOOR, UNO.
- BACK FILLING WALLS
  - DEPOSIT BACKFILL AGAINST WALLS EVENLY AGAINST BOTH SIDES OF WALL UNTIL THE LOWER FINAL GRADE IS REACHED.
- CONSTRUCT COLUMN FOOTINGS AND WALL FOOTINGS MONOLITHICALLY WITH TOPS OF ADJACENT FOOTINGS AT THE SAME ELEVATION.
- FILLS:
  - REMOVE ALL UNSUITABLE SOILS AND REPLACE WITH CLEAN STRUCTURAL FILL.
  - PLACE FILL SOILS IN 6" MAXIMUM (LOOSE) LIFTS AT MOISTURE CONTENTS AS DESCRIBED IN THE GEOTECHNICAL REPORT.
  - COMPACT ALL FILL WITHIN 40'-0" OF THE BUILDING LIMIT TO 95% STANDARD PROCTOR.
  - TEST FIELD DENSITY TO VERIFY ADEQUATE COMPACTION AND DESIGN BEARING PRESSURE.
- SIDES OF FOUNDATIONS MUST BE FORMED UNLESS CONDITIONS PERMIT EARTH FORMING. FOUNDATIONS PLACED AGAINST THE EARTH REQUIRE THE FOLLOWING PRECAUTIONS: SLOPE SIDES OF EXCAVATIONS AS APPROVED BY THE GEOTECHNICAL ENGINEER AND CLEAN UP SLOUGHING BEFORE AND DURING CONCRETE PLACEMENT. WHERE FOOTING STEPS ARE NECESSARY, SLOPE NOT STEEPER THAN ONE VERTICAL TO TWO HORIZONTAL.

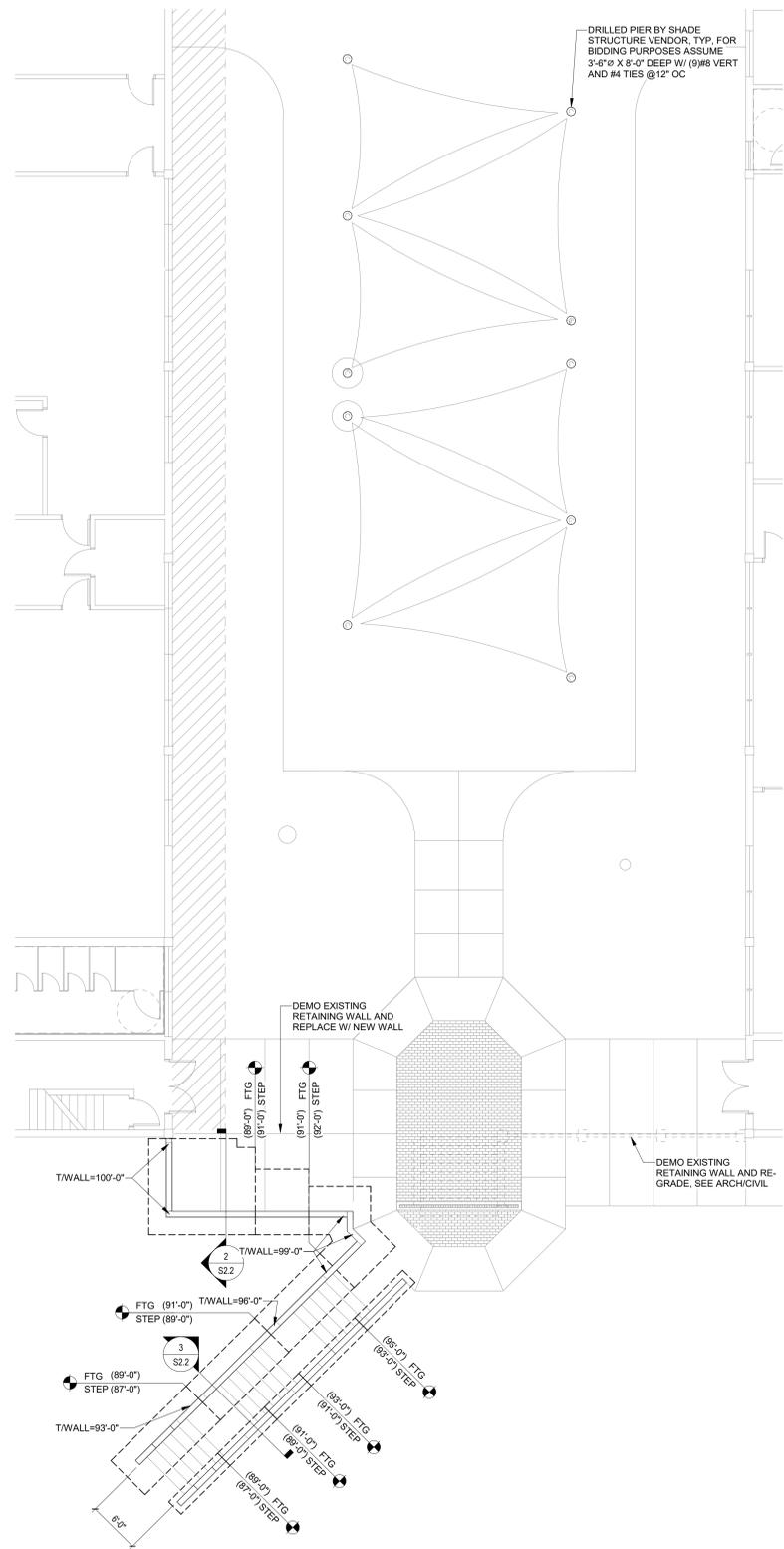
## REINFORCED CONCRETE:

- PROVIDE REINFORCED CONCRETE CONFORMING TO THE FOLLOWING STANDARDS:
  - ACI 301, SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, LATEST EDITION.
  - ACI 318, BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, LATEST EDITION.
  - ACI 302.1R, GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION, LATEST EDITION.
  - 360R, DESIGN OF SLABS-ON-GROUND, LATEST EDITION.
  - PROJECT SPECIFICATION MANUAL DIVISION 3 (WHEN PROVIDED).
- FULLY DOCUMENT AND SUBMIT FOR REVIEW THE PROPOSED MATERIALS AND MIX DESIGN FOR ALL CONCRETE. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE REQUIRED DESIGN STRENGTH. ALL CONCRETE TEST DATA MUST BE AVAILABLE TO THE ARCHITECT AND ENGINEER.
- DETAIL CONCRETE REINFORCEMENT ACCORDING TO ACI 308-DETAILED MANUAL, SUBMIT SHOP DRAWINGS FOR APPROVAL, SHOWING ALL FABRICATION DIMENSIONS AND LOCATIONS FOR PLACES AND CONCRETE REINFORCING AND ACCESSORIES. DO NOT BEGIN FABRICATION UNTIL SHOP DRAWINGS ARE COMPLETED AND REVIEWED BY THE STRUCTURAL EOR. UNLESS SPECIFICALLY APPROVED OTHERWISE, DETAIL ALL CONCRETE WALLS AND TOPS OF MASONRY WALL PANELS TO THE STRUCTURE BY DOUBLE THE ANCHORS, METAL STRAPS OR EQUIVALENT.
- PROVIDE NORMAL WEIGHT CONCR WITH THE FOLLOWING 28 DAY COMPRESSIVE STRENGTHS:
  - SITE RETAINING WALLS: 4500 PSI
  - FOUNDATIONS: 3000 PSI
  - INTERIOR SLABS-ON-GRADE: 3000 PSI
- PROVIDE CONCRETE WITH:
  - 4% TO 6% ENTRAINED AIR BY VOLUME IN CONCRETE PERMANENTLY EXPOSED TO WEATHER.
  - THE USE OF CALCIUM CHLORIDE, CHLORIDE IONS OR OTHER SALTS IS NOT PERMITTED.
  - PLACE CONCRETE AT A SLUMP OF 5 ± 1" UNO.
- UNO, PROVIDE REINFORCING COLUMNS TO ASTM A 615, GRADE 60.
- PROVIDE WELDED WIRE REINFORCEMENT (MESH) IN FLAT SHEETS (ROLLS NOT PERMITTED) CONFORMING TO ASTM A1064. LAP WWR A MINIMUM OF 6" AT EACH SPLICE.
- FIBER REINFORCING MAY BE SUBSTITUTED FOR WWR IN SLABS-ON-GRADE WITH THE APPROVAL OF THE STRUCTURAL EOR. PROVIDE FIBER REINFORCING CONFORMING TO THE STRUCTURAL ENGINEER'S APPROVAL.
- SEE ARCHITECTURAL DRAWINGS FOR WATERSTOPS.
- UNO, PROVIDE THE FOLLOWING CONCRETE COVER ON ALL REINFORCING STEEL:
  - FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:
    - #6 THROUGH #18 BARS: 2"
    - #4 THROUGH #6 BARS: 1 1/2"
  - FORMED CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
    - SLABS, JOISTS, AND WALLS: 3/4"
    - BEAMS (STRIPS) AND WALLS (TEES): 1 1/2"
- REINFORCING, INCLUDING DOWELS, SHALL BE SECURELY TIED AND CAST WITH THE LOWER MEMBER. PLACING REINFORCING AFTER CONCRETE HAS BEEN PLACED IS NOT PERMITTED.
- FIELD BENDING OF REINFORCING PARTIAL EMBEDDED IN CONCRETE IS NOT ALLOWED UNLESS SPECIFICALLY NOTED IN THE STRUCTURAL DOCUMENTS OR APPROVED BY STRUCTURAL ENGINEER.
- PROVIDE DOWELS FROM THE FOUNDATION WHICH ARE THE SAME GRADE, SIZE AND NUMBER AS VERTICAL WALL OR COLUMN REINFORCING UNO.
- SAWCUT CONTROL JOINTS AS SOON AFTER PLACING AS POSSIBLE. IN PLACE PRIOR TO PLACING CONCRETE. PROVIDE SUFFICIENT SUPPORTS TO MAINTAIN THE POSITION OF THE REINFORCEMENT WITHIN SPECIFIED TOLERANCES DURING ALL CONSTRUCTION ACTIVITIES.
- PROVIDE CORNER BARS AT ALL CORNERS AND INTERSECTIONS OF ALL FOOTINGS, BEAMS AND WALLS.
- PROVIDE CONNECTION OR CONNECTION JOINTS IN SLABS-ON-GRADE SPACED AT A MAXIMUM 12'-0" IN EACH DIRECTION AND WITH THE LENGTH BETWEEN CONTROL JOINTS NO GREATER THAN 1/4 TIMES THE WIDTH BETWEEN CONTROL JOINTS.
- SAWCUT CONTROL JOINTS AS SOON AFTER PLACING AS POSSIBLE, WHEN CONCRETE WILL NOT RAVEL, TEAR, ABRADE OR OTHERWISE DAMAGE THE SURFACE AND BEFORE THE CONCRETE DEVELOPS RANDOM SHRINKAGE CRACKING. CURE CONCRETE IN ACCORDANCE WITH ACI 301. BEGIN CURING IMMEDIATELY AFTER PLACING TO LIMIT CRACKING PRIOR TO SAWCUTTING CONTROL JOINTS.
- NON-STRUCTURAL EMBEDMENTS (CONDUIT, PIPES, SLEEVES, ETC. WITHIN WALLS, BEAMS OR SLABS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER AND ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. ALL EMBEDMENTS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH ACI STANDARDS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
  - ALUMINUM MATERIALS SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE
  - OVERALL OUTSIDE DIMENSION OF EMBEDMENTS SHALL NOT EXCEED 1/3 THE CONCRETE MEMBER THICKNESS UP TO 2" MAXIMUM.
  - EMBEDMENTS SHALL BE SPACED A MINIMUM OF 6" OC
  - EMBEDMENTS SHALL NOT ALTER OR DISPLACE REINFORCING.
- PROVIDE CONTINUOUS REINFORCEMENT WHEREVER POSSIBLE. SPLICE REINFORCING BARS ONLY AS SHOWN OR APPROVED. STAGGER SPLICES WHERE POSSIBLE. USE CLASS "B" TENSION SPLICES UNO, INCLUDING DOWELS.
- TEST CYLINDERS SHALL BE TAKEN TO THE LESSER OF THE FOLLOWING:
  - 75 CUBIC YARDS
  - 24 HOUR PERIOD
  - CHANGE IN CONCRETE STRENGTH
- TEST CYLINDERS AT 7 DAYS AND 28 DAYS. SHOULD 28 DAY STRENGTH NOT BE MET, TEST REMAINING CYLINDERS AT 56 DAYS. TEST RESULTS SHALL BE FORWARDED TO THE STRUCTURAL EOR.
- THE LOCATION OF CONSTRUCTION JOINTS REQUIRES THE APPROVAL OF THE STRUCTURAL EOR.
  - UNLESS NOTED OTHERWISE, THOROUGHLY ROUGHEN (BY MECHANICAL MEANS) AND CLEAN CONSTRUCTION JOINTS.
  - PROVIDE KEYS IN BEAMS AT CONSTRUCTION JOINTS.
  - APPLY SLUSH COAT AS SPECIFIED.
- THE PLACEMENT OF ALL REINFORCING STEEL MUST BE REVIEWED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS TO BE CONSTRUCTED OR BY A REPRESENTATIVE RESPONSIBLE TO HIM/HER (REF. ACI 318).
- PROVIDE COMPRESSIBLE FILLER AND SEALANT IN SLAB-ON-GRADE AND WALL AND COLUMN INTERFACES THAT ARE NOT DOWELED TOGETHER.
- AT FLOOR DRAINS, LOCALLY SLOPE FLOOR TOWARD DRAIN. SEE DOCUMENTS FROM OTHER DISCIPLINES FOR DRAIN LOCATIONS.
- UNO, STRUCTURAL SLABS EXPOSED TO WEATHER SHALL BE SLOPED APPROXIMATELY 1/4 INCH PER FOOT AWAY FROM OCCUPIED SPACE TOWARD FLOOR DRAINS, SCUPPERS, GUTTERS, ETC. FOR EXTERIOR NON-STRUCTURAL PLATWORK (EX. SIDEWALKS, PAVEMENT) REFERENCE CIVIL SITE PLAN AND SPECIFICATIONS.
- SEE ARCHITECTURAL DOCUMENTS FOR MOLDS, GROOVES, ORNAMENTS, CLIPS, ETC. REQUIRED TO BE ENCASED IN CONCRETE AND FOR LOCATION OF FLOOR FINISHES AND SLAB DEPRESSIONS.

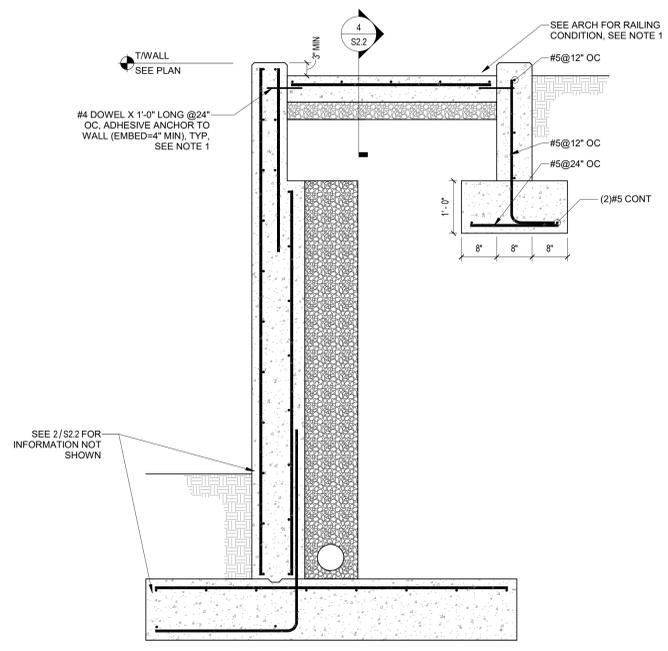
## STRUCTURAL MASONRY:

- PROVIDE STRUCTURAL MASONRY CONFORMING TO THE FOLLOWING STANDARDS:
  - ACI 530 / ASCE 5 / TMS 402, BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES, LATEST EDITIONS.
- LOAD BEARING MASONRY WALLS ARE DESIGNED IN ACCORDANCE WITH CHAPTERS 1 AND 2 OF TMS 402.
- PROVIDE HOLLOW, LOAD BEARING CONCRETE MASONRY UNITS (CMU) CONFORMING TO ASTM C 90 WITH A MINIMUM COMPRESSIVE STRENGTH OF MASONRY (F<sub>m</sub>) OF 2000 PSI AND NET SURFACE AREA OF 144" X 16" WITH THE NET CROSS-SECTIONAL AREA OF CMU DETERMIN

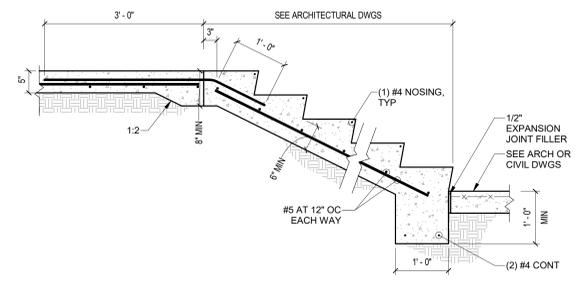




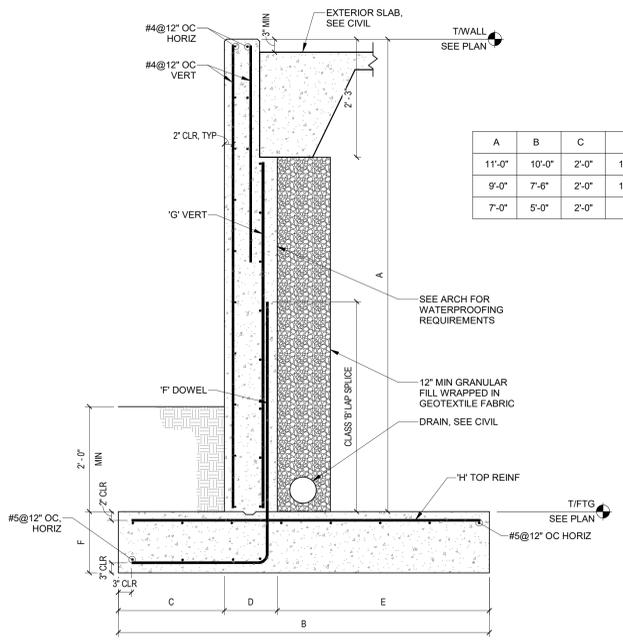
**1**  
**S2.2** **COURTYARD FOUNDATION**  
SCALE: 1/8" = 1'-0"  
NOTES:  
1. GRADE VARIES. SEE CIVIL DRAWINGS.  
2. COORDINATE FOOTING ELEVATIONS WITH GRADING PLAN. SEE CIVIL DRAWINGS.



**3**  
**S2.2** **TYPICAL DETAIL AT STAIR**  
SCALE: 3/4" = 1'-0"  
NOTES:  
1. SEE ARCH DWGS FOR RAILING CONDITION AND PROVIDE SLAB TURN DOWN AS REQUIRED FOR RAILING POST CONNECTION. DOWELS MAY BE OMITTED WHERE SLAB TURN DOWN BEARS ON FOUNDATION OR WALL LEDGER.



**4**  
**S2.2** **SECTION AT TYPICAL STAIR ON GRADE**  
SCALE: 3/4" = 1'-0"  
NOTES:  
1. SEE ARCHITECTURAL DRAWINGS FOR TREAD AND RISER INFORMATION.



**2**  
**S2.2** **RETAINING WALL SCHEDULE**  
SCALE: 3/4" = 1'-0"  
NOTES:  
1. FOOTING, WALL SIZE, AND REINFORCING VARY BASED ON WALL HEIGHT 'A.' SEE SCHEDULE.

A	B	C	D	E	F	F	G	H
11'-0"	10'-0"	2'-0"	1'-0"	7'-0"	1'-3"	#6@8" OC	#5@8" OC	#6@8" OC
9'-0"	7'-6"	2'-0"	1'-0"	4'-6"	1'-2"	#5@8" OC	#5@8" OC	#5@8" OC
7'-0"	5'-0"	2'-0"	8"	2'-4"	1'-2"	#5@12" OC	#5@12" OC	#5@12" OC



222 cloister court  
chapel hill, nc  
27514  
919.401.8586  
www.cra-ae.com

**bennett&pless**  
INC. STRUCTURAL ENGINEERS  
5430 Wade Park Boulevard, Suite 400  
Raleigh, North Carolina 27607  
919.832.5587  
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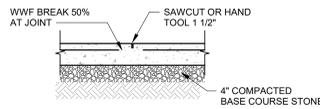
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**COURTYARD  
FOUNDATION  
PLAN**  
sheet

**S2.2**

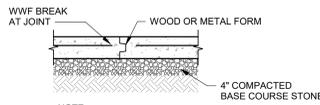
project no. 2122

date 5/25/23



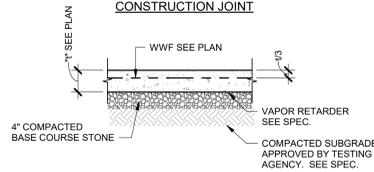
NOTE:  
IN LIEU OF SAWCUT OR HAND  
TOOL CONTRACTOR MAY USE  
FULL-DEPTH PREFORMED JOINT.

**CONTROL JOINT**

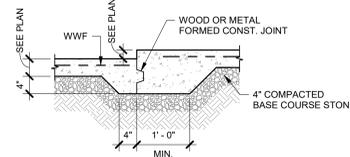


NOTE:  
IN LIEU OF FORMING KEY WAY,  
CONTRACTOR MAY USE 1/2"x2'-0"  
LONG SMOOTH DOWELS WITH ONE  
END GREASED, PLACE AT 24" O.C.

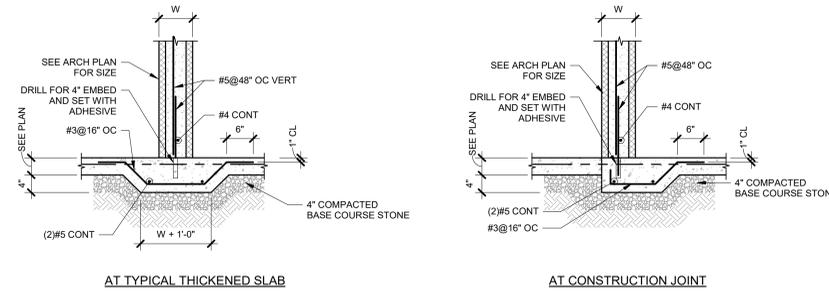
**CONSTRUCTION JOINT**



**1 TYPICAL SLAB ON GRADE DETAIL**  
SCALE: 3/4" = 1'-0"

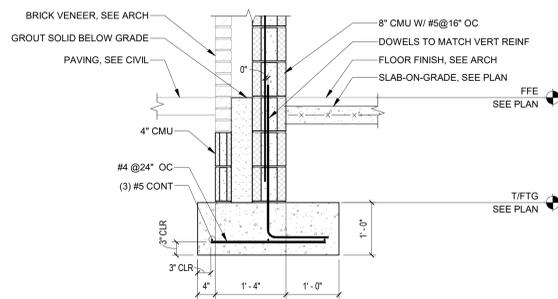


**2 TYPICAL DEPRESSED SLAB**  
SCALE: 3/4" = 1'-0"

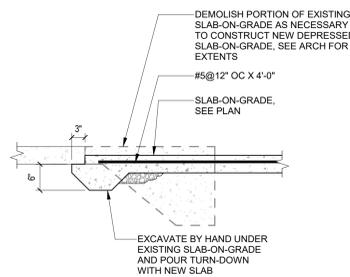


NOTES:  
1. PLACE DOWELS AND VERT BARS AT ALL WALLS CORNERS, INTERSECTIONS, AND EACH SIDE OF CONTROL JOINTS.

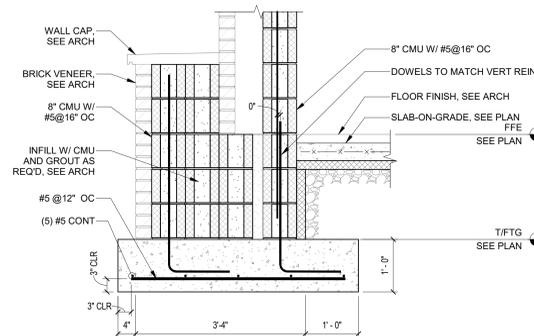
**3 TYPICAL SLAB SUPPORTED INTERIOR  
NON-LOAD BEARING (NLB) PARTITION WALL**  
SCALE: 3/4" = 1'-0"



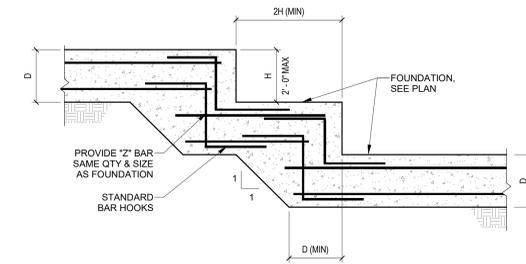
**4 TYPICAL EXTERIOR WALL FOOTING**  
SCALE: 3/4" = 1'-0"



**5 SLAB DEMO SECTION**  
SCALE: 3/4" = 1'-0"



**6 DOUBLE WALL FOOTING**  
SCALE: 3/4" = 1'-0"



**7 DETAIL AT TYPICAL FOOTING STEP**  
SCALE: 3/4" = 1'-0"



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27514  
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www.cra-ae.com

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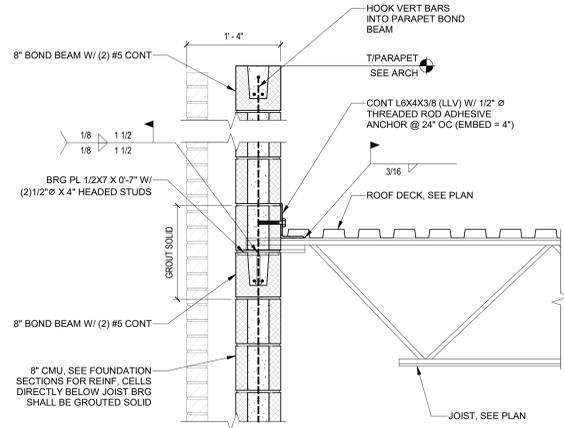
**FOUNDATION  
SECTIONS AND  
DETAILS**

sheet

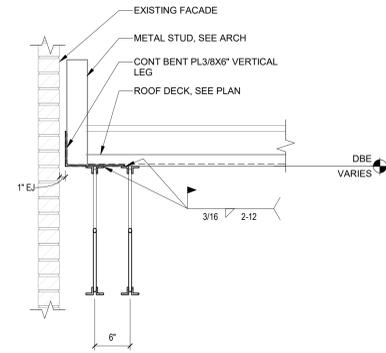
**S5.1**

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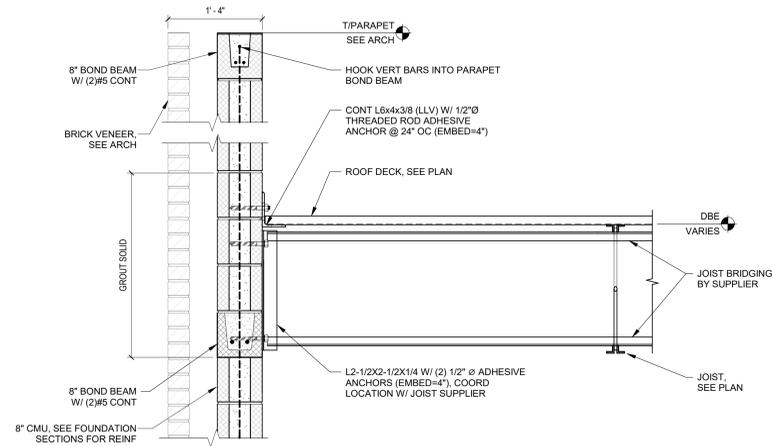
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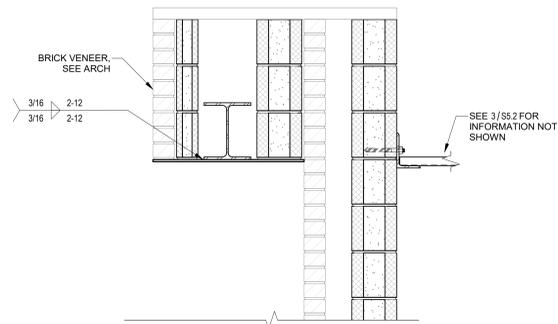
**1** TYPICAL JOIST BEARING AT CMU WALL  
S5.2 SCALE: 1" = 1'-0"



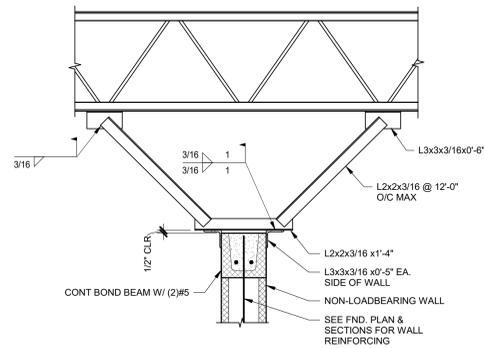
**2** INTERFACE AT EXISTING BUILDING  
S5.2 SCALE: 1" = 1'-0"



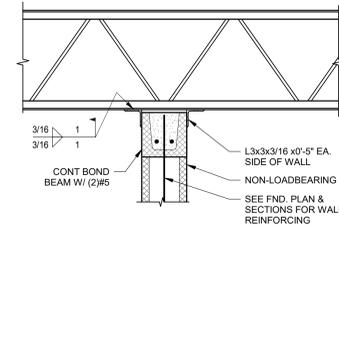
**3** TYPICAL DECK BEARING AT CMU WALL  
S5.2 SCALE: 1" = 1'-0"



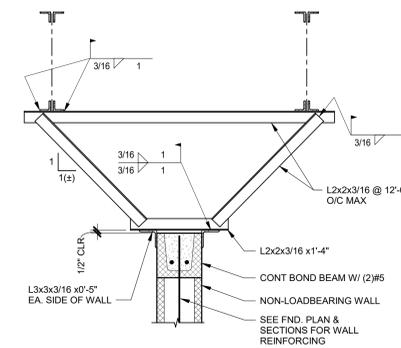
**4** SECTION AT STEEL BEAM LINTEL  
S5.2 SCALE: 1" = 1'-0"



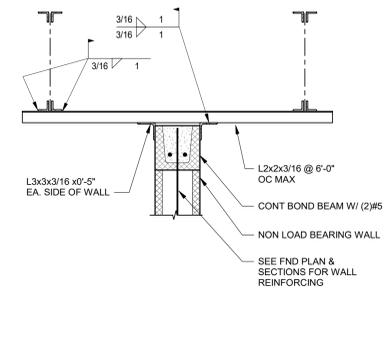
**WALL PERPENDICULAR TO FRAMING - OPTION 1**



**WALL PERPENDICULAR TO FRAMING - OPTION 2**



**WALL PARALLEL TO FRAMING - OPTION 1**



**WALL PARALLEL TO FRAMING - OPTION 2**

**NOTES:**  
1. CONTRACTOR COORDINATE BRACING OPTIONS BASED ON DIRECTION AND HEIGHT OF WALL RELATIVE TO JOIST FRAMING.

**5** NON-LOAD BEARING CMU WALL BRACING DETAIL BELOW DECK  
S5.2 SCALE: 1" = 1'-0"



222 cloister court  
chapel hill, nc  
27514  
919.401.8586  
www.cra-ae.com

**bennett & pless**  
INC STRUCTURAL ENGINEERS  
5430 Wade Park Boulevard, Suite 400  
Raleigh, North Carolina 27607  
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**FRAMING SECTIONS AND DETAILS**

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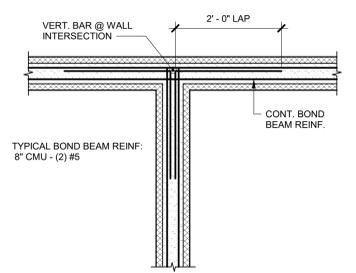
**S5.2**

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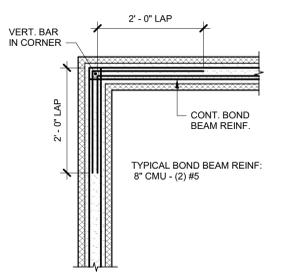
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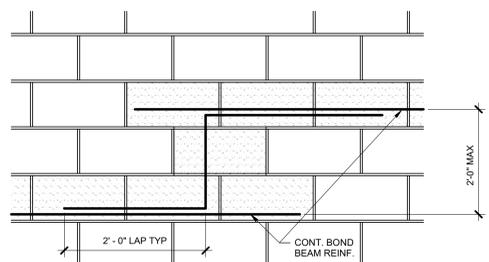
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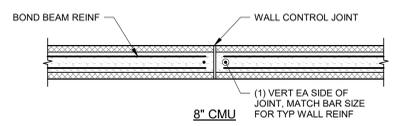
**1 TYP. BOND BEAM INTERSECTION**  
S5.3 SCALE: 3/4" = 1'-0"



**2 TYP. BOND BEAM CORNER**  
S5.3 SCALE: 3/4" = 1'-0"



**3 TYP. STEP IN BOND BEAM**  
S5.3 SCALE: 1" = 1'-0"

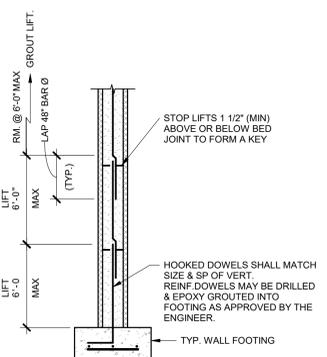


1. SEE PLAN FOR WCJ LOCATIONS IN LOAD BEARING WALLS.
2. FOR INTERIOR NON LOAD BEARING WALLS, CONTRACTOR SHALL COORDINATE WCJ LOCATIONS WITH 6/SS.3.
3. SEE ARCH DWGS FOR FIRE STOPPING REQUIREMENTS IN RATED WALLS.

**4 TYPICAL CONTROL JOINT DETAIL**  
S5.3 SCALE: 3/4" = 1'-0"

- GENERAL GROUTING REQUIREMENTS**
1. ALL REINFORCED CELLS SHALL BE GROUTED SOLID.
  2. REINFORCING BARS SHALL BE IN PROPER POSITION PRIOR TO PLACEMENT OF GROUT. NOT PUSHED DOWN INTO PREVIOUSLY PLACED GROUT. SAME REQUIREMENTS APPLIES FOR EMBEDDED BOLTS AND FASTENERS.
  3. MORTAR BEDDING UNDER THE FIRST COURSE OF BLOCK CELLS TO BE GROUTED SHALL PERMIT GROUT TO COME INTO DIRECT CONTACT WITH FOUNDATION.
  4. PLACE MORTAR ON CROSS WEBS ADJACENT TO ALL GROUTED CELLS.
  5. MORTAR THAT PROJECTS MORE THAN 1/2" INTO CELL SHALL BE REMOVED PRIOR TO GROUTING.
  6. GROUTED CELLS SHALL BE MECHANICALLY VIBRATED DURING PLACEMENT OF GROUT. TEN MINUTES AFTER PLACING GROUT. EACH GROUTED CELL SHALL BE RECONSOLIDATED WITH A VIBRATOR.
  7. METAL LATH SHALL BE PLACED UNDER ALL BOND BEAMS IN ORDER TO CONTAIN GROUT. FELT OR OTHER BOND BREAKING MATERIAL IS NOT PERMITTED AS AN ALTERNATE TO THIS. "U" SHAPED LINTEL BLOCKS MAY BE USED FOR BOND BEAMS.

- LOW LIFT GROUTING PROCEDURE:**
1. LAY WALL TO MAXIMUM OF 6'-0"
  2. CLEAN MORTAR AND DEBRIS FROM CELLS TO BE GROUTED.
  3. PLACE REINFORCING BARS IN PROPER POSITION.
  4. PLACE GROUT UP TO LIFT HEIGHT AND VIBRATE.

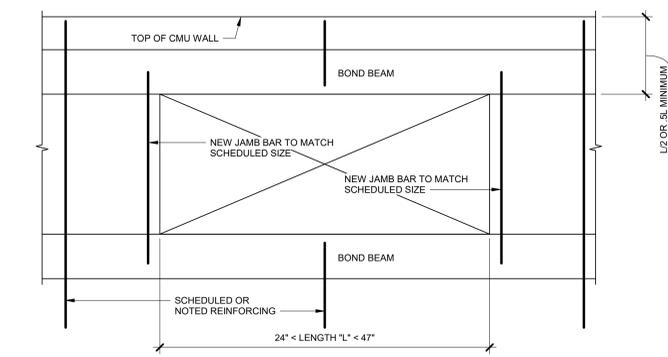


**5 CMU WALL REINF. DETAIL AT LOW LIFT GROUTED CELLS**  
S5.3 SCALE: NTS

	WALL HEIGHT (VERTICAL SPAN BETWEEN FLOORS/ROOFS)	VERTICAL REINFORCING		HORIZONTAL REINFORCING	TOP OF WALL REINFORCING	LINTEL REINFORCING (UP TO 4'-0" SPAN)
		8" CMU				
		VERTICAL REINFORCING	END WALL REINFORCING			
(NLB-V) PARTITION WALLS SPANNING VERTICALLY	UP TO 14'-0"	#5@48" OC	(1)#5	9 GA LADDER TYPE @ 16" OC	8" BOND BEAM W/ (2) #5	8" LINTEL W/ (2) #5
(NLB-H) INTERIOR PARTITION WALLS SPANNING HORIZONTALLY	ALL HEIGHTS	#5@48" OC	(1)#5	9 GA LADDER TYPE @ 16" OC	8" BOND BEAM W/ (2) #5	8" LINTEL W/ (2) #5

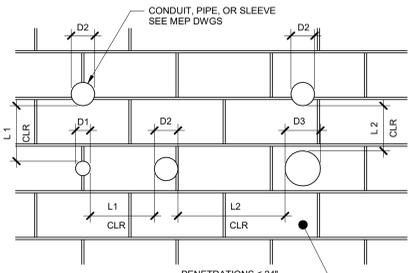
- NOTES:**
1. ALL NON-LOAD BEARING WALLS, INTERIOR PARTITION WALLS SHALL SPAN EITHER VERTICALLY OR HORIZONTALLY. SEE GUIDELINES BELOW FOR HORIZONTAL AND VERTICAL SPANNING WALLS IN DETAILS.
  2. ALL MASONRY TO BE CONSTRUCTED IN RUNNING BOND PATTERN WITH INTERLOCKING CORNERS.
  3. PROVIDE SCHEDULED END WALL REINF FULL HEIGHT EACH SIDE OF CONTROL JOINTS, END WALL CONDITIONS, AND INTERSECTING CORNERS.
  4. PROVIDE WALL CONTROL JOINTS (WCJ'S) AT 24'-0" OC MAXIMUM IN ALL INTERIOR NON LOAD BEARING WALLS. SHOP DRAWINGS SHALL BE SUBMITTED NOTING HEIGHT OF "NLB-V" WALL, REINFORCING LAYOUT, AND PLACEMENT OF CONTROL JOINTS.
  5. VERTICAL SPANNING WALLS, NOTED NLB-V ON PLAN, SHALL BE BRACED TO STEEL STRUCTURE PER 5/SS.2.
  6. HORIZONTAL SPANNING WALLS SHALL SPAN A MAXIMUM HORIZONTAL DISTANCE OF 24'-0" AND SHALL HAVE NO CONTROL JOINTS WITHIN THAT SPAN. THE HORIZONTAL SPAN IS DEFINED BY THE DISTANCE BETWEEN "T" OR "L" INTERSECTING WALLS. INTERSECTING WALLS SHALL BE INTERLOCKED WITH "T" TYPE HORIZONTAL LADDER REINFORCING.
  7. HORIZONTALLY SPANNING WALLS MAY CANTILEVER HORIZONTALLY UP TO 6'-0".
  8. PROVIDE MASONRY WIRE TIES @24" OC ON COLUMNS ADJACENT TO HORIZONTALLY SPANNING MASONRY.

**6 INTERIOR/NON-LOAD BEARING MASONRY WALL SCHEDULE**  
S5.3 SCALE: 1" = 1'-0"



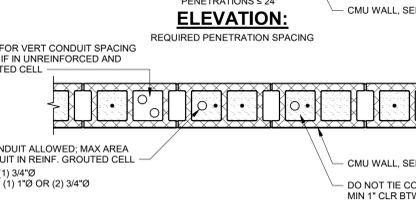
- DUCT OPENINGS UNDER 47" WIDE PROVIDE BOND BEAM AT BOTTOM AND DOWELS ON EITHER SIDE, AND BOND BEAM ACROSS THE TOP AS LONG AS DUCT IS NOT OVER 48" AND REBAR IS NOT MORE THAN 48" APART. IF REBAR IS MORE THAN 48", JAMB REINFORCING MUST BE INSTALLED FROM BELOW, FULL HT.
- NON-LOAD BEARING INTERIOR PARTITIONS. PENETRATIONS > 24" < 47" REFER TO PLANS/ELEVATIONS FOR REQUIRED LOAD BEARING LINTELS OPENING SIZE:  
 LESS THAN OR EQUAL TO 24" - REFER TO 9/SS-02.11. (ROUND OR RECTANGULAR)  
 GREATER THAN 24" AND LESS THAN 48" - SEE DETAIL  
 GREATER THAN 48" - LINTEL SHALL BE PROVIDED IN ACCORDANCE WITH THE NON-LOAD BEARING LINTEL SCHEDULE ON SHEET S-212. FOR MASONRY LINTEL - THE HEIGHT OF CMU ABOVE THE OPENING MUST MEET THE L2 OR 5L CRITERIA-OTHERWISE A STEEL LINTEL MUST BE PROVIDED IN ACCORDANCE WITH THE SCHEDULE. PROVIDE FULL HEIGHT JAMBS EACH SIDE.
- IF AT ALL POSSIBLE - THE TOP OPENING SHOULD ALIGN WITH A MORTAR JOINT (BOTTOM OF BLOCK) SO AN APPROPRIATE BOND BEAM OR LINTEL BLOCK COULD BE USED IN OPENINGS GREATER THAN 24".
- FOLLOW DISTANCE REQUIREMENTS TO END OF WALL, CONTROL JOINTS, AND SPACING OF OPENINGS PER 9/SS-02.11 IN ALL CASES.

**7 CMU WALL UTILITY PENETRATION AND EMBEDMENT TYPICAL DETAIL**  
S5.3 SCALE: 1" = 1'-0"



- NOTE: DO NOT PENETRATE REINFORCED PILASTERS OR END OF WALL OR WCJ JAMBS.**
- D= 8" DIA. PROVIDE MIN 8" FROM WCJ OR END OF WALL  
 D= 8" DIA. PROVIDE MIN 16" FROM WCJ OR END OF WALL
- D1 < D2 < D3  
 L1 = 3'D2  
 L2 = 3'D3
- D = DIAMETER OF PENETRATION  
 L = CLEAR SPACING

- NOTE:**  
 D > 24" MAY REQUIRE A LINTEL. NOTIFY THE EOR FOR LINTEL REQUIREMENTS IF NOT SHOWN ON THE CMU ELEVATIONS ON PLAN.

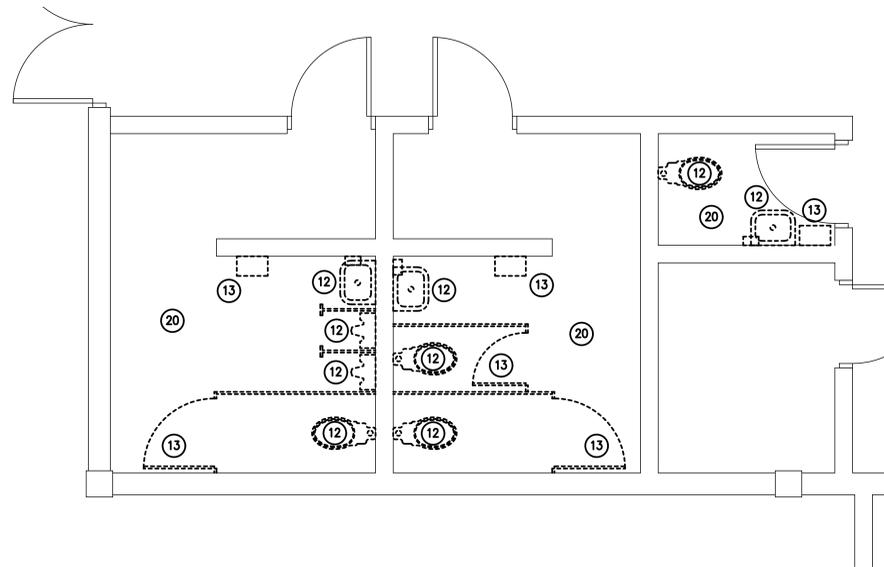


- PLAN DETAIL: EMBEDDED UTILITIES**
- NOTES:**
1. REFER TO MEP DRAWINGS FOR ALL TELECOM, CONDUIT, AND PIPES 8" AND SMALLER. CONTRACTOR TO FOLLOW DETAIL SPACING REQUIREMENTS FOR LAYOUT. IF SPACING CANNOT BE MAINTAINED, PENETRATIONS MUST BE GROUTED BELOW CMU LINTEL. NOTIFY THE EOR FOR LINTEL REQUIREMENTS.
  2. CONDUITS SHALL NOT PENETRATE BOND BEAMS NOR LINTELS.
  3. PIPES WITH LIQUID, GAS, OR VAPORS HIGHER THAN 150" ARE NOT PERMITTED VERTICALLY WITHIN WALLS.
  4. PIPES WITH PRESSURE IN EXCESS OF 55 PSI ARE NOT PERMITTED VERTICALLY WITHIN WALLS.
  5. PIPES WITH WATER OR LIQUID SUBJECT TO FREEZING ARE NOT PERMITTED VERTICALLY WITHIN WALLS.

**9 CMU WALL UTILITY PENETRATION AND EMBEDMENT PLAN DETAIL**  
S5.3 SCALE: 1" = 1'-0"

### DEMOLITION NOTES

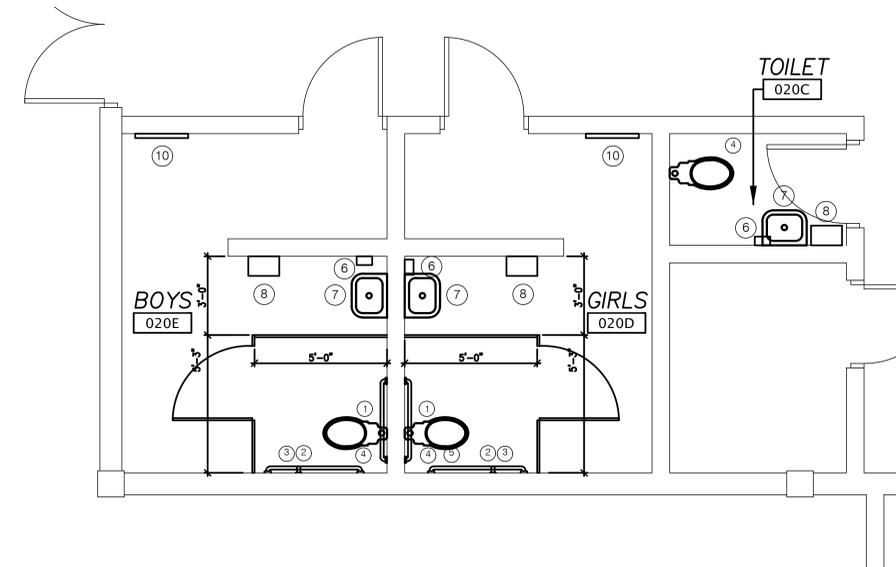
- 1 SAWCUT AND REMOVE EXISTING CONCRETE SLAB AND CONCRETE RISERS, COORDINATE WITH STRUCTURAL DRAWINGS.
- 2 REMOVE EXISTING WOOD DOORS AND DOOR HARDWARE, STORE FOR FUTURE RELOCATION DURING THE RENOVATION.
- 3 REMOVE ALL EXISTING FLOORING AND BASE THROUGHOUT THE ROOM.
- 4 REMOVE EXISTING DRYWALL PARTITIONS, COORDINATE WITH MECHANICAL AND ELECTRICAL DEMOLITION.
- 5 REMOVE EXISTING MECHANICAL AND ELECTRICAL COMPONENTS FOR FUTURE RELOCATION DURING THE RENOVATION. SEE MECHANICAL AND ELECTRICAL DEMOLITION DRAWINGS.
- 6 REMOVE EXISTING PERIMETER CEILING GRID AND THE FIRST PERPENDICULAR GRID, COORDINATE WITH RENOVATION REQUIREMENTS.
- 7 ALL EXISTING LIGHTING FIXTURES AND ACOUSTICAL DIFFUSERS ARE TO REMAIN AS IS, COORDINATE WITH RENOVATION REQUIREMENTS.
- 8 REMOVE EXISTING ACOUSTICAL CEILING PANELS.
- 9 REMOVE EXISTING ACOUSTICAL CEILING GRID, PANELS AND LIGHTING.
- 10 REMOVE EXISTING DOOR, DOOR FRAME AND HARDWARE.
- 11 REMOVE EXISTING DRYWALL PARTITION, COORDINATE WITH RENOVATION.
- 12 REMOVE EXISTING PLUMBING FIXTURES, COORDINATE WITH PLUMBING.
- 13 REMOVE ALL EXISTING TOILET PARTITIONS AND TOILET ACCESSORIES.
- 14 REMOVE EXISTING COUNTERTOP.
- 15 REMOVE EXISTING CMU PARTITION.
- 16 REMOVE EXISTING CMU PARTITION TO CREATE NEW DOOR OPENING.
- 17 DEMOLISH AND REMOVE ALL EXISTING CERAMIC FLOOR AND WALL TILE INCLUDING ANY SETTING BED DOWN TO EXISTING CONCRETE SLAB OR CMU WALLS.
- 18 REMOVE EXISTING DOOR AND HARDWARE, RETAIN DOOR FRAME.
- 19 EXISTING DRYWALL/PLASTER CEILING TO REMAIN, REMOVE LIGHTING AND OTHER COMPONENTS AS SHOWN ON MEP DRAWINGS.
- 20 DEMOLISH AND REMOVE EXISTING RESILIENT FLOORING AND BASE.
- 21 REMOVE EXISTING DISPLAY/BULLETIN BOARD.



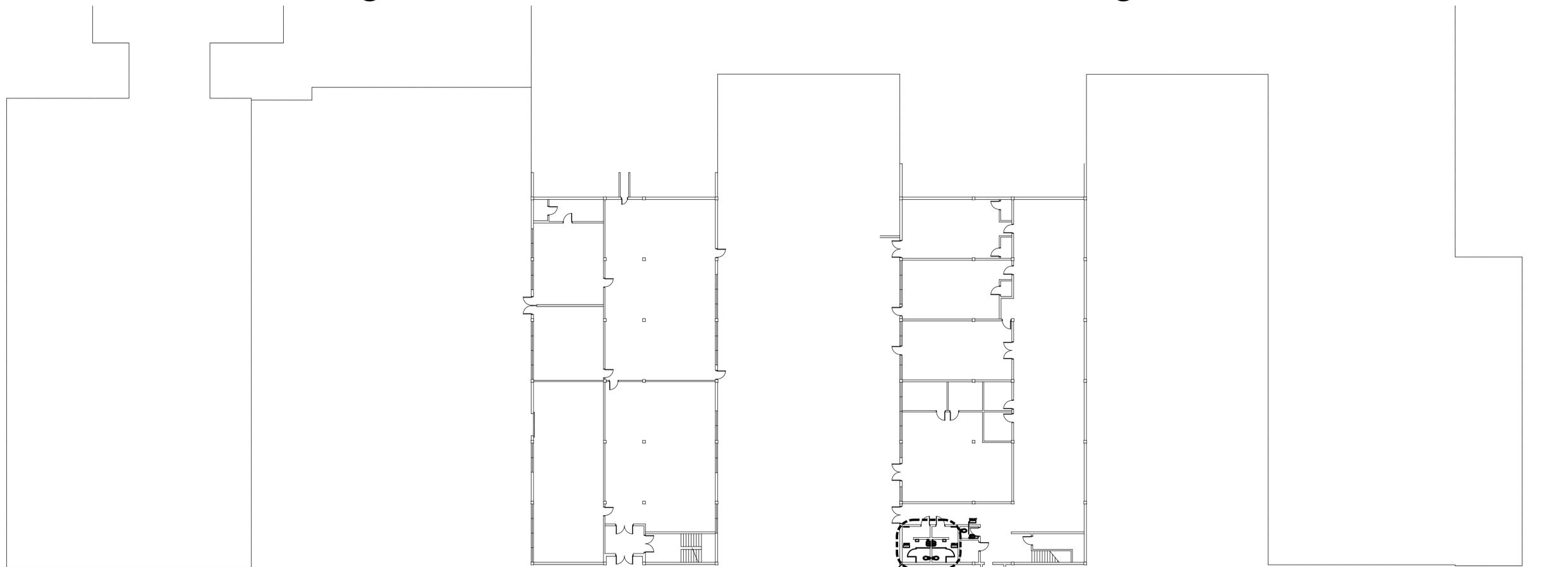
2 Enlarged Demo Plan-Toilets 020C-020E  
 Scale: 3/8" = 1'-0"

### TOILET ACCESSORY SCHEDULE

NO.	DESCRIPTION
1	36" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
2	42" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
3	18" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
4	MULTI-ROLL TOILET TISSUE DISPENSER (BY OWNER)
5	SANITARY NAPKIN DISPOSAL UNIT
6	WALL-MOUNTED SOAP DISPENSER (BY OWNER)
7	UNDER LAVATORY GAURDS
8	SURFACE-MOUNTED TOWEL DISPENSER (BY OWNER)
9	ELECTRIC HAND DRYER
10	24"X60" SURFACE-MOUNTED MIRROR WITH WELDED FRAME
11	UTILITY SHELF WITH MOP & BROOM HOLDERS
12	18"X30" SURFACE-MOUNTED MIRROR WITH WELDED FRAME
13	TOWEL HOOK
14	L-SHAPED SHOWER GRAB BAR
15	COMPACT FOLDING SHOWER SEAT
16	HEAVY DUTY SHOWER ROD
17	SHOWER CURTAIN
18	BODY WASH DISPENSER (BY OWNER)

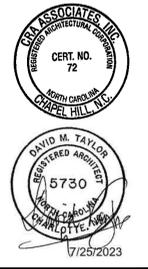


3 Enlarged Reno Plan-Toilets 020C-020E  
 Scale: 3/8" = 1'-0"



3 A1.0  
 2 A1.0

1 Composite Basement Plan  
 Scale: 1/16" = 1'-0"



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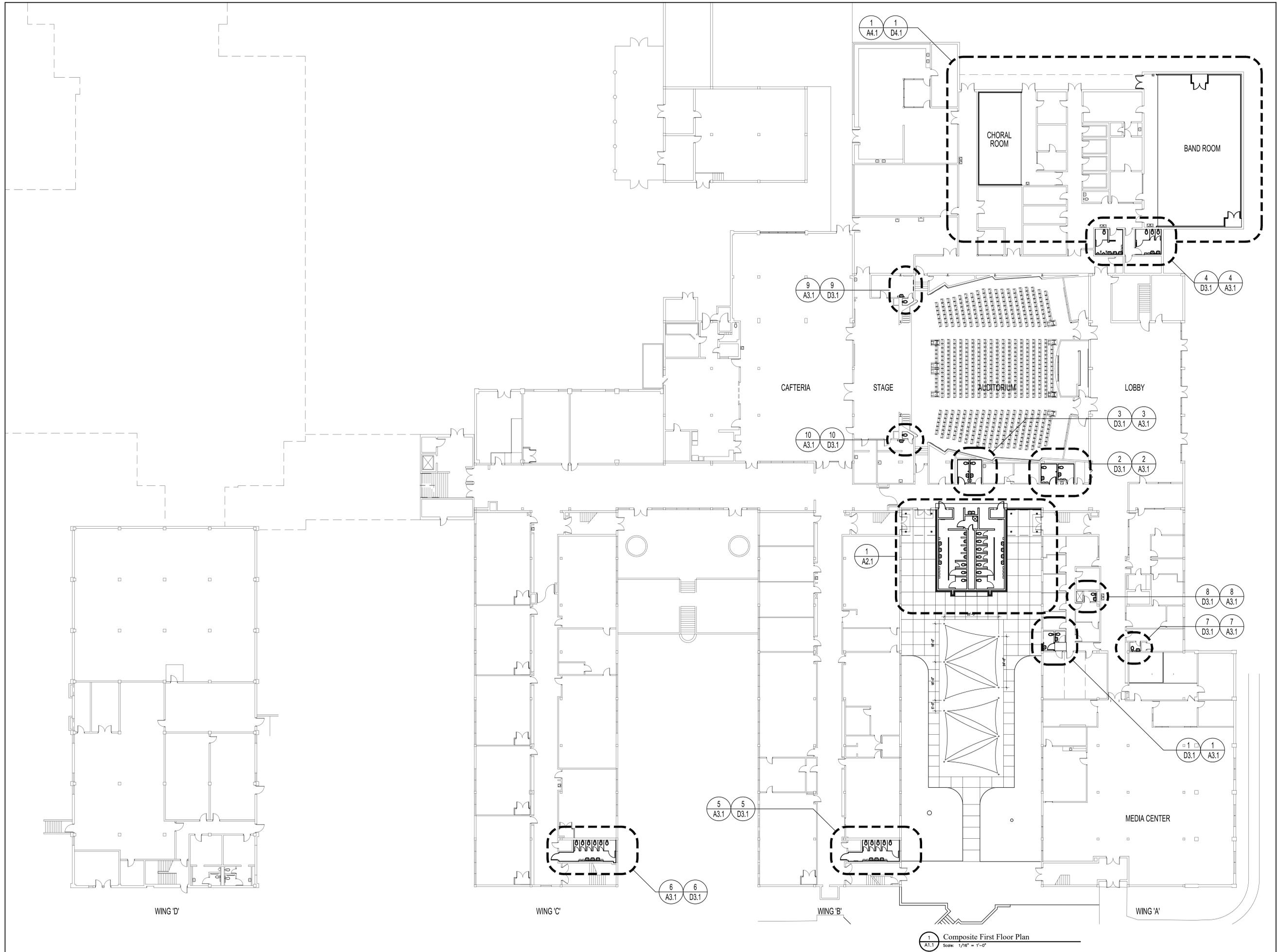
Basement  
 Comp/Demo/Reno  
 Floor Plans

sheet

A1.0

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drawn (ml) checked (ml)

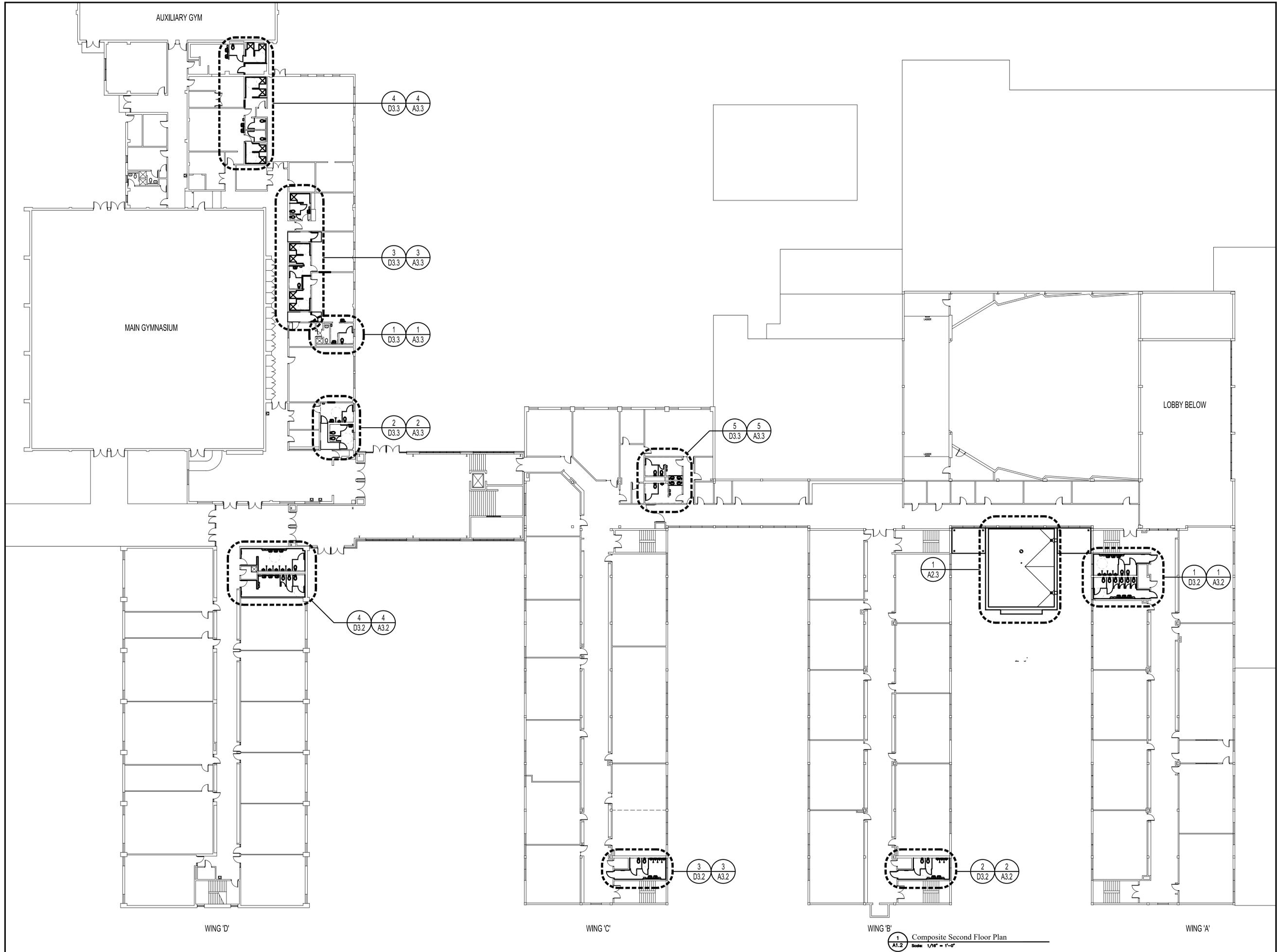
**Composite  
 First  
 Floor Plan**

sheet

**A1.1**

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date 6/15/23



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drawn (111) checked (111)

Composite  
 Second  
 Floor Plan

sheet  
**A1.2**

project no. 2231

date 6/15/23



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drawn: [initials] checked: [initials]

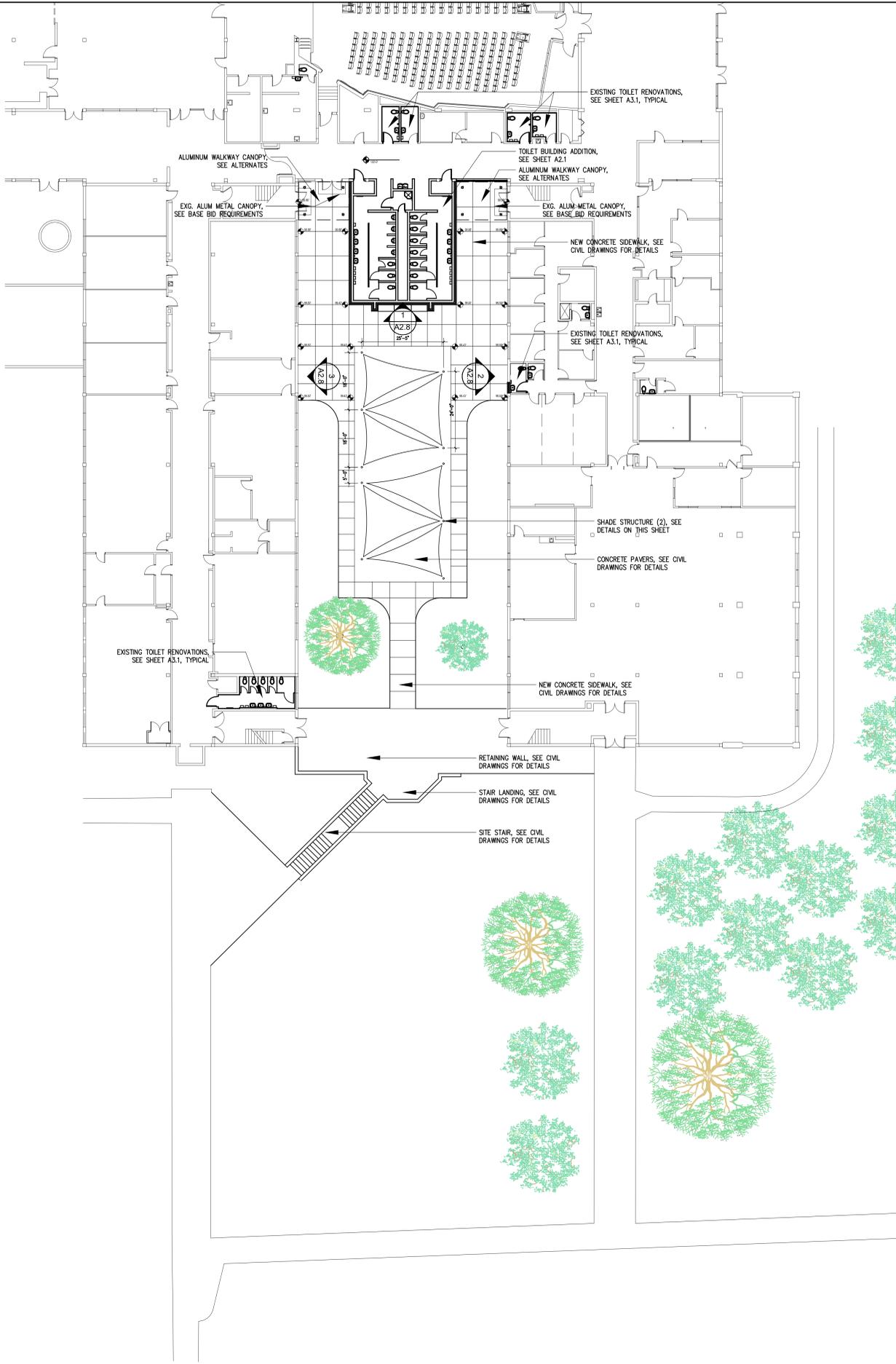
Courtyard  
Site  
Floor Plan

sheet

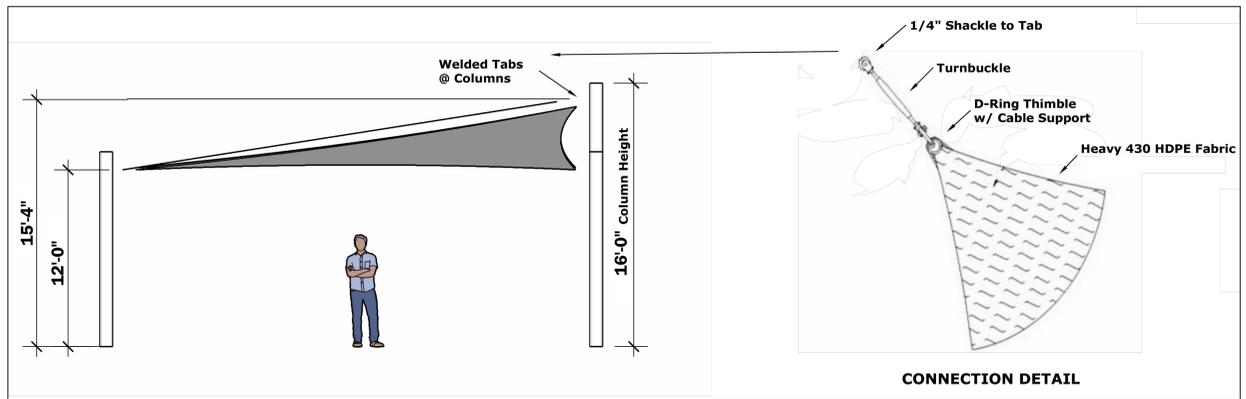
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project no. 2231

date 6/15/23

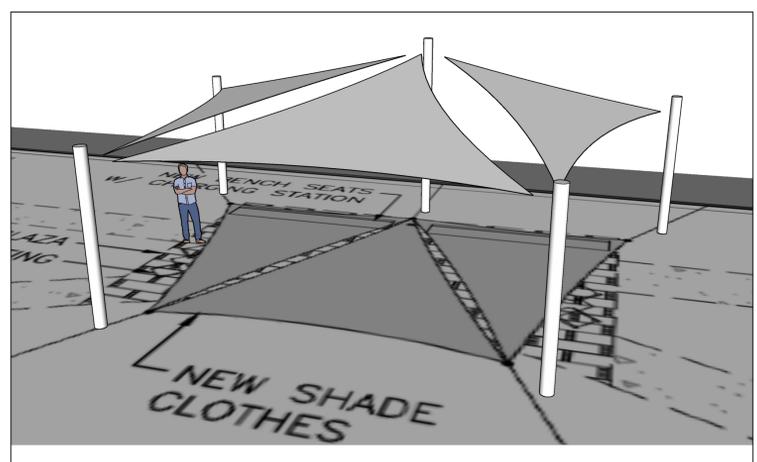


1 Courtyard Site Plan  
Scale: 1/16" = 1'-0"



4 Fabric Canopy Side Elevation  
Scale: Not to Scale

3 Fabric Canopy Connection Detail  
Scale: Not to Scale



2 Fabric Canopy Structure Rendering  
Scale: Not to Scale



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drawn [initials] checked [initials]

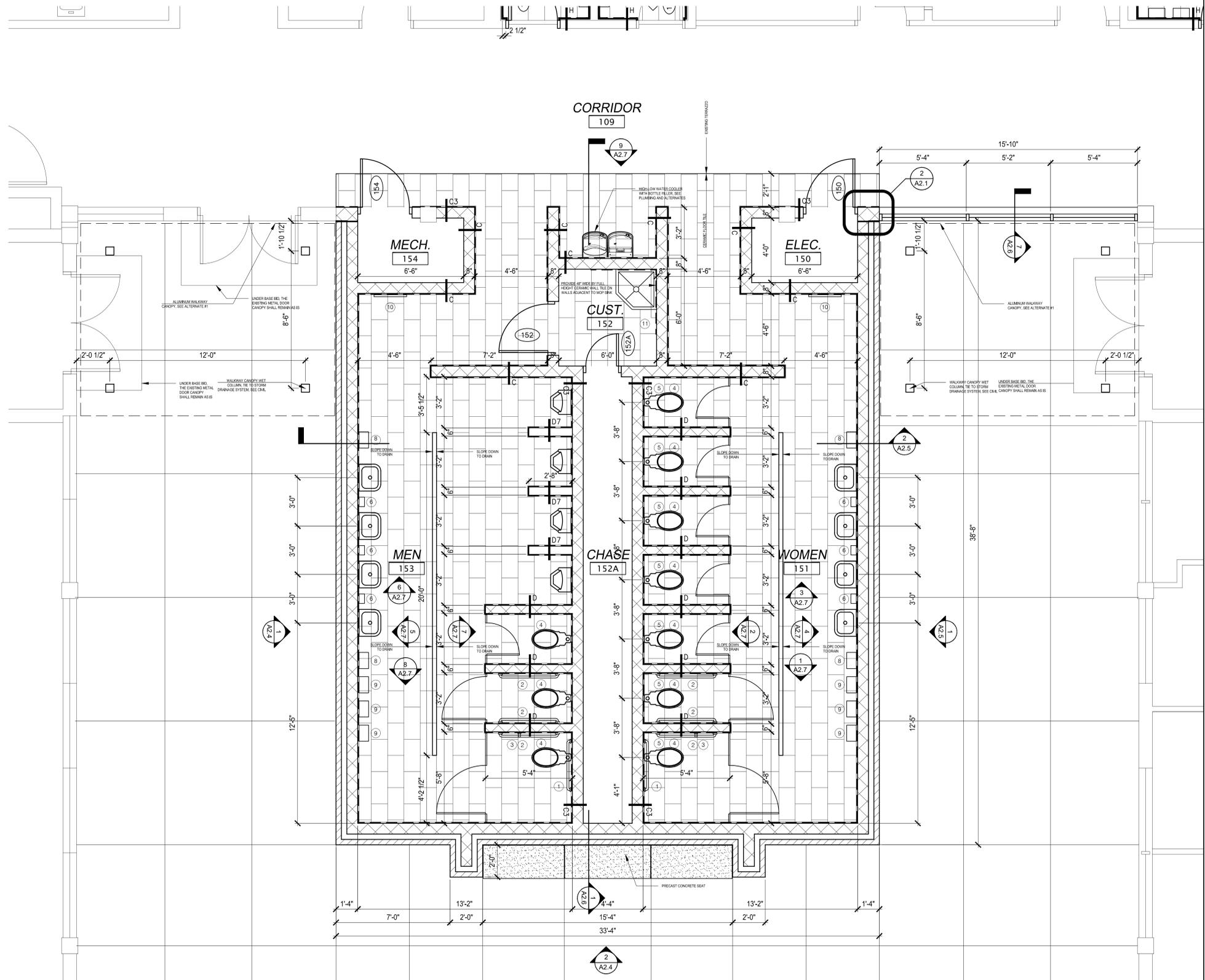
Enlarged  
 First Floor  
 Addition Plans

sheet

A2.1

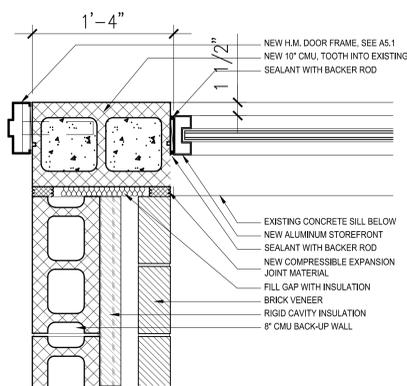
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TOILET ACCESSORY SCHEDULE

NO.	DESCRIPTION
1	36" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
2	42" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
3	18" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
4	MULTI-ROLL TOILET TISSUE DISPENSER (BY OWNER)
5	SANITARY NAPKIN DISPOSAL UNIT
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7	UNDER LAVATORY GAURDS
8	SURFACE MOUNTED TOWEL DISPENSER (BY OWNER)
9	ELECTRIC HAND DRYER
10	24"X60" SURFACE MOUNTED MIRROR WITH WELDED FRAME
11	UTILITY SHELF WITH MOP & BROOM HOLDERS
12	18"X36" SURFACE MOUNTED MIRROR WITH WELDED FRAME
13	TOWEL HOOK
14	L-SHAPED SHOWER GRAB BAR
15	COMPACT FOLDING SHOWER SEAT
16	HEAVY DUTY SHOWER ROD
17	SHOWER CURTAIN
18	BODY WASH DISPENSER (BY OWNER)



2 Plan Detail at Expansion Joint  
 A2.1 Scale: 3/8" = 1'-0"

1 Enlarged Plan - Toilet Room Addition  
 A2.1 Scale: 3/8" = 1'-0"



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drawn (ml) checked (tl)

Enlarged  
 Addition Reflected  
 Ceiling Plan

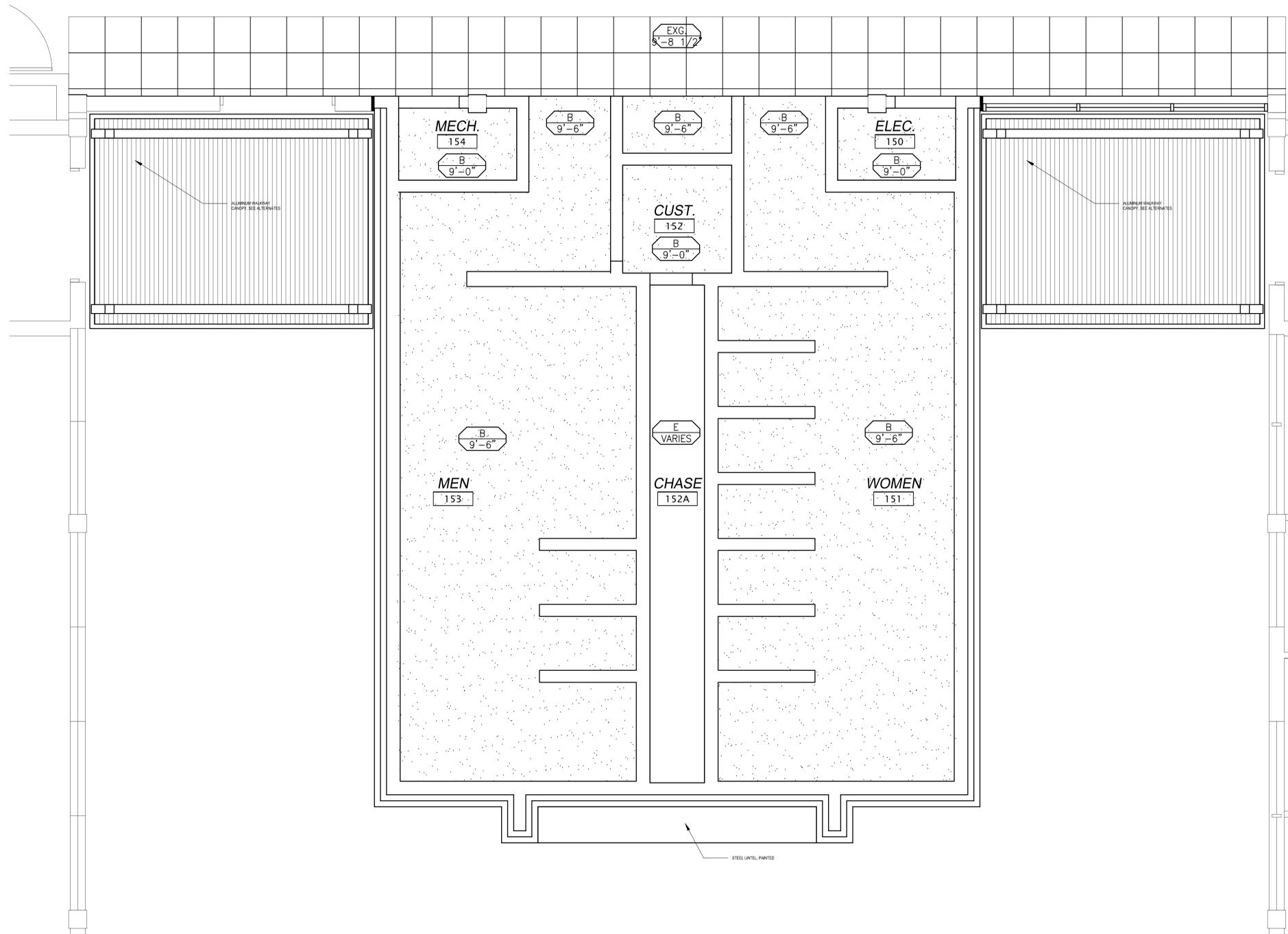
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A2.2

project no. 2231

date 6/15/23

Construction Document Progress Set



1 Enlarged RCP - Toilet Room Addition  
 A2.2 Scale: 3/8" = 1'-0"

CEILING SYMBOL LEGEND	
	2' x 2' GRID
	SMOOTH FINISH GYP. BD. CEILING, SEE CEILING TYPES KEY
	2' x 4' LIGHTING
	1' x 4' LIGHTING
	CAN LIGHT
	SUPPLY DIFFUSER
	RETURN AIR GRILLE
	CEILING TYPE AND HEIGHT TAG

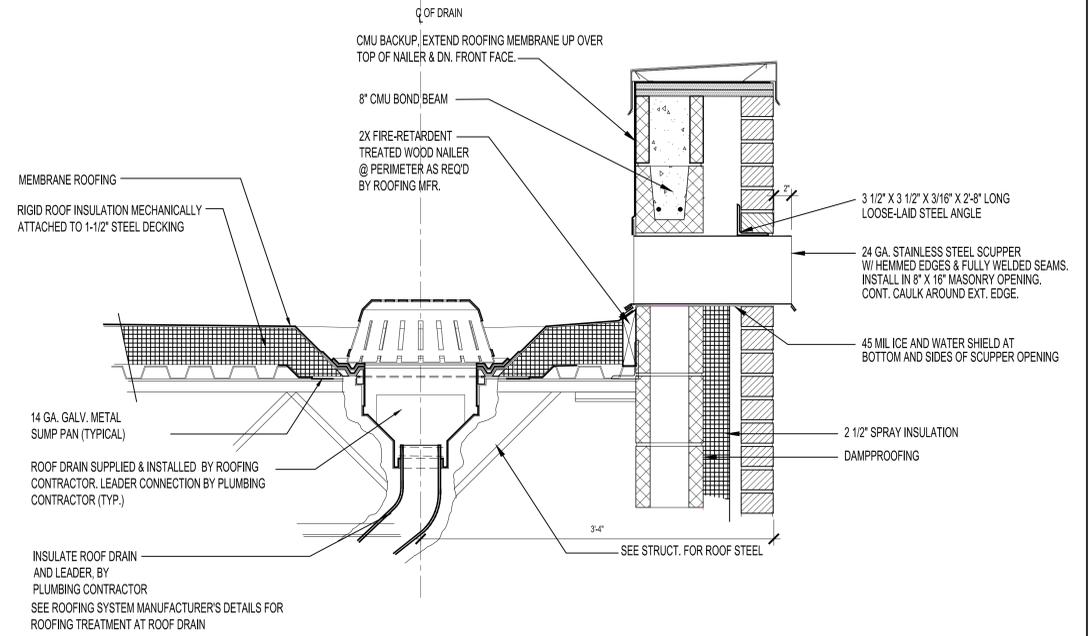
  

CEILING MATERIAL KEY	
TYPE	DESCRIPTION
A	SUSPENDED 2' x 2', LAY-IN ACOUSTICAL PANELS, SEE SPECS.
B	SUSPENDED 5/8" GYP. BD., PAINTED
E	EXPOSED STRUCTURE AND M/E/P/PP SYSTEMS, PAINTED
EX.	EXISTING CEILING TO REMAIN, PATCH ALL HOLES AND DAMAGED AREAS TO MATCH EXISTING FINISH, PAINTED

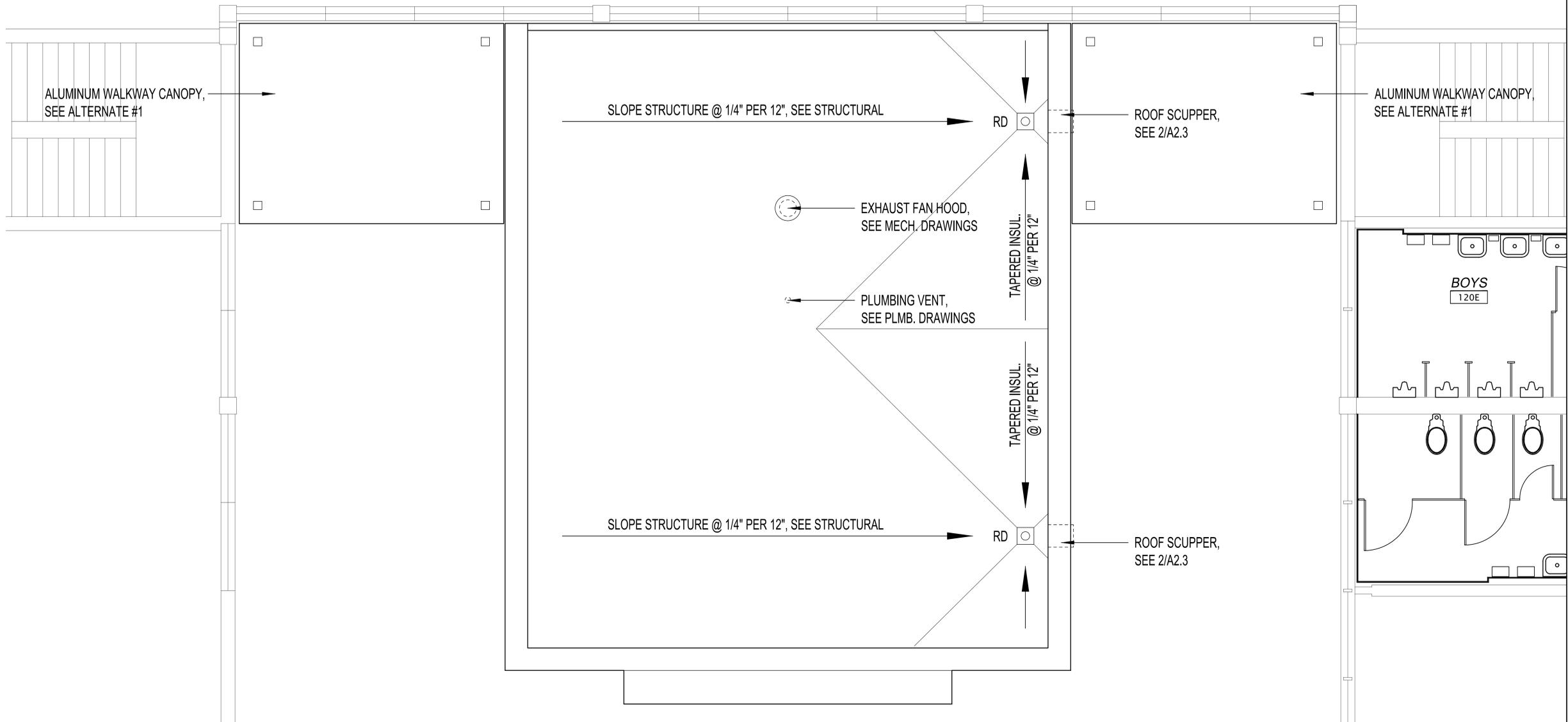
  

NOTES:

- REFER TO SPECIFICATIONS FOR COMPLETE CEILING DESCRIPTIONS.
- THE CONTRACTOR SHALL PROVIDE COORDINATION WITH OTHER TRADES TO INSURE ADHERENCE TO CEILING HEIGHTS INDICATED. PROPER CLEARANCES SHALL BE PROVIDED BETWEEN MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION ITEMS ABOVE CEILING. THE CONSTRUCTION MANAGER SHALL CONDUCT A PRE-INSTALLATION COORDINATION MEETING WITH AUTHORIZED REPRESENTATIVES OF ALL TRADES PRIOR TO THE INSTALLATION OF ABOVE CEILING ITEMS.
- THE CONTRACTOR SHALL COORDINATE LOCATIONS OF LIGHT FIXTURES, MECH. SUPPLY DIFFUSERS AND RETURN AIR GRILLES WITH CEILING GRID INSTALLATION. SEE ELECTRICAL DRAWINGS FOR LIGHT FIXTURES. SEE MECHANICAL DRAWINGS FOR SUPPLY DIFFUSERS, RETURN AIR GRILLES, ETC.



2 Roof Drain and Scupper Detail  
 A2.3 Scale: 1 1/2" = 1'-0"



1 Enlarged Roof Plan - Toilet Addition  
 A2.3 Scale: 3/8" = 1'-0"

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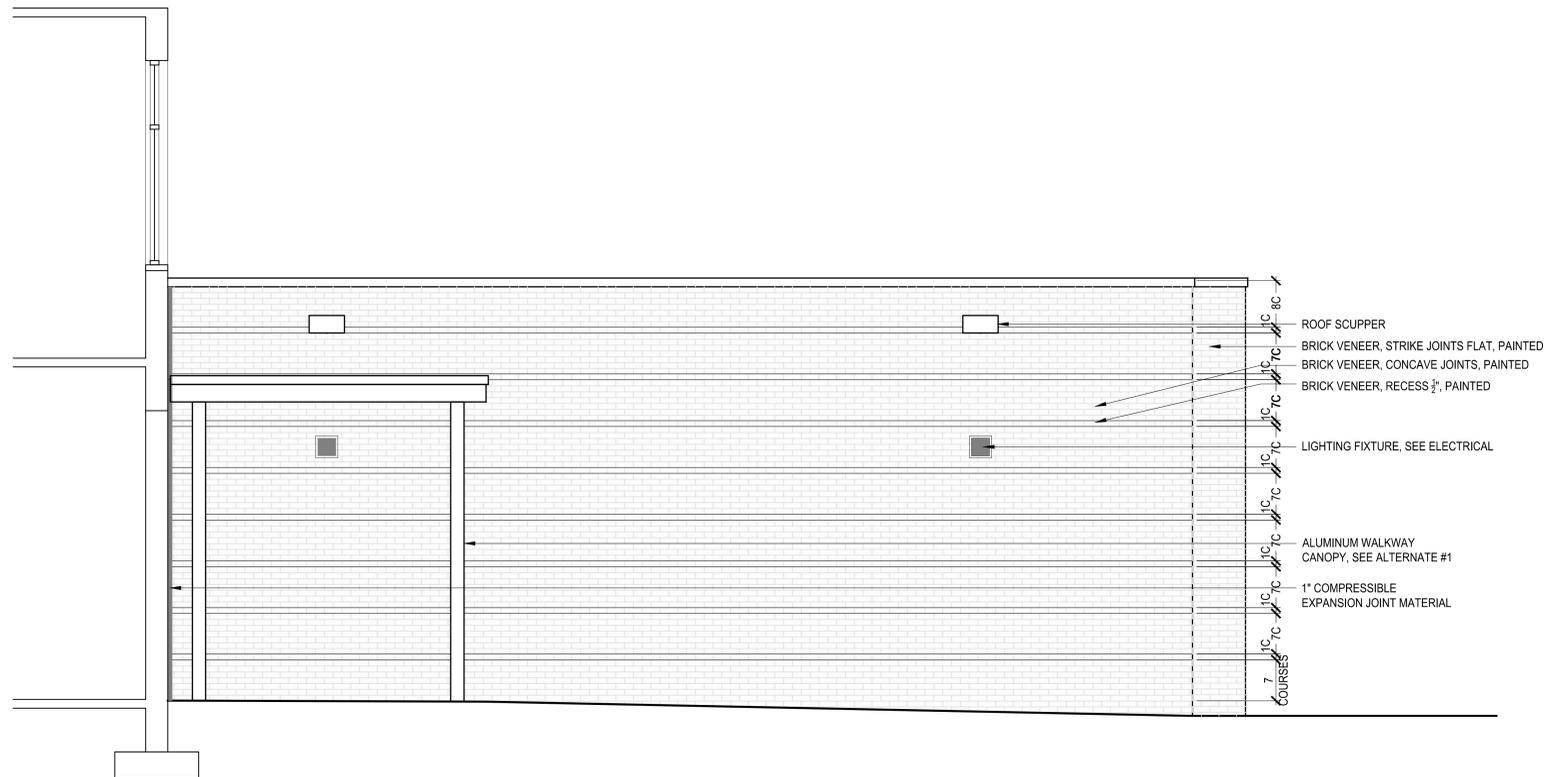
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drawn checked  
 DJH DJH  
 Enlarged Addition  
 Roof  
 Plan

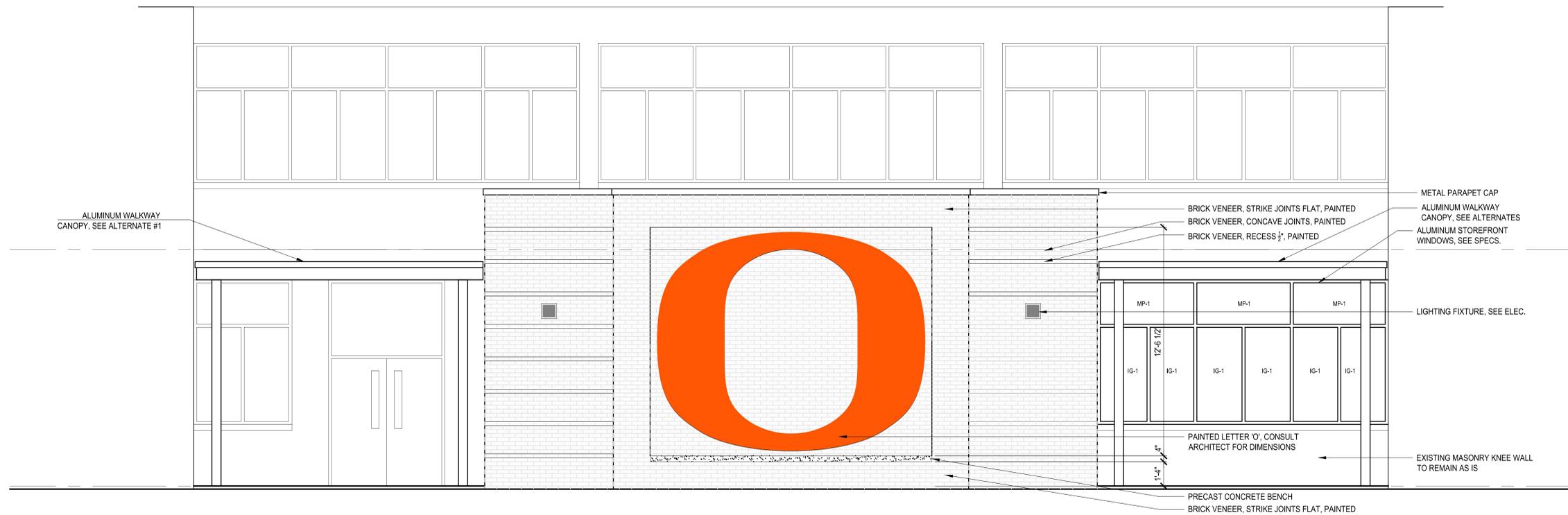
sheet  
 A2.3

project no. 2231

date 6/15/23



1 West Elevation - Toilet Addition  
 A2.4 Scale: 3/8" = 1'-0"



2 South Elevation - Toilet Addition  
 A2.4 Scale: 3/8" = 1'-0"



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drawn: DJM checked: DJM

Toilet Addition  
 Exterior  
 Elevations

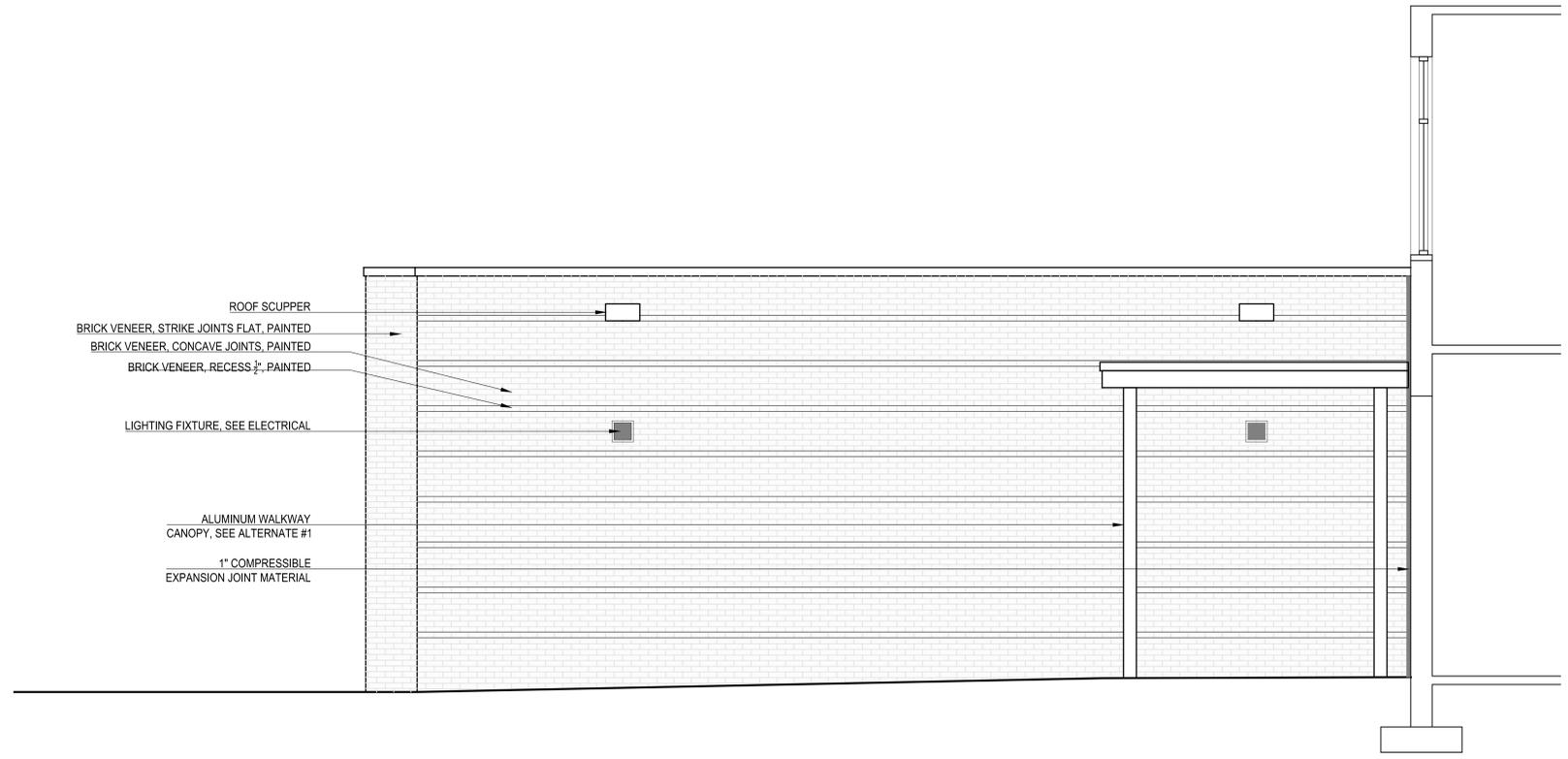
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**A2.4**

project no. 2231

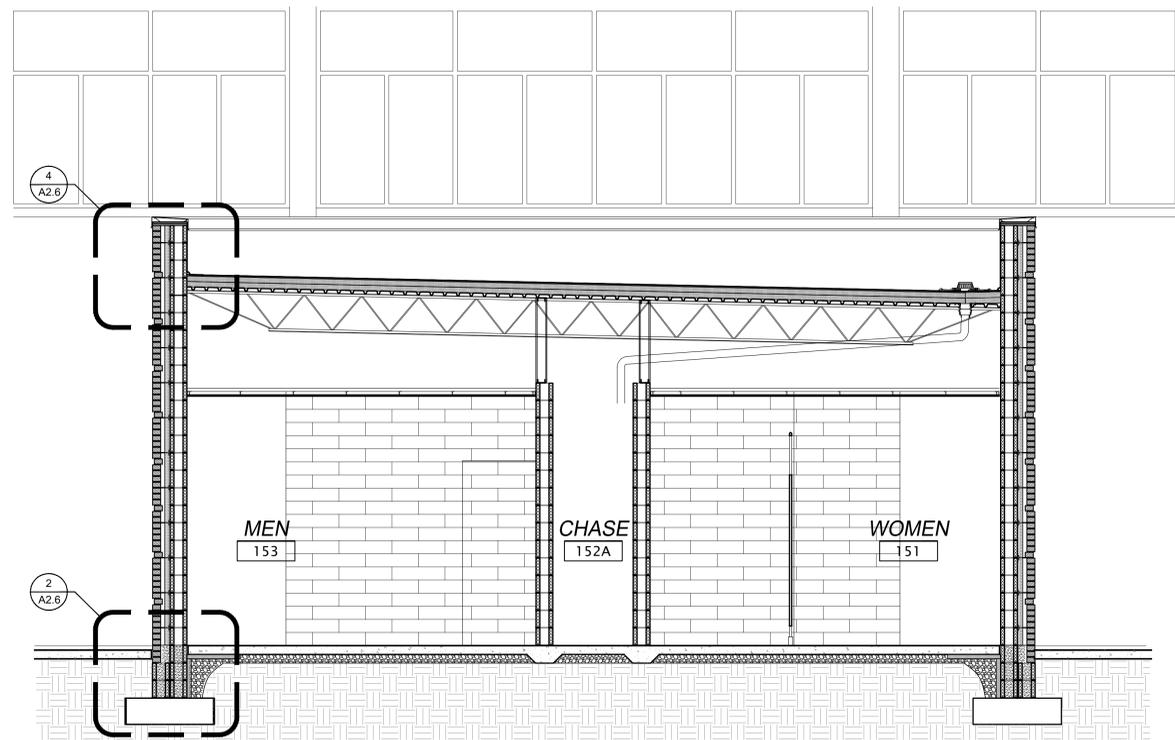
date 6/15/23



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1 East Elevation - Toilet Addition  
 A2.5 Scale: 3/8" = 1'-0"



2 Building Section - Toilet Addition  
 A2.5 Scale: 3/8" = 1'-0"

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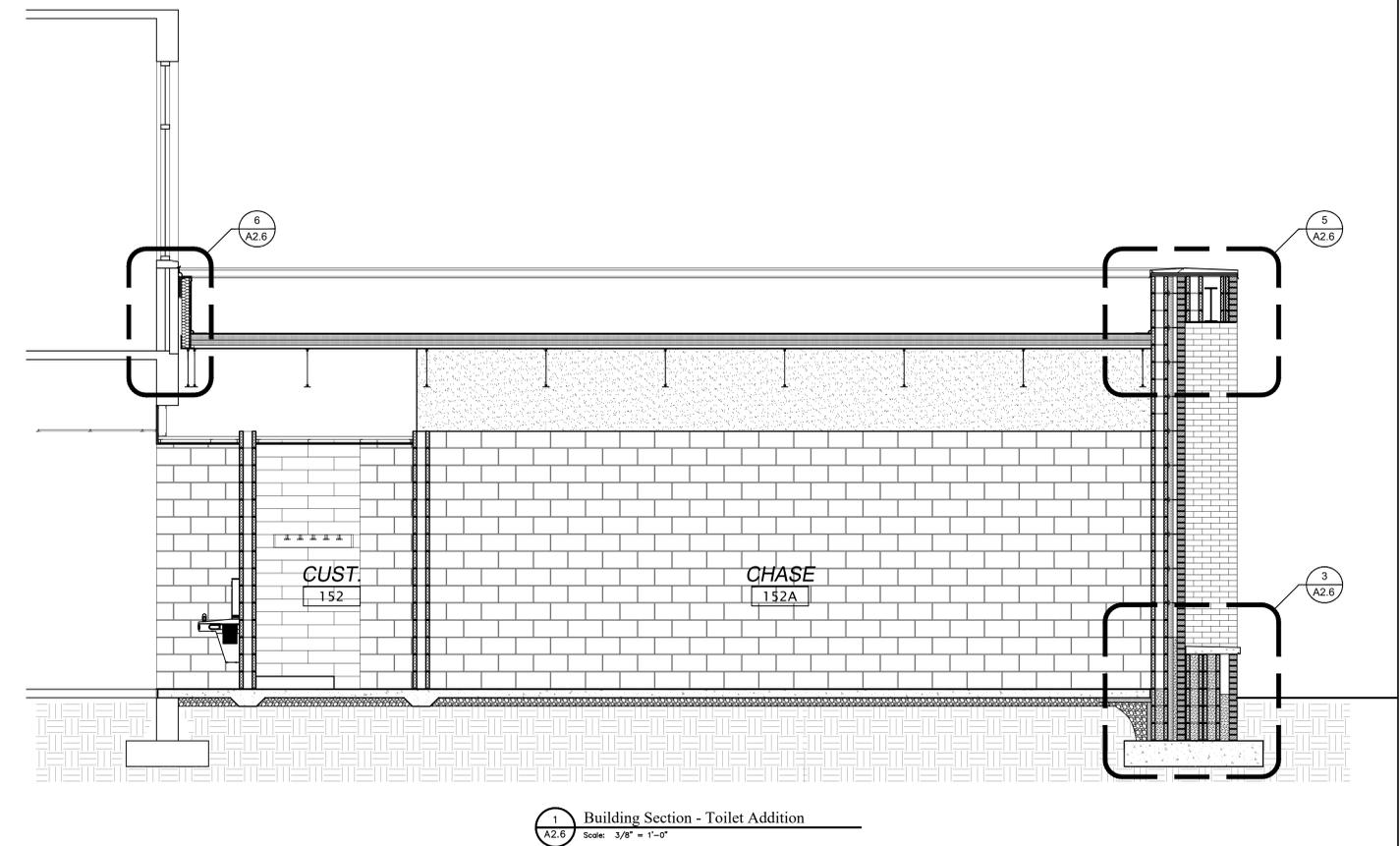
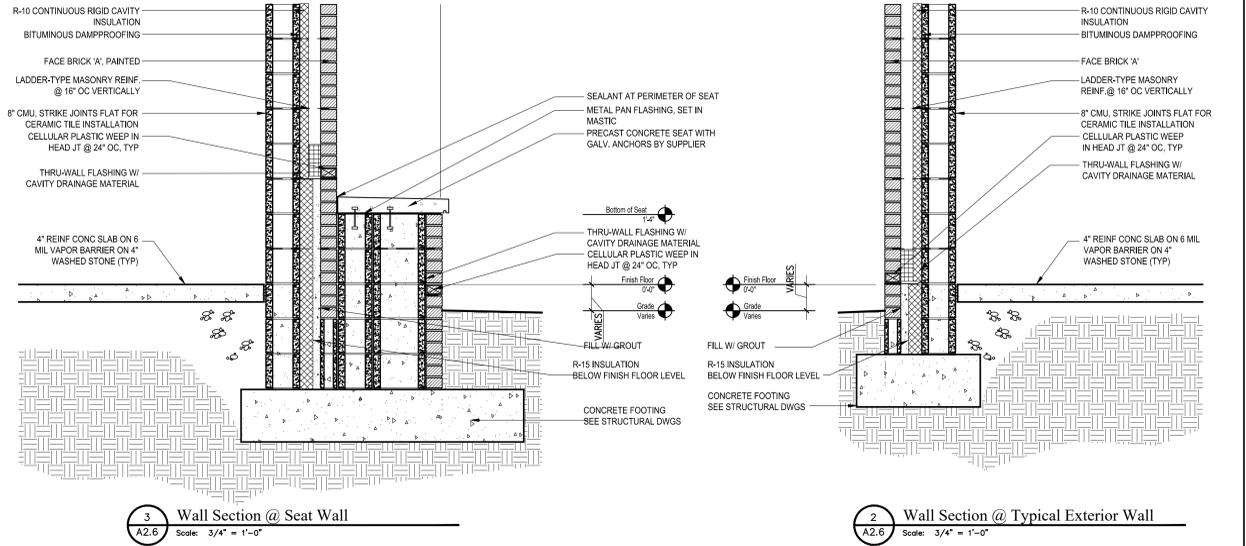
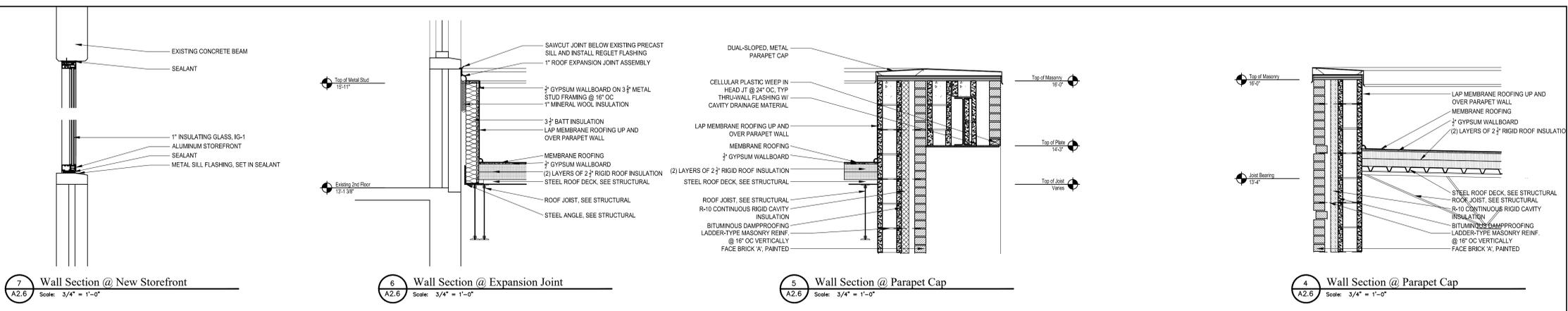
drawn	checked
dlm	kst

Toilet Addition  
 Exterior Elevations  
 and Sections

sheet  
**A2.5**

project no. 2231

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drawn: *gml* checked: *kt*

Toilet Addition  
Building  
Sections

sheet  
**A2.6**

project no. 2231

date 6/15/23



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drawn *gml* checked *lct*

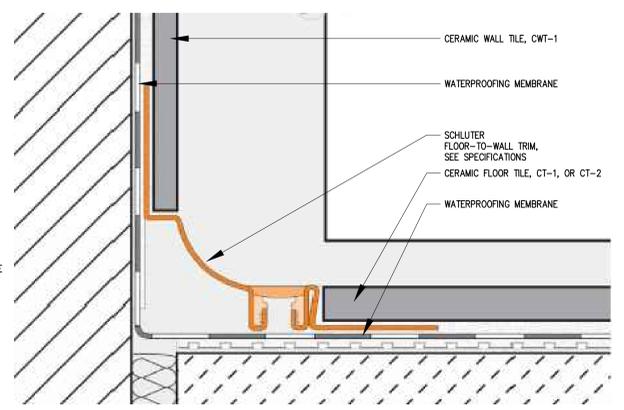
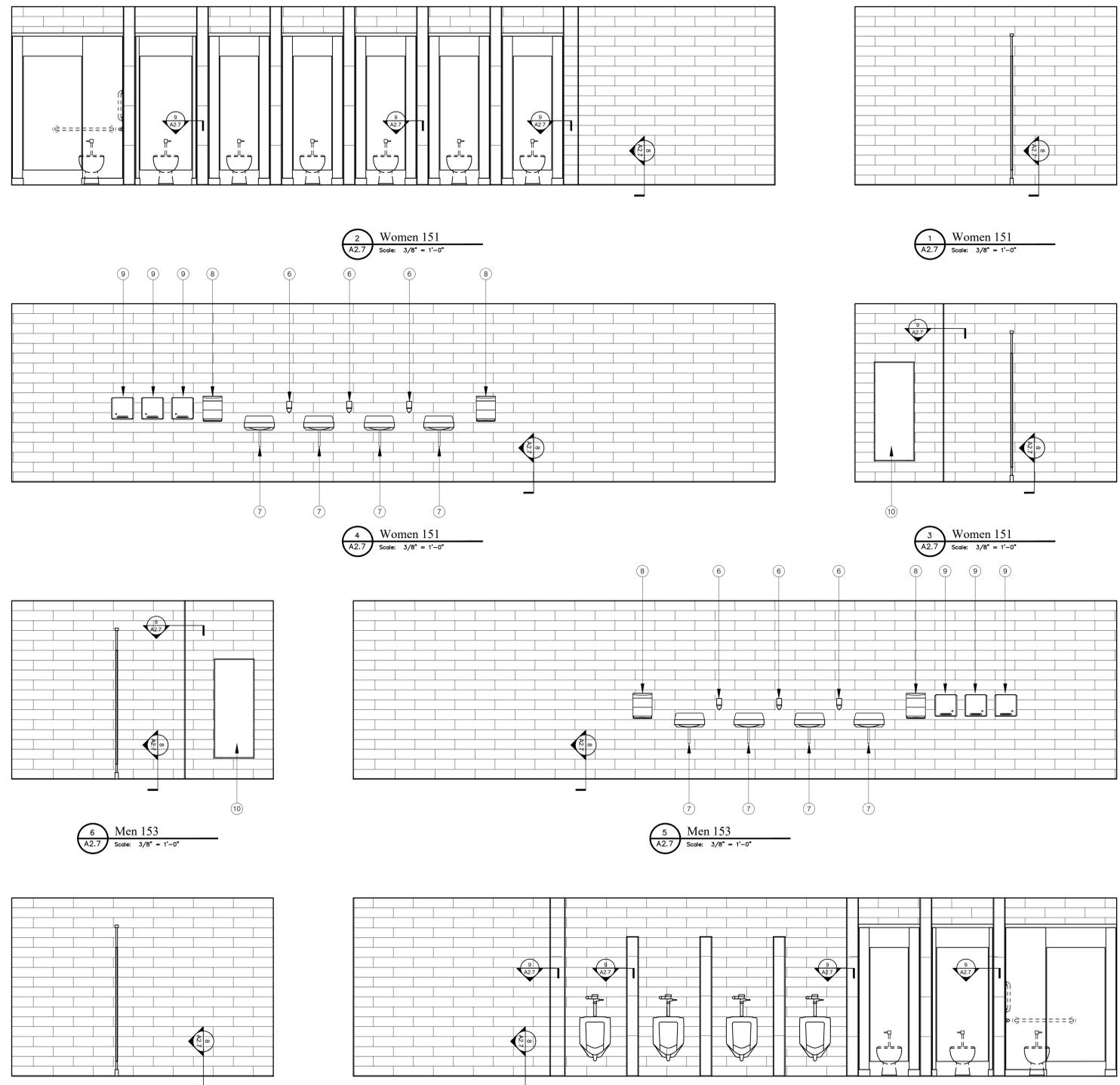
Toilet Addition  
 Interior  
 Elevations

sheet

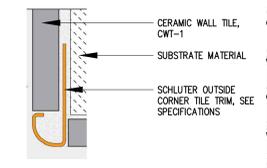
**A2.7**

project no. 2231

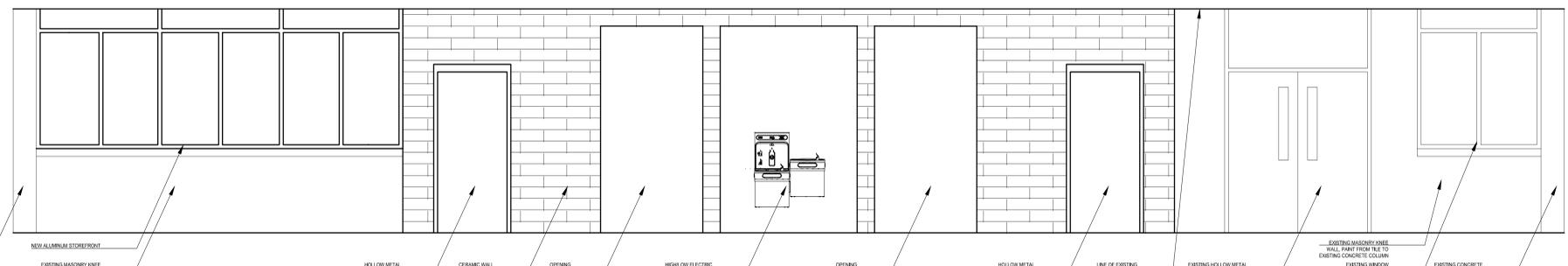
date 6/15/23



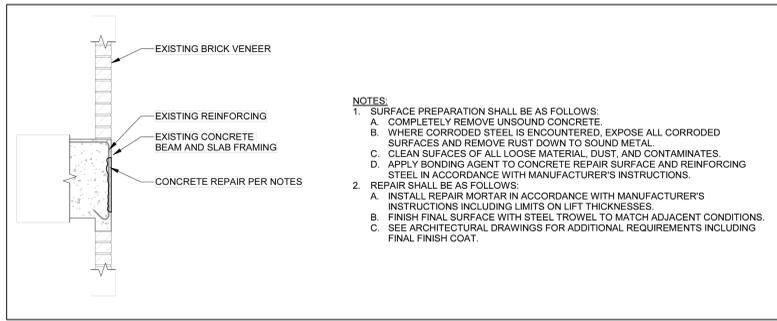
**8 Schluter Floor-to-Wall Trim Detail**  
 A2.7 Scale: Full Size



**9 Outside Wall Corner Schluter Trim Detail**  
 A2.7 Scale: Full Size

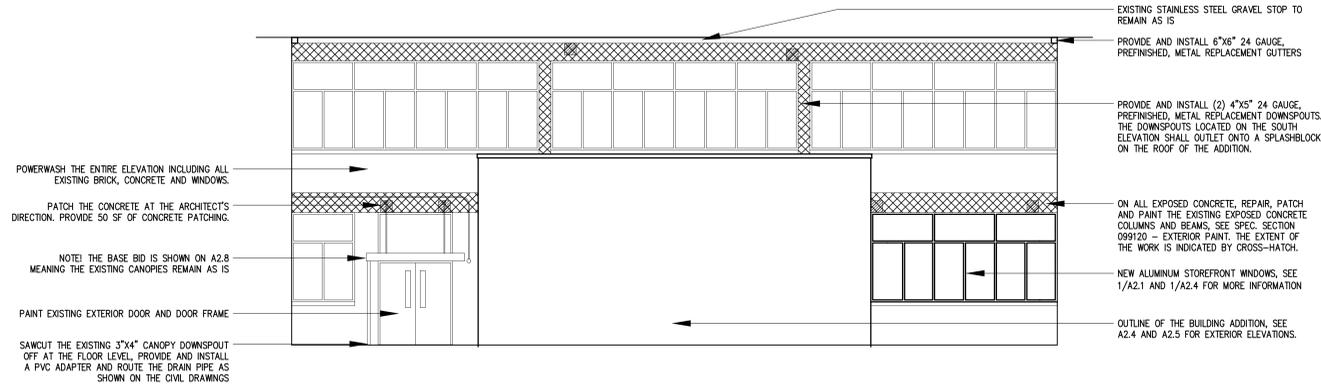


**9 Corridor 109**  
 A2.7 Scale: 3/8" = 1'-0"



- NOTES:**
- SURFACE PREPARATION SHALL BE AS FOLLOWS:
    - COMPLETELY REMOVE UNSOUND CONCRETE
    - WHERE CORRODED STEEL IS ENCOUNTERED, EXPOSE ALL CORRODED SURFACES AND REMOVE RUST DOWN TO SOUND METAL
    - CLEAN SURFACES OF ALL LOOSE MATERIAL, DUST, AND CONTAMINATES.
    - APPLY BONDING AGENT TO CONCRETE REPAIR SURFACE AND REINFORCING STEEL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
  - REPAIR SHALL BE AS FOLLOWS:
    - INSTALL REPAIR MORTAR IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS INCLUDING LIMITS ON LIFT THICKNESSES.
    - FINISH FINAL SURFACE WITH STEEL TROWEL TO MATCH ADJACENT CONDITIONS.
    - SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS INCLUDING FINAL FINISH COAT.

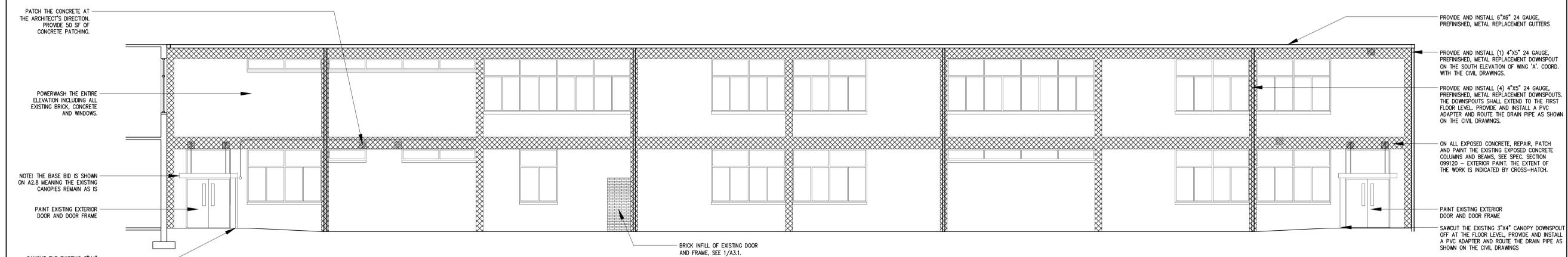
**4 Concrete Repair Detail and Notes**  
 A2.8 Scale: Not to Scale



- POWERWASH THE ENTIRE ELEVATION INCLUDING ALL EXISTING BRICK, CONCRETE AND WINDOWS.
- BRICK INFILL OF EXISTING DOOR AND FRAME, SEE 1/A3.1.
- NOTE! THE BASE BID IS SHOWN ON A2.8 MEANING THE EXISTING CANOPIES REMAIN AS IS
- PAINT EXISTING EXTERIOR DOOR AND DOOR FRAME
- SAWCUT THE EXISTING 3"x4" CANOPY DOWNSPOUT OFF AT THE FLOOR LEVEL, PROVIDE AND INSTALL A PVC ADAPTER AND ROUTE THE DRAIN PIPE AS SHOWN ON THE CIVIL DRAWINGS

- EXISTING STAINLESS STEEL GRAVEL STOP TO REMAIN AS IS
- PROVIDE AND INSTALL 6"x6" 24 GAUGE, PREFINISHED, METAL REPLACEMENT GUTTERS
- PROVIDE AND INSTALL (2) 4"x5" 24 GAUGE, PREFINISHED, METAL REPLACEMENT DOWNSPOUTS. THE DOWNSPOUTS LOCATED ON THE SOUTH ELEVATION SHALL OUTLET ONTO A SPLASHBLOCK ON THE ROOF OF THE ADDITION.
- ON ALL EXPOSED CONCRETE, REPAIR, PATCH AND PAINT THE EXISTING EXPOSED CONCRETE COLUMNS AND BEAMS, SEE SPEC. SECTION 099120 - EXTERIOR PAINT. THE EXTENT OF THE WORK IS INDICATED BY CROSS-HATCH.
- NEW ALUMINUM STOREFRONT WINDOWS, SEE 1/A2.1 AND 1/A2.4 FOR MORE INFORMATION
- OUTLINE OF THE BUILDING ADDITION, SEE A2.4 AND A2.5 FOR EXTERIOR ELEVATIONS.

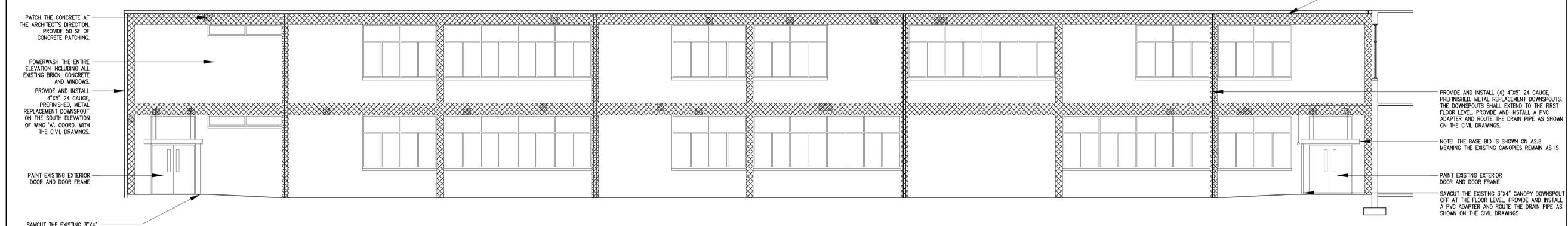
**1 South Courtyard Elevation**  
 A2.8 Scale: 3/16" = 1'-0"



- BRICK INFILL OF EXISTING DOOR AND FRAME, SEE 1/A3.1.
- NOTE! THE BASE BID IS SHOWN ON A2.8 MEANING THE EXISTING CANOPIES REMAIN AS IS
- PAINT EXISTING EXTERIOR DOOR AND DOOR FRAME
- SAWCUT THE EXISTING 3"x4" CANOPY DOWNSPOUT OFF AT THE FLOOR LEVEL, PROVIDE AND INSTALL A PVC ADAPTER AND ROUTE THE DRAIN PIPE AS SHOWN ON THE CIVIL DRAWINGS

- PROVIDE AND INSTALL 6"x6" 24 GAUGE, PREFINISHED, METAL REPLACEMENT GUTTERS
- PROVIDE AND INSTALL (1) 4"x5" 24 GAUGE, PREFINISHED, METAL REPLACEMENT DOWNSPOUT ON THE SOUTH ELEVATION OF WING 'A'. COORD. WITH THE CIVIL DRAWINGS.
- PROVIDE AND INSTALL (4) 4"x5" 24 GAUGE, PREFINISHED, METAL REPLACEMENT DOWNSPOUTS. THE DOWNSPOUTS SHALL EXTEND TO THE FIRST FLOOR LEVEL, PROVIDE AND INSTALL A PVC ADAPTER AND ROUTE THE DRAIN PIPE AS SHOWN ON THE CIVIL DRAWINGS.
- ON ALL EXPOSED CONCRETE, REPAIR, PATCH AND PAINT THE EXISTING EXPOSED CONCRETE COLUMNS AND BEAMS, SEE SPEC. SECTION 099120 - EXTERIOR PAINT. THE EXTENT OF THE WORK IS INDICATED BY CROSS-HATCH.
- PAINT EXISTING EXTERIOR DOOR AND DOOR FRAME
- SAWCUT THE EXISTING 3"x4" CANOPY DOWNSPOUT OFF AT THE FLOOR LEVEL, PROVIDE AND INSTALL A PVC ADAPTER AND ROUTE THE DRAIN PIPE AS SHOWN ON THE CIVIL DRAWINGS

**2 West Courtyard Elevation**  
 A2.8 Scale: 3/16" = 1'-0"



- BRICK INFILL OF EXISTING DOOR AND FRAME, SEE 1/A3.1.
- NOTE! THE BASE BID IS SHOWN ON A2.8 MEANING THE EXISTING CANOPIES REMAIN AS IS
- PAINT EXISTING EXTERIOR DOOR AND DOOR FRAME
- SAWCUT THE EXISTING 3"x4" CANOPY DOWNSPOUT OFF AT THE FLOOR LEVEL, PROVIDE AND INSTALL A PVC ADAPTER AND ROUTE THE DRAIN PIPE AS SHOWN ON THE CIVIL DRAWINGS

- PROVIDE AND INSTALL 6"x6" 24 GAUGE, PREFINISHED, METAL REPLACEMENT GUTTERS
- PROVIDE AND INSTALL (4) 4"x5" 24 GAUGE, PREFINISHED, METAL REPLACEMENT DOWNSPOUTS. THE DOWNSPOUTS SHALL EXTEND TO THE FIRST FLOOR LEVEL, PROVIDE AND INSTALL A PVC ADAPTER AND ROUTE THE DRAIN PIPE AS SHOWN ON THE CIVIL DRAWINGS.
- NOTE! THE BASE BID IS SHOWN ON A2.8 MEANING THE EXISTING CANOPIES REMAIN AS IS
- PAINT EXISTING EXTERIOR DOOR AND DOOR FRAME
- SAWCUT THE EXISTING 3"x4" CANOPY DOWNSPOUT OFF AT THE FLOOR LEVEL, PROVIDE AND INSTALL A PVC ADAPTER AND ROUTE THE DRAIN PIPE AS SHOWN ON THE CIVIL DRAWINGS

**3 East Courtyard Elevation**  
 A2.8 Scale: 3/16" = 1'-0"



**Orange High School  
 Renovations and Addition  
 Orange County Schools**  
 500 Orange High School Road  
 Hillsborough, North Carolina



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drawn: JETL checked: KST

Existing Courtyard Exterior Elevations

sheet

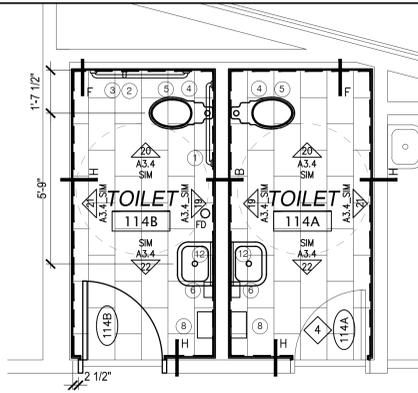
**A2.8**

project no. 2231

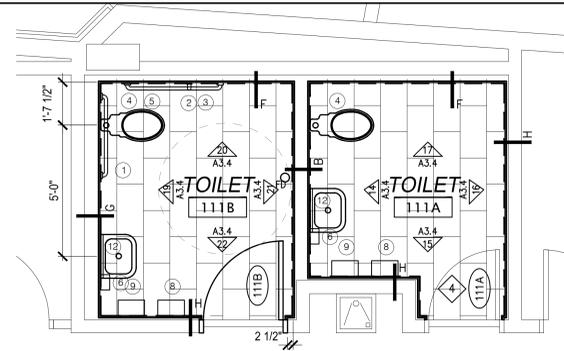
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**TOILET ACCESSORY SCHEDULE**

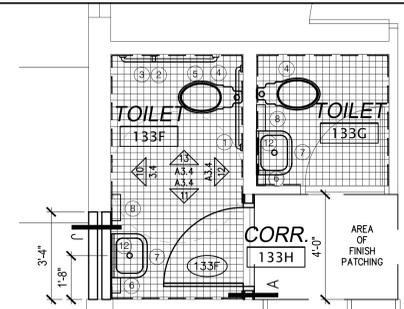
NO.	DESCRIPTION
1	36" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
2	42" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
3	18" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
4	MULTI-ROLL TOILET TISSUE DISPENSER (BY OWNER)
5	SANITARY NAPKIN DISPOSAL UNIT
6	WALL-MOUNTED SOAP DISPENSER (BY OWNER)
7	UNDER LAVATORY GAURDS
8	SURFACE-MOUNTED TOWEL DISPENSER (BY OWNER)
9	ELECTRIC HAND DRYER
10	24"X60" SURFACE-MOUNTED MIRROR WITH WELDED FRAME
11	UTILITY SHELF WITH MOP & BROOM HOLDERS
12	18"X36" SURFACE-MOUNTED MIRROR WITH WELDED FRAME
13	TOWEL HOOK
14	L-SHAPED SHOWER GRAB BAR
15	COMPACT FOLDING SHOWER SEAT
16	HEAVY DUTY SHOWER ROD
17	SHOWER CURTAIN
18	BODY WASH DISPENSER (BY OWNER)



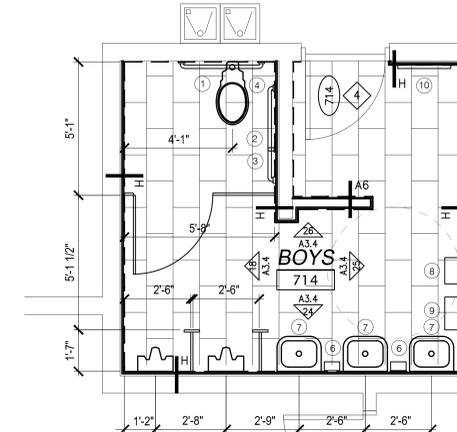
3 Enlarged Plan - Toilets 114A and 114B  
A3.1 Scale: 3/8" = 1'-0"



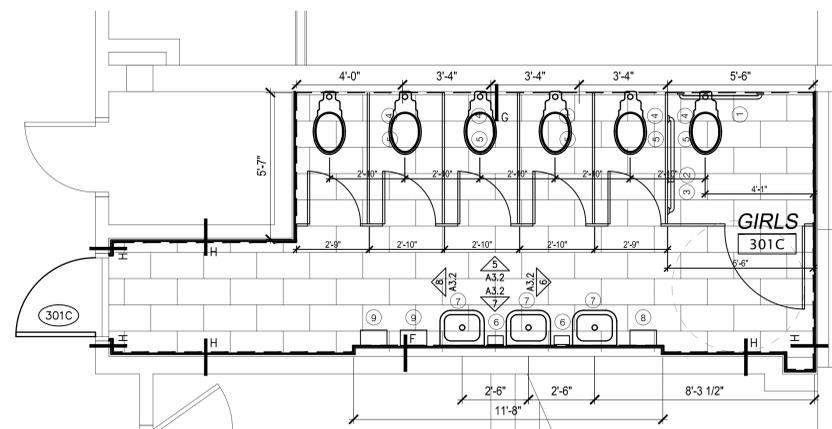
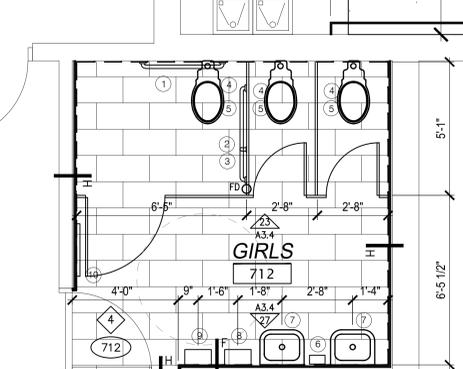
2 Enlarged Plan - Toilets 111A and 111B  
A3.1 Scale: 3/8" = 1'-0"



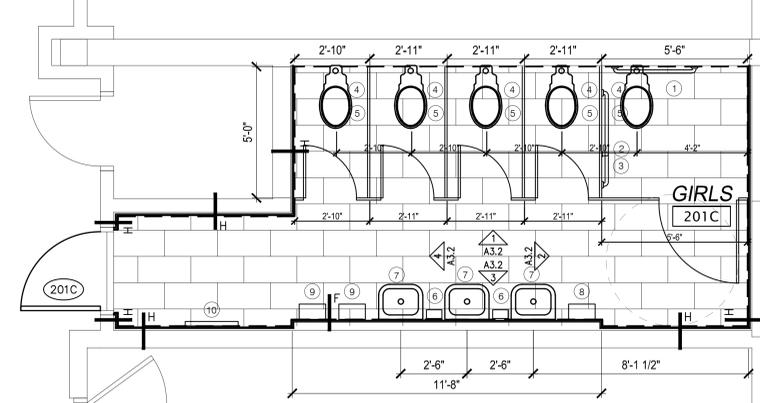
1 Enlarged Plan - Toilets 133F and 133G  
A3.1 Scale: 3/8" = 1'-0"



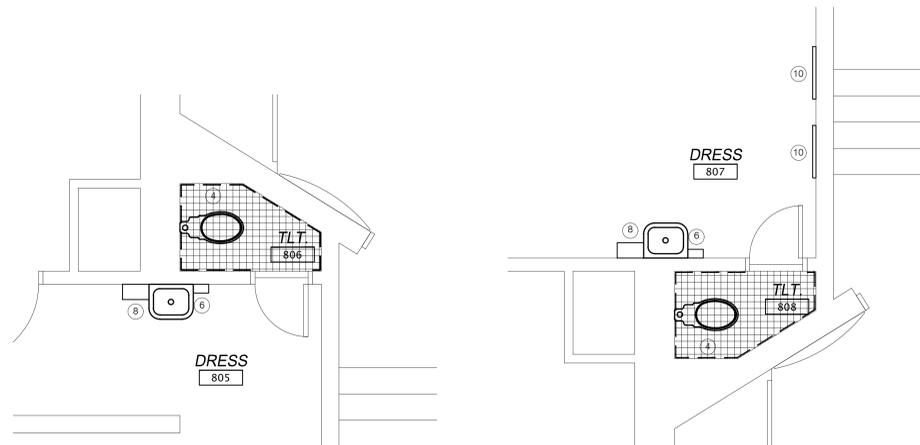
4 Enlarged Plan - Girls 712 & Boys 714  
A3.1 Scale: 3/8" = 1'-0"



6 Enlarged Plan - Girls 301C  
A3.1 Scale: 3/8" = 1'-0"

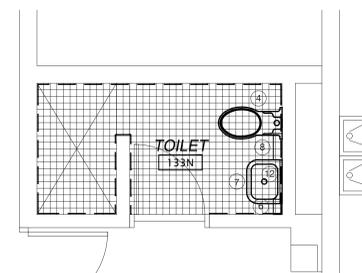


5 Enlarged Plan - Girls 201C  
A3.1 Scale: 3/8" = 1'-0"

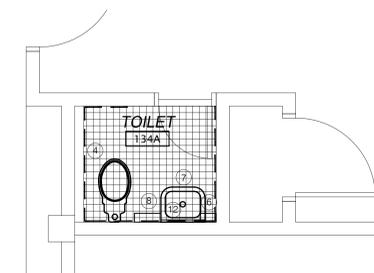


10 Enlarged Plan - Toilet 806  
A3.1 Scale: 3/8" = 1'-0"

9 Enlarged Plan - Toilet 808  
A3.1 Scale: 3/8" = 1'-0"



8 Enlarged Plan - Toilet 133N  
A3.1 Scale: 3/8" = 1'-0"



7 Enlarged Plan - Toilet 134A  
A3.1 Scale: 3/8" = 1'-0"



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drawn [initials] checked [initials]

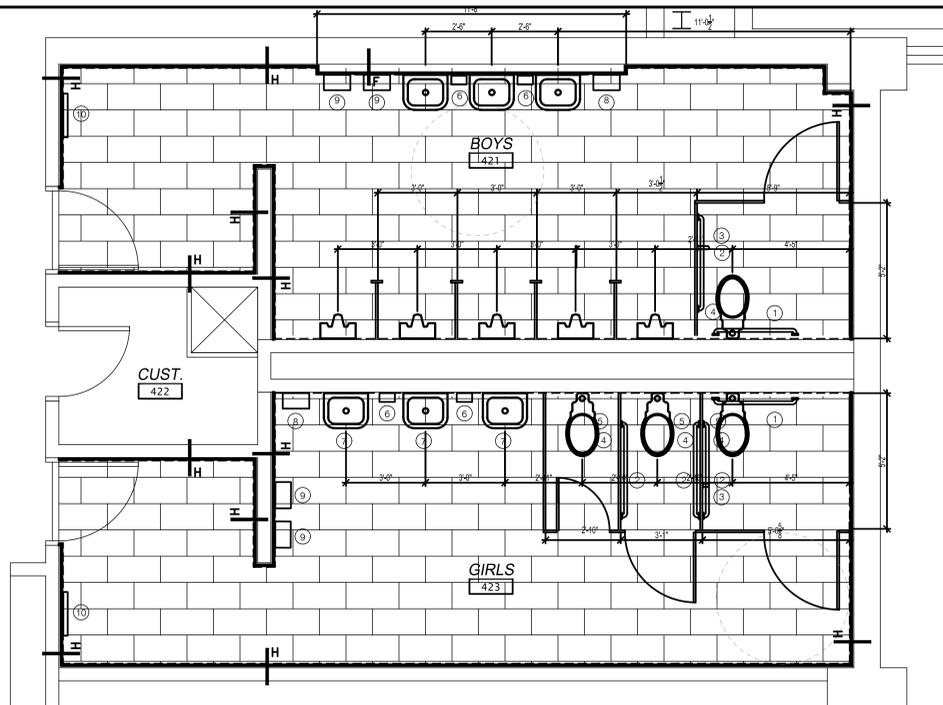
Enlarged  
First Floor  
Renovation Plans

sheet

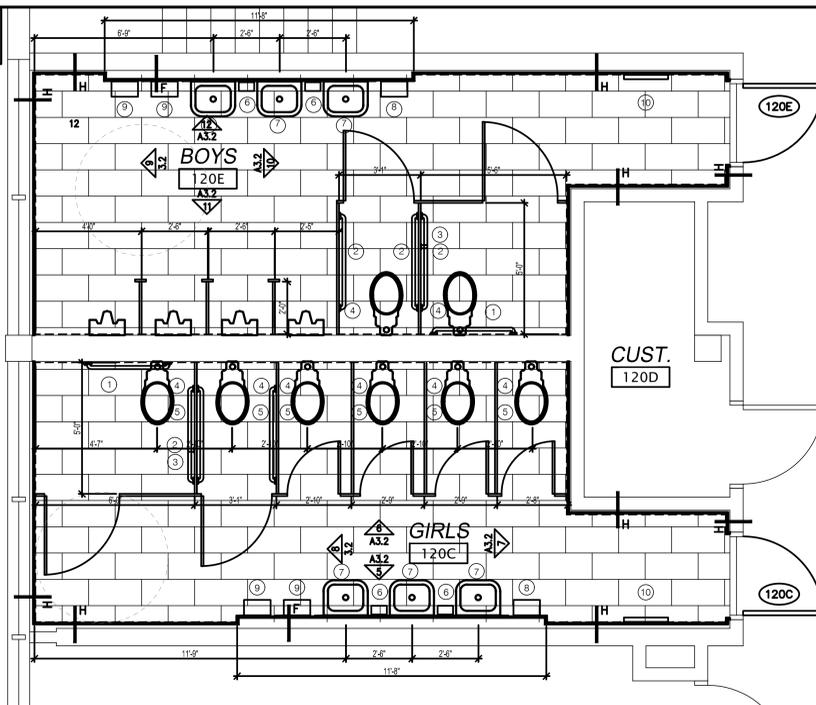
**A3.1**

project no. 2231

date 6/15/23



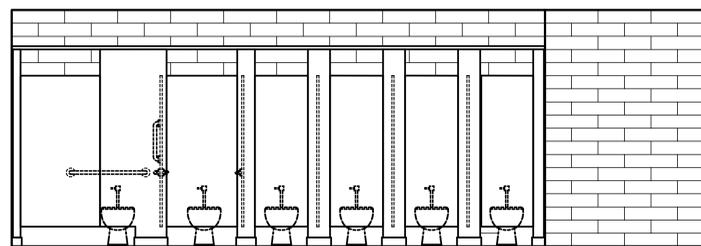
4 Enlarged Reno Plan - Boys 401/Girls 402  
A3.2 Scale: 3/8" = 1'-0"



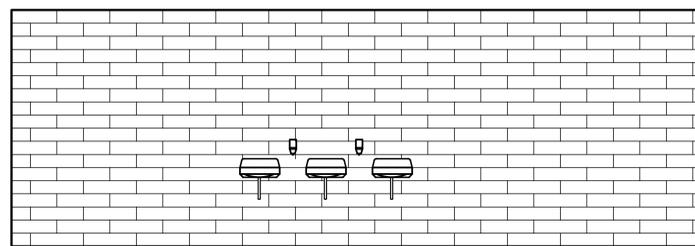
1 Enlarged Reno Plan - Girls 120C/Boys 120E  
A3.2 Scale: 3/8" = 1'-0"

TOILET ACCESSORY SCHEDULE

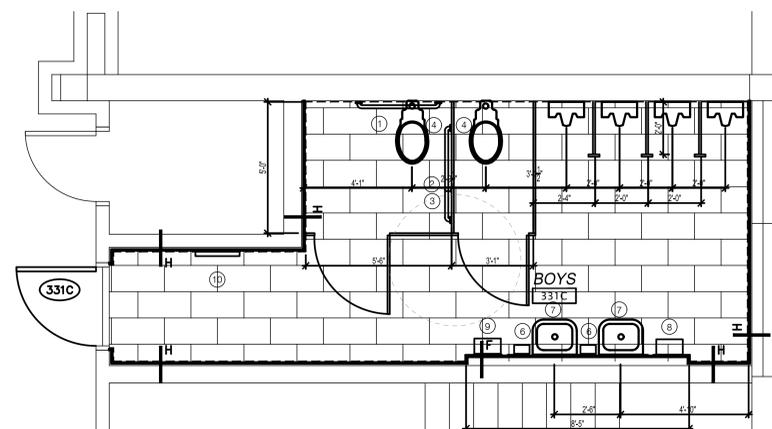
NO.	DESCRIPTION
1	36" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
2	42" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
3	18" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
4	MULTI-ROLL TOILET TISSUE DISPENSER (BY OWNER)
5	SANITARY NAPKIN DISPOSAL UNIT
6	WALL-MOUNTED SOAP DISPENSER (BY OWNER)
7	UNDER LAVATORY GAURDS
8	SURFACE-MOUNTED TOWEL DISPENSER (BY OWNER)
9	ELECTRIC HAND DRYER
10	24"X60" SURFACE-MOUNTED MIRROR WITH WELDED FRAME
11	UTILITY SHELF WITH MOP & BROOM HOLDERS
12	18"X36" SURFACE-MOUNTED MIRROR WITH WELDED FRAME
13	TOWEL HOOK
14	L-SHAPED SHOWER GRAB BAR
15	COMPACT FOLDING SHOWER SEAT
16	HEAVY DUTY SHOWER ROD
17	SHOWER CURTAIN
18	BODY WASH DISPENSER (BY OWNER)



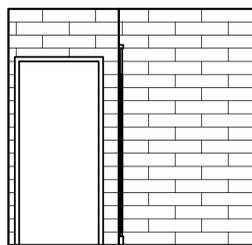
6 Girls 120C  
A3.2 Scale: 3/8" = 1'-0"



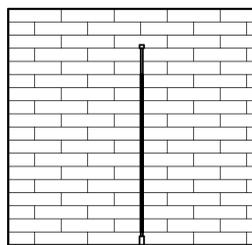
5 Girls 120C  
A3.2 Scale: 3/8" = 1'-0"



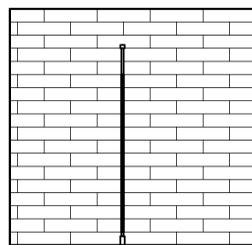
2 Enlarged Reno Plan - Boys 331C  
A3.2 Scale: 3/8" = 1'-0"



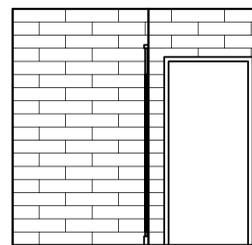
10 Boys 120E  
A3.2 Scale: 3/8" = 1'-0"



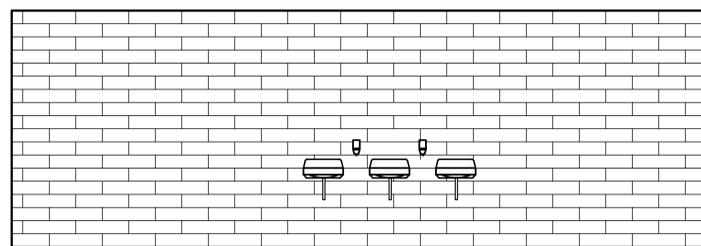
9 Boys 120E  
A3.2 Scale: 3/8" = 1'-0"



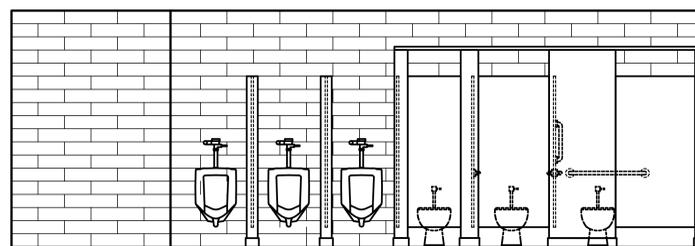
8 Girls 120C  
A3.2 Scale: 3/8" = 1'-0"



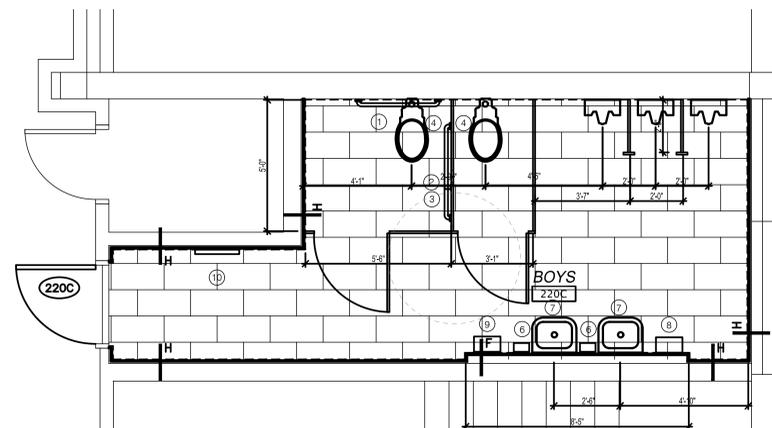
7 Girls 120C  
A3.2 Scale: 3/8" = 1'-0"



12 Boys 120E  
A3.2 Scale: 3/8" = 1'-0"



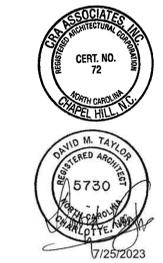
11 Boys 120E  
A3.2 Scale: 3/8" = 1'-0"



3 Enlarged Reno Plan - Boys 220C  
A3.2 Scale: 3/8" = 1'-0"



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Hillsborough, North Carolina



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drawn (11) checked (11)

Enlarged  
Second Floor  
Renovation Plans

sheet

A3.2

project no. 2231

date 6/15/23



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**TOILET ACCESSORY SCHEDULE**

NO.	DESCRIPTION
1	36" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
2	42" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
3	18" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
4	MULTI-ROLL TOILET TISSUE DISPENSER (BY OWNER)
5	SANITARY NAPKIN DISPOSAL UNIT
6	WALL-MOUNTED SOAP DISPENSER (BY OWNER)
7	UNDER LAVATORY GAURDS
8	SURFACE-MOUNTED TOWEL DISPENSER (BY OWNER)
9	ELECTRIC HAND DRYER
10	24"x60" SURFACE-MOUNTED MIRROR WITH WELDED FRAME
11	UTILITY SHELF WITH MOP & BROOM HOLDERS
12	18"x36" SURFACE-MOUNTED MIRROR WITH WELDED FRAME
13	TOWEL HOOK
14	L-SHAPED SHOWER GRAB BAR
15	COMPACT FOLDING SHOWER SEAT
16	HEAVY DUTY SHOWER ROD
17	SHOWER CURTAIN
18	BODY WASH DISPENSER (BY OWNER)



Orange High School  
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drawn (ml) checked (ml)

Enlarged Second Floor Renovation Plans

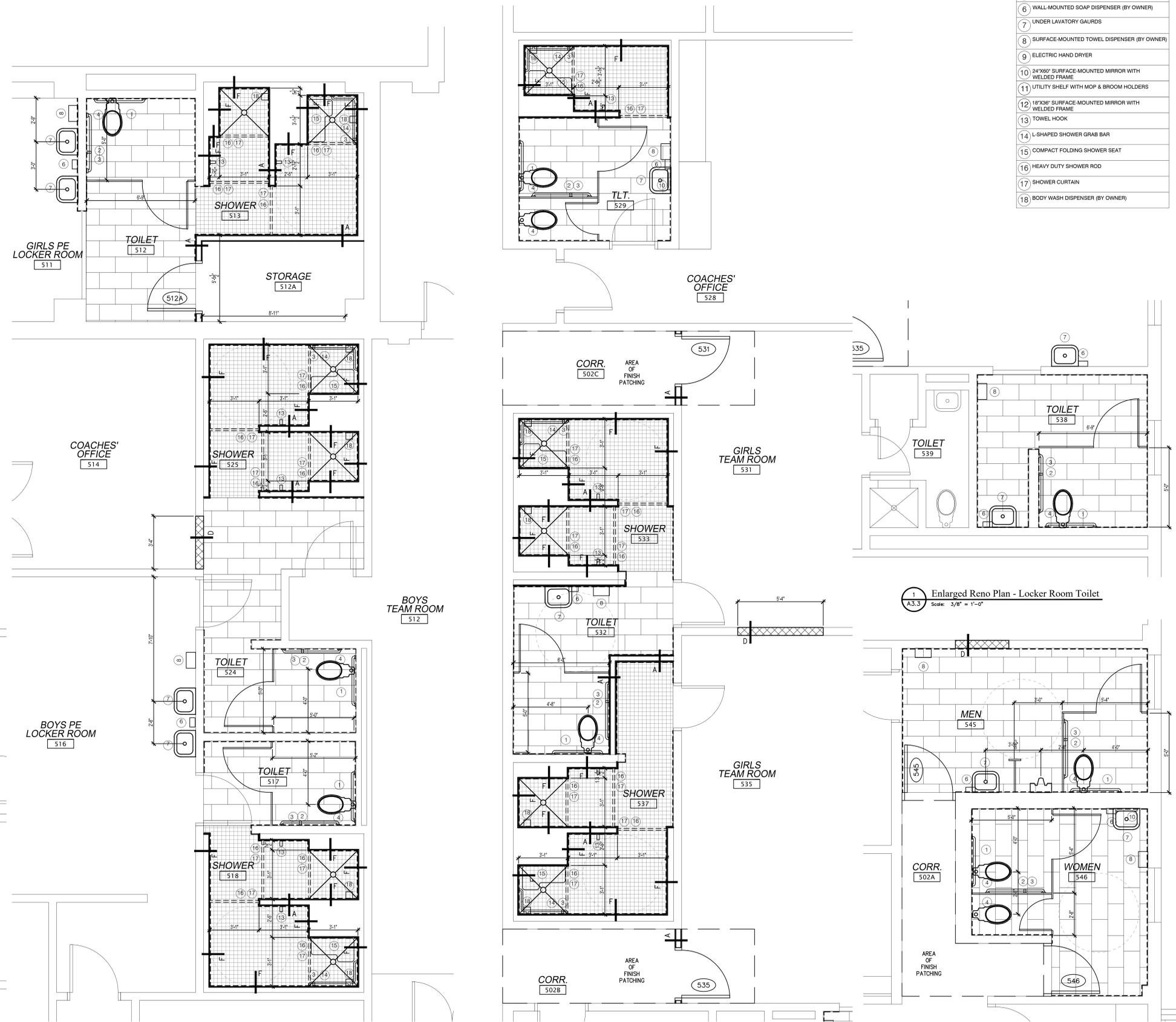
sheet

A3.3

project no. 2231

date 6/15/23

Construction Document Progress Set



5 Enlarged Reno Plan - Men 238/Women 239  
 A3.3 Scale: 3/8" = 1'-0"

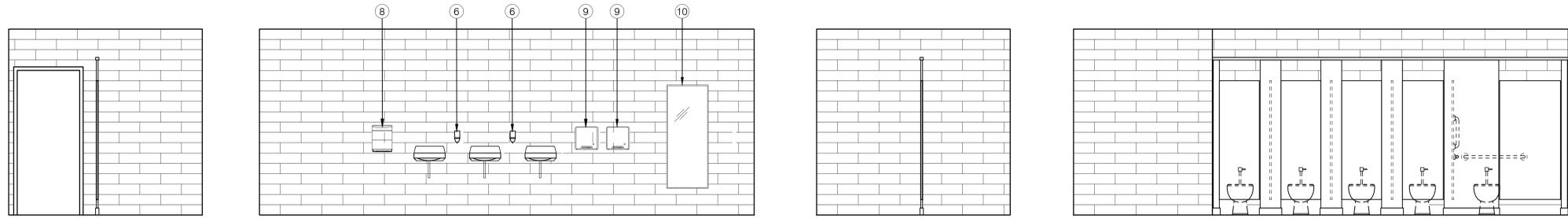
4 Enlarged Reno Plan - Locker Room Toilets  
 A3.3 Scale: 3/8" = 1'-0"

3 Enlarged Reno Plan - Locker Room Toilets  
 A3.3 Scale: 3/8" = 1'-0"

2 Enlarged Reno Plan - Gym Public Toilets  
 A3.3 Scale: 3/8" = 1'-0"

**TOILET ACCESSORY SCHEDULE**

NO.	DESCRIPTION
1	36" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
2	42" LONG 1 1/4" DIA. WALL MOUNTED GRAB BAR
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4	MULTI-ROLL TOILET TISSUE DISPENSER (BY OWNER)
5	SANITARY NAPKIN DISPOSAL UNIT
6	WALL-MOUNTED SOAP DISPENSER (BY OWNER)
7	UNDER LAVATORY GAURDS
8	SURFACE-MOUNTED TOWEL DISPENSER (BY OWNER)
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16	HEAVY DUTY SHOWER ROD
17	SHOWER CURTAIN
18	BODY WASH DISPENSER (BY OWNER)

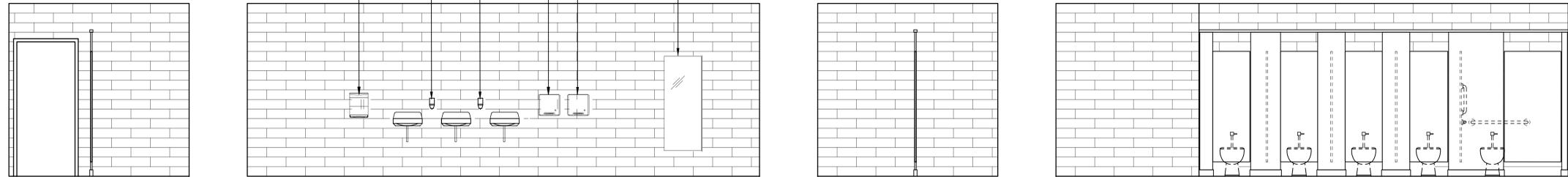


4 Girls 201C  
A3.4 Scale: 3/8" = 1'-0"

3 Girls 201C  
A3.4 Scale: 3/8" = 1'-0"

2 Girls 201C  
A3.4 Scale: 3/8" = 1'-0"

1 Girls 201C  
A3.4 Scale: 3/8" = 1'-0"

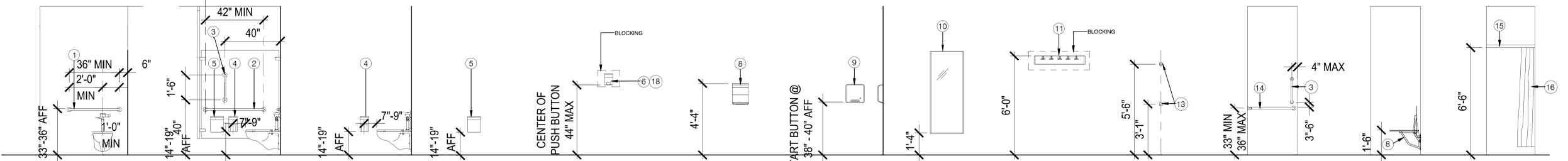


8 Girls 301C  
A3.4 Scale: 3/8" = 1'-0"

7 Girls 301C  
A3.4 Scale: 3/8" = 1'-0"

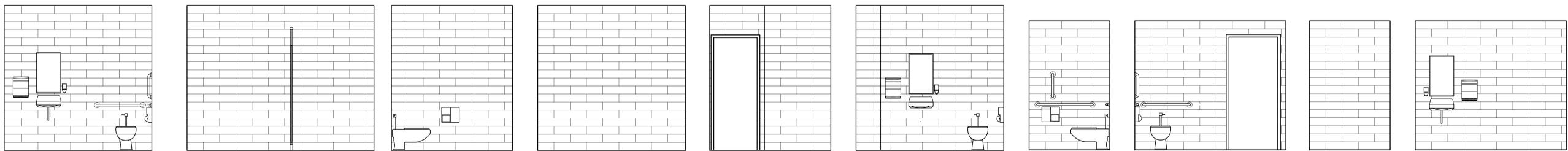
6 Girls 301C  
A3.4 Scale: 3/8" = 1'-0"

5 Girls 301C  
A3.4 Scale: 3/8" = 1'-0"



- 1 36" LONG 1 1/4" DIA. GRAB BAR
- 2 42" LONG 1 1/4" DIA. GRAB BAR
- 3 18" LONG 1 1/4" DIA. GRAB BAR
- 4 MULTI-ROLL TOILET TISSUE DISPENSER (FURNISHED BY OWNER, INSTALLED BY GC)
- 5 SURFACE MOUNTED SANITARY NAPKIN DISP
- 6 WALL-MOUNTED SOAP/BODY WASH DISPENSER (FURNISHED BY OWNER INSTALLED BY GC)
- 7 18" X 36" SURFACE-MOUNTED MIRROR WITH WELDED FRAME
- 8 SURFACE-MOUNTED TOWEL DISPENSER (FURNISHED BY OWNER INSTALLED BY GC)
- 9 HAND DRYERS
- 10 SURFACE-MOUNTED MIRROR WITH TRIM
- 11 UTILITY SHELF WITH MOP & BROOM HOLDERS
- 12 18" X 36" SURFACE-MOUNTED MIRROR WITH WELDED FRAME
- 13 SURFACE MOUNTED ROBE HOOKS (2 EA. LOCATION)
- 14 L-SHAPED 1 1/4" Ø GRAB BAR
- 15 COMPACT FOLDING SHOWER SEAT
- 16 HEAVY DUTY SHOWER ROD
- 17 SHOWER CURTAIN

9 Toilet Accessory Mounting Heights  
A3.4 Scale: 3/8" = 1'-0"



19 Toilet 111B  
A3.4 Scale: 3/8" = 1'-0"

18 Boys 714  
A3.4 Scale: 3/8" = 1'-0"

17 Toilet 111A  
A3.4 Scale: 3/8" = 1'-0"

16 Toilet 111A  
A3.4 Scale: 3/8" = 1'-0"

15 Toilet 111A  
A3.4 Scale: 3/8" = 1'-0"

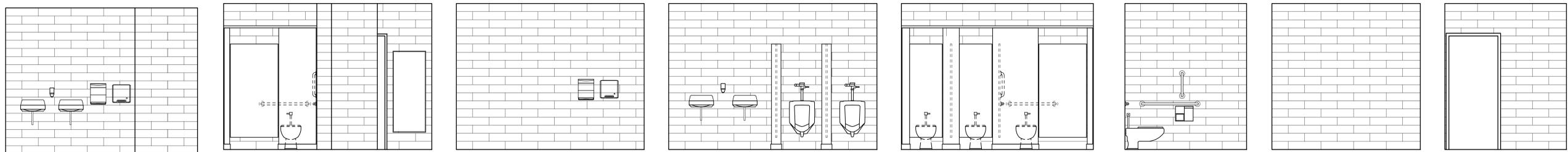
14 Toilet 111A  
A3.4 Scale: 3/8" = 1'-0"

13 Toilet 113F  
A3.4 Scale: 3/8" = 1'-0"

12 Toilet 113F  
A3.4 Scale: 3/8" = 1'-0"

11 Toilet 113F  
A3.4 Scale: 3/8" = 1'-0"

10 Toilet 113F  
A3.4 Scale: 3/8" = 1'-0"



27 Girls 712  
A3.4 Scale: 3/8" = 1'-0"

26 Boys 714  
A3.4 Scale: 3/8" = 1'-0"

25 Boys 714  
A3.4 Scale: 3/8" = 1'-0"

24 Boys 714  
A3.4 Scale: 3/8" = 1'-0"

23 Girls 712  
A3.4 Scale: 3/8" = 1'-0"

22 Toilet 111B  
A3.4 Scale: 3/8" = 1'-0"

21 Toilet 111B  
A3.4 Scale: 3/8" = 1'-0"

20 Toilet 111B  
A3.4 Scale: 3/8" = 1'-0"



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drawn [initials] checked [initials]  
Enlarged  
First Floor  
Interior Elevations

sheet  
**A3.4**

project no. 2231

date 6/15/23

CEILING SYMBOL LEGEND	
	2' x 2' GRID
	SMOOTH FINISH GYP. BD. CEILING, SEE CEILING TYPES KEY
	2' x 4' LIGHTING
	1' x 4' LIGHTING
	CAN LIGHT
	SUPPLY DIFFUSER
	RETURN AIR GRILLE
	CEILING TYPE AND HEIGHT TAG

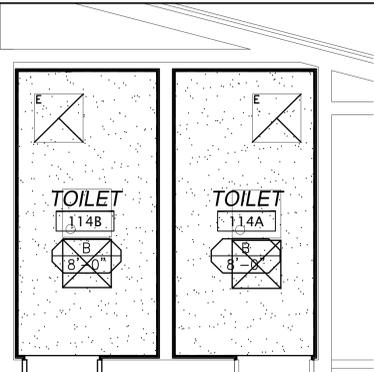
  

CEILING MATERIAL KEY	
TYPE	DESCRIPTION
A	SUSPENDED 2' x 2', LAY-IN ACOUSTICAL PANELS, SEE SPECS.
B	SUSPENDED 5/8" GYP. BD., PAINTED
E	EXPOSED STRUCTURE AND M/E/P/PP SYSTEMS, PAINTED
EX.	EXISTING CEILING TO REMAIN, PATCH ALL HOLES AND DAMAGED AREAS TO MATCH EXISTING FINISH, PAINTED

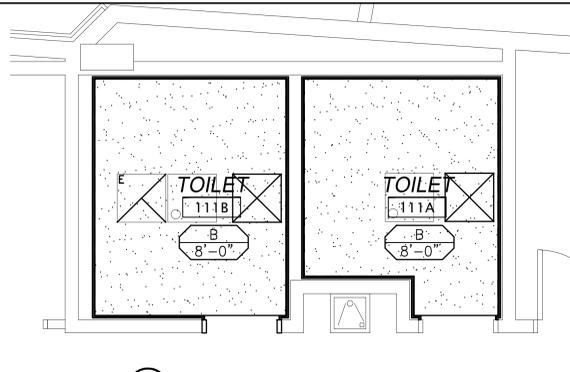
  

NOTES:

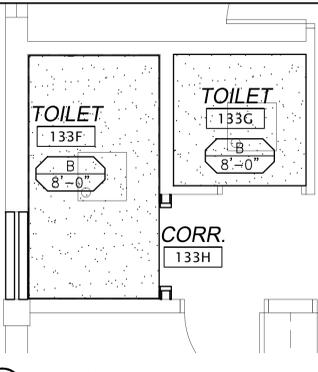
- REFER TO SPECIFICATIONS FOR COMPLETE CEILING DESCRIPTIONS.
- THE CONTRACTOR SHALL PROVIDE COORDINATION WITH OTHER TRADES TO INSURE ADHERENCE TO CEILING HEIGHTS INDICATED. PROPER CLEARANCES SHALL BE PROVIDED BETWEEN MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION ITEMS ABOVE CEILING. THE CONSTRUCTION MANAGER SHALL CONDUCT A PRE-INSTALLATION COORDINATION MEETING WITH AUTHORIZED REPRESENTATIVES OF ALL TRADES PRIOR TO THE INSTALLATION OF ABOVE CEILING ITEMS.
- THE CONTRACTOR SHALL COORDINATE LOCATIONS OF LIGHT FIXTURES, MECH. SUPPLY DIFFUSERS AND RETURN AIR GRILLES WITH CEILING GRID INSTALLATION. SEE ELECTRICAL DRAWINGS FOR LIGHT FIXTURES. SEE MECHANICAL DRAWINGS FOR SUPPLY DIFFUSERS, RETURN AIR GRILLES, ETC.



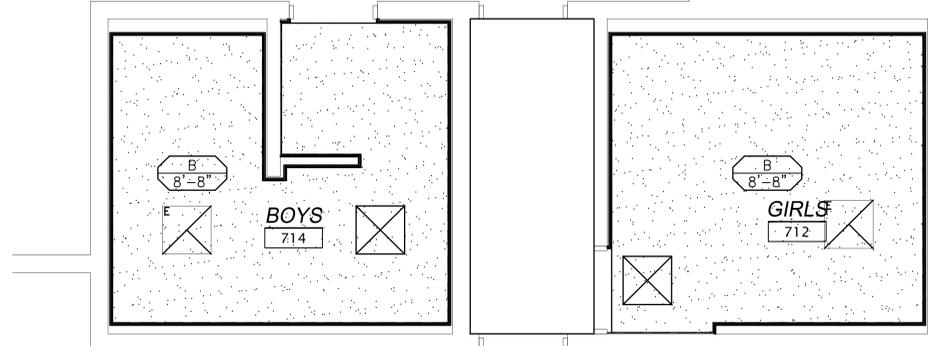
3 Enlarged Clg. Plan - Toilets 114A and 114B  
A3.5 Scale: 3/8" = 1'-0"



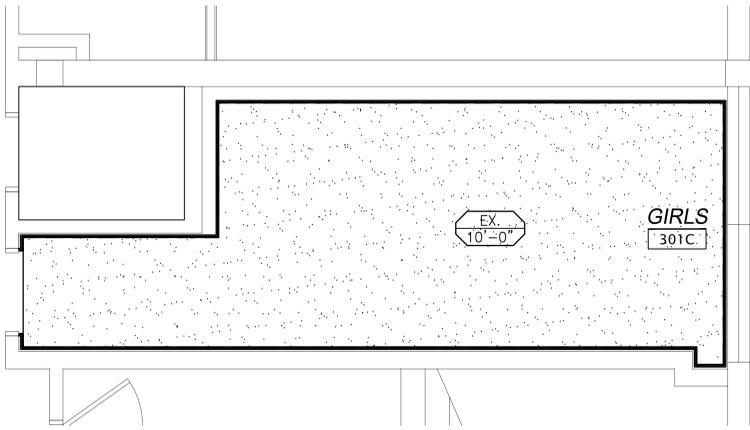
2 Enlarged Clg. Plan - Toilets 111A and 111B  
A3.5 Scale: 3/8" = 1'-0"



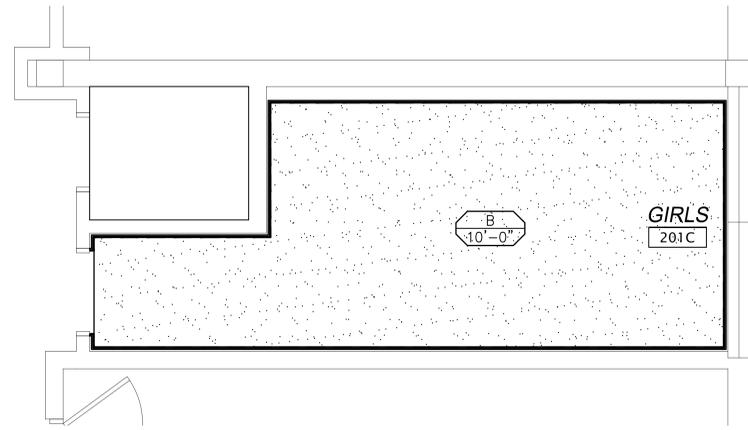
1 Enlarged Clg. Plan - Toilets 133F and 133G  
A3.5 Scale: 3/8" = 1'-0"



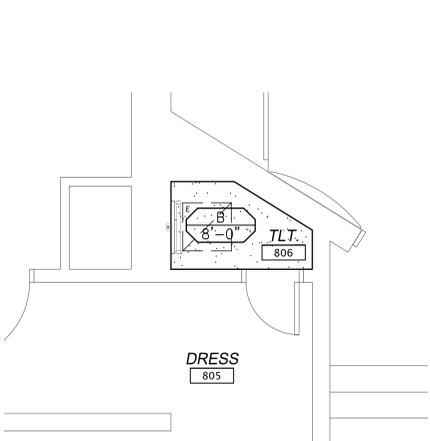
4 Enlarged Clg. Plan - Girls 712 & Boys 714  
A3.5 Scale: 3/8" = 1'-0"



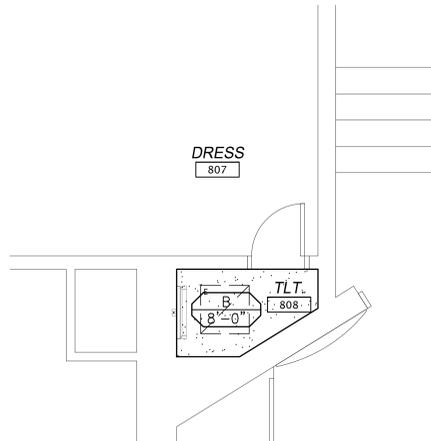
6 Enlarged Ceiling Plan - Girls 301C  
A3.5 Scale: 3/8" = 1'-0"



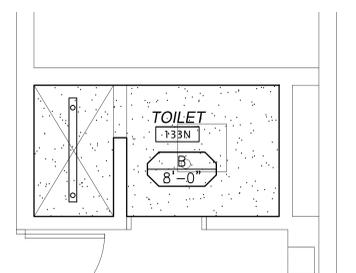
5 Enlarged Ceiling Plan - Girls 201C  
A3.5 Scale: 3/8" = 1'-0"



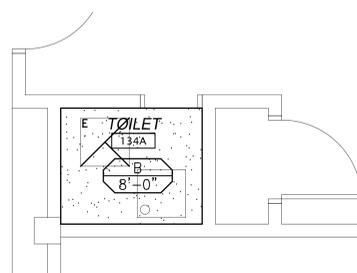
10 Enlarged Ceiling Plan - Toilet 806  
A3.5 Scale: 3/8" = 1'-0"



9 Enlarged Ceiling Plan - Toilet 808  
A3.5 Scale: 3/8" = 1'-0"



8 Enlarged Ceiling Plan - Toilet 133N  
A3.5 Scale: 3/8" = 1'-0"



7 Enlarged Ceiling Plan - Toilet 134A  
A3.5 Scale: 3/8" = 1'-0"



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drawn (ml) checked (ml)

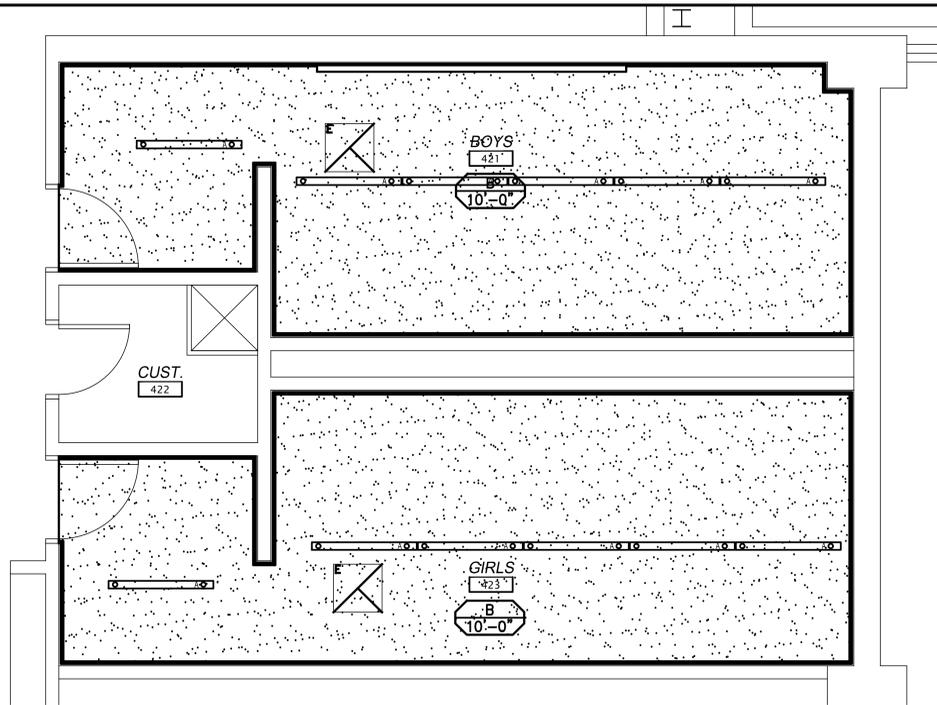
Enlarged  
First Floor  
Reno Ceiling Plans

sheet

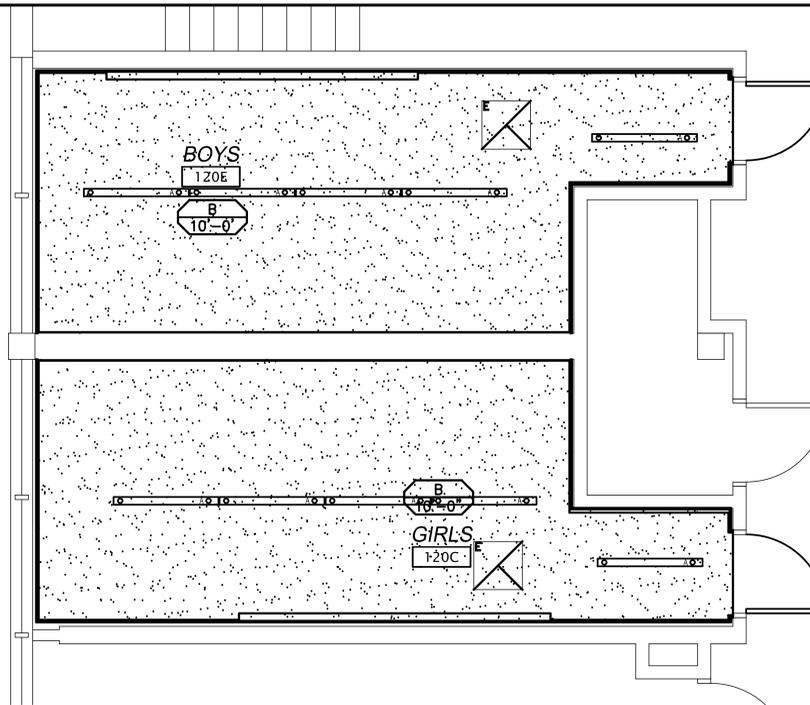
A3.5

project no. 2231

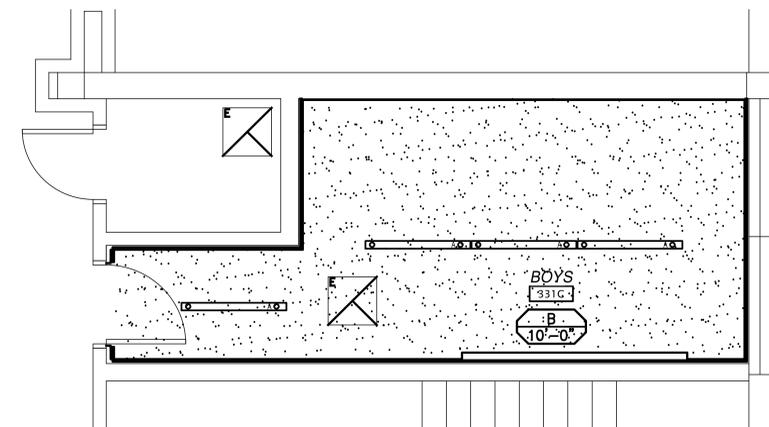
date 6/15/23



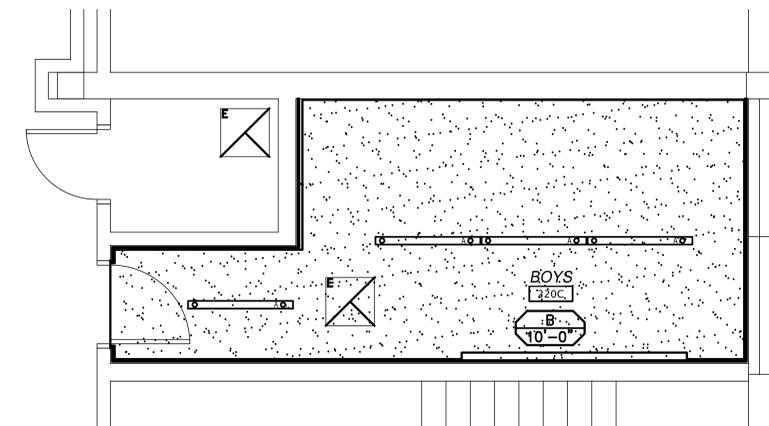
4 Enlarged Reno Ceiling Plan - Boys 401/Girls 402  
A3.6 Scale: 3/8" = 1'-0"



1 Enlarged Reno Ceiling Plan - Girls 120C/Boys 120E  
A3.6 Scale: 3/8" = 1'-0"



2 Enlarged Reno Ceiling Plan - Boys 331C  
A3.6 Scale: 3/8" = 1'-0"



3 Enlarged Reno Ceiling Plan - Boys 220C  
A3.6 Scale: 3/8" = 1'-0"

CEILING SYMBOL LEGEND	
	2' x 2' GRID
	SMOOTH FINISH GYP. BD. CEILING, SEE CEILING TYPES KEY
	2' x 4' LIGHTING
	1' x 4' LIGHTING
	CAN LIGHT
	SUPPLY DIFFUSER
	RETURN AIR GRILLE
	CEILING TYPE AND HEIGHT TAG

CEILING MATERIAL KEY	
TYPE	DESCRIPTION
A	SUSPENDED 2' x 2', LAY-IN ACOUSTICAL PANELS, SEE SPECS.
B	SUSPENDED 5/8" GYP. BD., PAINTED
E	EXPOSED STRUCTURE AND M/E/P SYSTEMS, PAINTED
EX.	EXISTING CEILING TO REMAIN, PATCH ALL HOLES, DAMAGED AREAS TO MATCH EXISTING FINISH

NOTES:

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- THE CONTRACTOR SHALL PROVIDE COORDINATION WITH OTHER TRADES TO INSURE ADHERENCE TO CEILING HEIGHTS INDICATED. PROPER CLEARANCES SHALL BE PROVIDED BETWEEN MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION ITEMS ABOVE CEILING. THE CONSTRUCTION MANAGER SHALL CONDUCT A PRE-INSTALLATION COORDINATION MEETING WITH AUTHORIZED REPRESENTATIVES OF ALL TRADES PRIOR TO THE INSTALLATION OF ABOVE CEILING ITEMS.
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drawn	checked
(initials)	(initials)

Enlarged  
Second Floor  
Reno Ceiling Plans

sheet

A3.6

project no. 2231

date 6/15/23



CEILING SYMBOL LEGEND	
	2' x 2' GRID
	SMOOTH FINISH GYP. BD. CEILING, SEE CEILING TYPES KEY
	2' x 4' LIGHTING
	1' x 4' LIGHTING
	CAN LIGHT
	SUPPLY DIFFUSER
	RETURN AIR GRILLE
	CEILING TYPE AND HEIGHT TAG

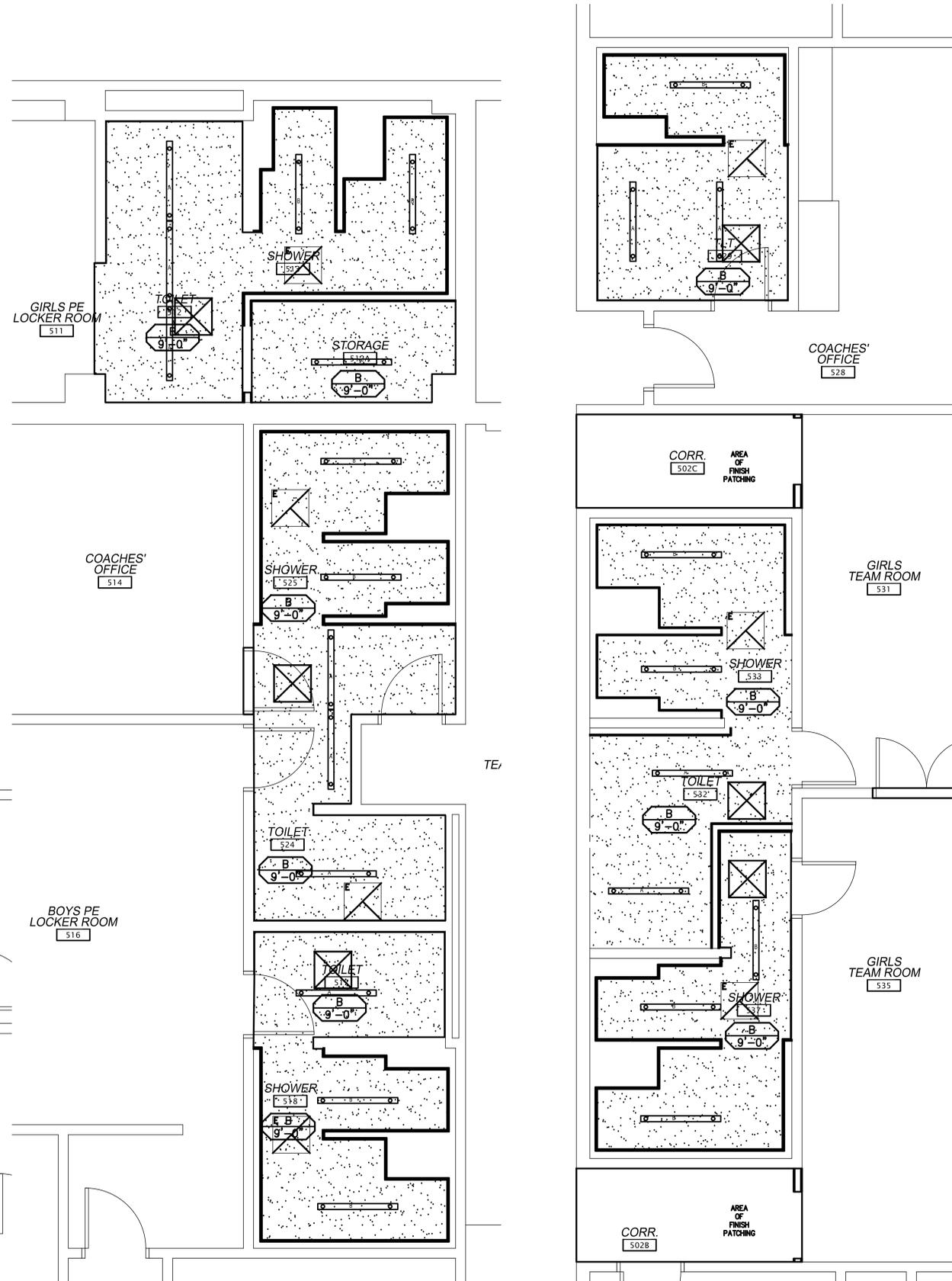
  

CEILING MATERIAL KEY	
TYPE	DESCRIPTION
A	SUSPENDED 2' x 2', LAY-IN ACOUSTICAL PANELS, SEE SPECS.
B	SUSPENDED 5/8" GYP. BD., PAINTED
E	EXPOSED STRUCTURE AND M/E/P/FP SYSTEMS, PAINTED
EX.	EXISTING CEILING TO REMAIN, PATCH ALL HOLES, DAMAGED AREAS TO MATCH EXISTING FINISH

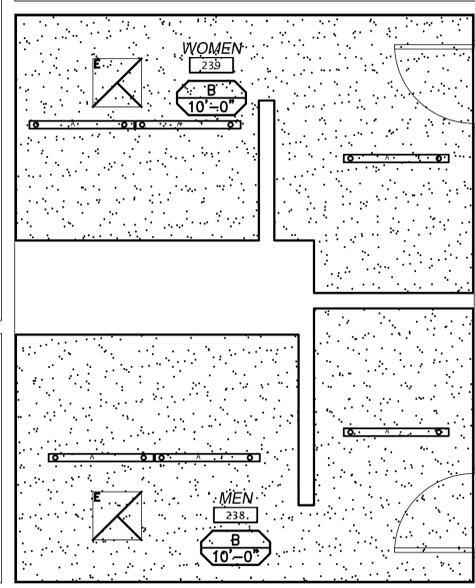
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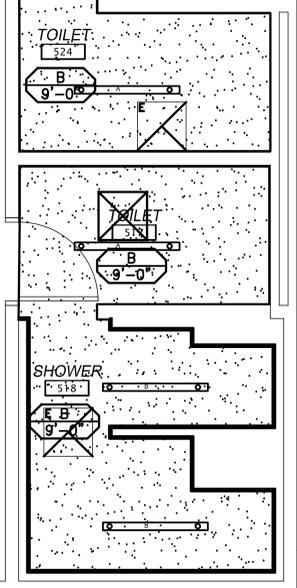


1 Enlarged Reno Ceiling Plan - Locker Room Toilet  
 Scale: 3/8" = 1'-0"

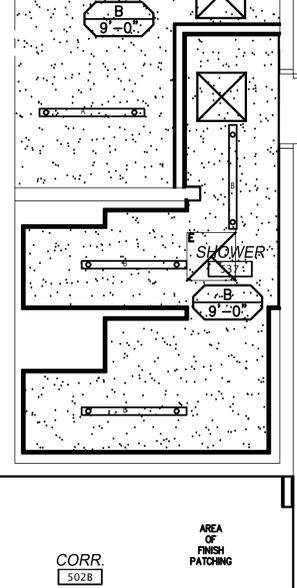
2 Enlarged Reno Ceiling Plan - Gym Public Toilets  
 Scale: 3/8" = 1'-0"



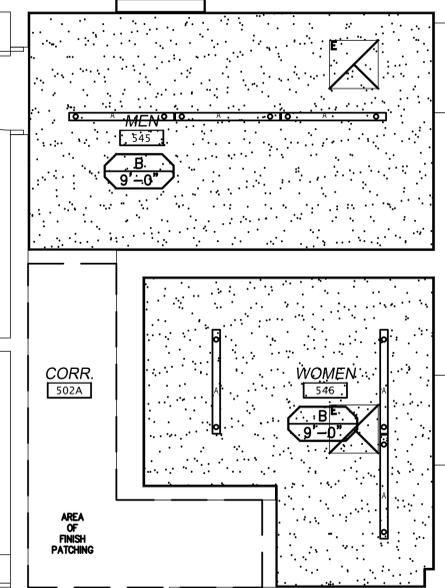
5 Enlarged Clg. Plan - Men 238/Women 239  
 Scale: 3/8" = 1'-0"



4 Enlarged Reno Ceiling Plan - Locker Room Toilets  
 Scale: 3/8" = 1'-0"



3 Enlarged Reno Ceiling Plan - Locker Room Toilets  
 Scale: 3/8" = 1'-0"



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drawn (111) checked (111)

Enlarged Second Floor Reno Ceiling Plans

sheet

A3.7

project no. 2231

date 6/15/23



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drawn checked  
dml kct

Partition Schedule,  
Door Schedule  
And Details

sheet

**A5.1**

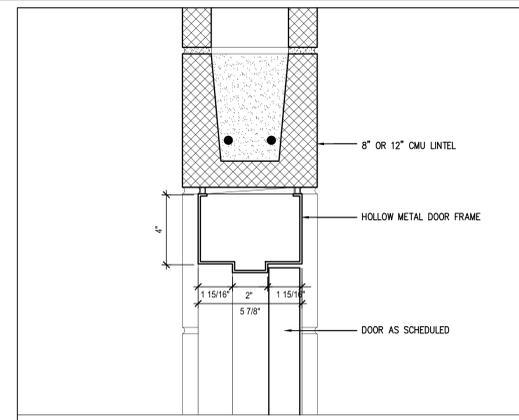
project no. 2231

date 6/15/23

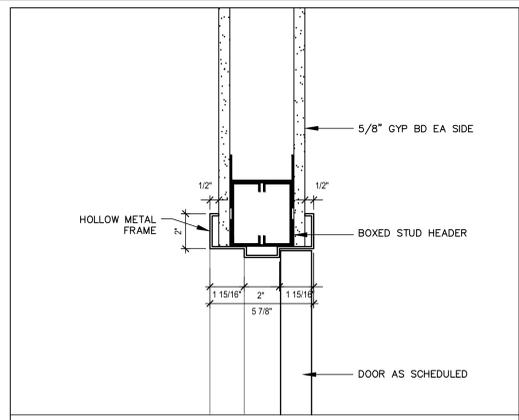
## DOOR SCHEDULE

MARK	DOOR			FRAME			GLAZING	HDWR SET	LABEL	REMARKS
	TYPE	MAT'L	FINISH	TYPE	HEAD	JAMB				
<b>TOILET BUILDING ADDITION</b>										
150	A	HM	PAINTED	F-2	H-2	J-2	-	1	-	-
152	A	HM	PAINTED	F-2	H-2	J-2	-	1	-	-
152A	A	HM	PAINTED	F-2	H-2	J-2	-	1	-	-
154	A	HM	PAINTED	F-2	H-2	J-2	-	1	-	-
<b>EXISTING TOILET ROOM RENOVATION</b>										
111A	EXISTING	EXISTING	REFINISH	-	-	-	-	-	-	SEE NOTE 1
111B	A	S. C. WOOD	PREFINISHED	F-2	H-2	J-2	-	3	-	KNOCK-DOWN (KD) FRAME
114A	EXISTING	EXISTING	REFINISH	-	-	-	-	-	-	SEE NOTE 1
114B	A	S. C. WOOD	PREFINISHED	F-2	H-2	J-2	-	3	-	KNOCK-DOWN (KD) FRAME
133F	A	S. C. WOOD	PREFINISHED	F-2	H-2	J-2	-	3	-	KNOCK-DOWN (KD) FRAME
201C	A	S. C. WOOD	PREFINISHED	EXISTING	-	-	-	4	-	-
301C	A	S. C. WOOD	PREFINISHED	EXISTING	-	-	-	4	-	-
120C	A	S. C. WOOD	PREFINISHED	EXISTING	-	-	-	4	-	-
120E	A	S. C. WOOD	PREFINISHED	EXISTING	-	-	-	4	-	-
220C	A	S. C. WOOD	PREFINISHED	EXISTING	-	-	-	4	-	-
237	EXISTING	EXISTING	REFINISH	-	-	-	-	-	-	SEE NOTE 1
238	EXISTING	EXISTING	REFINISH	-	-	-	-	-	-	SEE NOTE 1
239	EXISTING	EXISTING	REFINISH	-	-	-	-	-	-	SEE NOTE 1
331C	A	S. C. WOOD	PREFINISHED	EXISTING	-	-	-	4	-	-
512A	A	S. C. WOOD	PREFINISHED	F-3	H-1	J-1	-	1	-	-
531	A	S. C. WOOD	PREFINISHED	F-3	H-1	J-1	-	5	-	-
535	A	S. C. WOOD	PREFINISHED	F-3	H-1	J-1	-	5	-	-
545	A	S. C. WOOD	PREFINISHED	F-2	H-2	J-2	-	6	-	KNOCK-DOWN (KD) FRAME
546	A	S. C. WOOD	PREFINISHED	F-2	H-2	J-2	-	6	-	KNOCK-DOWN (KD) FRAME
712	EXISTING	EXISTING	REFINISH	-	-	-	-	-	-	SEE NOTE 1
714	EXISTING	EXISTING	REFINISH	-	-	-	-	-	-	SEE NOTE 1

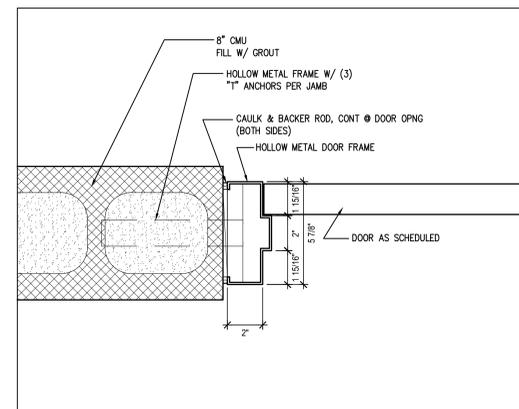
DOOR NOTES  
1. REMOVE DOOR FROM DOOR FRAME, REMOVE DOOR HARDWARE FROM DOOR, REFINISH DOOR AND REASSEMBLE ON EXISTING FRAME.



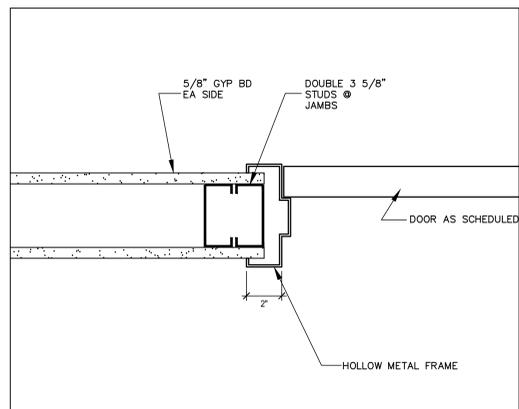
**H-2**  
A5.1  
Scale: 3" = 1'-0"



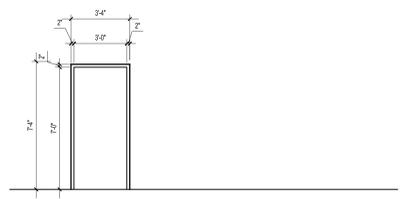
**H-1**  
A5.1  
Scale: 3" = 1'-0"



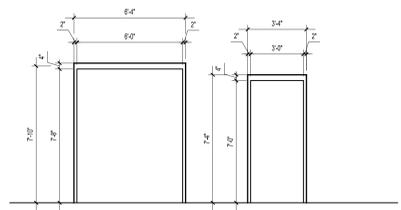
**J-2**  
A5.1  
Scale: 3" = 1'-0"



**J-1**  
A5.1  
Scale: 3" = 1'-0"

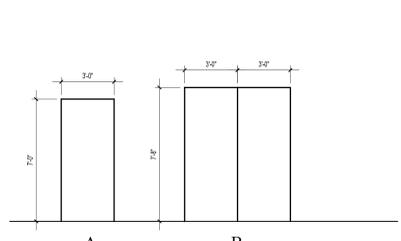


**F-3**



**F-1 F-2**

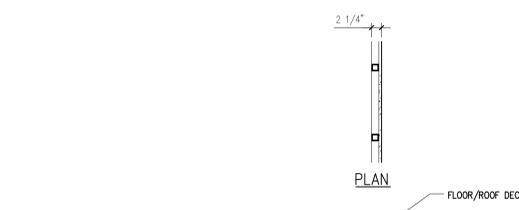
**3**  
A5.1  
1/4" = 1'-0"



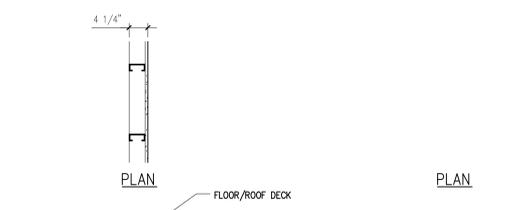
**2**  
A5.1  
1/4" = 1'-0"

### PARTITION NOTES

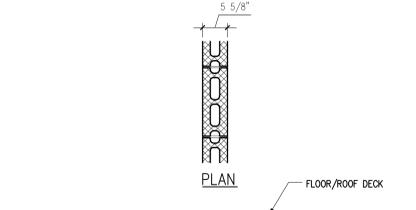
- IF APPLICABLE, LABEL ALL RATED PARTITIONS WITH A SIGN STENOILED TO THE PARTITION ABOVE FINISHED CEILING @ 20 FOOT INTERVALS, TO COMPLY WITH NC BUILDING CODE.
- DO NOT CUT OPENINGS BACK TO BACK IN PARTITION FOR ELECTRICAL OR MECHANICAL ITEMS (E: PHONE, ELEC. OUTLETS, DATA, THERMOSTATS, ETC.)
- INTERIOR PARTITION DIMENSIONS ARE TO THE FACE OF CMU FOR MASONRY PARTITIONS AND TO THE FACE OF GYP. BD. FOR DRYWALL PARTITIONS. FOR CONDITIONS WHERE GYPSUM WALLBOARD ON FURRING IS APPLIED TO CMU, DIMENSIONS ARE TO THE FACE OF CMU.
- CONTRACTOR SHALL FIELD VERIFY ROOM DIMENSIONS PRIOR TO FABRICATION OF CASEWORK AND MILLWORK.
- WHERE CMU WALLS ARE TO RECEIVE CERAMIC TILE, STRIKE JOINTS FLUSH.
- SEE STRUCTURAL DRAWINGS FOR DETAILED INFORMATION (REINFORCING BAR SIZE, ETC.) FOR ALL LINTEL AND BOND BEAMS SHOWN ON ARCHITECTURAL SECTIONS.
- THE CONTRACTOR SHALL COORDINATE WITH ALL OTHER CONTRACTORS REGARDING THE REQUIREMENT FOR WOOD BLOCKING FOR INSTALLATION OF WALL-HUNG ITEMS. THE CONTRACTOR SHALL VERIFY MOUNTING HEIGHTS OF ALL WALL-HUNG & CEILING HUNG ITEMS WITH THE OTHER CONTRACTORS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL WOOD BLOCKING REQUIRED BY ALL CONTRACTORS.
- THE CONTRACTOR SHALL PROVIDE WATER-RESISTANT GYPSUM WALLBOARD AT ALL PARTITIONS RECEIVING GLAZED CERAMIC WALL TILE.
- IT IS ACCEPTABLE FOR THE WIDTH OF THE CHASE WALL AT THE TOILETS TO BE GREATER THAN 1'-0" TO ACCOMMODATE FIXTURE CARRIERS. VERIFY REQUIRED CLEARANCE WITH MANUFACTURER PRIOR TO FRAMING. ALL REQUIRED ACCESSIBILITY CLEARANCES SHALL BE PROVIDED WITHIN THE TOILET ROOM.



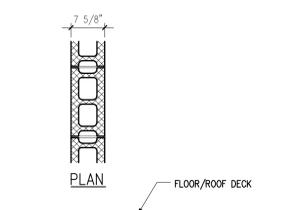
**J**  
PLAN  
FLOOR/ROOF DECK



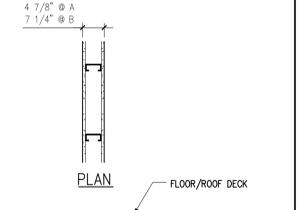
**G**  
PLAN  
FLOOR/ROOF DECK



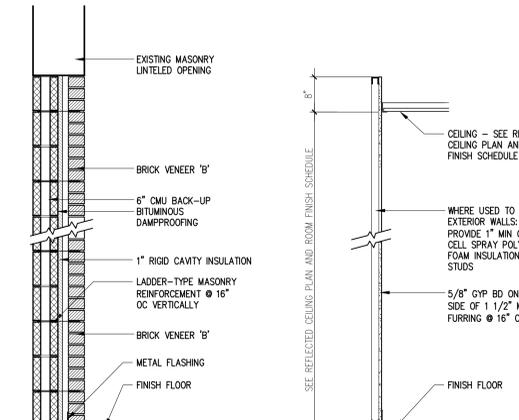
**D7**  
PLAN  
FLOOR/ROOF DECK



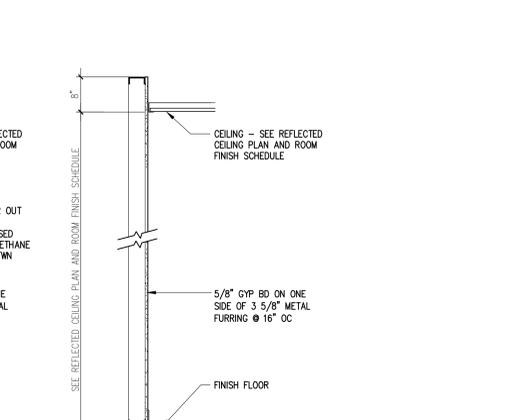
**C3**  
PLAN  
FLOOR/ROOF DECK



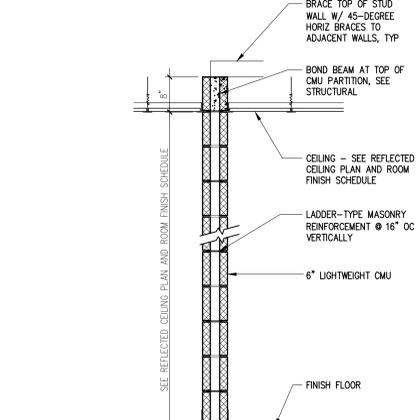
**A1**  
PLAN  
FLOOR/ROOF DECK



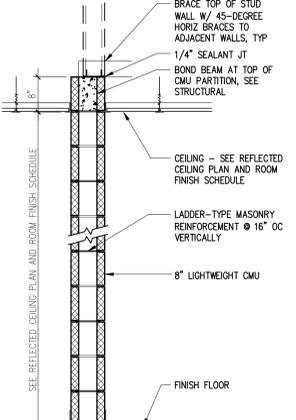
**J**  
SECTION  
CMU/BRICK INFILL



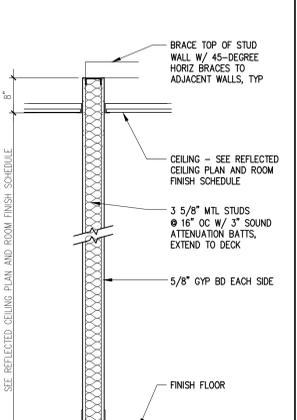
**H**  
SECTION



**D**  
SECTION



**C3**  
SECTION  
CMU PART'N ONLY



**A1**  
SECTION

**G** SAME AS "F" EXCEPT 6" STUD

**E** NOT USED

**D7** SAME AS "D", EXCEPT 7'-0" IN HEIGHT

**C3** SAME AS "C", EXCEPT W/ GYP BD EXTENSION TO STRUCTURE

**A1** SAME AS "A" EXCEPT STOP AT UNDERSIDE OF CEILING  
**B** SAME AS "A" EXCEPT 6" STUD

**1**  
A5.1  
Scale: 3/4" = 1'-0"



no. revisions

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drawn gmt checked ket

Finish Schedule  
And Details

sheet

A5.2

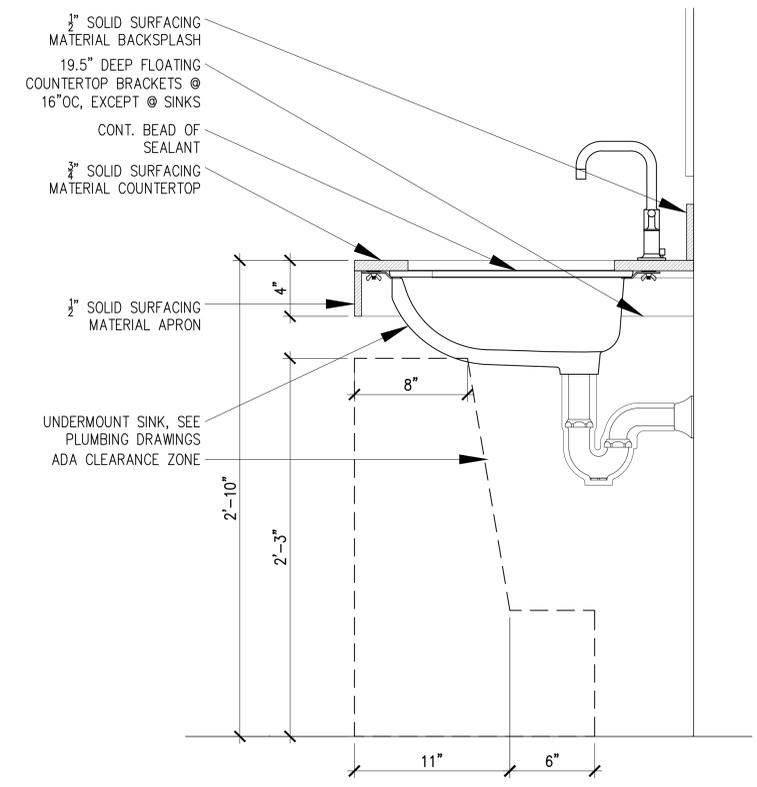
project no. 2231

date 6/15/23

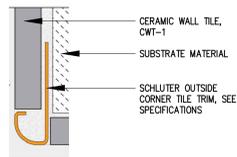
# FINISH SCHEDULE

MARK	ROOM NAME	FLOOR	BASE	WALLS	CLG. TYPE	REMARKS
<b>TOILET BUILDING ADDITION</b>						
109	CORRIDOR	EX. TERRAZZO	4" RUBBER	SEE 9/A2.7	ACOUSTICAL TILE	TIE IN EXISTING ACOU. TILE INTO NEW BULKHEAD
150	ELECTRICAL ROOM	LINOLEUM TILE	4" RUBBER	PAINT	PAINTED DRYWALL	
151	WOMEN	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	
152	CUSTODIAL ROOM	CERAMIC TILE, CT-1	SCHLUTER TRIM	CWT-1 / PAINT	PAINTED DRYWALL	PROVIDE CERAMIC WALL TILE @ MOP SINK
152A	CHASE	NONE	NONE	UNPAINTED	NONE	
153	MEN	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	
154	MECHANICAL ROOM	LINOLEUM TILE	4" RUBBER	PAINT	PAINTED DRYWALL	

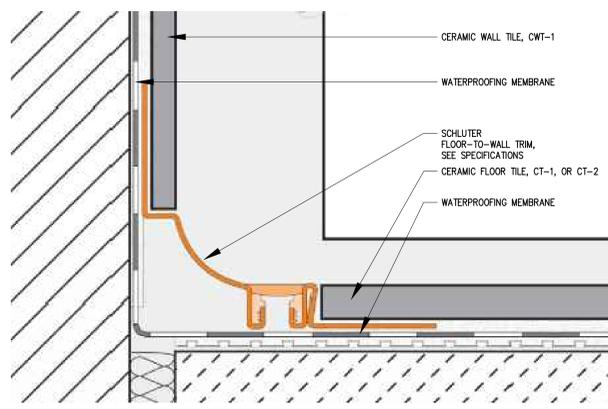
<b>EXISTING TOILET ROOM RENOVATION</b>						
020C	TOILET	CERAMIC TILE, CT-2	SCHLUTER TRIM	EXISTING CMU, PAINTED	REMAIN AS IS	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
020D	GIRLS	CERAMIC TILE, CT-2	SCHLUTER TRIM	EXISTING CMU, PAINTED	PAINT ALL EXPOSED COMPONENTS	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
020E	BOYS	CERAMIC TILE, CT-2	SCHLUTER TRIM	EXISTING CMU, PAINTED	PAINT ALL EXPOSED COMPONENTS	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
111A	TOILET	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
111B	TOILET	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
114A	TOILET	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
114B	TOILET	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
133F	TOILET	CERAMIC TILE, CT-2	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
133G	TOILET	CERAMIC TILE, CT-2	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	EXISTING DRYWALL, PAINTED	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
133H	CORRIDOR	PATCH CARPET TILE	PATCH 4" RUBBER	PATCH PAINT	PATCH ACOUSTICAL TILE	
133N	TOILET	CERAMIC TILE, CT-2	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	EXISTING DRYWALL, PAINTED	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
134A	TOILET	CERAMIC TILE, CT-2	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	EXISTING DRYWALL, PAINTED	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
201C	GIRLS	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
301C	GIRLS	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
120C	GIRLS	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
120E	BOYS	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
220C	BOYS	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
238	MEN	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
239	WOMEN	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
331C	BOYS	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
421	BOYS	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
423	GIRLS	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
512	TOILET	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
512A	STORAGE	LINOLEUM TILE	4" RUBBER	PAINT	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
513	SHOWER	CERAMIC TILE, CT-2	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
517	TOILET	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
518	SHOWER	CERAMIC TILE, CT-2	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
524	TOILET	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
525	SHOWER	CERAMIC TILE, CT-2	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
502C	CORRIDOR	REFINISH TERRAZZO	4" RUBBER	PAINT	PAINTED DRYWALL	
531	GIRLS TEAM ROOM	LINOLEUM TILE	4" RUBBER	PAINT	PAINTED DRYWALL	
532	TOILET	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
533	SHOWER	CERAMIC TILE, CT-2	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
502B	CORRIDOR	REFINISH TERRAZZO	4" RUBBER	PAINT	PAINTED DRYWALL	
535	GIRLS TEAM ROOM	LINOLEUM TILE	4" RUBBER	PAINT	PAINTED DRYWALL	
537	SHOWER	CERAMIC TILE, CT-2	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
538	TOILET	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
539	TOILET	REMAIN AS IS	REMAIN AS IS	REMAIN AS IS	EXISTING DRYWALL, PAINTED	
502A	CORRIDOR	REFINISH TERRAZZO	4" RUBBER	PAINT	PAINTED DRYWALL	
545	MEN	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS
546	WOMEN	CERAMIC TILE, CT-1	SCHLUTER TRIM	CERAMIC WALL TILE, CWT-1	PAINTED DRYWALL	PROVIDE MARBLE THRESHOLD AT ALL TRANSITIONS



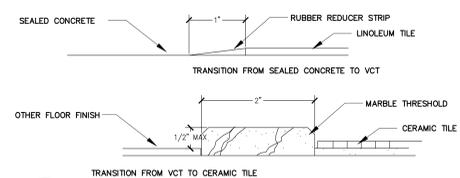
4 Vanity Detail, CW-1  
A5.2 Scale: 1 1/2" = 1'-0"



3 Outside Wall Corner Schluter Trim Detail  
A5.2 Scale: Full Size



2 Schluter Floor-to-Wall Trim Detail  
A5.2 Scale: Full Size



1 Flooring Transition Details  
A5.2 3" = 1'-0"

## FINISH NOTES

- PAINTING TYPES SHALL BE PROVIDED PER THE FOLLOWING SCHEDULE:  
 EPOXY PAINT ON ALL SURFACES SCHEDULED NOTED ABOVE  
 SEMI-GLOSS PAINT ON ALL CMU PARTITIONS, UNLESS OTHERWISE SCHEDULED  
 EGGSHELL PAINT ON ALL HOLLOW METAL DOOR FRAMES  
 FLAT PAINT ON ALL GYPSUM WALLBOARD PARTITIONS, EXCEPT AS INDICATED ABOVE.  
 ON ALL GYPSUM WALLBOARD CEILINGS AND BULKHEADS, EXCEPT AS INDICATED ABOVE.  
 PROVIDE FLAT PAINT ON ALL EXPOSED STRUCTURE, DUCTWORK, PIPING, CONDUITS AND OTHER MISCELLANEOUS ITEMS.
- IN ALL ROOMS BEING DENOTED TO BE PAINTED, ALL DOOR AND INTERIOR WINDOW FRAMES SHALL BE PAINTED, AS WELL. IF THE DOOR IS PAINTED, IT SHALL BE PAINTED, AS WELL.
-

## PLUMBING SPECIFICATIONS

IT IS THE INTENT OF THESE SPECIFICATIONS TO FURNISH A COMPLETE PLUMBING SYSTEM, FULLY ADJUSTED, AND READY FOR USE.

ALL WORK SHALL BE DONE IN COMPLIANCE WITH NORTH CAROLINA BUILDING CODE AND ALL LOCAL CODES.

THIS CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS AND PAY ALL SALES TAXES, TAP AND METER FEES, AND OTHER COSTS, IN CONNECTION WITH HIS WORK.

ALL MATERIAL AND EQUIPMENT HAS BEEN CAREFULLY SELECTED FOR THIS PROJECT AND THE CONTRACTOR IS EXPECTED TO PROVIDE ALL ITEMS AS CLOSELY AS POSSIBLE TO THE SPECIFICATIONS AND AS CALLED FOR ON THE DRAWINGS.

ALL INCIDENTAL CONSTRUCTION WORK TO BE INCLUDED BY THIS CONTRACTOR.

SUBMIT ELECTRONIC FILE OF EQUIPMENT DATA SHOP DRAWINGS TO ENGINEER FOR ALL ITEMS TO BE FURNISHED AND INSTALLED FOR APPROVAL.

THIS CONTRACTOR SHALL INCLUDE IN THE WORK, WITHOUT EXTRA COST TO THE OWNER, ANY LABOR, MATERIALS, SERVICES, APPARATUS, DRAWINGS IN ORDER TO COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES AND REGULATIONS, WHETHER OR NOT SHOWN ON DRAWINGS AND/OR SPECIFIED. NO CLAIM FOR EXTRA WILL BE APPROVED WITHOUT PRIOR COORDINATION FOR CONFLICTS BY CONTRACTOR, AND WRITTEN REQUEST AND APPROVAL PRIOR TO PERFORMING WORK.

ALL WORK AND EQUIPMENT TO BE GUARANTEED BY CONTRACTOR FOR ONE (1) YEAR.

UPON COMPLETION OF ALL WORK AND ALL TESTS, INSTRUCT THE OWNER OR HIS REPRESENTATIVE FULLY IN THE OPERATIONS, ADJUSTMENTS, AND MAINTENANCE OF ALL EQUIPMENT FURNISHED. PROVIDE OWNER MAINTENANCE SCHEDULE FOR THE PRINCIPAL ITEMS OF EQUIPMENT FURNISHED. MANUFACTURER'S ADVERTISING LITERATURE OR CATALOGS WILL NOT BE ACCEPTABLE.

ALL MATERIALS AND EQUIPMENT TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND GOOD RECOMMENDED PRACTICES.

ALL WORK AND MATERIALS SHALL MEET APPROVAL OF ARCHITECT/ENGINEER.

THIS CONTRACTOR SHALL GIVE FULL COORDINATION TO OTHER TRADES, WHERE THE WORK OF THIS CONTRACTOR WILL BE INSTALLED IN CLOSE PROXIMITY TO, OR WILL INTERFERE WITH WORK OF OTHER TRADES. HE SHALL ASSIST IN WORKING OUT SPACE CONDITIONS TO MAKE SATISFACTORY ADJUSTMENTS. IF THIS CONTRACTOR INSTALLS HIS WORK BEFORE COORDINATING WITH OTHER TRADES, HE SHALL MAKE THE NECESSARY CHANGES IN HIS WORK TO CORRECT THE CONDITION WITHOUT EXTRA CHARGE.

DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. DRAWINGS ARE NOT TO BE SCALED.

SOIL, WASTE AND VENT PIPING UNDERGROUND INSIDE BUILDING TO BE CAST IRON HUB AND SPOOT SOIL PIPE WITH COMPRESSION JOINTS. ABOVE FLOOR CAST IRON HUB SOIL PIPE WITH COUPLING ASSEMBLY. PIPE UNDER PAVED AREA TO BE CAST IRON.

DOMESTIC WATER PIPE UNDERGROUND TYPE "C" COPPER, ABOVE GROUND, TYPE "L" HARD DRAWN COPPER.

ALL HOT AND COLD WATER PIPING ABOVE GRADE WITHIN BUILDING SHALL BE INSULATED. HOT WATER PIPE INSULATION SHALL BE 1" THICK, AND COLD WATER INSULATION SHALL BE 1/2" THICK SECTIONAL TYPE, FIBROUS GLASS OR CELLULAR TYPE INSULATION (ARMAFLEX).

ALL LINES TO BE INSULATED CONTINUOUSLY AND SUFFICIENTLY TO PREVENT FREEZING IN EXTREME CONDITIONS. WHERE PIPES ARE INSTALLED IN CEILING PLenum ABOVE BATT INSULATION, THE BATT INSULATION SHALL BE LOOPED UP OVER THE WATER PIPES. IF IN WALL CHASE, CHASE TO BE LINED WITH STYROFOAM OR FIBERGLASS INSULATION. IF OF CONCRETE BLOCK CELLS, PIPE TO BE INSULATED WITH 3/4" ARMAFLEX AND BLOCKS FILLED WITH GRANULAR STYROFOAM PELLETS.

CONTROL VALVES FOR HOT AND COLD WATER LINES SHALL BE BALL VALVES, SWEAT TYPE.

PROVIDE ALL PLUMBING PIPING AND EQUIPMENT IN CONNECTION WITH THE SYSTEM.

PROVIDE ALL HANGERS AND SUPPORTS TO SUPPORT PIPING AND EQUIPMENT. HANGERS AND SUPPORTS IN CONTACT WITH COPPER PIPE SHALL BE COPPER PLATES OR BRASS.

CONTROL VALVES TO BE ON WATER CONNECTIONS TO ALL FIXTURES AND EQUIPMENT.

INSULATE HOT WATER SUPPLY PIPE AND DRAIN PIPE ON LAVATORY FOR HANDICAPPED.

CEILING FIBERGLASS INSULATION SHALL BE LAPPED OVER HOT AND COLD WATER PIPING IN CEILING SPACE IN ADDITION TO PIPE INSULATION. SPECIFIED TO PREVENT FREEZING WHERE APPLICABLE.

THIS CONTRACTOR TO PERFORM ALL ADJUSTMENTS AND DISINFECTION OF SYSTEMS, EQUIPMENT, CONTROLS, ETC., NECESSARY FOR THE SYSTEM TO PROVIDE THE REQUIRED PERFORMANCE AND TO OPERATE SAFELY. SUBMIT "AS-BUILT" DRAWINGS TO ENGINEER SHOWING ACTUAL INVERTS AND LOCATIONS OF UNDERGROUND LINES, AND ALL CHANGES.

CONDENSATE DRAINS FROM AIR CONDITIONING UNITS SHALL BE PROVIDED FOR ALL AIR CONDITIONING UNITS, SIZED AND INSTALLED IN ACCORDANCE WITH THE UNIT MANUFACTURER'S RECOMMENDATIONS. CONDENSATE DRAINS SHALL BE PIPED (OR PUMPED) TO THE OUTSIDE OF BUILDING, NATURAL DRAIN, DRY WELL, LAVATORY, SERVICE SINK, ROOF DRAIN, OR STORM SEWER, CONNECTED DIRECTLY TO THE DRAINAGE PIPING BETWEEN A LAVATORY, SERVICE SINK (LIES SINK AND ITS TRAP) OR CONNECTED INDIRECTLY (AIR GAP) TO A "PROPERLY" TRAPPED AND VENTED CONNECTION TO THE SANITARY DRAINAGE OR VENT SYSTEMS, IN COMPLIANCE WITH LOCAL PLUMBING CODE REQUIREMENTS.

ALL PIPING SHALL BE THOROUGHLY FLUSHED OUT BEFORE USE.

THE WATER SYSTEM, AFTER IT HAS BEEN COMPLETED, TESTED AND THOROUGHLY FLUSHED TO REMOVE MUD AND DEBRIS, SHALL BE DISINFECTED BY CHLORINATION.

PROVIDE CLEAN OUTS LOCATED NOT MORE THAN 100' APART IN HORIZONTAL DRAINAGE LINES OR 4" NOMINAL DIAMETER OR LESS. CLEAN OUTS MUST BE INSTALLED FOR EVERY FOUR HORIZONTAL 45° CHANGES LOCATED IN SERIES AND AT THE BASE OF EACH STACK.

PROVIDE FLOOR DRAINS AS REQUIRED BY THE PLUMBING CODE. FLOOR DRAINS TO BE NOT LESS THAN 3", AND WITH A REMOVABLE STRAINER. TRAP SEAL BE AT LEAST 3" IN DEPTH.

SUSPENDED WATER LINES TO BE BRACED TO PREVENT SWAYING DURING THE OPERATION OF VALVES/EQUIPMENT.

## GENERAL PLUMBING NOTES

- THIS CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS AND PLACEMENTS OF PLUMBING FIXTURES AND EQUIPMENT WITH SITE AND ARCHITECTURAL DRAWINGS, INCLUDING REFLECTED CEILING PLANS, INTERIOR ELEVATIONS, DETAILS, AND SECTIONS, PRIOR TO ROUGH-IN OR RELOCATE AS DIRECTED BY THE DESIGNER AT NO ADDITIONAL COST TO THE OWNER.
- ALL PIPING, FIXTURES, EQUIPMENT, ETC. SHOWN ON THESE DRAWINGS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODE REQUIREMENTS.
- ALL PIPING, SLEEVES, INSERTS, AND OTHER ROUGH-IN MATERIALS SHALL BE INSTALLED AS BUILDING CONSTRUCTION PROGRESSES.
- PIPE HANGERS SHALL BE SIZED SO THAT INSULATION IS CONTINUOUS AT ALL HANGERS.
- THIS CONTRACTOR SHALL COORDINATE WITH ALL OTHER CONTRACTORS AND TRADES TO LOCATE HIS WORK TO AVOID CONFLICTS.
- ALL VENTS THROUGH THE ROOF SHALL BE COMBINED AS PRACTICAL AND ALLOWED BY CODE, AND PENETRATE THE ROOF ON THE BACK SIDE OF THE BUILDING WHERE PRACTICAL. THIS CONTRACTOR SHALL COORDINATE DETAILS OF VENT PENETRATIONS AND FLASHING WITH THE ROOFING INSTALLER. ALL VENTS THROUGH THE ROOF SHALL BE LOCATED AT LEAST THE MINIMUM DISTANCE AWAY FROM AIR INTAKES AS REQUIRED BY CODE.
- EXISTING SERVICES INDICATED ON THESE DRAWINGS WERE REPRODUCED FROM EXISTING DRAWINGS AND LIMITED SITE OBSERVATIONS/VERIFICATION. THESE DRAWINGS MAY NOT BE ALL INCLUSIVE OF SERVICES THAT EXIST IN THE AREA OF WORK. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS AND LOCATIONS PRIOR TO CONSTRUCTION. ANY DIFFERENCE THAT IMPACT WORK SHOWN ON THESE DRAWINGS SHALL BE REPORTED TO THE ARCHITECT/ENGINEER FOR COORDINATION PRIOR TO CONSTRUCTION.
- CLEAN OUTS SHALL BE INSTALLED WHERE SHOWN AND WHERE REQUIRED BY CODE.
- THIS CONTRACTOR SHALL PROVIDE AND INSTALL ALL OFFSETS, FITTINGS, VALVES, AND ACCESSORIES THAT MAY BE REQUIRED FOR A COMPLETE AND PROPER INSTALLATION, OR RECOMMENDED BY THE EQUIPMENT MANUFACTURER, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN OR SPECIFIED.
- INSTALL ALL PIPING INSIDE OF THERMAL ENVELOPE. SEE ARCHITECTURAL DRAWINGS.
- INSTALL BALL VALVE STOPS ON ALL FIXTURE HOT WATER AND COLD WATER SUPPLIES.
- ALL FLOOR HUB DRAINS TO HAVE CORRESPONDING SIZE "SURE SEAL" TRAP SEAL.
- ALL EQUIPMENT CONNECTIONS SHALL BE COORDINATED WITH EQUIPMENT DRAWINGS AND EQUIPMENT VENDOR. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE ALL NECESSARY PIPING, SHUT-OFF VALVES, P-TRAPS, PRIVS, ETC. REQUIRED TO INSTALL EQUIPMENT AND MAKE FINAL CONNECTIONS.
- EXISTING FIXTURES, SERVICES, EQUIPMENT, ETC. TO REMAIN OR TO BE RELOCATED SHALL BE REPAIRED TO ORIGINAL OPERATION/CONDITION OR REPLACED, SHOULD THEY BE DAMAGED DURING CONSTRUCTION.
- NO "DOUBLE WYE" FITTINGS PERMITTED ON HORIZONTAL WASTE PIPING.
- PROVIDE AND INSTALL SHOCK ARRESTOR PROTECTION FOR ALL FLUSH VALVES AND LINES SERVING QUICK CLOSING VALVES. SIZE PER MANUFACTURER'S INSTRUCTIONS.
- ALL DOMESTIC WATER PIPE, TRIM, AND FITTINGS TO BE LEAD FREE.
- COORDINATE LOCATION OF ALL FLOOR DRAINS WITH ARCHITECTURAL PLANS.
- ALL EXISTING WASTE PIPING TO BE SCOOPED TO ENSURE PROPER OPERATION. SCOPE TO EXTEND EXTERIOR TO THE FIRST MANHOLE. NOTIFY OWNER AND ENGINEER OF ANY ISSUES THAT ARE DISCOVERED.
- INSTALL NEW P9 HOSE BIBB AT ALL EXISTING HOSE BIBB ROUGH-IN LOCATIONS THAT HAVE BEEN CAPPED. FIELD VERIFY EXACT LOCATIONS AND QUANTITY.
- EXISTING FLOOR DRAINS IN AREAS OF WORK TO BE REMOVED AND DISPOSED OF AS DIRECTED BY OWNER. INSTALL NEW SIOUX CHIEF SERIES 832 FLOOR DRAIN IN PREVIOUS DRAIN LOCATION WITH TRAP SEAL DEVICE. EXTEND PIPING AS NEEDED FOR NEW FLOORING. PATCH FLOOR AS REQUIRED TO MATCH EXISTING CONDITIONS AND THICKNESS. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS.
- INSTALL NEW FLOOR MOUNTED CARRIERS WITH LEGS FOR ALL NEW LAVATORIES. INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. INSTALL ALL LAVATORIES TO BE AS RIGID AS POSSIBLE TO PREVENT VANDALISM.

## PLUMBING FIXTURE SCHEDULE & SPECIFICATIONS

ITEM	FINISH	ACCESSORIES	WASTE	VENT	TRAP	HW	CW	SERVICE VALVE	WORKING HEIGHT
P1	WATER CLOSET: FLUSH VALVE TYPE KOHLER MODEL # K4655-S5-0 "WELLCOME ULTRA" VITREOUS CHINA COORDINATE COLOR W/ARCHITECT	- SLOAN ROYAL 111-1/8 FLUSH VALVE 1/8 GPF - BEMIS # 2155SCT TOILET SEAT	4"	2"	INT.	---	1"	INT.	FL. MTD. - 15 3/16" A.F.F. TO RIM SEE NOTE 1.
PIA	ADA WATER CLOSET: FLUSH VALVE TYPE KOHLER MODEL # K4657-S5-0 "HIGLIFL ULTRA" VITREOUS CHINA COORDINATE COLOR W/ARCHITECT	- SLOAN ROYAL 111-1/8 FLUSH VALVE 1/8 GPF - BEMIS # 2155SCT TOILET SEAT	4"	2"	INT.	---	1"	INT.	FL. MTD. - 18 5/8" A.F.F. TO RIM SEE NOTE 1.
P1B	ADA WATER CLOSET: WALL HUNG KOHLER MODEL # K4325-S5 "KINGSTON ULTRA" VITREOUS CHINA COORDINATE COLOR W/ARCHITECT	- SLOAN ROYAL 111-1/8 FLUSH VALVE 1/8 GPF - BEMIS # 2155SCT TOILET SEAT - RE-USE EXISTING CARRIER IF FEASIBLE. PROVIDE AND INSTALL NEW CONCEALED FLOOR CARRIER IF NOT	4"	2"	INT.	---	1"	INT.	WALL HUNG-SEE ARCH. ELEVATIONS
P2	ADA LAVATORY: WALL HUNG (0.5 GPM) KOHLER MODEL # K4012 "HUDSON ENAMELED CAST IRON COORDINATE COLOR W/ARCHITECT	- ZURN MODEL # 228200-KL METERNO FAUCET SET - MCGUIRE BALL VALVE STOPS AND SUPPLIES - 1/2 GA. CHROME PLATED P-TRAP - CONCEALED FLOOR CARRIER - ASSE 1070 TEMPERATURE LIMITING DEVICE	2"	2"	1 1/4"	1/2"	1/2"	3/8"	WALL HUNG-SEE ARCH. ELEVATIONS
P2A	ADA LAVATORY: COUNTER TOP MOUNTED KOHLER MODEL # K-2905-4 "FARMINGTON ENAMELED CAST IRON COORDINATE COLOR W/ARCHITECT	- ZURN MODEL # 221284-XL FAUCET SET - MCGUIRE BALL VALVE STOPS AND SUPPLIES - 1/2 GA. CHROME PLATED P-TRAP - ASSE 1070 TEMPERATURE LIMITING DEVICE	2"	2"	1 1/4"	1/2"	1/2"	3/8"	COUNTER TOP MOUNTED
P3	URINAL: WALL HUNG KOHLER MODEL # K4409-HET "BARDON" VITREOUS CHINA	- SLOAN ROYAL 186-5 FLUSH VALVE - CONCEALED ARM FLOOR CARRIER	2"	2"	INT.	---	3/4"	INT.	WALL HUNG-SEE ARCH. ELEVATIONS
P4	ADA SHOWER BUILT IN PLACE	- SYMONS TEMPTRO # C-86-200-330-V-1.5-VF-X-CHKS PRESSURE-BALANCING MIXING VALVE - REVERSE CORING IN VALVE AS NEEDED - SIOUX CHIEF SHOWER DRAIN	3"	2"	3"	1/2"	1/2"	1/2"	SEE ARCH. DRAWINGS/ELEVATIONS
PA4	SHOWER BUILT IN PLACE	- SYMONS TEMPTRO # C-36-1-1.5-VF-X-CHKS PRESSURE-BALANCING MIXING VALVE - REVERSE CORING IN VALVE AS NEEDED - SIOUX CHIEF SHOWER DRAIN	3"	2"	3"	1/2"	1/2"	1/2"	SEE ARCH. DRAWINGS/ELEVATIONS
P5	ADA WATER COOLER: WALL HUNG ELKAY MODEL # L237LWSLK COORDINATE COLOR W/ARCHITECT	- MCGUIRE BALL VALVE STOPS AND SUPPLIES - CHROME PLATED 1/2 GA P-TRAP - KICK APPROX AND SUPPORT CARRIER - "TOUCHLESS" ACTIVATION BOTTLE FILLER (GFCI TO BE ACCESSIBLE WITHOUT USE OF TOOLS, COORDINATE ROUGH-IN WITH ELECTRICAL CONTRACTOR)	2"	2"	1 1/4"	---	1/2"	3/8"	WALL HUNG PER ADA REQUIREMENTS
P6	FLOOR CLEANOUT SIOUX CHIEF MODEL # 834-(83046)/NOVB "FINISHLINE" - DUCTILE / CAST IRON	DUCTILE IRON HEAD ADAPTOR, CORING SLEEVE, AND CLAMPING COLLAR. HIGH-IMPACT POLYMER CORING PLUG. ADJUSTABLE ROUND NICKEL BRONZE TOP. BRASS CLEANOUT PLUG. CARPET MARKER (AS REQUIRED). LEVELING SHIM KIT AND FLEXIBLE LOCATING BRISTLE KIT	---	---	---	---	---	---	MTD FLUSH WITH FLOOR
PA6A	EXTERIOR CLEANOUT SIOUX CHIEF MODEL # 834-(83046)/RIBB "FINISHLINE" - DUCTILE / CAST IRON	DUCTILE IRON HEAD ADAPTOR, CORING SLEEVE, AND CLAMPING COLLAR. HIGH-IMPACT POLYMER CORING PLUG. ADJUSTABLE ROUND DUCTILE IRON TOP. BRASS CLEANOUT PLUG AND LEVELING SHIM KIT	4"	---	---	---	---	---	SEE "EXTERIOR DOUBLE CLEANOUT DETAIL"
P7	TRENCH DRAIN: 20'-0" SIOUX CHIEF 865 SERIES, FASTTRACK	FURNISH COMPLETE WITH PERFORATED STAINLESS STEEL GRATE AND DECORATIVE EDGE GUARDS.	3"	2"	3"	---	---	---	MTD FLUSH WITH FLOOR
P7A	FLOOR DRAIN SIOUX CHIEF 833 SERIES "FINISHLINE" - DUCTILE / CAST IRON	DUCTILE IRON HEAD ADAPTOR, CORING SLEEVE, AND CLAMPING COLLAR. CAST IRON BASE ADAPTOR. HIGH-IMPACT POLYMER CORING PLUG. FLASHING COLLAR. BOTTOM OUTLET. ADJUSTABLE SQUARE TOP NICKEL BRONZE STRAINER, LEVELING SHIM KIT, FLEXIBLE LOCATING BRISTLES, AND STAINLESS MESH DEBRIS BASKET.	4"	2"	4"	---	---	---	MTD FLUSH WITH FLOOR
P8	HOSE BIBB - INTERIOR WOODFORD # 4-C4-LOOSE KEY	- FURNISH COMPLETE	---	---	---	---	1/2"	---	WALL MOUNTED 18" A.F.F.
PA8	HOSE BIBB: EXTERIOR, FREEZELESS WOODFORD MODEL # 867	- FURNISH COMPLETE. STEM SIZE AS REQUIRED.	---	---	---	---	3/4"	---	WALL MOUNTED 18" A.F.F. GRADE
P9	JANITORS SINK: FLOOR MOUNTED FRIAT MODEL # F302011 PRECAST TERAZZO	- AMERICAN STD. # 8351 3/16" FAUCET W/INTEGRAL CHECKS - STAINLESS STEEL CAP ON ALL CURBS - FRIAT # 886-CC MOP HANGER - FRIAT # 832-AA HOSE & HOSE BRACKET	3"	2"	3"	1/2"	1/2"	3/8"	FLOOR MOUNTED FAUCET AT 4" A.F.F.

### NOTES:

- FLUSH VALVE HANDLES SHALL BE TO THE WIDE SIDE OF TOILET STALL PER N.C. ACCESSIBILITY CODE.
- OWNERS PREFERRED BRAND - KOHLER. EQUAL FIXTURES BY AMERICAN STANDARD, SLOAN OR APPROVED EQUAL.
- OWNERS PREFERRED BRAND - ZURN. EQUAL FAUCETS BY DELTA, SYMONS, OR APPROVED EQUAL.
- OWNERS PREFERRED BRAND - SLOAN. EQUAL FLUSH VALVES BY ZURN, AMERICAN STANDARD, OR APPROVED EQUAL.
- OWNERS PREFERRED BRAND - ELKAY. EQUAL DRINKING FOUNTAINS BY OASIS, HAWS, OR APPROVED EQUAL.
- ALL HANDICAP SINKS TO BE PROVIDED WITH OFFSET TALKER.
- ALL HANDICAP SINK/LAVATORIES TO HAVE MCGUIRE # P92125AVCPRO SEAMLESS PREWRAPPED P-TRAP AND SUPPLY INSULATION KIT

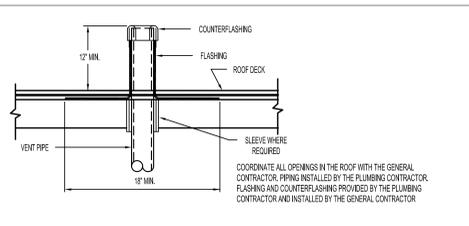
## ELECTRIC WATER HEATER SCHEDULE

ITEM	MANUFACTURER & MODEL NUMBER	ACCESSORIES/REMARKS	STORAGE CAPACITY (GALLONS)	RECOVERY RATE (GALLONS PER HOUR)	HEATING ELEMENTS	LOCATION
EW-1	BRADFORD WHITE MODEL # LE30T35	REFERENCE "WATER HEATER DETAIL"	55	23	200V, 450W	PLUMBING CHASE
EW-2	BRADFORD WHITE MODEL # LE30X35	REFERENCE "WATER HEATER DETAIL"	36	23	200V, 450W	JANITORS CLOSET

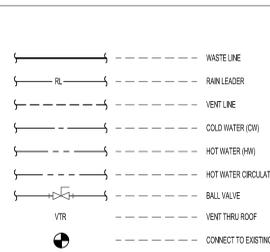
## HOT WATER RECIRCULATING PUMP SCHEDULE

ITEM	MANUFACTURER & MODEL NUMBER	CAPACITY (G.P.M.)	HEAD (FEET)	TYPE	MATERIAL	ELECTRICAL REQUIREMENTS	HP	RPM	LOCATION
RC-1	TACO MODEL # 1010	4	10	INLINE	STAINLESS STEEL	120V, 18, 65/1/2 1.7T AMPS	1/8	3,250	PLUMBING CHASE

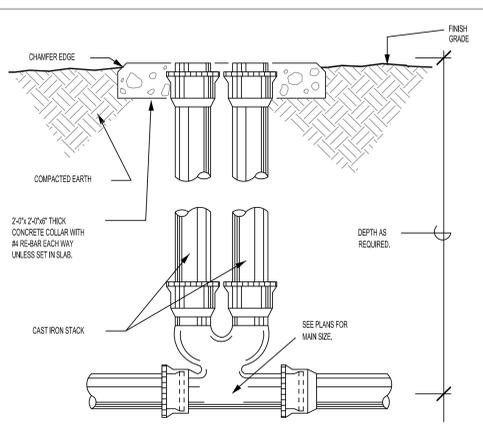
## VENT THROUGH ROOF



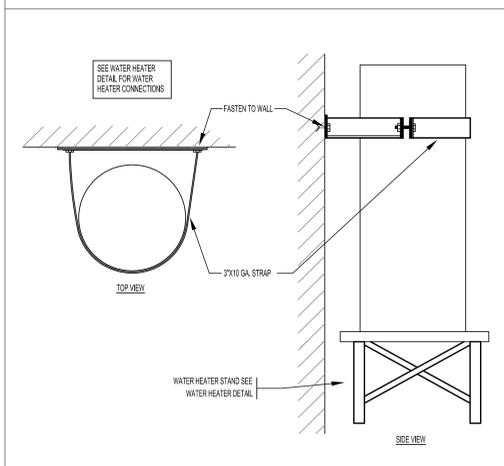
## PLUMBING LEGEND



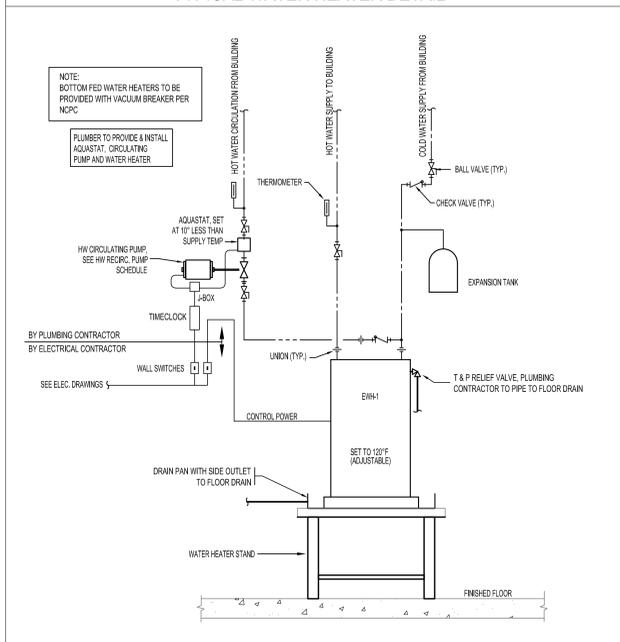
## EXTERIOR DOUBLE CLEANOUT DETAIL



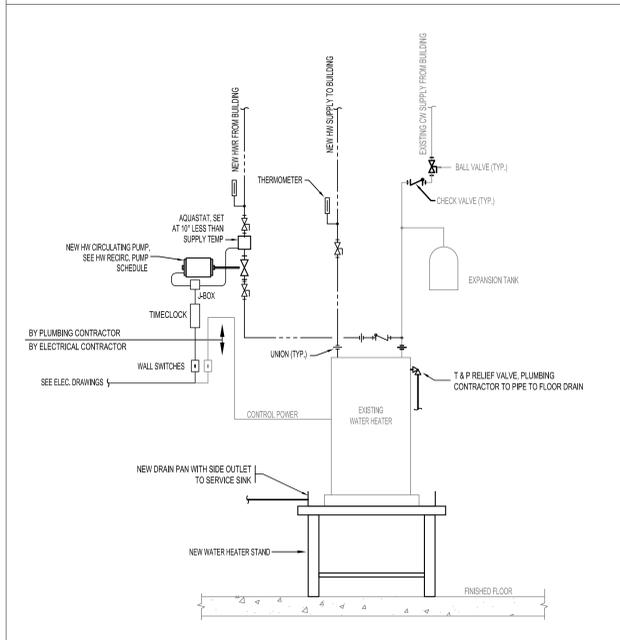
## WATER HEATER RESTRAINT DETAIL



## TYPICAL WATER HEATER DETAIL



## EXISTING WATER HEATER RE-CONFIGURE DETAIL



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JRW MRM

Plumbing Details,  
Notes, and  
Specifications

sheet

P0.1

project no. 2231

date 7/25/23



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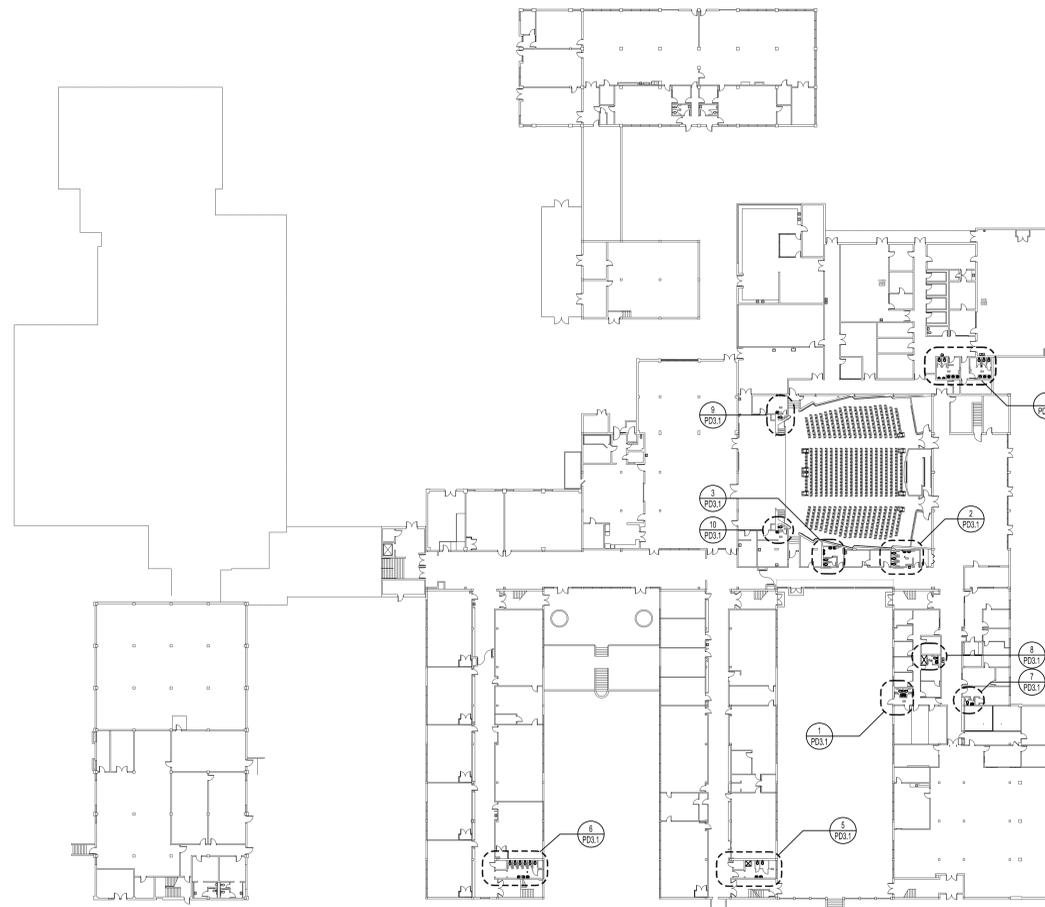
**Overall  
Plumbing Demolition  
Plans**

sheet

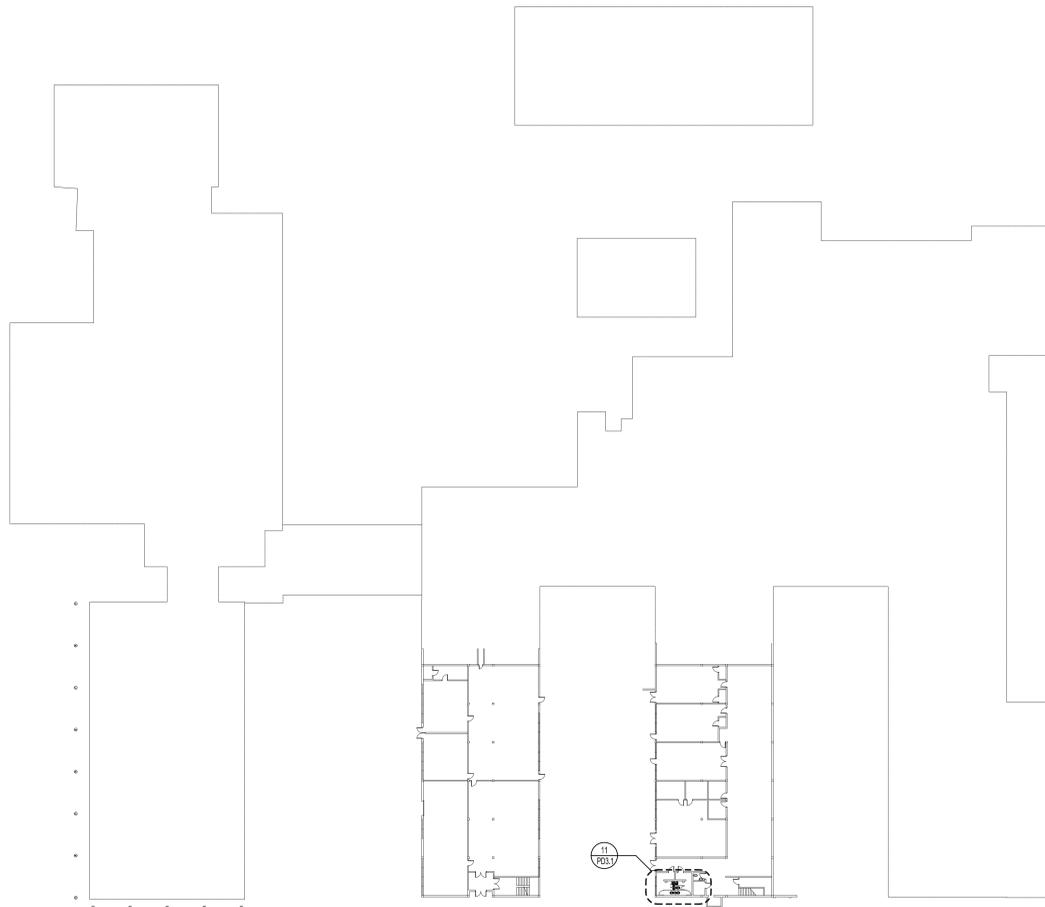
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project no. 2231

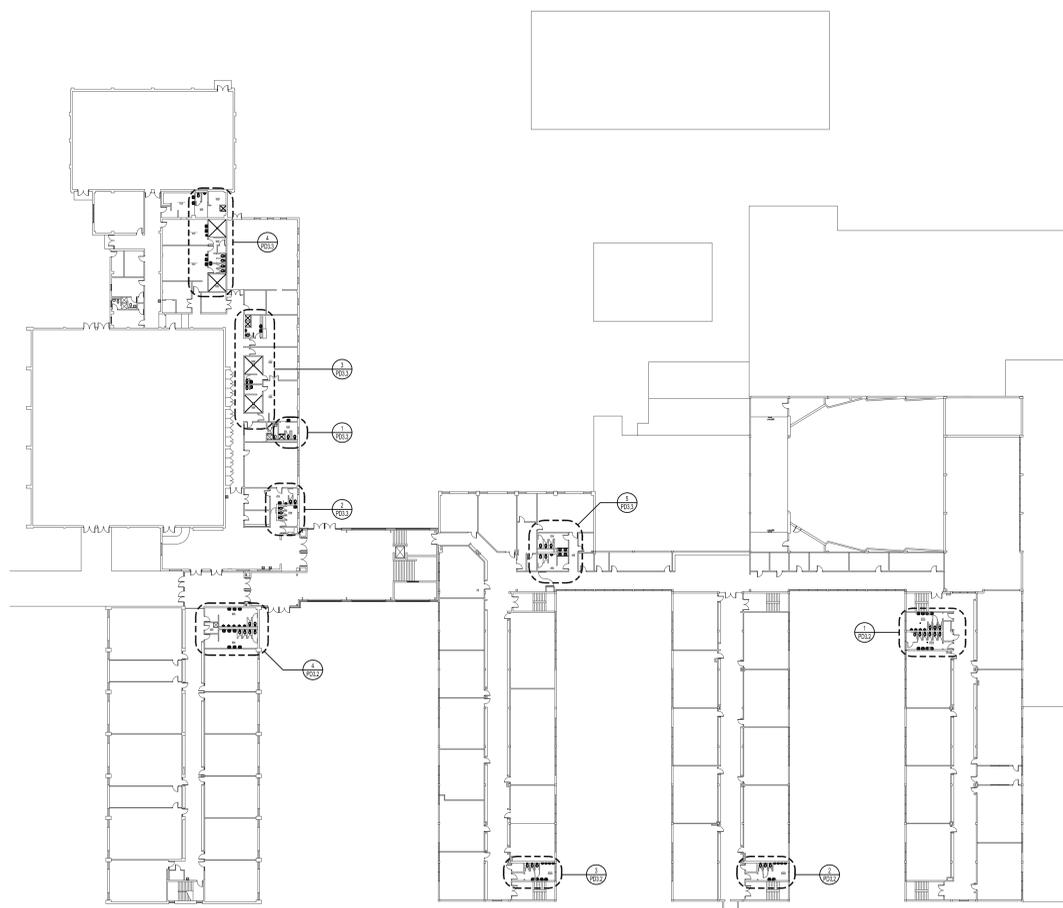
date 7/25/23



**2 Overall First Floor Plumbing Demolition Floor Plan**  
Scale: 1" = 40'-0"



**1 Overall Basement Floor Plumbing Demolition Floor Plan**  
Scale: 1" = 40'-0"



**3 Overall Second Floor Plumbing Demolition Floor Plan**  
Scale: 1" = 40'-0"



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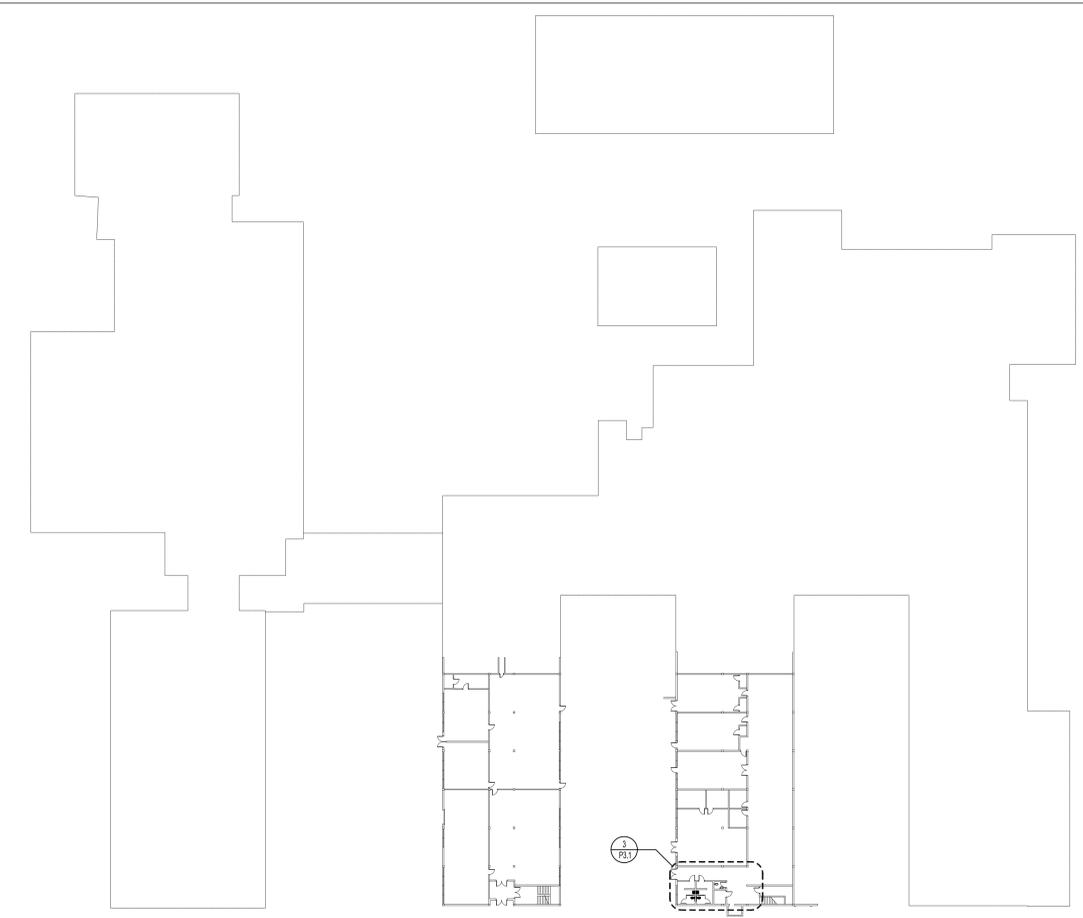
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**Overall  
New Plumbing  
Plans**

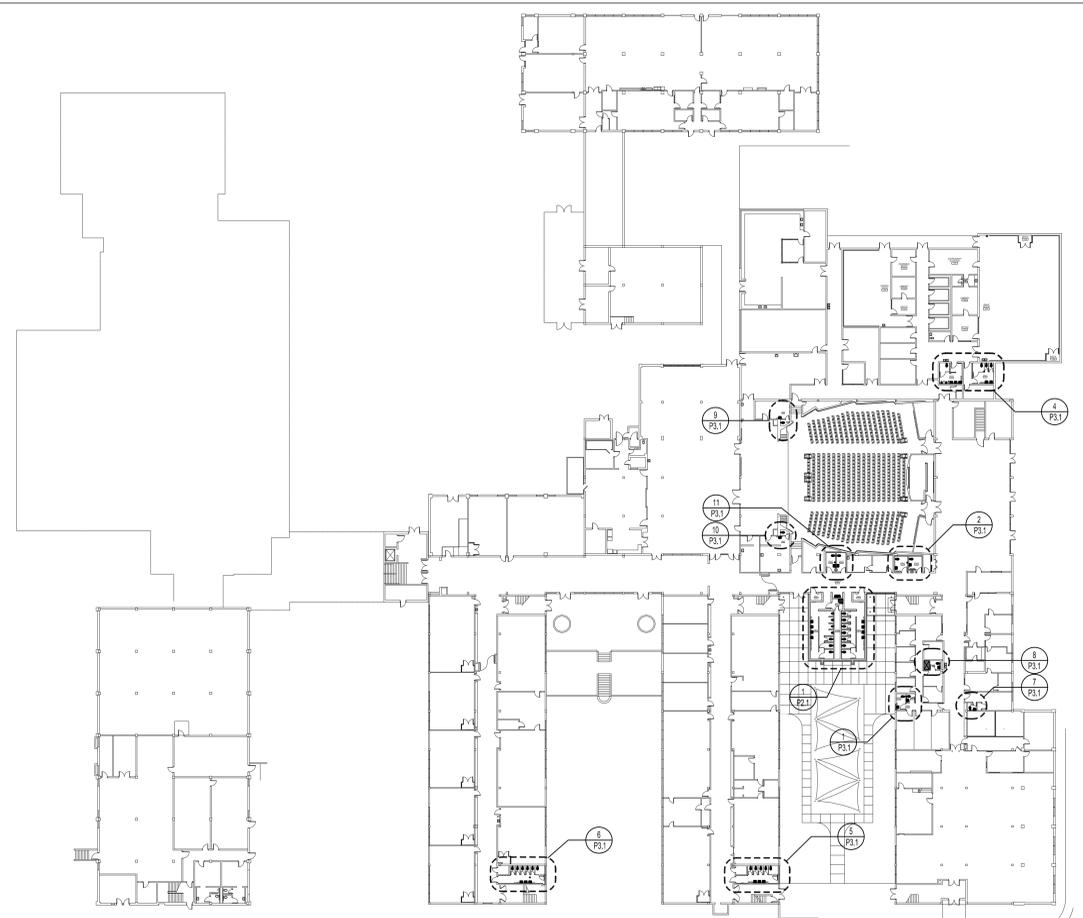
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**P1.2**

project no. 2231

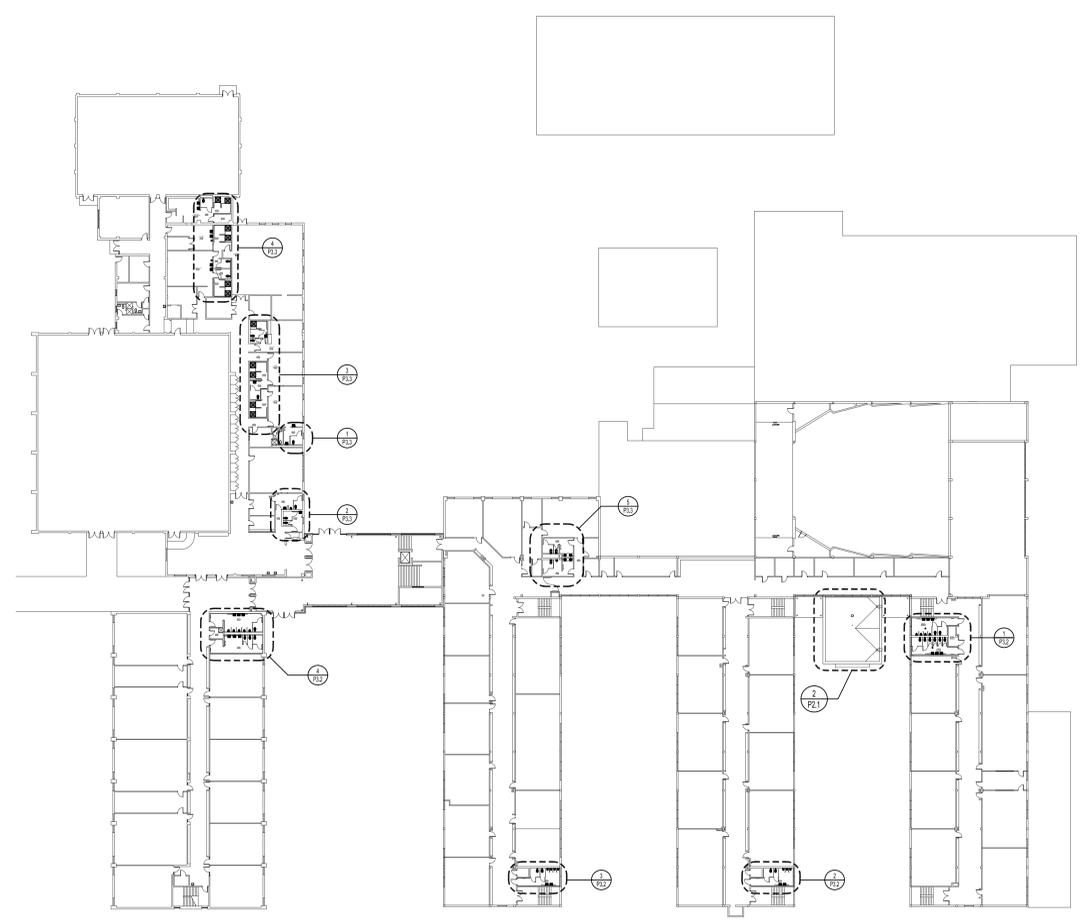
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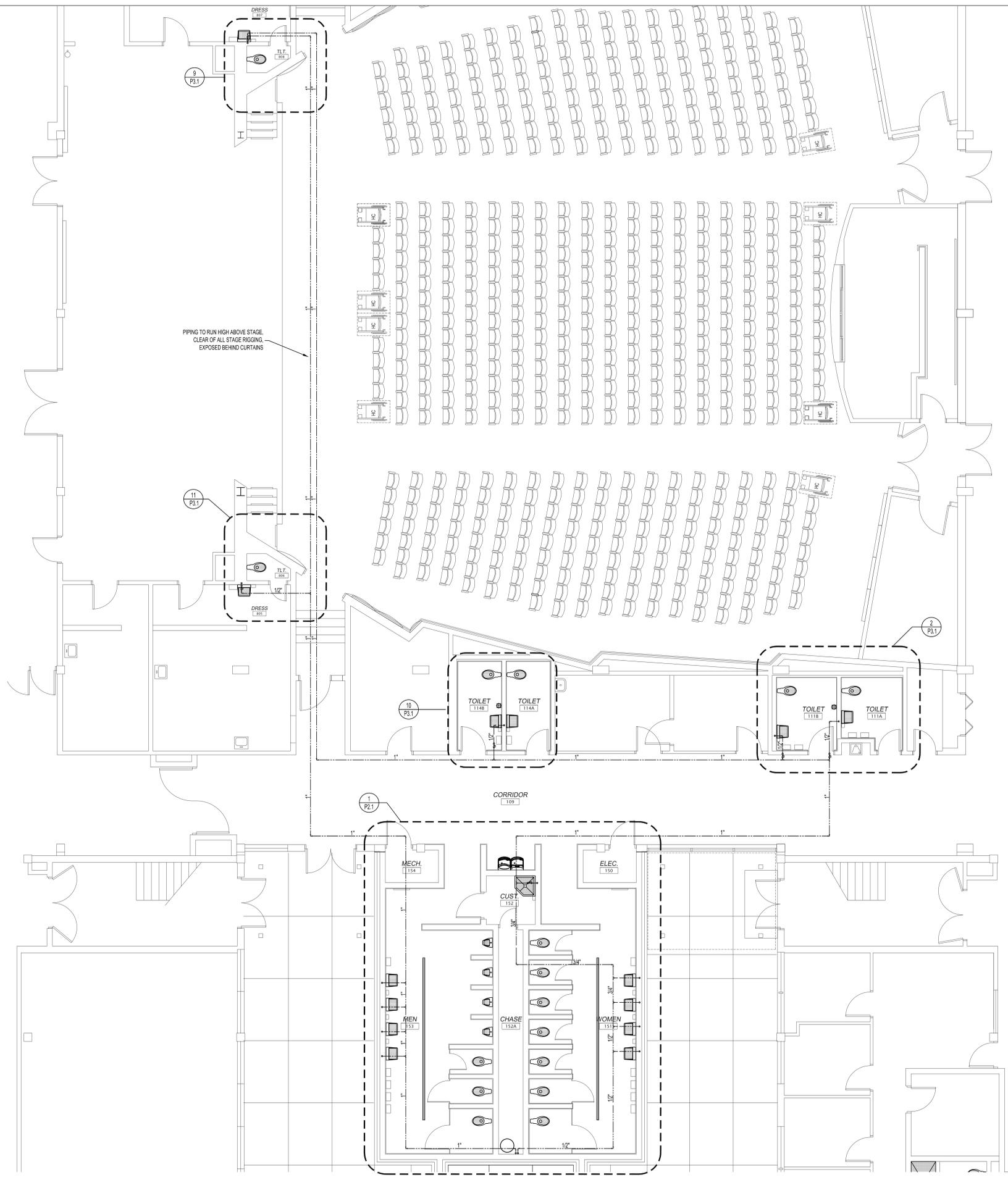
**1 Overall Basement Floor New Plumbing Floor Plan**  
Scale: 1" = 40'-0"



**2 Overall First Floor New Plumbing Floor Plan**  
Scale: 1" = 40'-0"



**3 Overall Second Floor New Plumbing Floor Plan**  
Scale: 1" = 40'-0"



1 Overall First Floor New Plumbing Hot Water Piping Floor Plan  
 P1.3 Scale: 3/16" = 1'-0"



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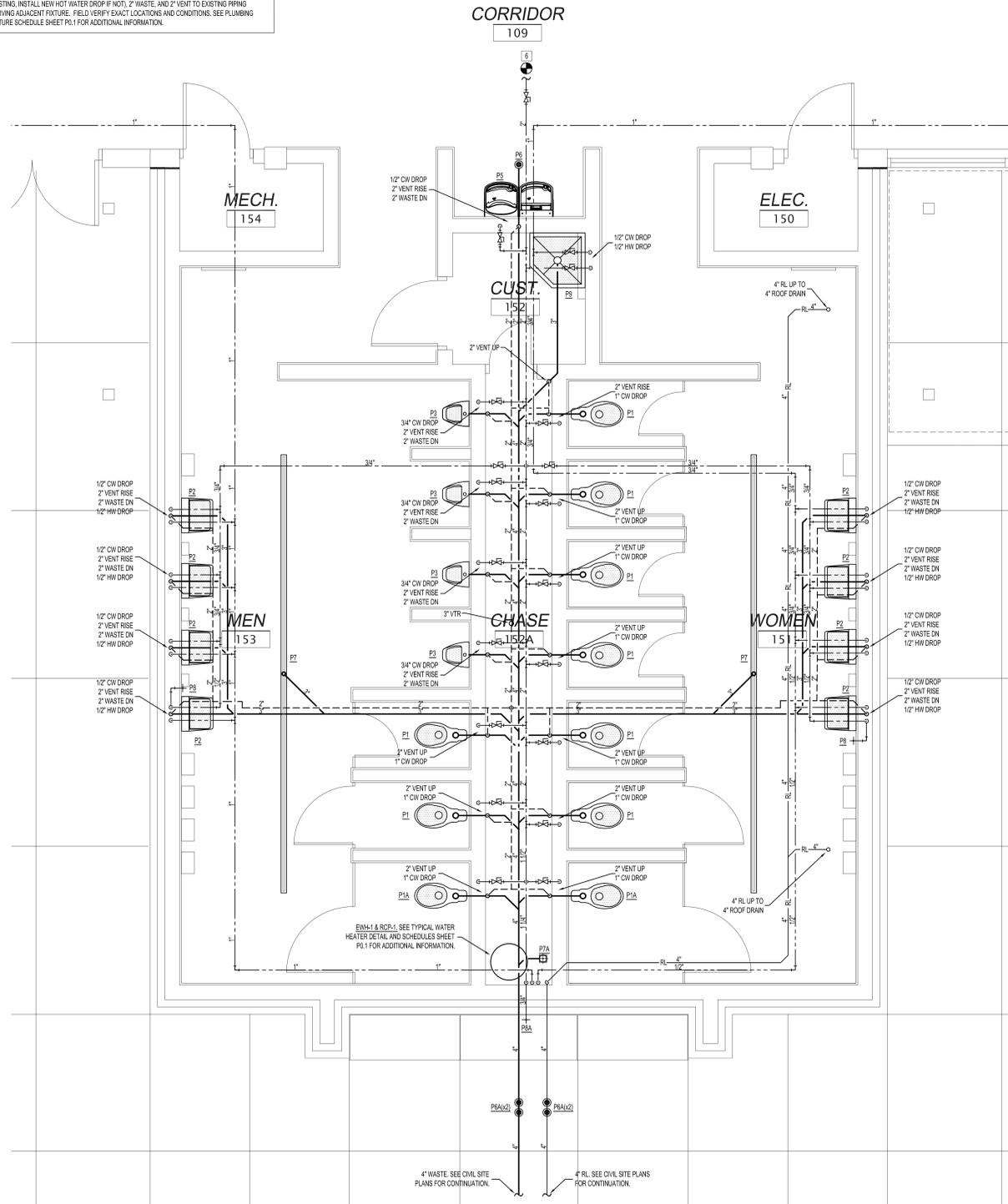
Overall First  
 Floor Plumbing  
 Hot Water Piping

sheet  
**P1.3**

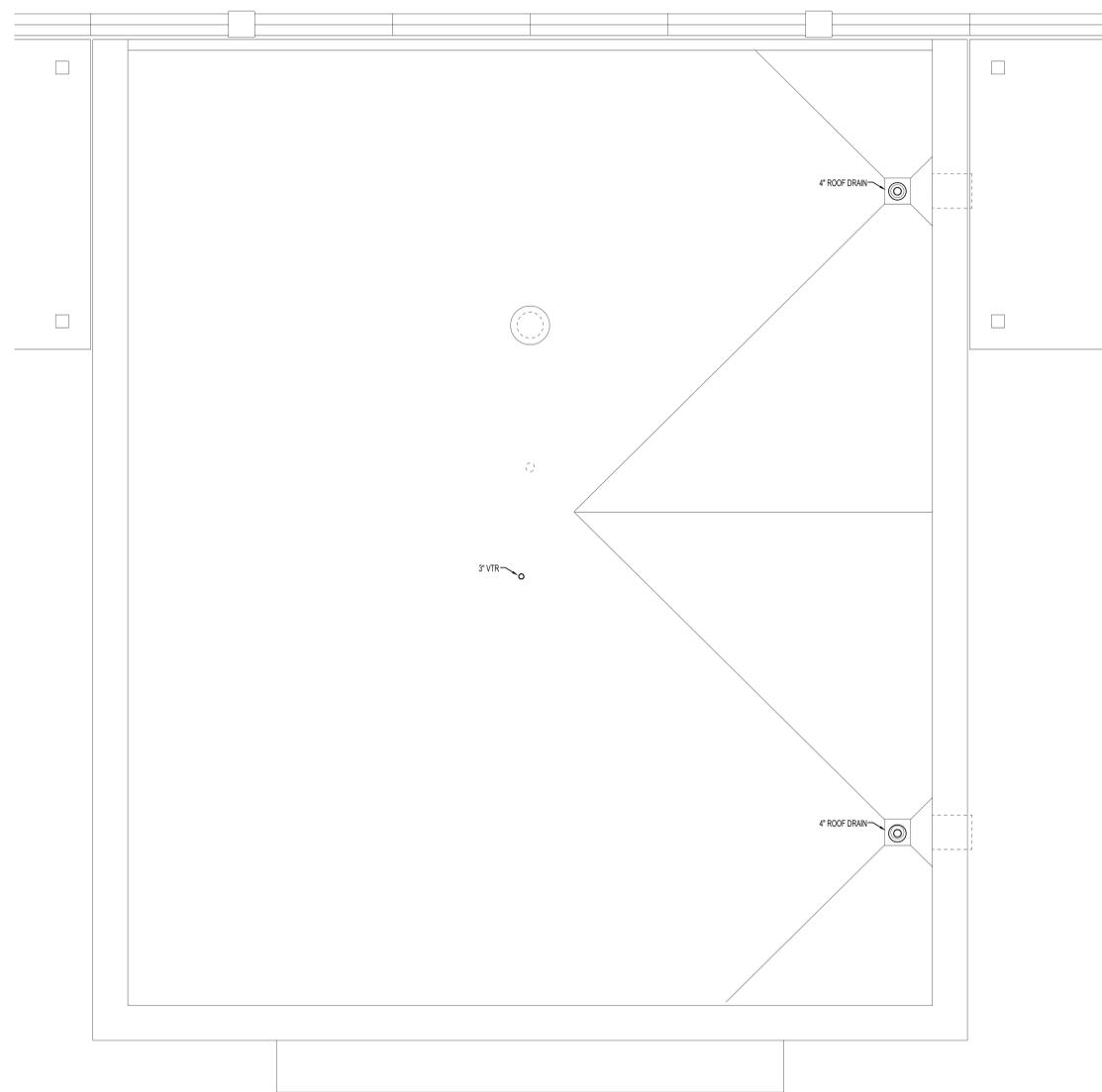
project no. 2231  
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**KEYED PLUMBING CONSTRUCTION NOTES**  
NOTES APPLY TO PLUMBING SHEETS ONLY. NOT ALL NOTES MAY BE APPLICABLE TO THIS SHEET.

1. INSTALL NEW PLUMBING FIXTURE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONNECT TO EXISTING PIPING THAT WAS PREPARED DURING DEMOLITION. SEE PLUMBING FIXTURE SCHEDULE SHEET P0.1 FOR ADDITIONAL INFORMATION.
2. INSTALL NEW HOT WATER LOOPS AND CIRCULATING PUMP ON EXISTING WATER HEATER. INSTALL NEW WATER HEATER STAND AND DRAIN PAN WITH DRAIN TO EXISTING SERVICE SINK / FLOOR DRAIN. CONNECT EXISTING FIXTURE HOT WATER SUPPLIES THAT EXISTING WATER HEATER IS CURRENTLY SUPPLYING TO NEW HOT WATER LOOP IF POSSIBLE. ALL VALVE COMPONENTS TO BE INSTALLED IN ROOM WITH WATER HEATER. SHOWN WHERE THEY ARE FOR CLARITY. SEE DETAILS AND SCHEDULES SHEET P0.1 FOR ADDITIONAL INFORMATION.
3. INSTALL NEW WALL HUNG LAVATORY. CONNECT NEW FIXTURE 1/2" COLD WATER, 2" WASTE, AND 2" VENT TO EXISTING PIPING THAT WAS PREPARED DURING DEMOLITION PREVIOUSLY SERVING DEMOLISHED WATER CLOSET. CONNECT NEW 1/2" HOT WATER TO EXISTING HOT WATER PIPING ABOVE CEILING IF PRESENT. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS. SEE PLUMBING FIXTURE SCHEDULE SHEET P0.1 FOR ADDITIONAL INFORMATION.
4. CONNECT NEW PIPING (SIZES DENOTED ON PLANS / PLUMBING FIXTURE SCHEDULE) TO EXISTING PIPING THAT WAS PREPARED DURING DEMOLITION ABOVE CEILING AND BELOW FLOOR. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS.
5. INSTALL NEW WATER CLOSET PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONNECT NEW 4" WASTE, 2" VENT, AND 1" COLD WATER TO WATER CLOSET DIRECTLY ACROSS WALL, BACK TO BACK INSTALLATION OR ADJACENT WATER CLOSET.
6. CONNECT NEW 2" COLD WATER PIPING TO EXISTING COLD WATER PIPING. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS.
7. INSTALL NEW PLUMBING FIXTURE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONNECT TO EXISTING PIPING THAT WAS PREPARED DURING DEMOLITION. INSTALL NEW 1/2" HOT WATER DROP FROM NEW HOT WATER LOOP. SEE PLUMBING FIXTURE SCHEDULE SHEET P0.1 FOR ADDITIONAL INFORMATION.
8. INSTALL NEW WALL HUNG LAVATORY. CONNECT NEW FIXTURE 1/2" COLD WATER, 1/2" HOT WATER IF EXISTING. INSTALL NEW HOT WATER DROP IF NOT. 2" WASTE, AND 2" VENT TO EXISTING PIPING SERVING ADJACENT FIXTURE. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS. SEE PLUMBING FIXTURE SCHEDULE SHEET P0.1 FOR ADDITIONAL INFORMATION.



1 Enlarged Plan - Toilet Room Addition  
P2.1 Scale: 3/8" = 1'-0"



2 Enlarged Plan - Toilet Room Addition Roof  
P2.1 Scale: 3/8" = 1'-0"



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Enlarged First  
Floor Addition  
Plumbing Plans

sheet  
P2.1

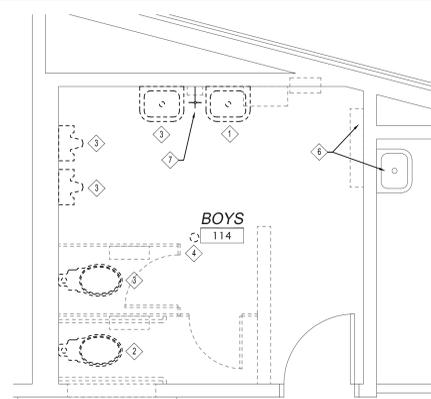
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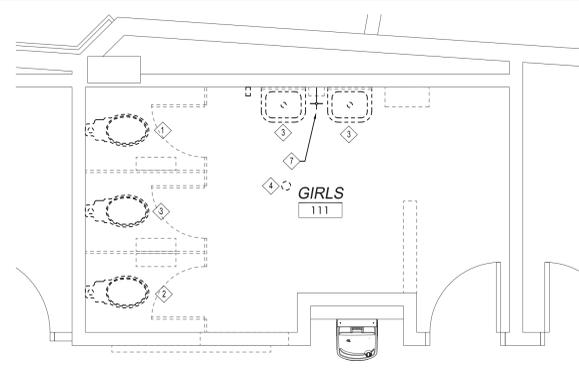
**KEYED PLUMBING DEMOLITION NOTES**

NOTES APPLY TO PLUMBING SHEETS ONLY. NOT ALL NOTES MAY BE APPLICABLE TO THIS SHEET

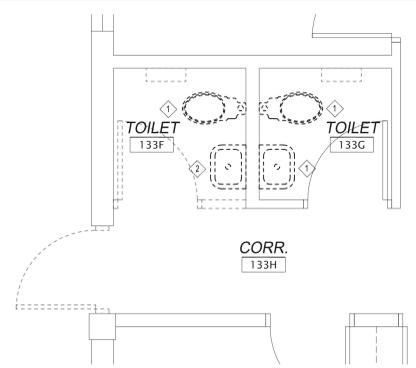
- 1 EXISTING PLUMBING FIXTURE TO BE REMOVED AND DISPOSED OF AS DIRECTED BY OWNER. EXISTING PLUMBING ROUGH-INS TO REMAIN AND BE REWORKED AS NEEDED TO ACCOMMODATE NEW PLUMBING FIXTURE. PATCH FLOOR AND WALLS AS REQUIRED TO MATCH EXISTING CONDITIONS AND THICKNESS. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS.
- 2 EXISTING PLUMBING FIXTURE TO BE REMOVED AND DISPOSED OF AS DIRECTED BY OWNER. REMOVE EXISTING FUTURE WATER SUPPLIES AND VENT PIPING BACK TO ABOVE CEILING AND PREPARE PIPING FOR RECONNECTION TO NEW PIPING. REMOVE EXISTING FUTURE WASTE BACK TO BELOW FLOOR AND PREPARE PIPING FOR RECONNECTION TO NEW PIPING. PATCH FLOOR AND WALLS AS REQUIRED TO MATCH EXISTING CONDITIONS AND THICKNESS. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS.
- 3 EXISTING PLUMBING FIXTURES TO BE REMOVED AND DISPOSED OF AS DIRECTED BY OWNER. REMOVE EXISTING WATER SUPPLIES AND VENT PIPING BACK TO THE NEXT INTERSECTION AND CAP. REMOVE EXISTING WASTE PIPING BACK TO THE NEXT INTERSECTION AND CAP OR INSTALL NEW CLEANOUT. NO DEAD END PIPING ALLOWED. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS. PATCH FLOOR AND WALLS AS REQUIRED TO MATCH EXISTING CONDITIONS AND THICKNESS. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS.
- 4 EXISTING FLOOR DRAIN TO BE REMOVED AND DISPOSED OF AS DIRECTED BY OWNER. INSTALL NEW SIOUX CHIEF SERIES 882 FLOOR DRAIN IN PREVIOUS DRAINS LOCATION WITH TRAP SEAL DEVICE. EXTEND PIPING AS NEEDED FOR NEW FLOORING. PATCH FLOOR AS REQUIRED TO MATCH EXISTING CONDITIONS AND THICKNESS. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS.
- 5 EXISTING TOILET ROUGH-IN TO REMAIN AND REWORKED AS NEEDED TO ACCOMMODATE NEW FIXTURES AND LOCATIONS. PATCH FLOOR AS NEEDED TO MATCH EXISTING CONDITIONS AND THICKNESS. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS.
- 6 EXISTING SINK IN NURSE'S ROOM TO REMAIN IN PLACE. EXISTING EXPOSED PIPING IN BATHROOM TO REMAIN AND BE REWORKED AS NEEDED TO CONCEAL IN WALL. CONNECT TO EXISTING ROUGH-IN OF LABORATORY BEING REMOVED. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS.
- 7 EXISTING HOSE BIBB TO BE REMOVED. REMOVE WATER SUPPLY BACK TO THE NEXT INTERSECTION AND CAP TO PREVENT DEAD END PIPING. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS.
- 8 EXISTING PLUMBING ROUGH-IN TO BE REMOVED AND DISPOSED OF AS DIRECTED BY OWNER. REMOVE EXISTING WATER SUPPLIES AND VENT PIPING BACK TO THE NEXT INTERSECTION AND CAP. REMOVE EXISTING WASTE PIPING BACK TO THE NEXT INTERSECTION AND CAP OR INSTALL NEW CLEANOUT. NO DEAD END PIPING ALLOWED. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS. PATCH FLOOR AND WALLS AS REQUIRED TO MATCH EXISTING CONDITIONS AND THICKNESS.
- 9 EXISTING WATER HEATER TO REMAIN AND BE RE-INSTALLED ON NEW WATER HEATER STAND (TO BE ABLE TO BE DRAINED INTO EXISTING SERVICE SINK OR FLOOR DRAIN. NEW HOT WATER PIPING SYSTEM AND RECIRCULATING PUMP TO BE INSTALLED ON WATER HEATER. SEE NEW PLANS AND DETAILS FOR ADDITIONAL INFORMATION.



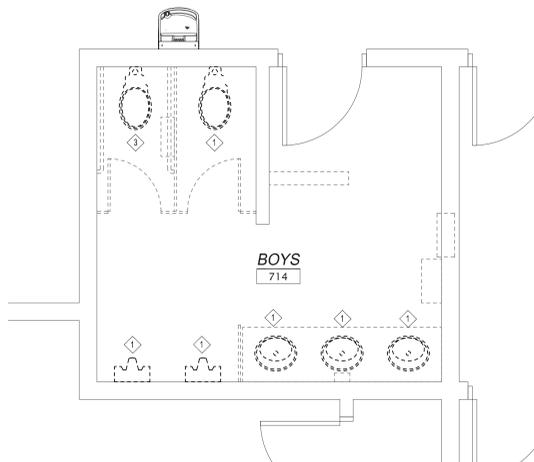
3 Enlarged Plan - Toilets 114A and 114B  
Scale: 3/8" = 1'-0"



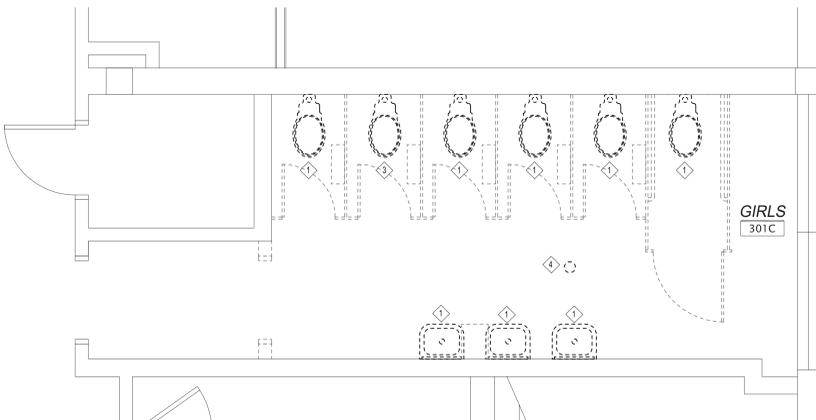
2 Enlarged Plan - Toilets 111A and 111B  
Scale: 3/8" = 1'-0"



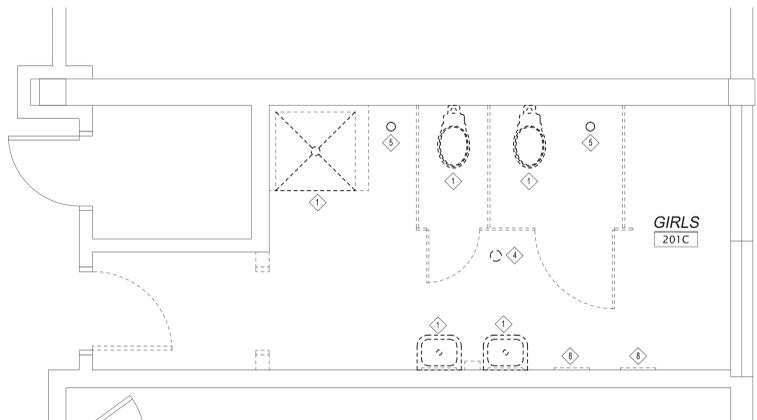
1 Enlarged Plan - Toilets 133F and 133G  
Scale: 3/8" = 1'-0"



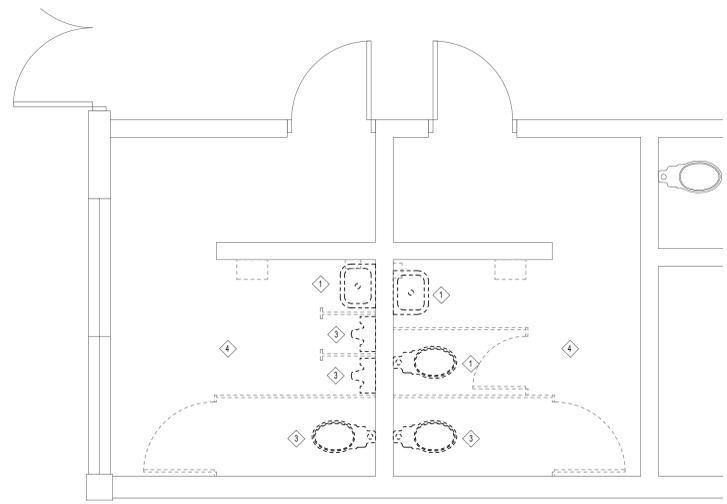
4 Enlarged Plan - Girls 712 & Boys 714  
Scale: 3/8" = 1'-0"



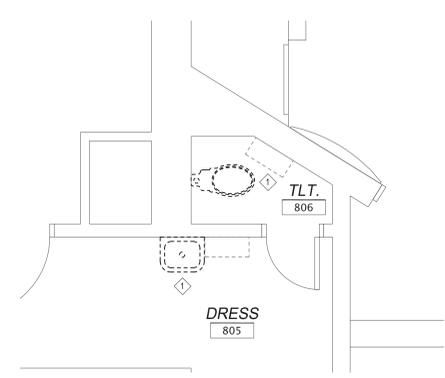
6 Enlarged Plan - Girls 301C  
Scale: 3/8" = 1'-0"



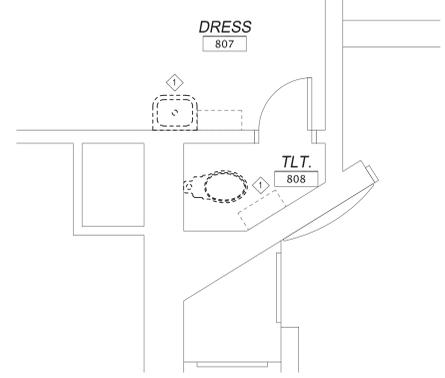
5 Enlarged Plan - Girls 201C  
Scale: 3/8" = 1'-0"



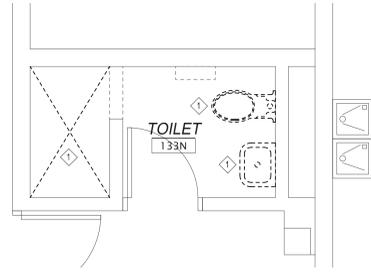
11 Enlarged Plan - Basement Bathroom  
Scale: 3/8" = 1'-0"



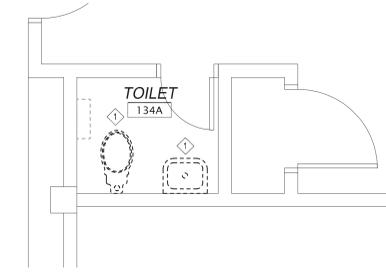
10 Enlarged Plan - Toilet 806  
Scale: 3/8" = 1'-0"



9 Enlarged Plan - Toilet 808  
Scale: 3/8" = 1'-0"



8 Enlarged Plan - Toilet 133N  
Scale: 3/8" = 1'-0"



7 Enlarged Plan - Toilet 134A  
Scale: 3/8" = 1'-0"



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JRW MRM

Enlarged Basement  
And First Floor  
Plumbing  
Demolition Plans

sheet  
**PD3.1**

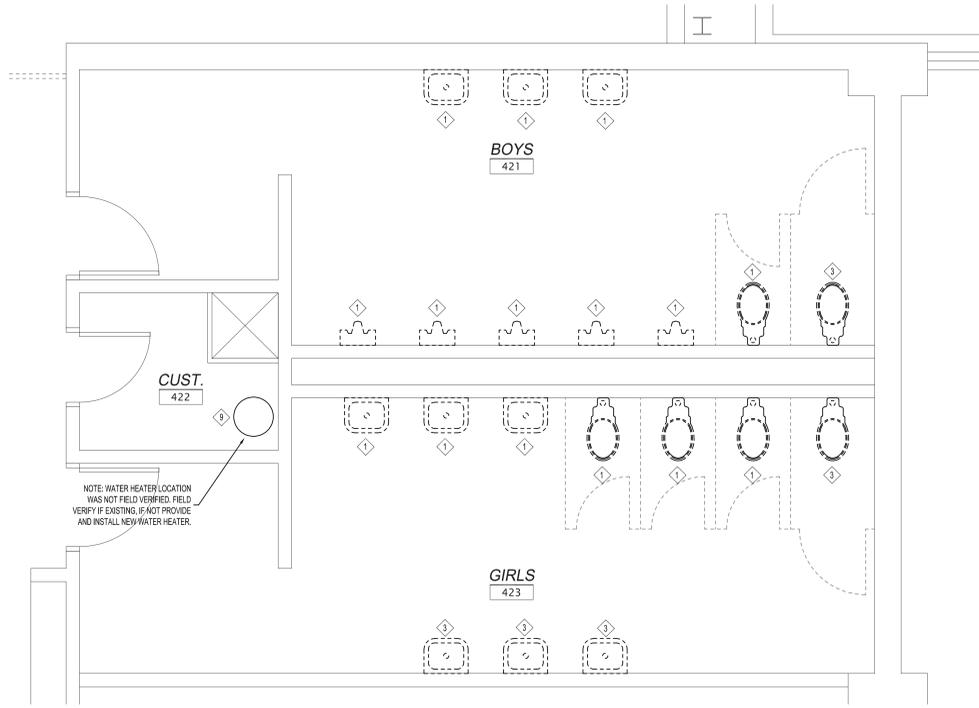
project no. 2231

date 7/25/23

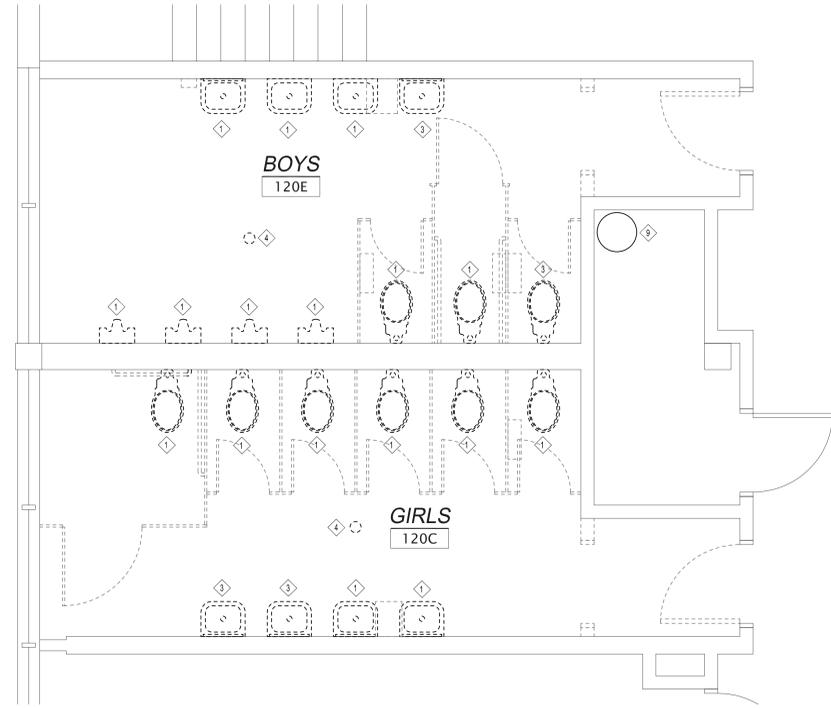
**KEYED PLUMBING DEMOLITION NOTES**

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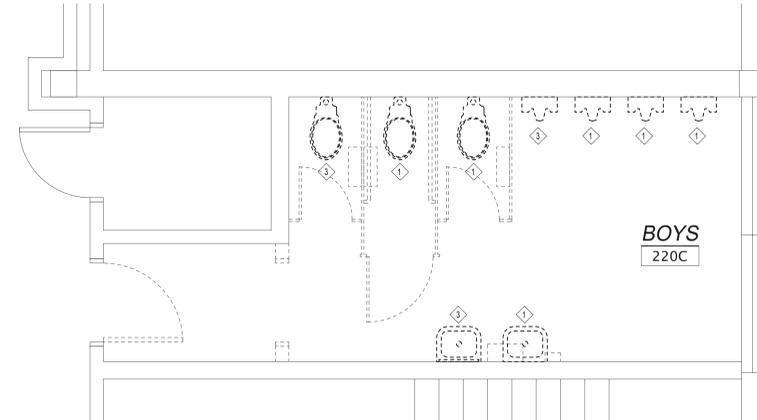
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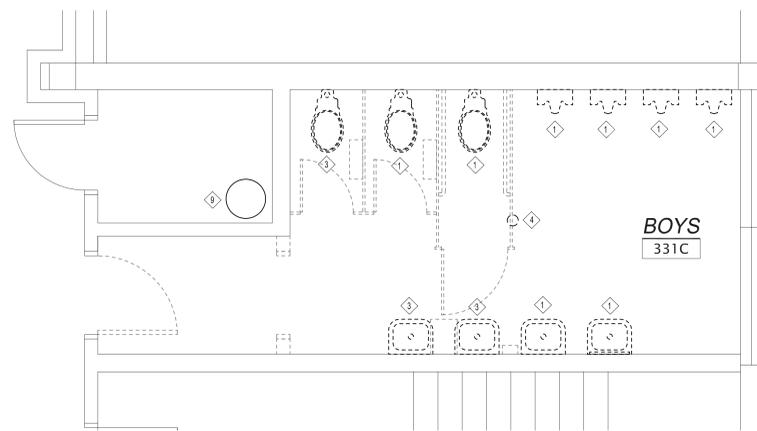
4 Enlarged Reno Plan - Boys 401/Girls 402  
Scale: 3/8" = 1'-0"



1 Enlarged Reno Plan - Girls 120C/Boys 120E  
Scale: 3/8" = 1'-0"



2 Enlarged Reno Plan - Boys 220C  
Scale: 3/8" = 1'-0"



3 Enlarged Reno Plan - Boys 331C  
Scale: 3/8" = 1'-0"



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drawn	checked
JRW	MRM

Enlarged Second  
Floor Plumbing  
Demolition Plans

sheet  
**PD3.2**

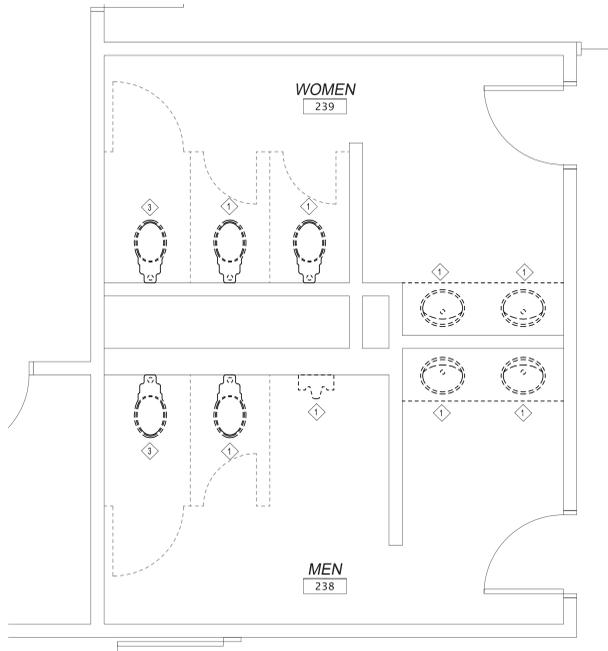
project no. 2231

date 7/25/23

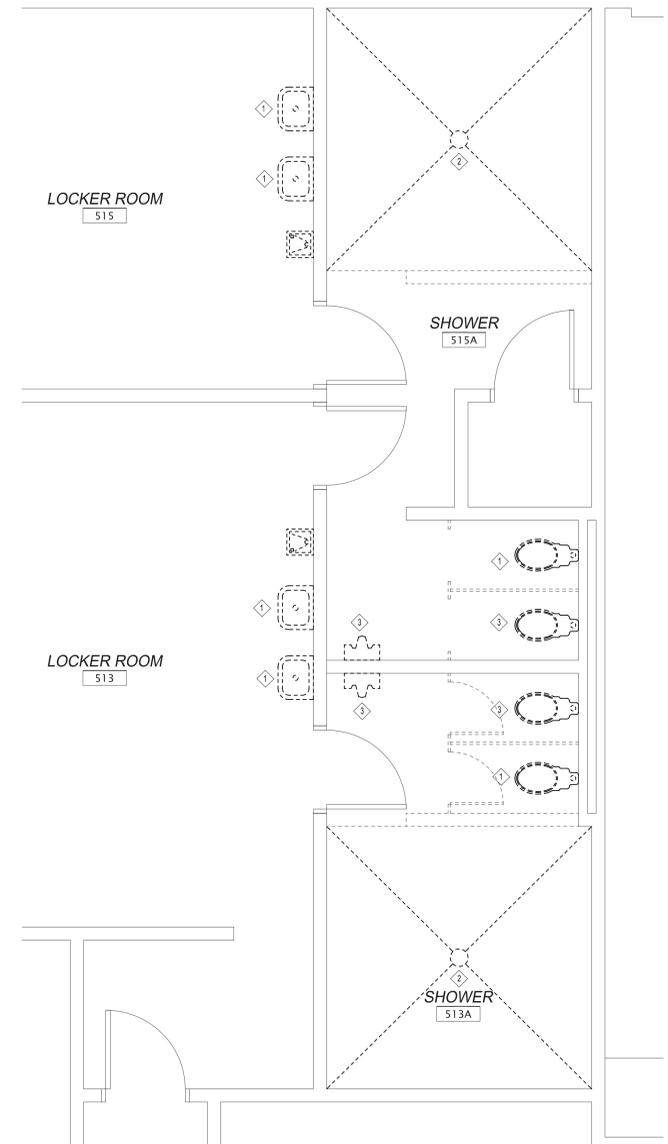
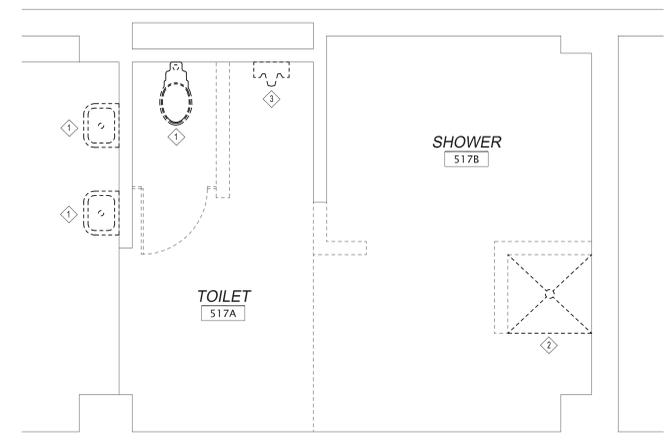
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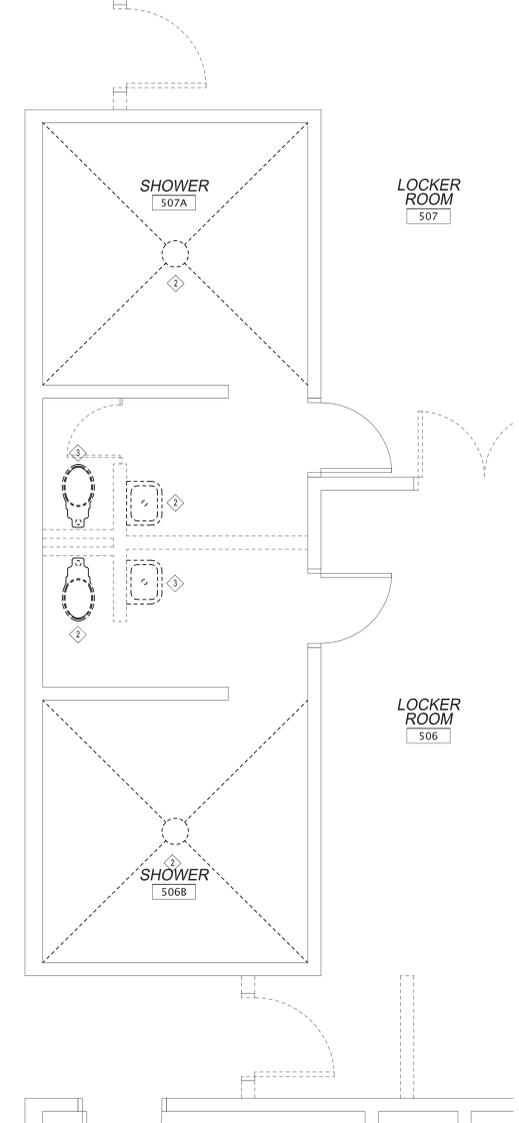
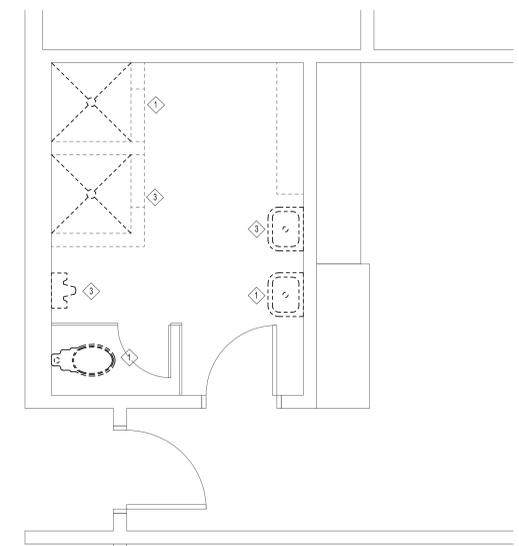
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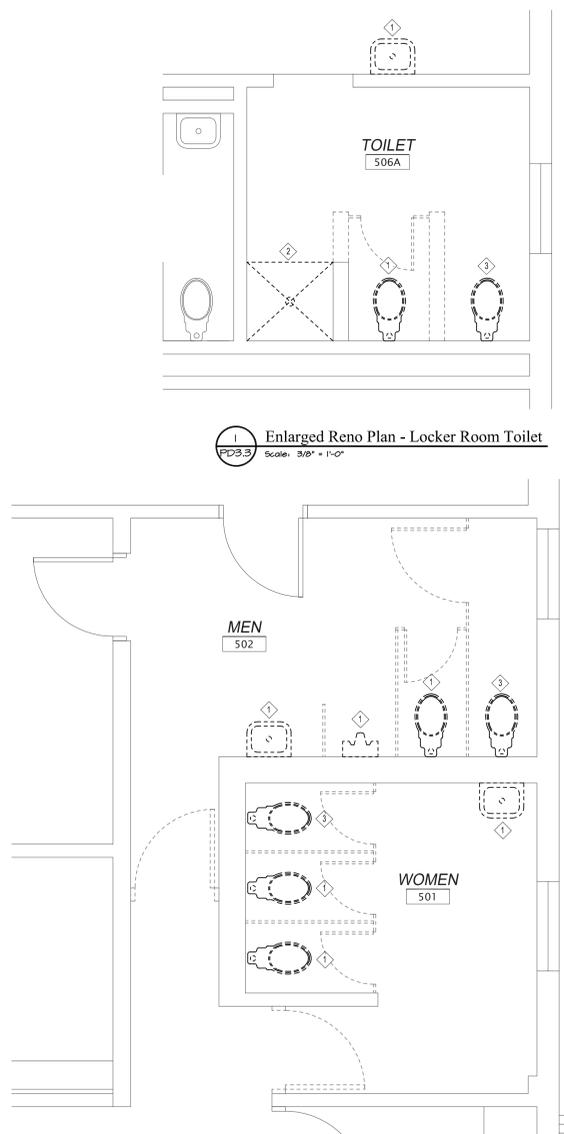
5 Enlarged Reno Plan - Mens 238/ Womens 239  
Scale: 3/8" = 1'-0"



4 Enlarged Reno Plan - Locker Room Toilets  
Scale: 3/8" = 1'-0"



3 Enlarged Reno Plan - Locker Room Toilets  
Scale: 3/8" = 1'-0"



2 Enlarged Reno Plan - Gym Public Toilets  
Scale: 3/8" = 1'-0"



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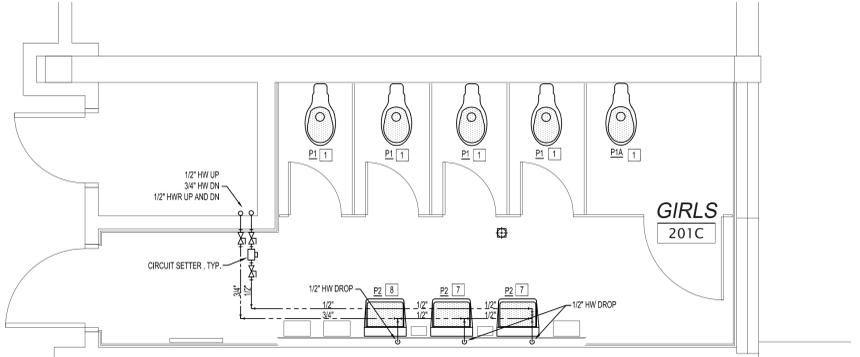
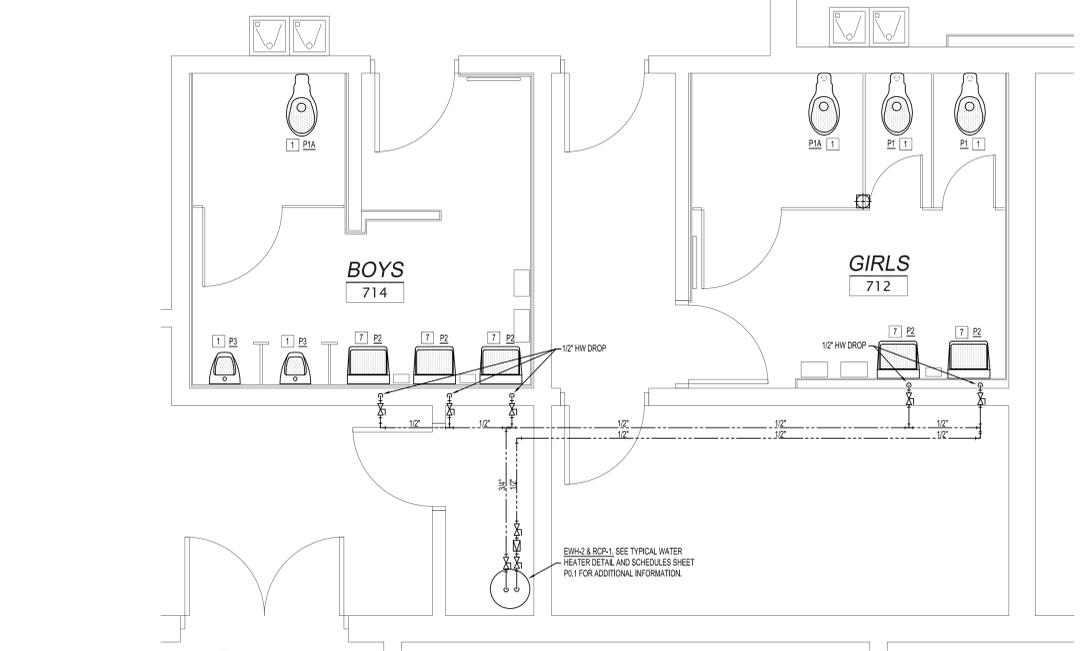
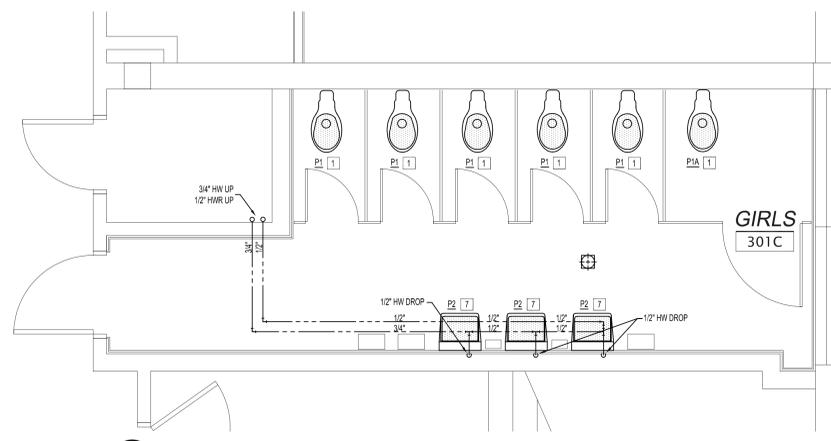
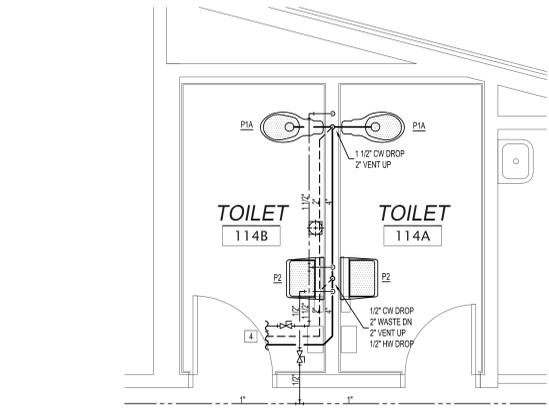
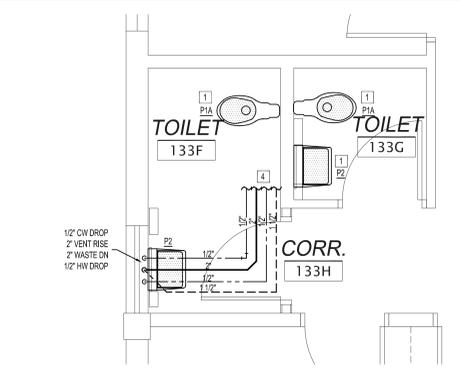
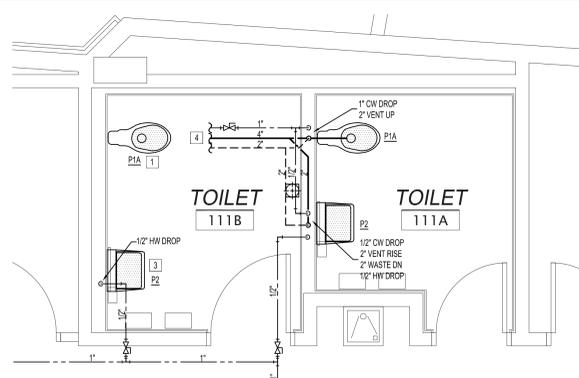
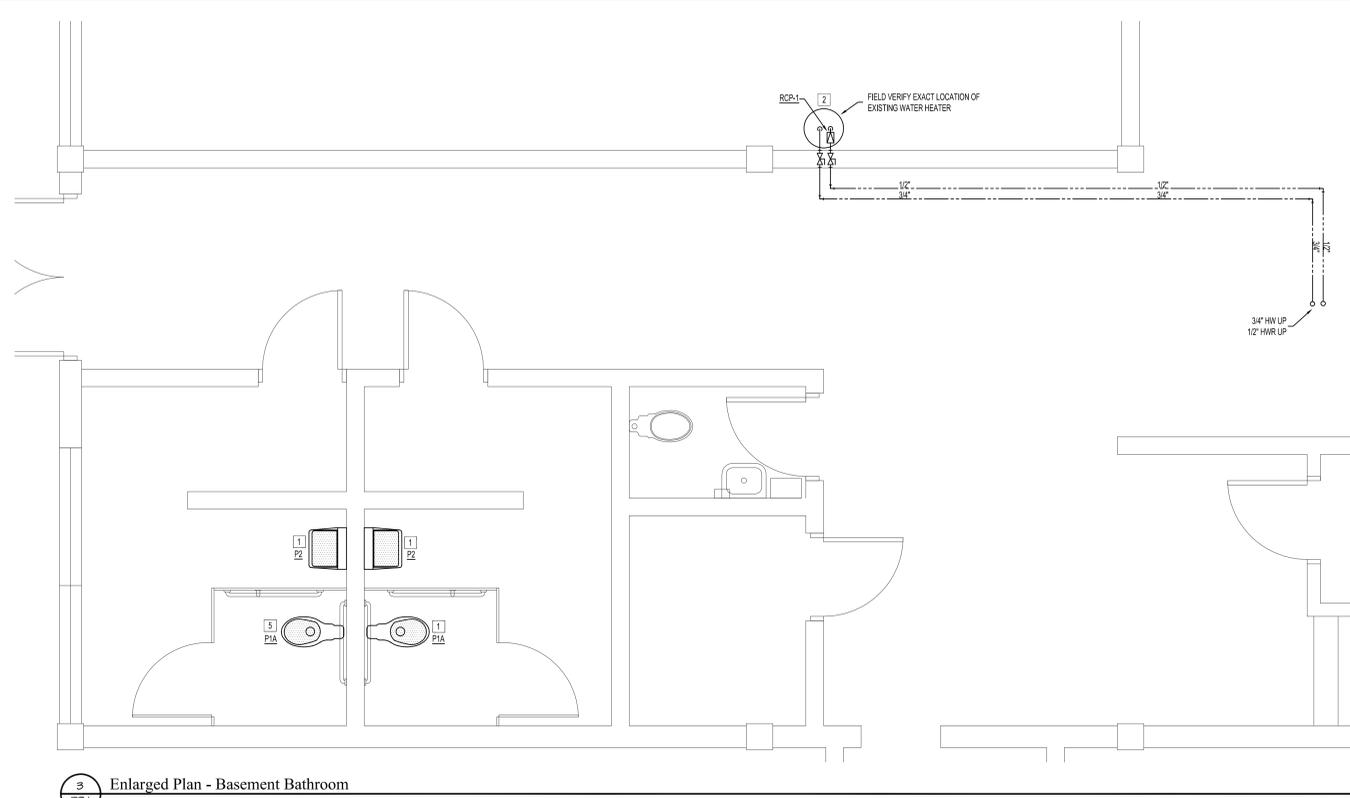
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JRW MRM

Enlarged Second  
Floor Plumbing  
Demolition Plans

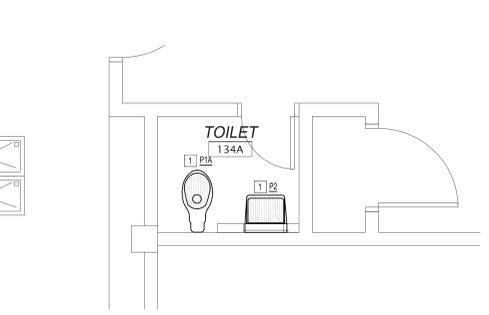
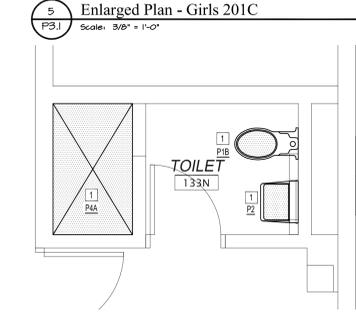
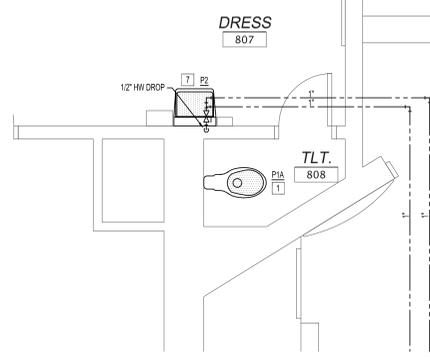
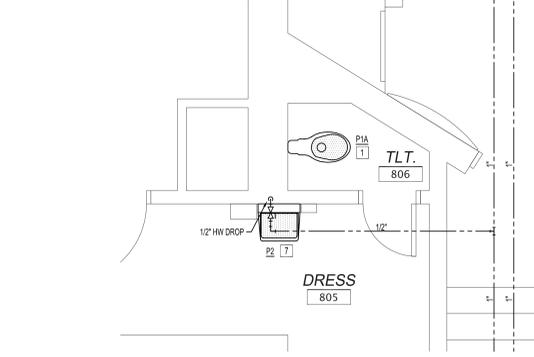
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PD3.3

project no. 2231

date 7/25/23



- KEYED PLUMBING CONSTRUCTION NOTES**  
NOTES APPLY TO PLUMBING SHEETS ONLY. NOT ALL NOTES MAY BE APPLICABLE TO THIS SHEET
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New Plumbing  
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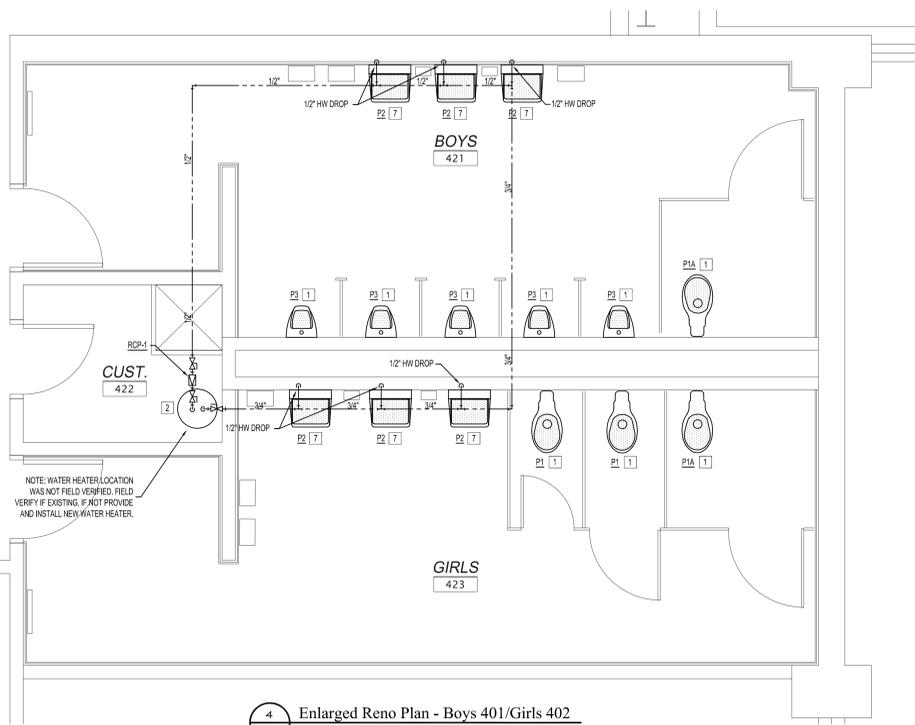
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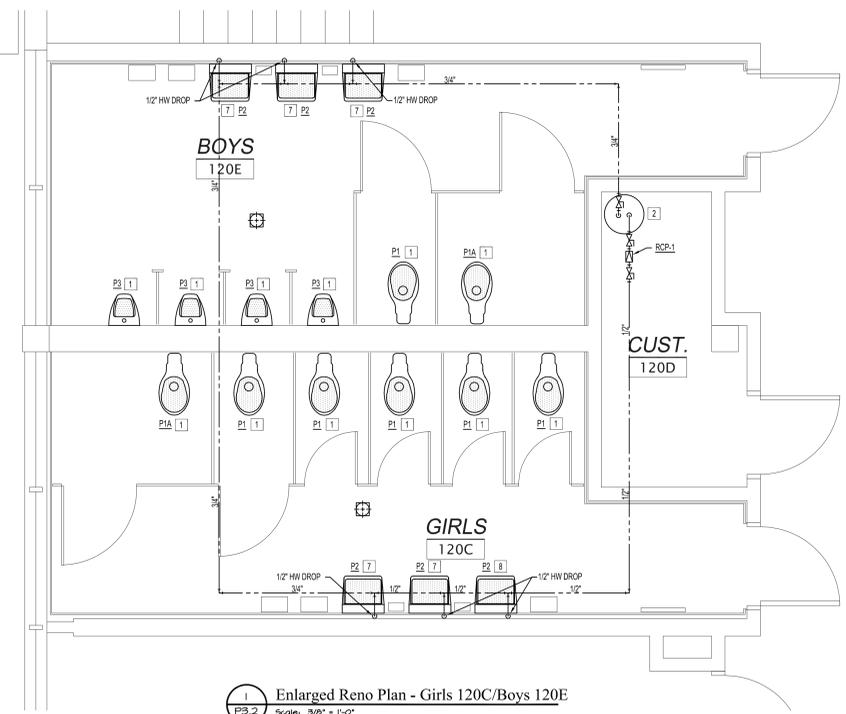
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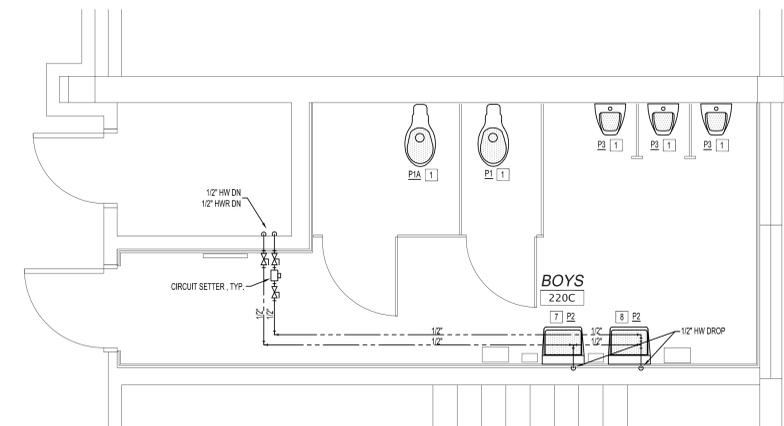
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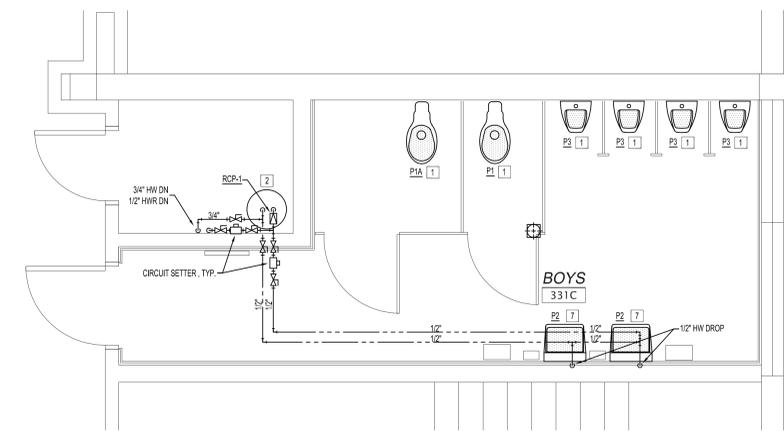
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Hillsborough, North Carolina



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JRW MRM

Enlarged Second  
Floor New  
Plumbing Plans

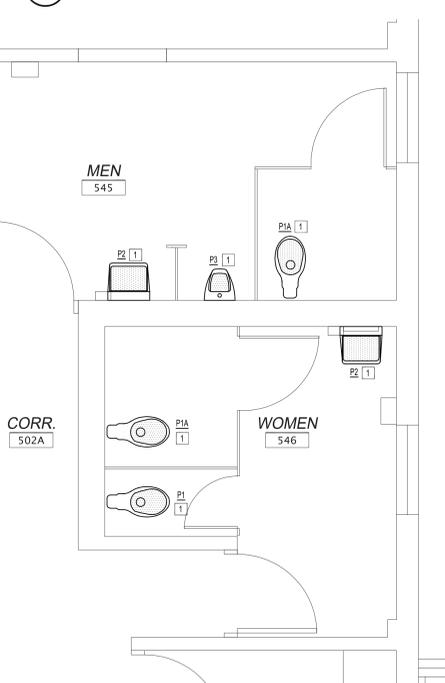
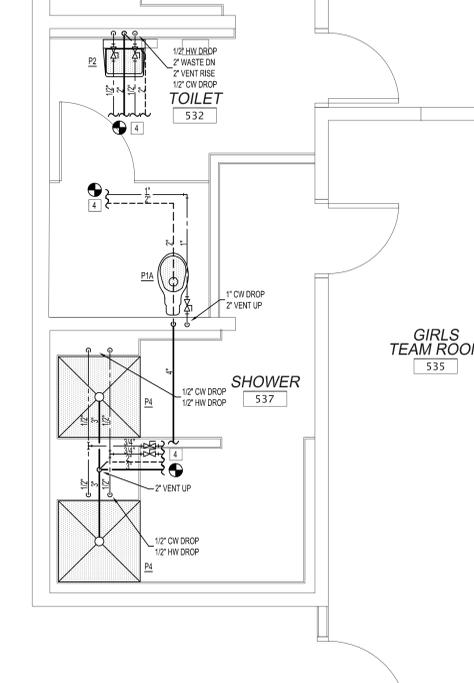
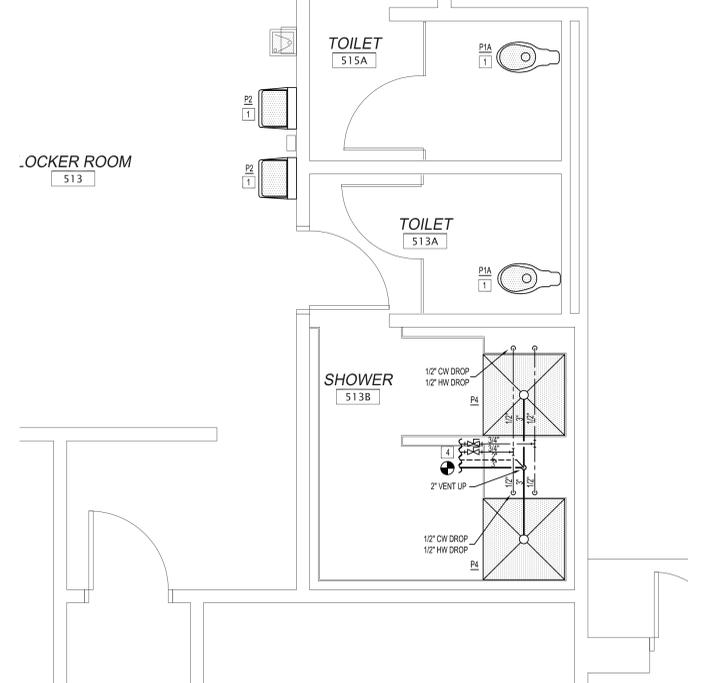
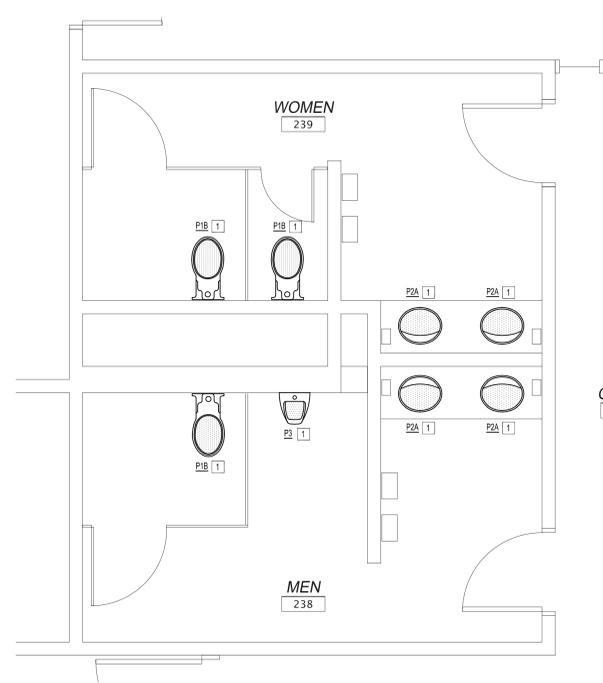
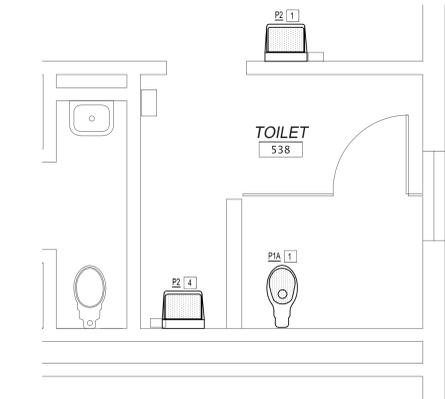
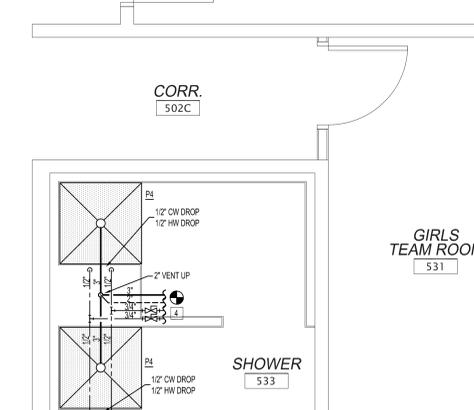
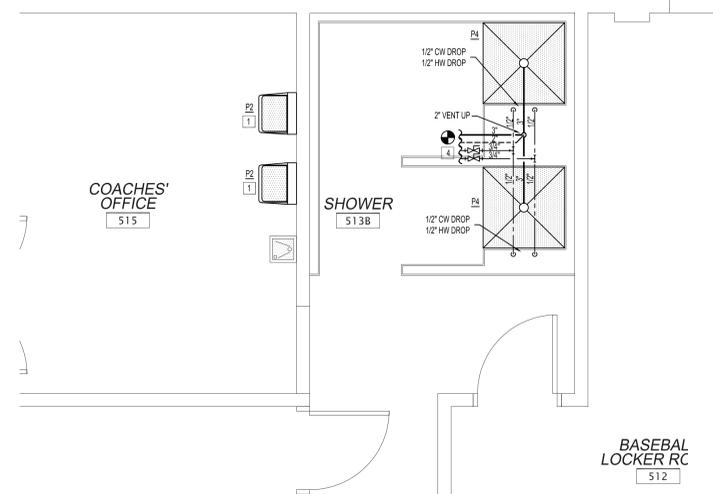
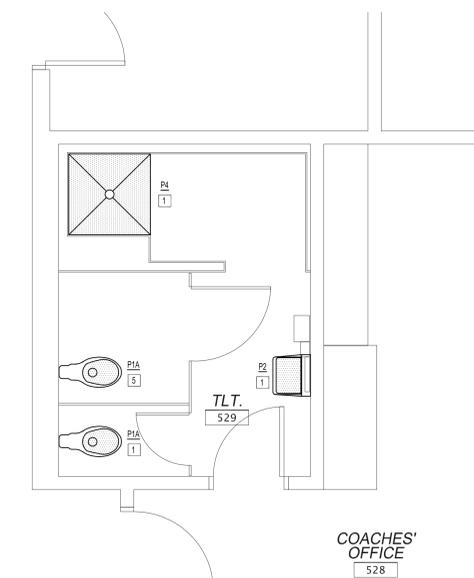
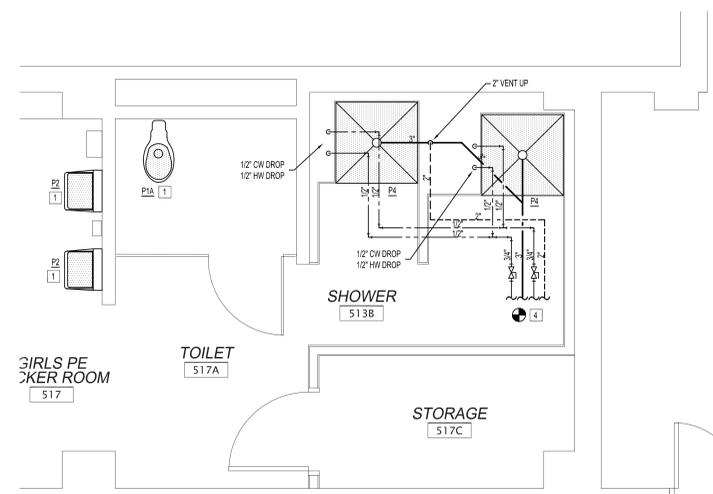
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project no. 2231

date 7/25/23

**KEYED PLUMBING CONSTRUCTION NOTES**

- NOTES APPLY TO PLUMBING SHEETS ONLY. NOT ALL NOTES MAY BE APPLICABLE TO THIS SHEET.
- 1) INSTALL NEW PLUMBING FIXTURE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONNECT TO EXISTING PIPING THAT WAS PREPARED DURING DEMOLITION. SEE PLUMBING FIXTURE SCHEDULE SHEET P0.1 FOR ADDITIONAL INFORMATION.
  - 2) INSTALL NEW HOT WATER LOOPS AND CIRCULATING PUMP ON EXISTING WATER HEATER. INSTALL NEW WATER HEATER STAND AND DRAIN PAN WITH DRAIN TO EXISTING SERVICE SINK / FLOOR DRAIN. CONNECT EXISTING FIXTURE HOT WATER SUPPLIES THAT EXISTING WATER HEATER IS CURRENTLY SUPPLYING TO NEW HOT WATER LOOP IF POSSIBLE. ALL VALVES/COMPONENTS TO BE INSTALLED IN ROOM WITH WATER HEATER. SHOWN WHERE THEY ARE FOR CLARITY. SEE DETAILS AND SCHEDULES SHEET P0.1 FOR ADDITIONAL INFORMATION.
  - 3) INSTALL NEW WALL HUNG LAVATORY. CONNECT NEW FIXTURE 1/2" COLD WATER, 2" WASTE, AND 2" VENT TO EXISTING PIPING THAT WAS PREPARED DURING DEMOLITION PREVIOUSLY SERVING DEMOLISHED WATER CLOSET. CONNECT NEW 1/2" HOT WATER TO EXISTING HOT WATER PIPING ABOVE CEILING IF PRESENT. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS. SEE PLUMBING FIXTURE SCHEDULE SHEET P0.1 FOR ADDITIONAL INFORMATION.
  - 4) CONNECT NEW PIPING (SIZES DENOTED ON PLANS / PLUMBING FIXTURE SCHEDULES) TO EXISTING PIPING THAT WAS PREPARED DURING DEMOLITION ABOVE CEILING AND BELOW FLOOR. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS.
  - 5) INSTALL NEW WATER CLOSET PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONNECT NEW 4" WASTE, 2" VENT, AND 1" COLD WATER TO WATER CLOSET DIRECTLY ACROSS WALL, BACK TO BACK INSTALLATION OR ADJACENT WATER CLOSET.
  - 6) CONNECT NEW 2" COLD WATER PIPING TO EXISTING COLD WATER PIPING. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS.
  - 7) INSTALL NEW PLUMBING FIXTURE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONNECT TO EXISTING PIPING THAT WAS PREPARED DURING DEMOLITION. INSTALL NEW 1/2" HOT WATER DROP FROM NEW HOT WATER LOOP. SEE PLUMBING FIXTURE SCHEDULE SHEET P0.1 FOR ADDITIONAL INFORMATION.
  - 8) INSTALL NEW WALL HUNG LAVATORY. CONNECT NEW FIXTURE 1/2" COLD WATER, 1/2" HOT WATER IF EXISTING. INSTALL NEW HOT WATER DROP IF NOT. 2" WASTE AND 2" VENT TO EXISTING PIPING SERVING ADJACENT FIXTURE. FIELD VERIFY EXACT LOCATIONS AND CONDITIONS. SEE PLUMBING FIXTURE SCHEDULE SHEET P0.1 FOR ADDITIONAL INFORMATION.



5 Enlarged Reno Plan - Mens 238/ Womens 239  
Scale: 3/8" = 1'-0"

4 Enlarged Reno Plan - Locker Room Toilets  
Scale: 3/8" = 1'-0"

3 Enlarged Reno Plan - Locker Room Toilets  
Scale: 3/8" = 1'-0"

2 Enlarged Reno Plan - Gym Public Toilets  
Scale: 3/8" = 1'-0"

1 Enlarged Reno Plan - Locker Room Toilet  
Scale: 3/8" = 1'-0"



222 cloister  
hill, nc 27514  
919.401.8586  
www.cra-ae.com



Orange High School  
Renovations and Addition  
Orange County Schools  
500 Orange High School Road  
Hillsborough, North Carolina



no. revisions

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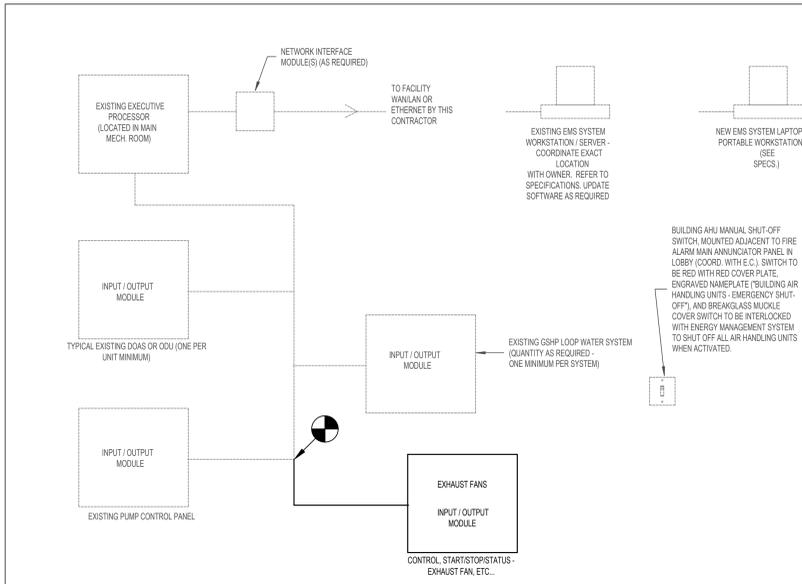
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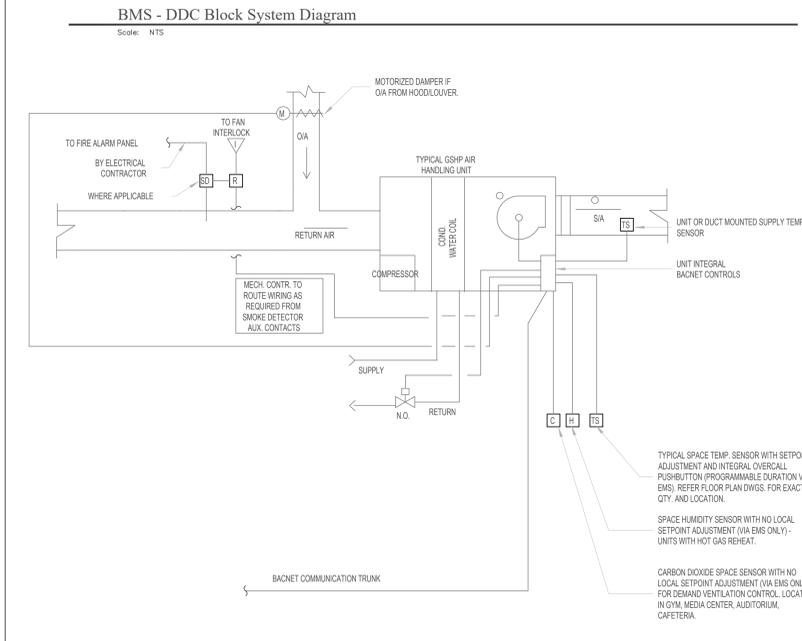
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- NOTES:**
- EXISTING CAMPUS EMS WORKSTATION LOCATED IN MAINTENANCE AREA. COORDINATE WITH OWNER AND EXISTING CONDITIONS. FURNISH NEW NETWORK INTERFACE MODULES, RELAYS, DEVICES, WIRING, PROGRAMMING, GRAPHICS, ETC. AS REQUIRED.
  - DIAGRAMS ARE SCHEMATIC ONLY. CONTRACTOR TO REFER TO SPECIFICATIONS FOR EXACT CONTROL SEQUENCE. CONTRACTOR RESPONSIBLE FOR FURNISHING ALL HARDWARE, EQUIPMENT, WIRING, ETC., NECESSARY FOR A COMPLETE CONTROL SYSTEM - WHETHER SHOWN ON DRAWINGS OR NOT.
  - THIS DIAGRAM IS SCHEMATIC ONLY. NOT ALL CONTROL POINTS HAVE BEEN SHOWN ON THIS DIAGRAM. CONTRACTOR RESPONSIBLE FOR PROVIDING POINTS AS REQUIRED PER INDIVIDUAL CONTROL DIAGRAMS AND SPECIFICATIONS, TO PROVIDE A COMPLETE CONTROL SYSTEM.
  - AMP PROBES MAY BE SUBSTITUTED FOR DIFFERENTIAL PRESSURE SWITCHES FOR FAN STATUS IF DESIRED.



- NOTES:**
- UNITS TO BE PROVIDED WITH FACTORY MOUNTED CONTROLLERS WITH BACNET INTERFACE CARDS.
  - UNIT INTEGRAL CONTROLS TO CONTROL THE SEQUENCE OF OPERATIONS FOR ALL HEAT PUMPS. UNITS TO BE PROVIDED WITH BACNET COMMUNICATION CARDS. CONTROLS CONTRACTOR TO INTEGRATE EACH HEAT PUMP TO THE ENERGY MANAGEMENT SYSTEM.
  - AT THE DISCRETION OF THE HEAT PUMP MANUFACTURER CONTROLS CONTRACTOR WIRELESS ROOM THERMOSTATS MAY BE PROVIDED.

**WATER SOURCE HEAT PUMPS**

Mark	MODEL	REFRIGERANT CIRCUIT	ELECTRICAL				AIRFLOW				COOLING												HEATING			
			FREQ.	VOLT.	PHASE	MCC	OUTDOOR AIR FLOW	SUPPLY FAN AIR FLOW	ESP	SUPPLY FAN HP	TOTAL CAP.	SENSIBLE CAP.	EER	EDB	EWB	LDB	LWB	EWT	LWT	PD	FLOW	TOTAL CAP.	Coefficient of Performance	EDB	LDB	EWT
GSHP-144	GEVE604	HEATING & COOLING W/ HGRH	60 Hz	480 V	3	12 A	400 CFM	1900 CFM	0.38 inwg	1.0 hp	55/30.0 Btu/h	13.2	75 °F	63 °F	55 °F	53 °F	80 °F	102 °F	4.87 psi	12 GPM	60480.0 Btu/h	4.65	63 °F	92 °F	50 °F	42 °F

**NOTES:**

- FACTORY PROVIDED DDC CONTROLLERS WITH BACNET OR LONWORKS COMMUNICATION CARD. COORDINATE WITH CONTROLS CONTRACTOR FOR PROTOCOL TO BE PROVIDED.
- CONTRACTOR MAY PROVIDE WIRELESS TEMPERATURE SENSORS.
- WALL MOUNTED TEMPERATURE SENSORS TO BE PROVIDED WITH PROTECTIVE COVER IN ALL CLASSROOMS AND COMMON AREAS. COVERS TO HAVE MATCHING KEYS LOCKS.
- ALL HEAT PUMPS 2000 CFM AND GREATER TO INCLUDE RETURN AIR SMOKE DETECTORS INSTALLED TO SHUT-DOWN THE UNIT ON PRESENCE OF SMOKE.
- DUCTED HINGED FILTER HOUSING WITH MERV 9 FILTERS.
- PROVIDE HOSE KITS WITH AUTO/CW VALVES, STRAINERS, 2-WAY CONTROL VALVE AND ISOLATION VALVES.
- PROVIDE NEOPRENE PADS UNDER UNIT.
- FOR UNITS DESIGNATED AS HAVING A HGRH REFRIGERANT CIRCUIT UNIT TO BE PROVIDED WITH COMBINATION TEMPERATURE AND HUMIDITY SENSOR.
- PROVIDE TWO SPEED MOTOR OPTION ON ALL UNITS GREATER THAN 5 TONS.
- BASIS OF DESIGN IS TRANE. COMPARABLE PRODUCTS BY CLIMATEMASTER AND CARRIER AS APPROVED BY ENGINEER.

- GENERAL MECHANICAL PIPING NOTES**
- CONTRACTOR TO SLOPE ALL CONDENSATE DRAIN PIPING ABOVE CEILING, UNDER SLAB, AND BELOW GRADE - 1/8" PER FOOT (MINIMUM).
  - ALL GSHP AHU COILS TO RECEIVE 2-WAY CONTROL VALVE, EXCEPT AT END OF PIPE RUNS (WHERE COILS SHALL HAVE NO VALVE). TOTAL OF COILS WITH VALVES TO BE APPROXIMATELY 70% OF TOTAL FLOW.
  - IN MECHANICAL ROOMS AND ON MECHANICAL PLATFORMS, ROUTE ALL AHU UNIT CONDENSATE DRAIN PIPING TO CLOSEST FLOOR OR HUB DRAIN UNLESS SHOWN OTHERWISE.
  - ROUTE 1-1/4" CONDENSATE DRAIN PIPES FROM EACH AHU UNIT TO CLOSEST HUB DRAIN (UNLESS NOTED OTHERWISE AS SHOWN ON AN UNIT DETAILS). WHERE PIPING IS ROUTED TO FLOOR DRAINS, SECURE PIPING TO FLOOR AND PROTECT FROM DAMAGE WITH ANGLE IRON COORDINATE FLOOR AND HUB DRAIN LOCATIONS PRIOR TO ROUGH-IN BETWEEN GENERAL CONTR. AND PLUMBING CONTR. SO THAT DRAINS DO NOT END UP UNDER HOUSEKEEPING PADS, THAT FLOORS ARE CORRECTLY SLOPED, ETC.
  - REFER TO DRAWINGS AND DETAILS FOR PERMISSIBLE LOCATIONS AND METHODS FOR HANGING PIPING FROM STRUCTURE. ALL PIPE HANGERS TO BE WITHIN 6" OF PANEL POINTS JOISTS. DO NOT WELD PIPE HANGERS/SUPPORTS TO STRUCTURE WITHOUT PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER.
  - ALL FLOOR/ROOF/PLATFORM/WALL PENETRATIONS TO BE MADE/INSTALLED PER DRAWINGS AND DETAILS.

- GENERAL MECHANICAL DUCTWORK NOTES**
- THE DRAWINGS SHOW THE LOCATION AND ARRANGEMENT OF PIPING, DUCTS, AND EQUIPMENT. TOGETHER WITH DETAILS OF CONNECTIONS OF CERTAIN PRINCIPAL ITEMS. THE LAYOUT SHOWN SHALL BE FOLLOWED AS CLOSELY AS CIRCUMSTANCES WILL PERMIT. BUT THIS CONTRACTOR SHALL REFER TO ARCHITECTURAL, STRUCTURAL, PLUMBING, AND ELECTRICAL DRAWINGS AND SHALL COORDINATE FULLY WITH OTHER CONTRACTORS AND TRADES WHILE INSTALLING DUCTS, PIPING, AND OTHER EQUIPMENT BECAUSE OF CLOSE SPACE LIMITS. IN CASE OF CONFLICT, NOTIFY DESIGNER BEFORE PROCEEDING WITH INSTALLATION. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND LOCATIONS OF PARTITION WALLS, DOORS, CHASES, CASEWORK, ETC. DO NOT SCALE MECHANICAL DRAWINGS FOR SUCH DIMENSIONS.
  - THIS CONTRACTOR SHALL PROVIDE AND INSTALL ALL OFFSETS, FITTINGS, AND ACCESSORIES THAT MAY BE REQUIRED FOR A COMPLETE AND PROPER INSTALLATION OR RECOMMENDED BY THE EQUIPMENT MANUFACTURER, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN OR SPECIFIED.
  - DUCTWORK SIZES INDICATED ON DRAWINGS ARE FREE INSIDE DIMENSIONS.
  - MAXIMUM LENGTH OF FLEXIBLE DUCT IS SIX FEET (6').
  - ALL VALVES, DAMPERS, CONTROLS, AND OTHER ITEMS REQUIRED FOR OPERATION OR MAINTENANCE ARE TO BE ACCESSIBLE.
  - ALL SLEEVES, OUTLET BOXES, AND OTHER ROUGHINS FOR SUCH ITEMS AS FIRE DAMPERS, PIPE PENETRATIONS, LOUVERS, AND CONTROL ITEMS SHALL BE INSTALLED AS THE BUILDING CONSTRUCTION PROGRESSES. ALL FLOOR/ROOF/PLATFORM PENETRATIONS TO BE CAST IN PLACE LEAVES.
  - PROVIDE AND INSTALL VOLUME CONTROL DAMPERS AT ALL SUPPLY MAIN AND BRANCH DUCT TAKE-OFFS.
  - PROVIDE AND INSTALL DUCT ACCESS DOORS AT ALL SMOKE DAMPERS, FIRE DAMPERS, AND DUCT SMOKE DETECTORS. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR DUCT SMOKE DETECTOR LOCATIONS.

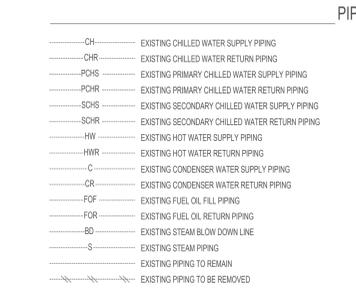
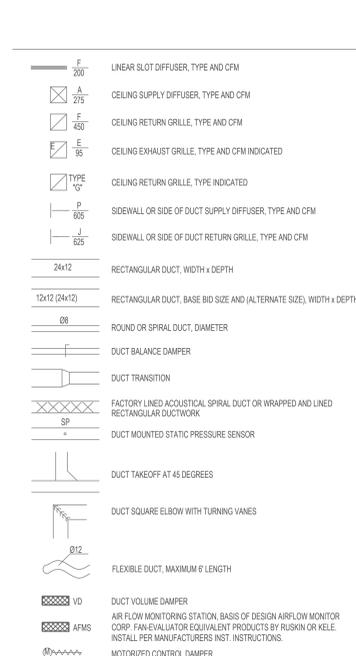
- THIS CONTRACTOR SHALL TAKE FIELD MEASUREMENTS BEFORE FABRICATING ANY DUCTS TO ENSURE THAT DUCT SIZES SHOWN WILL FIT INTO AVAILABLE SPACE. IN CASE OF CONFLICT, NOTIFY THE DESIGNER BEFORE PROCEEDING.
- ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- COORDINATE LOCATIONS OF ALL FLOOR DRAINS WITH PLUMBING CONTRACTOR, PRIOR TO SLABS BEING POURED.
- COORDINATE EXACT LOCATION FOR ALL CEILING DIFFUSERS/GRILLES WITH ARCHITECTURAL REFLECTED CEILING PLAN AND ELECTRICAL CONTRACTOR'S LIGHTING LAYOUT.
- ALL EMS SENSORS AND OTHER FIELD DEVICES MOUNTED ON WALLS TO BE PROTECTED FROM DAMAGE AS REQUIRED - INSTALL LEVEX COVERS, WIRE GUARDS, OR SIMILAR AS REQUIRED. COORDINATE CONDITIONS IN THE FIELD.
- THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TO THE GENERAL CONTRACTOR THE QUANTITY, SIZE, AND LOCATIONS OF ALL ACCESS DOORS IN WALLS, DRYWALL CEILINGS, ETC. FOR ACCESS TO VALVES, BALANCE DAMPERS OR OTHER EQUIPMENT AS REQUIRED. COORDINATE THIS WORK WITH THE REFLECTED CEILING PLANS. ALL VALVES OR OTHER DEVICES LOCATED ABOVE THE CEILING SHALL BE LOCATED IN ACCESSIBLE CEILING WHEREVER POSSIBLE. VERIFY LOCATION OF ALL VALVES IN INACCESSIBLE CEILING OR CHASES WITH THE ARCHITECT PRIOR TO INSTALLATION.
- COORDINATE EXACT SIZE, LOCATION, APPURTENANCES, ETC. FOR ALL ROOF OPENINGS WITH GENERAL CONTRACTOR.
- REFER TO INTERIOR LINTEL SCHEDULE ON STRUCTURAL DRAWINGS AND COORDINATE ALL OPENINGS WITH GENERAL CONTRACTOR PRIOR TO WALL CONSTRUCTION.
- REFER TO DRAWINGS AND DETAILS FOR PERMISSIBLE LOCATIONS AND METHODS FOR HANGING DUCTWORK FROM STRUCTURE. ALL DUCTWORK HANGERS TO BE WITHIN 6" OF PANEL POINTS OF JOISTS. DO NOT WELD DUCT HANGERS/SUPPORTS TO STRUCTURE WITHOUT PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER.
- COORDINATE EXACT SIZES REQUIRED FOR ALL OPENING FOR DUCTWORK AND PIPING WITH SPACE REQUIREMENTS, FIRE DAMPER INSTALLATION INSTRUCTIONS, AND THE GENERAL CONTRACTOR, PRIOR TO FRAMING FOR THE PENETRATIONS.
- THE MECHANICAL CONTRACTOR SHALL THOROUGHLY COORDINATE DUCT / PIPE PENETRATIONS AT STRUCTURAL SHEAR WALLS / SHEAR BRACING WITH ALL DRAWINGS AND SHOP DRAWINGS. INSTALL LINTELS AS REQUIRED.
- ALL FLOOR/ROOF/PLATFORM/WALL PENETRATIONS TO BE MADE/INSTALLED PER DRAWINGS AND DETAILS. THE MECHANICAL CONTRACTOR SHALL PROVIDE 2" RIGID INSULATION BLANK-OFF PANELS ON ALL ARCHITECTURAL LOUVERS OR PORTIONS THEREOF NOT USED AS INTAKE OR EXHAUST AS SHOWN ON THE DRAWINGS.
- THE MECHANICAL CONTRACTOR SHALL REVIEW THE LOCATIONS OF ALL ARCHITECTURAL LOUVERS AS SHOWN ON THE PLATFORM PLANS AND THE BUILDING ELEVATIONS.
- ALL CEILING MOUNTED SMOKE DETECTORS TO BE MOUNTED AT LEAST 9" FROM ALL CEILING GRILLES / DIFFUSERS. COORDINATE EXACT LOCATION FOR ALL CEILING DIFFUSERS/GRILLES WITH ARCHITECTURAL REFLECTED CEILING PLAN AND ELECTRICAL CONTRACTOR'S LIGHTING LAYOUT.

**Exhaust Fan Schedule**

Mark	Manufacturer	Model	Wheel Diameter (in.)	Volume (CFM)	Total External SP (in. wg)	Fan Speed (RPM)	dBA	Inlet Sones	Voltage	Hz	Phase	Motor Size	EC Motor
NOT USED													
EF-1	Greenheck	CUE-120-VG	13.063	1,450	1	1682	70	17.7	115	60	1	1/2 hp	VarGreen
EF-2	Greenheck	CUE-100HP-VG	11.125	450	1	1856	58	9.8	115	60	1	1/2 hp	VarGreen
EF-3	Greenheck	CUE-100HP-VG	11.125	900	1	2500	67	15.1	115	60	1	1/2 hp	VarGreen
EF-4	Greenheck	CUE-100HP-VG	11.125	850	1	2488	66	14.8	115	60	1	1/2 hp	VarGreen
EF-5	Greenheck	CUE-140HP-VG	14.625	1000	1	1666	64	14.6	115	60	1	1/2 hp	VarGreen
EF-6	Greenheck	CUE-140HP-VG	14.625	950	1	1623	64	14.3	115	60	1	1/2 hp	VarGreen
EF-7	Greenheck	CSP-A700-VG	7.75	300	1	1571	40	3.5	115	60	1	4.1A	VarGreen
EF-8	Greenheck	CUE-100HP-VG	11.125	450	1	1856	58	9.8	115	60	1	1/2hp	VarGreen

- NOTES:**
- BASIS OF DESIGN IS GREENHECK. COMPARABLE PRODUCTS BY COOK AND TWIN CITY AS APPROVED BY ENGINEER.
  - FANS TO RUN CONTINUOUS DURING OCCUPIED HOURS.
  - PROVIDE ROOF CURB FOR EF-2,3,4,5,6,7,8,9. COORDINATE ROOF SLOPE PRIOR TO ORDERING.
  - PROVIDE ROOF JACK FOR EF-8.
  - PROVIDE WALL VENT FOR EF-1.
  - PROVIDE SPRING ISOLATOR HANGERS FOR SUSPENDED FANS EF-1 & 8.
  - PROVIDE BACK DRAFT DAMPERS FOR ALL FANS.

- GENERAL PROJECT NOTES**
- ALL EQUIPMENT TO BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ALL APPLICABLE NORTH CAROLINA BUILDING CODES.
  - WITH THE EXCEPTION OF THE ADMINISTRATION AREA, ALL WALL MOUNTED SENSORS IN CLASSROOMS, CORRIDORS, DINING, BANQUET ROOM, ETC., TO BE MOUNTED WITH LOOKING COVER TO PROTECT FROM TAMPERING AND DAMAGE.
  - ALL THERMOSTATS IN BLOCK WALLS TO HAVE THE BACKPLATE CALKED AND SEALED TO PREVENT AIR FROM THE EXTERIOR OF THE BUILDING FROM ENTERING THE BACK OF THE THERMOSTAT.
  - ALL MECHANICAL EQUIPMENT IN THIS PROJECT TO HAVE NEW LABELS ATTACHED IDENTIFYING THE EQUIPMENT ACCORDING TO THE NOMENCLATURE SHOWN IN THIS PROJECT. THIS CONTRACTOR TO MAKE CHANGES TO LABELS IN ELECTRICAL PANELS TO ENSURE CONSISTENT LABELING FROM THE POWER SOURCE, TO THE EQUIPMENT AND ULTIMATELY TO THE TAGS USED IN THE ENERGY MANAGEMENT SYSTEM TAGS AND GRAPHICS.
  - ALL WORK TO BE PERFORMED INSIDE OF AN OCCUPIED SCHOOL. COORDINATE WITH SCHOOL STAFF PRIOR TO BEGINNING ANY WORK WITHIN THE BUILDING. THE PROJECT IS PHASED AND ALL PHASES SHALL BE FULLY COORDINATED WITH THE OWNER AND ENGINEER.
  - CONTRACTOR TO PROVIDE TEMPORARY CONSTRUCTION WALLS IN THE CLASSROOMS WINGS TO BE RENOVATED. PROVIDE ALL CODE REQUIRED EXITS SIGNS AND ACCESS PER THE NORTH CAROLINA BUILDING CODE.
  - ALL CONTROL PANELS IN MECHANICAL ROOMS SHALL HAVE A COPY OF THE COMPLETE CONTROL DIAGRAMS FOR THAT PLANT INCLUDING ANY CHANGES TO THE SEQUENCES THAT OCCURRED DURING THE PROJECT.
  - AT THE END OF THE PROJECT THE OWNER SHALL BE PROVIDED WITH AN AS-BUILT CONTROLS SUBMITTAL PACKAGE DETAILING ANY CHANGES THAT OCCURRED DURING THE PROJECT.
  - THE CONTROLS CONTRACTOR SHALL PROVIDE THE OWNER 8 HOURS OF INITIAL TRAINING ONCE ALL WORK IS COMPLETED. AFTER 6 MONTHS HAVE PASSED FROM THE COMPLETION OF PROJECT THE CONTROLS CONTRACTOR SHALL CONDUCT A 4 HOUR TRAINING SESSION WITH THE OWNER TO ADDRESS ANY QUESTIONS/CONCERNS.
  - ALL INSTALLED CONTROLLERS SHALL HAVE 10% OR MORE ADDITIONAL CAPACITY FOR FUTURE ADDITIONS AND CONTROL SUBJECTS. SYSTEM ARCHITECTURE TO BE DESIGNED FOR FUTURE INTEGRATION OF EXISTING EQUIPMENT AS REPLACEMENT IS PERFORMED.
  - COORDINATE WITH OWNER AND ENGINEER PRIOR TO RUNNING ANY NEW EXPOSED CONDUIT (EXTERIOR OR INTERIOR) IN VISIBLE AREAS. TO THE GREATEST EXTENT POSSIBLE REUSE EXISTING CONDUIT.
  - COORDINATE WITH OWNER AND ENGINEER FOR LOCATION OF ANY NEW CONTROL PANELS IN NON-MACHINERY ROOMS SPACES.
  - IT IS THE RESPONSIBILITY OF THE CONTROLS CONTRACTOR TO PROVIDE POWER WIRING AND CONDUIT TO ALL CONTROLS. ALL WORK TO BE CONDUCTED ACCORDING TO CURRENT NEC STANDARDS.
  - ASBESTOS IS PRESENT IN FLOOR TILES AND EXISTING PIPING INSULATION. PRIOR TO REMOVING/TAMPING WITH ANY OF THESE AREAS NOTIFY THE ENGINEER AND OWNER FOR COORDINATION OF TESTING AND ABATEMENT.
  - CONTRACTOR RESPONSIBLE FOR VERIFYING THE STRUCTURAL INTEGRITY OF THE BUILDING WILL NOT BE COMPROMISED BY THE DEMOLITION OF ANY EXISTING EQUIPMENT, PIPING, DUCTWORK, HANGERS/SUPPORTS, ETC.
  - CONTRACTOR TO VERIFY THE INSTALLATION OF NEW EQUIPMENT WILL NOT ADVERSELY IMPACT THE STRUCTURAL INTEGRITY OF THE BUILDING.
  - CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE EXISTING FLOOR FROM DAMAGE.
  - GENERALLY CONTRACTOR TO DISCONNECT AND ABANDON IN PLACE AT OWNER'S DIRECTION ALL CHILLERS, PIPING AND CONDUITS TO BE CAPPED JUST ABOVE GRADE LEVEL.



**Air Terminal Schedule**

Mark	Manufacturer	Model	Size	Max Flow	System Classification	Description
A	Price Industries	SCD Series	6"ø	100 CFM	Supply Air	Square Cone Diffuser
B	Price Industries	SCD Series	8"ø	210 CFM	Supply Air	Square Cone Diffuser
C	Price Industries	SCD Series	10"ø	330 CFM	Supply Air	Square Cone Diffuser
D	Price Industries	SCD Series	12"ø	470 CFM	Supply Air	Square Cone Diffuser
E	Price Industries	SDGE Series	6"x14"	275 CFM	Supply Air	Spiral Duct Grille Ducted Aluminum
F	Price Industries	610 Series	12"x8"	300 CFM	Supply Air	Louvered Face Supply
G	Price Industries	DLSS Series	24"x6"	500 CFM	Supply Air	Stainless Steel Drum Louver
H	Price Industries	PDDR Series	10"x10"	415 CFM	Supply Air	Perforated Diffusers Ducted Return
J	Price Industries	PDDR Series	6"x6"	125 CFM	Return/Exhaust Air	Perforated Diffusers Ducted Return
I	Price Industries	PDDR Series	8"x8"	250 CFM	Return/Exhaust Air	Perforated Diffusers Ducted Return
J	Price Industries	PDDR Series	10"x10"	415 CFM	Return/Exhaust Air	Perforated Diffusers Ducted Return
K	Price Industries	PDDR Series	12"x12"	600 CFM	Return/Exhaust Air	Perforated Diffusers Ducted Return
L	Price Industries	PDDR Series	14"x14"	800 CFM	Return/Exhaust Air	Perforated Diffusers Ducted Return
M	Price Industries	PDDR Series	16"x16"	1300 CFM	Return/Exhaust Air	Perforated Diffusers Ducted Return
N	Price Industries	630 Series	10"x10"	240 CFM	Return/Exhaust Air	Louvered Face Return
O	Price Industries	630 Series	16"x24"	950 CFM	Return/Exhaust Air	Louvered Face Return
P	Price Industries	630 Series	18"x36"	1300 CFM	Return/Exhaust Air	Louvered Face Return
Q	Price Industries	630 Series	38"x22"	1700 CFM	Return/Exhaust Air	Louvered Face Return
R	Price Industries	630 Series	24"x40"	2100 CFM	Return/Exhaust Air	Louvered Face Return
S	Price Industries	630 Series	30"x16"	3000 CFM	Return/Exhaust Air	Louvered Face Return
T	Price Industries	91 Series	48"x48"	3600 CFM	Return/Exhaust Air	Heavy Duty Gym Grilles
U	Price Industries	630-FF Series	18"x36"	1300 CFM	Return/Exhaust Air	Louvered Face Filter Return

- NOTES:**
- ALL GRILLES / DIFFUSERS SERVING TOILETS AND JAN. CLOSETS TO HAVE ALUMINUM CONSTRUCTION.
  - ALL GRILLE DESIGNATIONS MAY NOT BE UTILIZED ON THIS PROJECT.
  - APPROVED EQUALS BY CANNES, TRUS, AND KRUEGER.
  - ALL GRILLES WITH RADIATION DAMPERS TO HAVE STEEL CONSTRUCTION.
  - FOR WALL RETURN GRILLES - FIELD VERIFY / COORDINATE EXACT SIZES PRIOR TO ORDERING.



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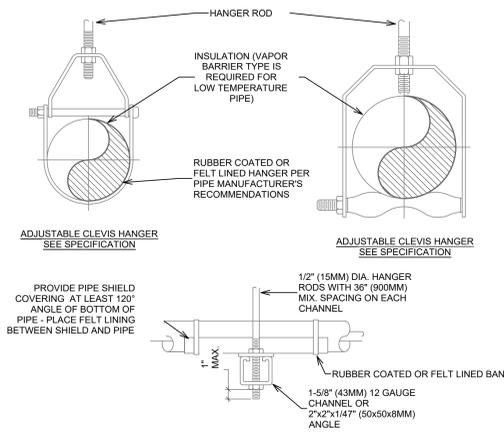
Mechanical Details, Notes, and Specifications

sheet

M0.1

project no. 2231

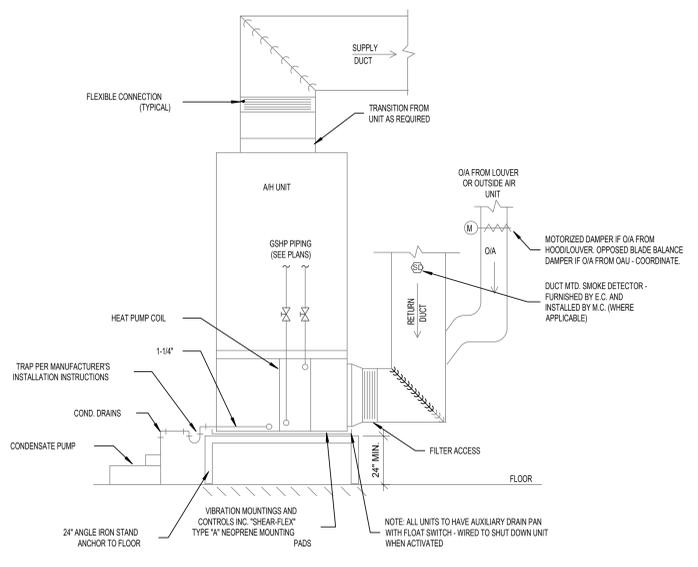
date 7/25/23



NOTES:  
 1. PIPE HANGERS AND SUPPORTS TO COMPLY WITH PIPE MANUFACTURER'S RECOMMENDATIONS.  
 2. PIPE SPACING TO COMPLY WITH MANUFACTURER'S RECOMMENDATIONS FOR PP-R OR HDPE PIPE AT 100°F.

1 PIPE HANGERS

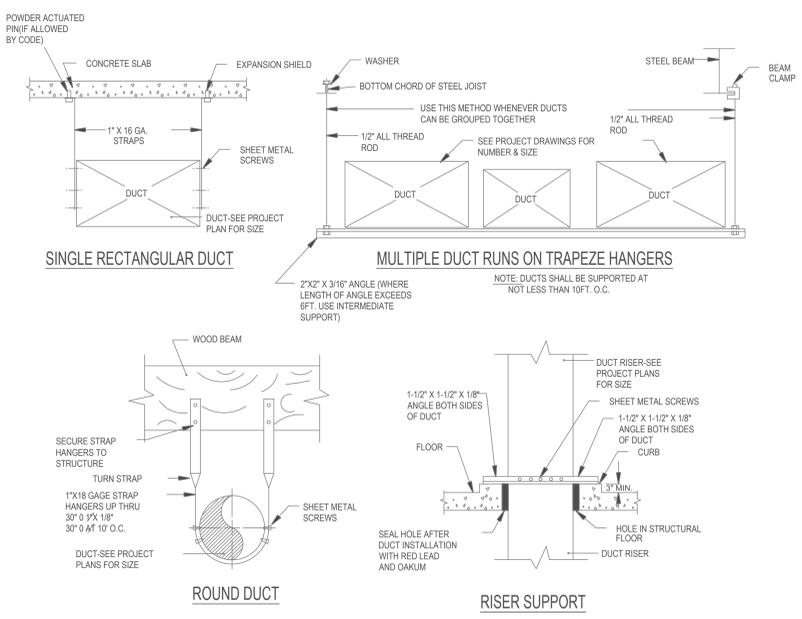
SCALE: NTS



NOTES:  
 1. SEE EQUIPMENT SCHEDULE FOR SECTIONS/ARRANGEMENT REQUIRED.

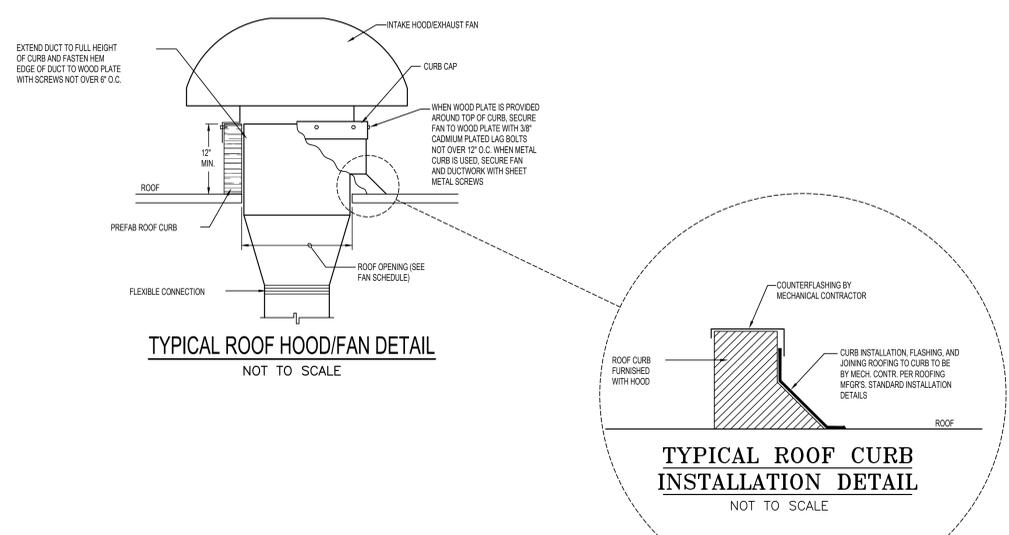
2 VERTICAL WATER SOURCE HEAT PUMP

SCALE: NTS



3 DUCT HANGERS AND SUPPORTS DETAILS

SCALE: NTS



4 TYPICAL ROOF CURB AND FAN DETAIL

SCALE: NTS



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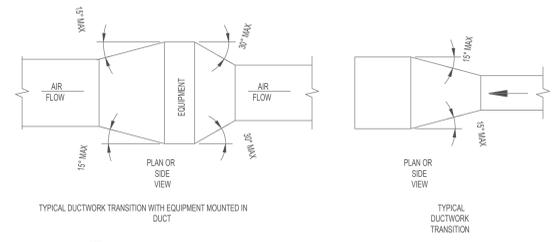
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 MRN JLM

Mechanical Details

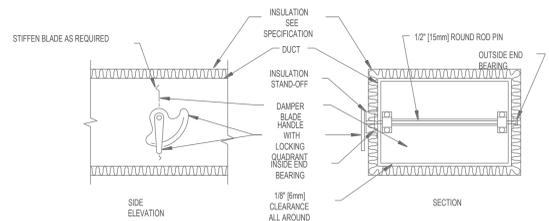
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**M0.2**

project no. 2231

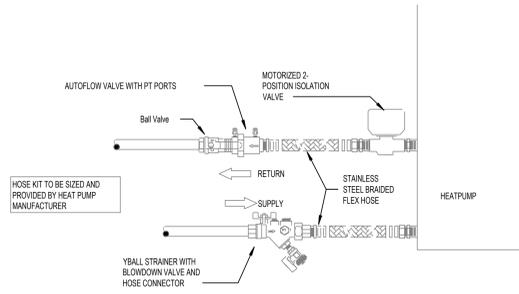
date 7/25/23



NOTE:  
UNLESS OTHERWISE INDICATED ON PLANS,  
MAXIMUM ANGLES SHOWN SHALL  
APPLY.

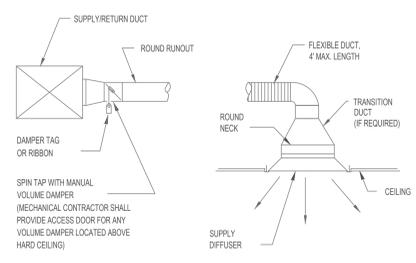


NOTE:  
1. DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.  
2. DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

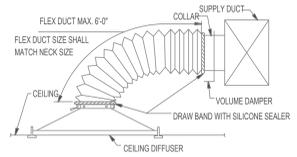


HOSE KIT TO BE SIZED AND PROVIDED BY HEAT PUMP MANUFACTURER

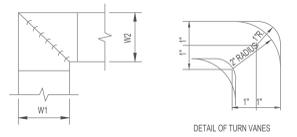
1 HEAT PUMP HOSE KIT CONNECTION DETAIL SCALE: NTS 2 VOLUME DAMPER DETAIL SCALE: NTS 3 DUCT TRANSITIONS SCALE: NTS



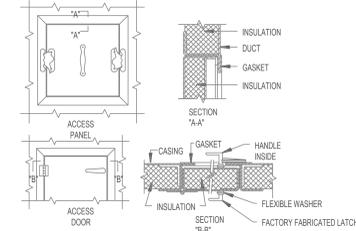
NOTE:  
1. ALL MANUAL VOLUME DAMPERS (FOR INSULATED DUCTWORK) SHALL BE PROVIDED WITH AN ELEVATED REGULATOR (STAND-OFF) EQUAL TO DUCT DYNAMIC SERIES. STAND SHALL EXTEND A MINIMUM OF 2\"/>



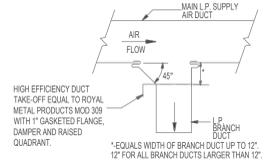
4 SPIN-IN TAKEOFF SCALE: NTS 5 LOW PRESSURE DUCT BRANCH TAKEOFF SCALE: NTS 6 FLEX DUCT DETAIL SCALE: NTS



NOTES:  
1. ALL VANE ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA  
2. WHEN W1 DOES NOT EQUAL W2, VANE SHALL BE SINGLE THICKNESS VANE TYPE REGARDLESS OF W DIMENSION.  
3. ALL SINGLE THICKNESS VANES SHALL HAVE A 2\"/>



NOTES:  
1. LATCHES SHALL BE OF THE WEDGE TYPE TO CLOSE DOORS TIGHTLY.  
2. HINGES ON THE ACCESS DOORS SHALL HAVE NON-CORROSIVE PINS  
3. SEE SMACNA 2005, FIGURE 9-15



7 LOW PRESSURE DUCT TAKEOFF SCALE: NTS 8 ACCESS DOOR DETAIL SCALE: NTS 9 TURNING VANE DETAIL SCALE: NTS



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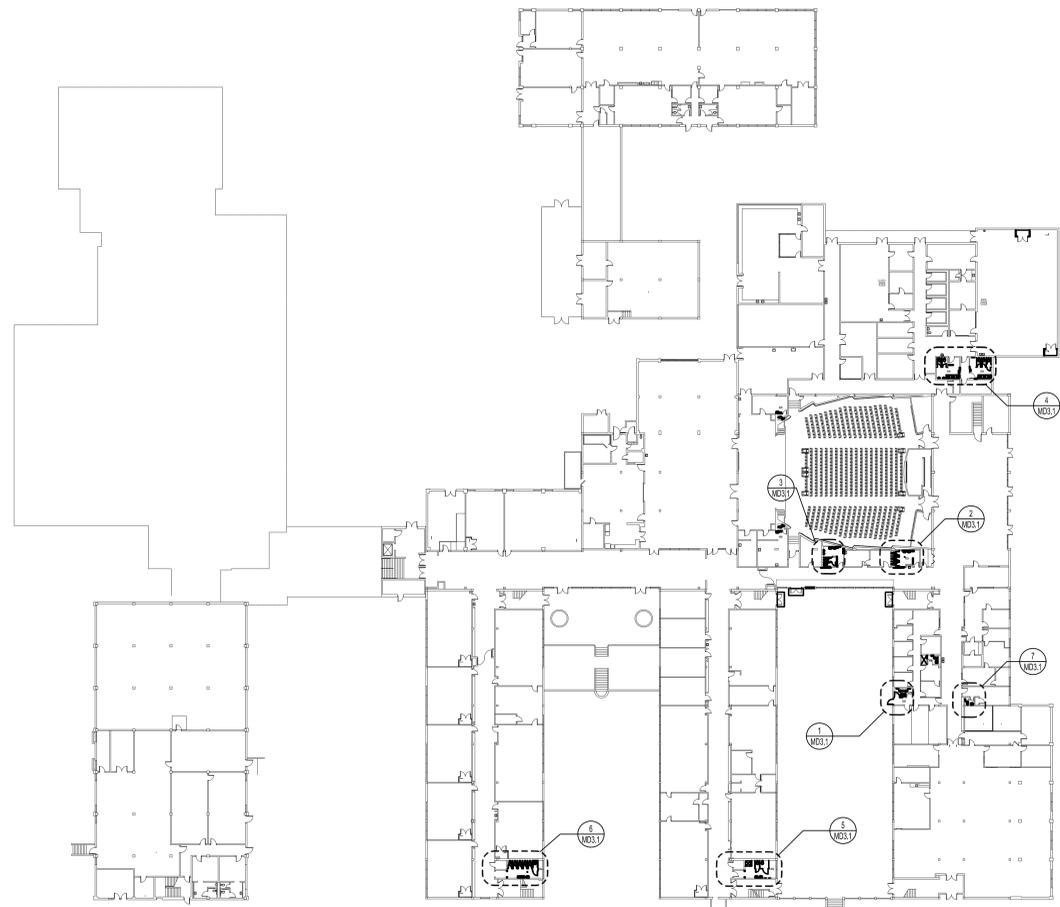
drawn	checked
MRN	JLM

Overall  
Mechanical Demolition  
Plans

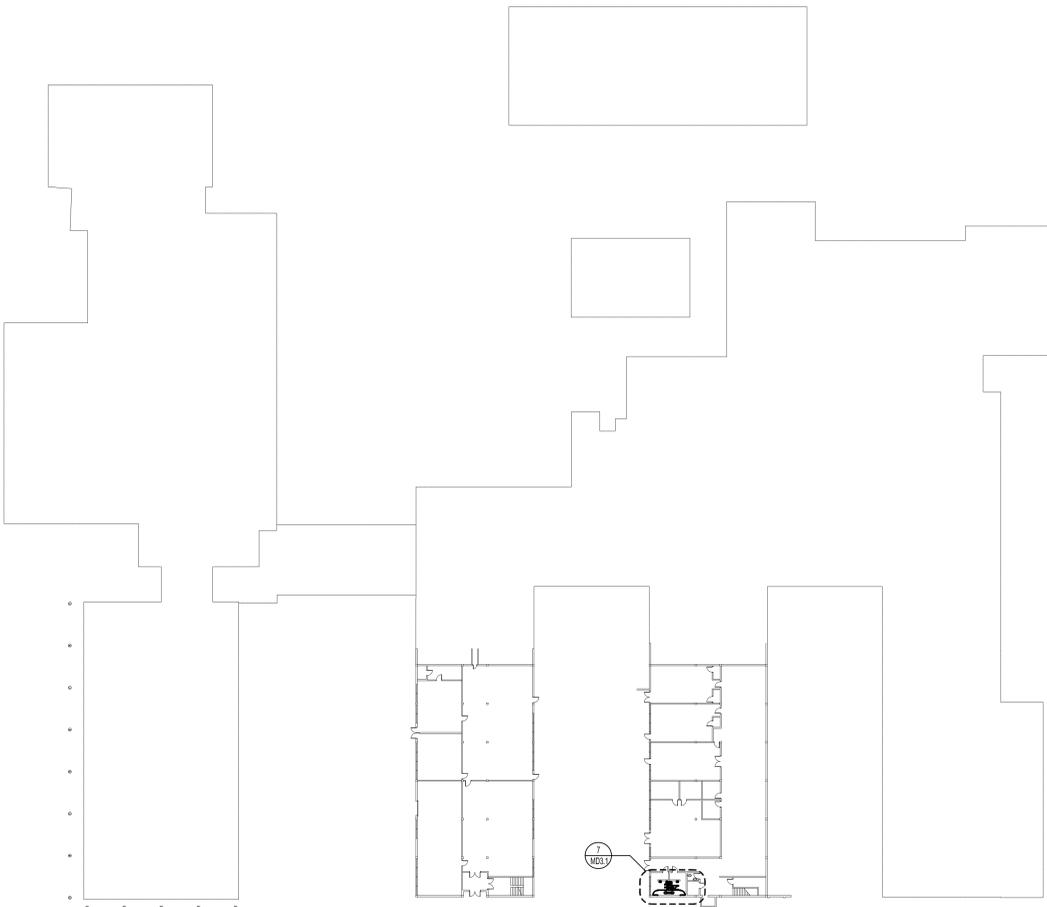
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**M1.1**

project no. 2231

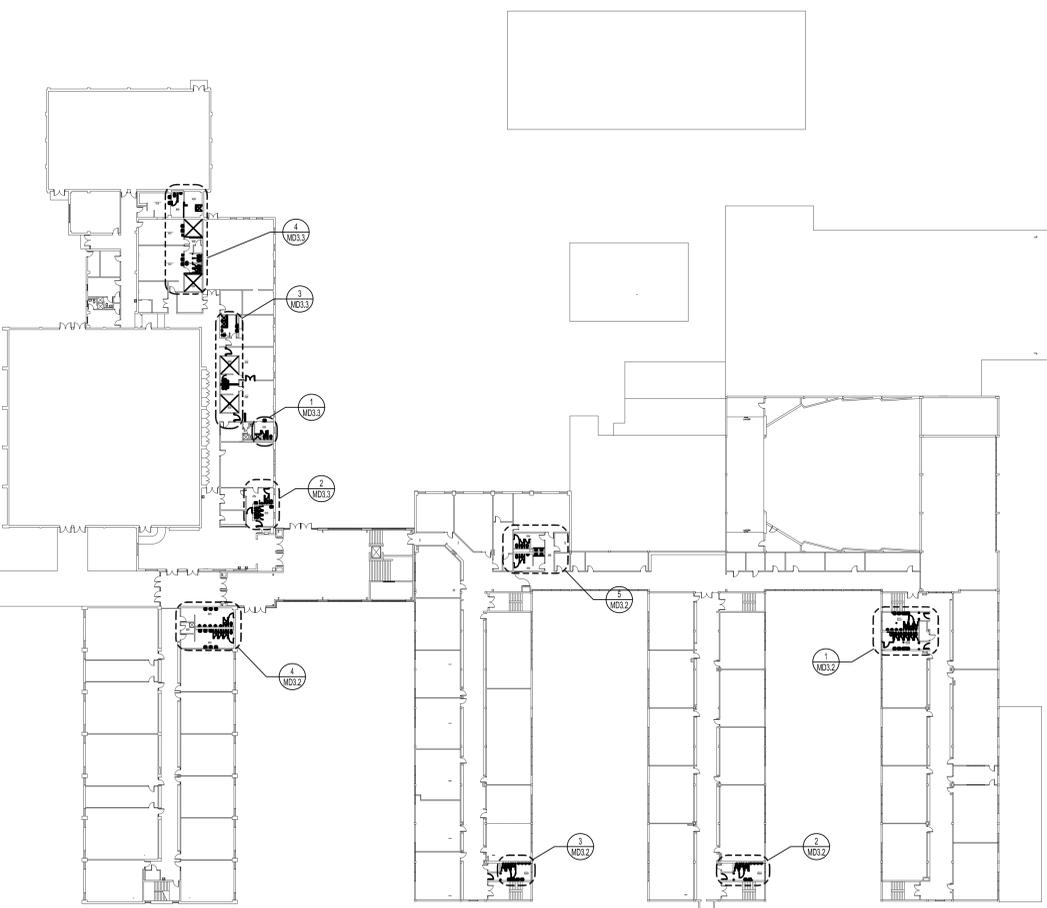
date 7/25/23



2 Overall First Floor Mechanical Demolition Floor Plan  
Scale: 1" = 40'-0"



1 Overall Basement Floor Mechanical Demolition Floor Plan  
Scale: 1" = 40'-0"



3 Overall Second Floor Mechanical Demolition Floor Plan  
Scale: 1" = 40'-0"



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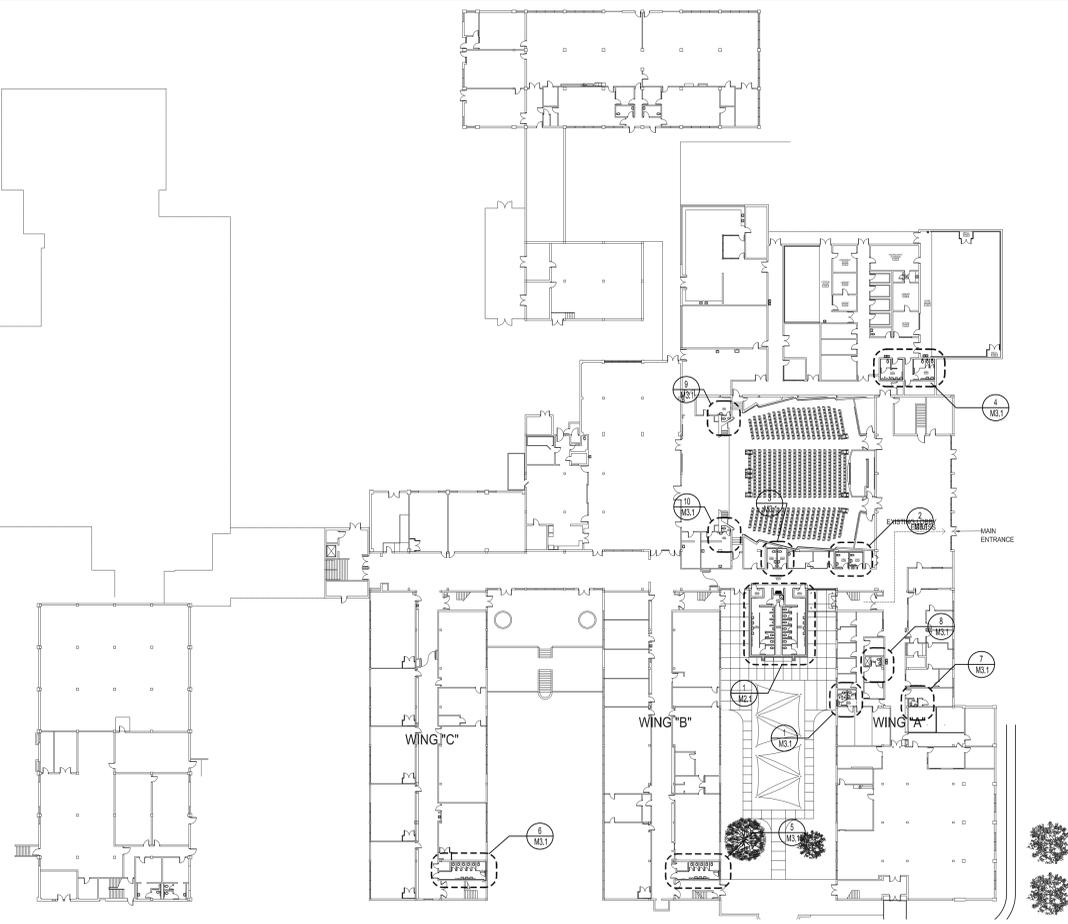
drawn checked  
 MRN JLM

**Overall  
 New Mechanical  
 Plans**

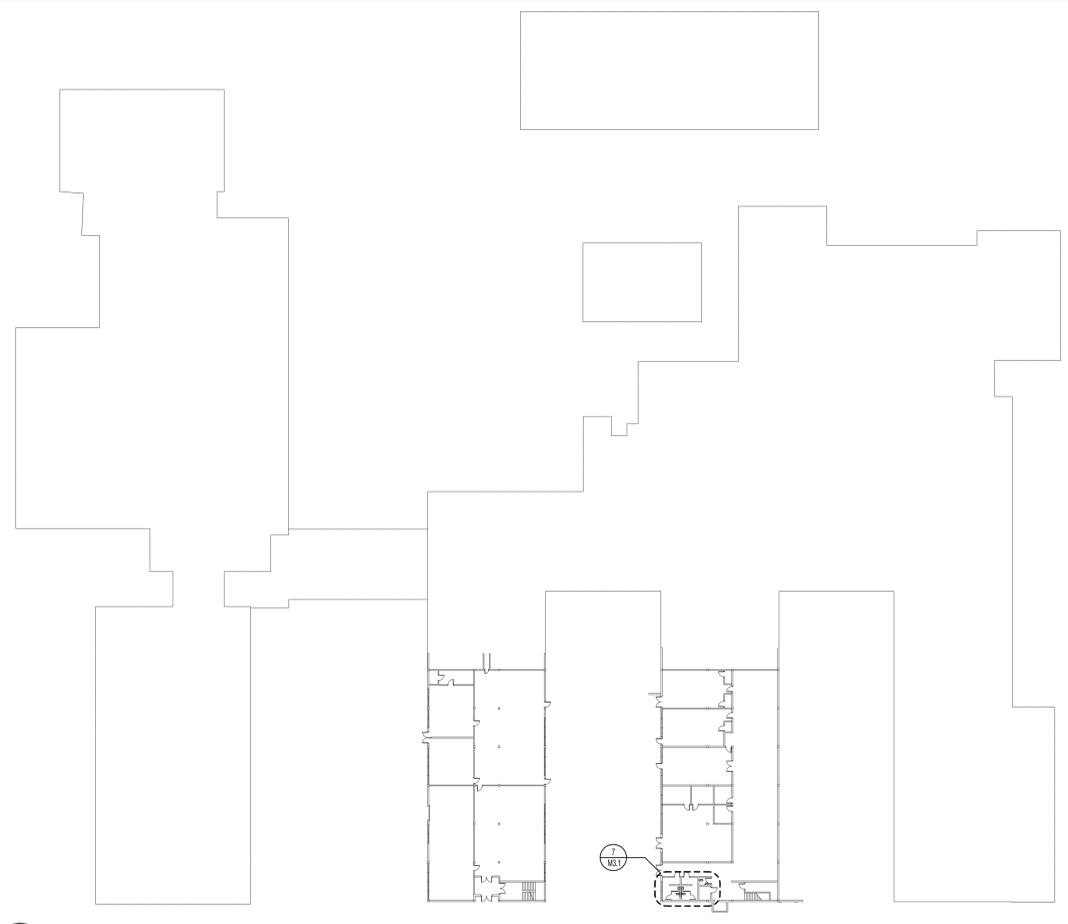
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**M1.2**

project no. 2231

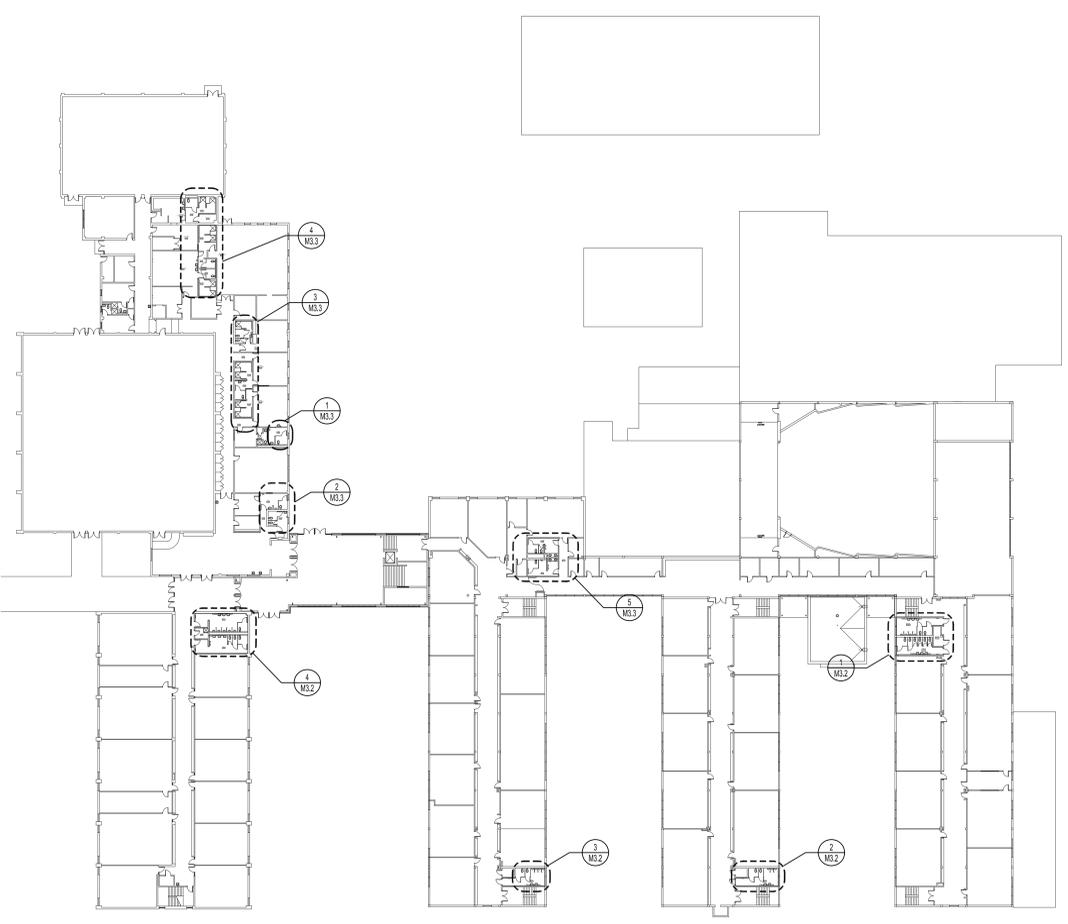
date 7/25/23



2 Overall First Floor New Mechanical Floor Plan  
 Scale: 1" = 40'-0"



1 Overall Basement Floor New Mechanical Floor Plan  
 Scale: 1" = 40'-0"



3 Overall Second Floor New Mechanical Floor Plan  
 Scale: 1" = 40'-0"



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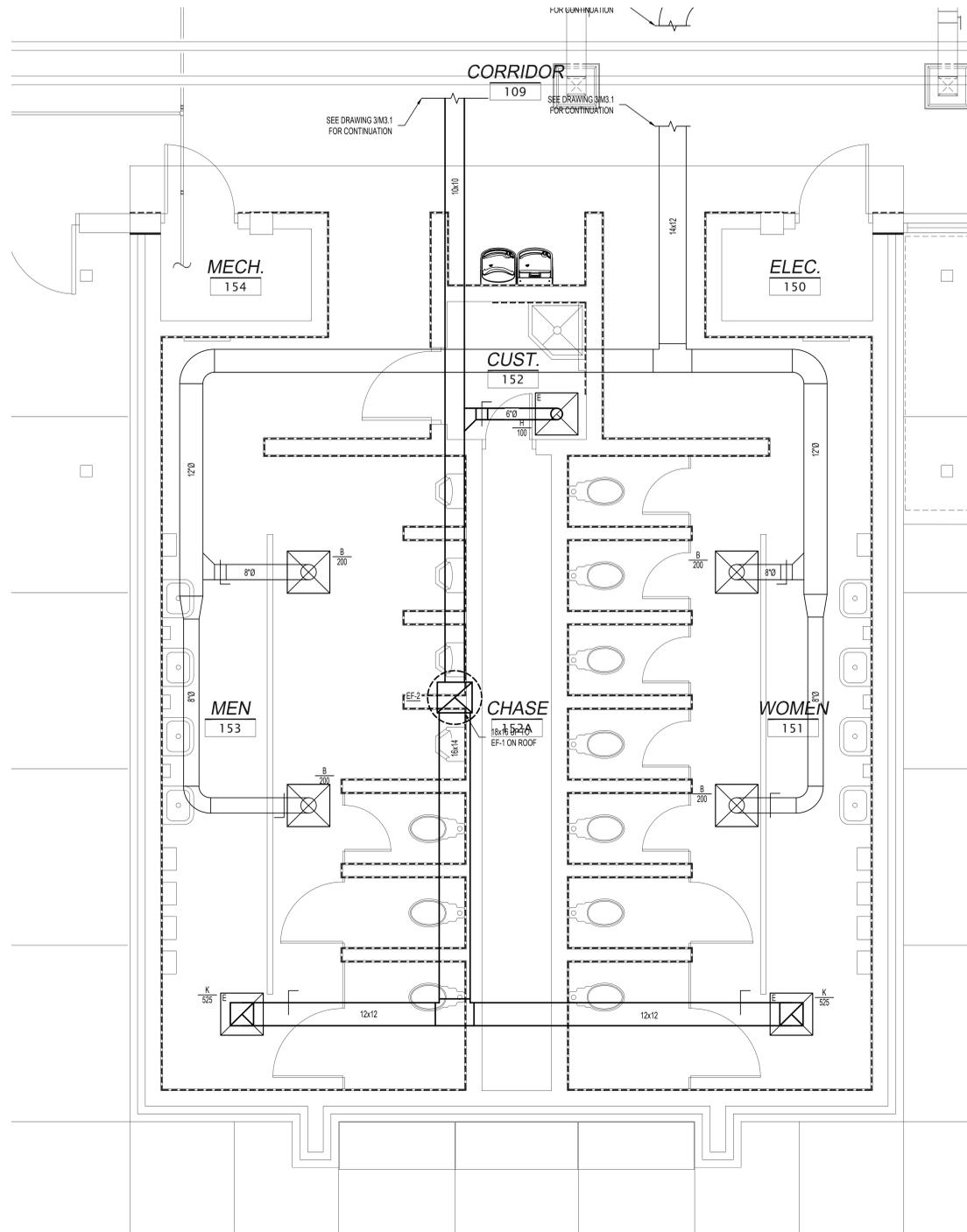
drawn checked  
MRN JLM

Enlarged First  
Floor New  
Mechanical Plan

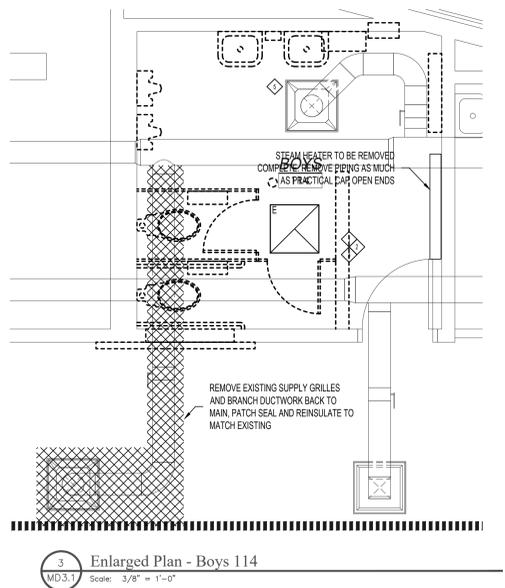
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**M2.1**

project no. 2231

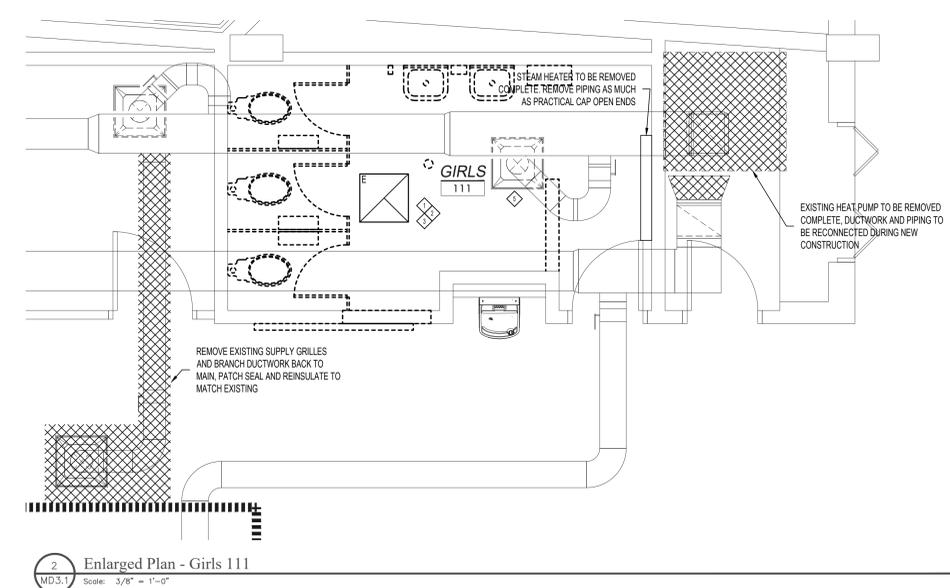
date 7/25/23



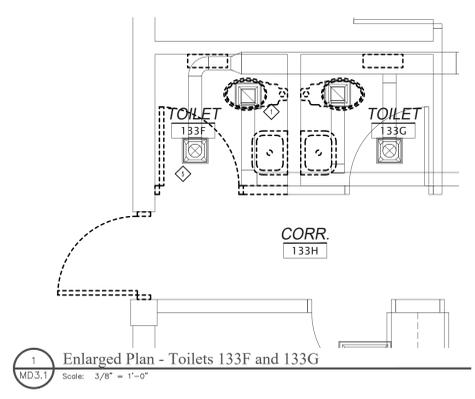
1 Enlarged Plan - Toilet Room Addition  
M2.1 Scale: 3/8" = 1'-0"



3 Enlarged Plan - Boys 114  
MD3.1 Scale: 3/8" = 1'-0"

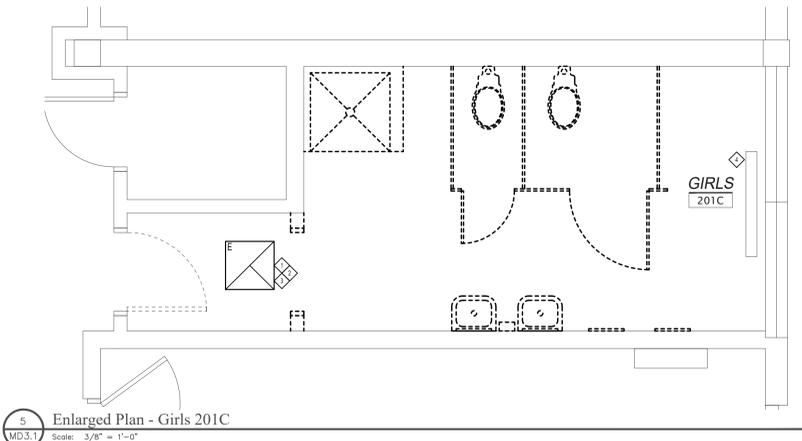


2 Enlarged Plan - Girls 111  
MD3.1 Scale: 3/8" = 1'-0"

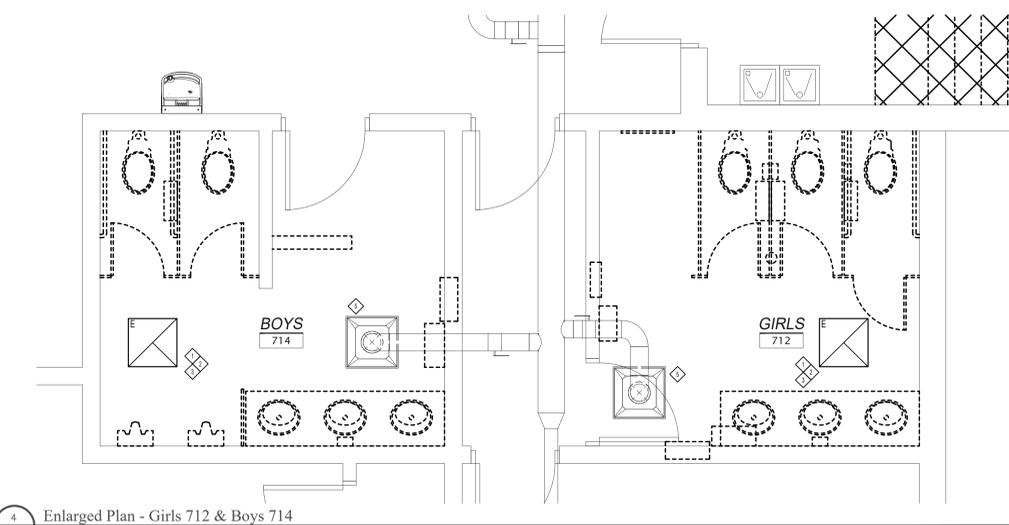


1 Enlarged Plan - Toilets 133F and 133G  
MD3.1 Scale: 3/8" = 1'-0"

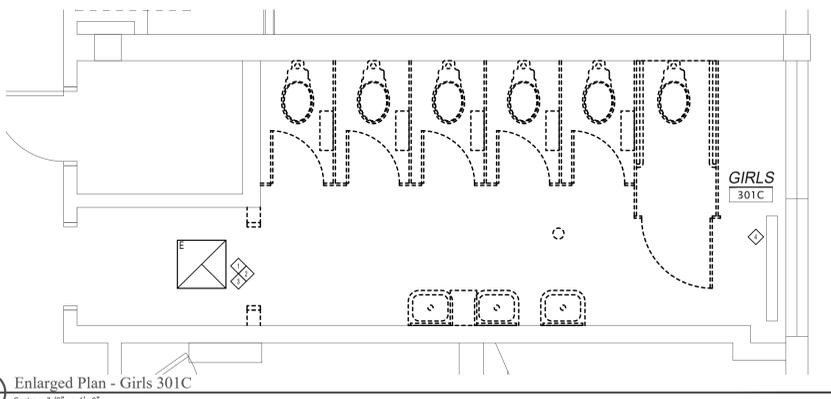
- KEYED MECHANICAL DEMOLITION NOTES**
- REMOVE EXISTING EXHAUST GRILLES;
  - REMOVE ALL ASSOCIATED DUCTWORK, SUPPORTS/HANGERS AND INSULATION BACK TO FAN OR MAIN TRUNK, AS REQUIRED TO ALLOW FOR INSTALLATION OF NEW WORK.
  - REMOVE EXHAUST FAN, CONTRACTOR TO FIELD VERIFY EXHAUST FAN DOES NOT SERVE ANY OTHER AREAS. CAP EXISTING ROOF CURB WITH INSULATED ROOF CAP.
  - ELECTRIC HEATER TO BE REMOVED DURING DEMOLITION BUT REINSTALLED DURING RENOVATION. CONTRACTOR TO CLEAN, STORE AND PROTECT FROM DAMAGE. NOTIFY OWNER/ENGINEER OF ANY MATERIAL DEFICIENCIES PRIOR TO REINSTALLATION.
  - REMOVE EXISTING SUPPLY GRILLES;



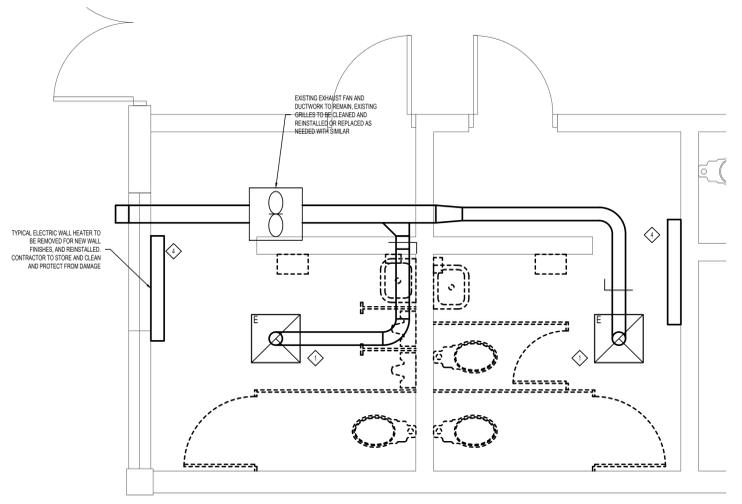
5 Enlarged Plan - Girls 201C  
MD3.1 Scale: 3/8" = 1'-0"



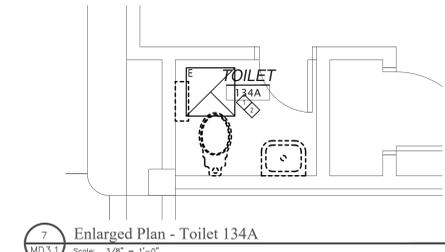
4 Enlarged Plan - Girls 712 & Boys 714  
MD3.1 Scale: 3/8" = 1'-0"



6 Enlarged Plan - Girls 301C  
MD3.1 Scale: 3/8" = 1'-0"



7 Enlarged Plan - Basement Toilets  
MD3.1 Scale: 3/8" = 1'-0"



7 Enlarged Plan - Toilet 134A  
MD3.1 Scale: 3/8" = 1'-0"



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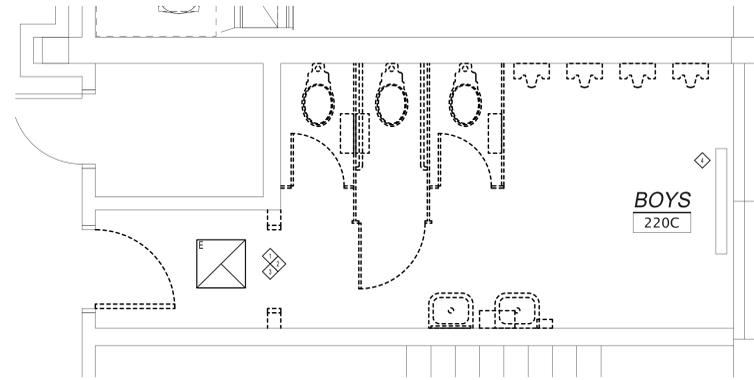
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MRN JLM

Enlarged Basement  
And First Floor  
Mechanical  
Demolition Plans

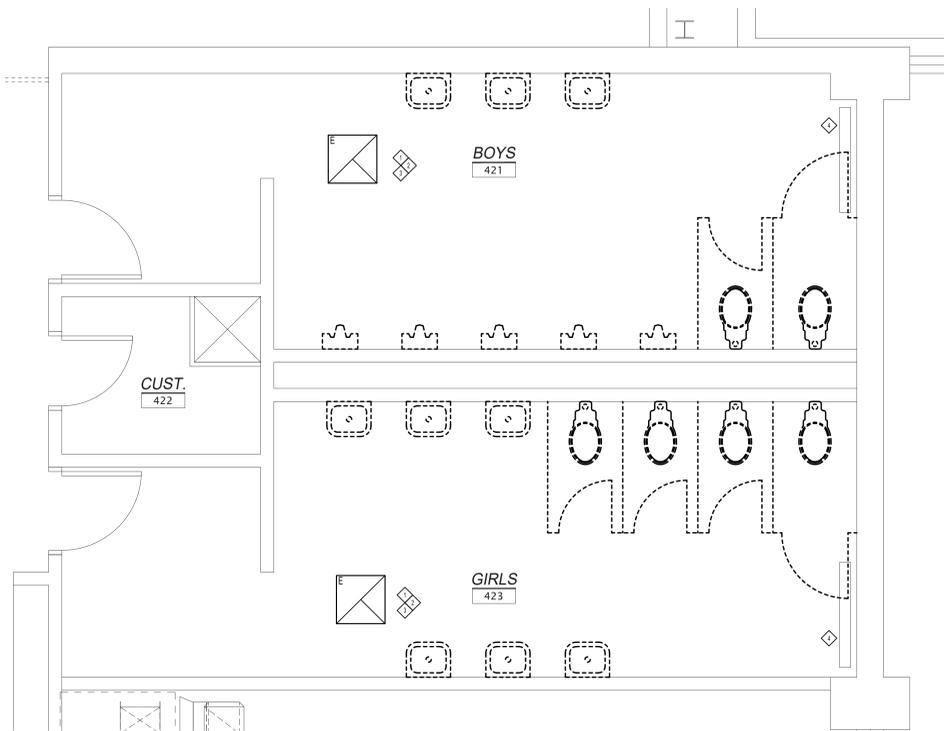
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project no. 2231

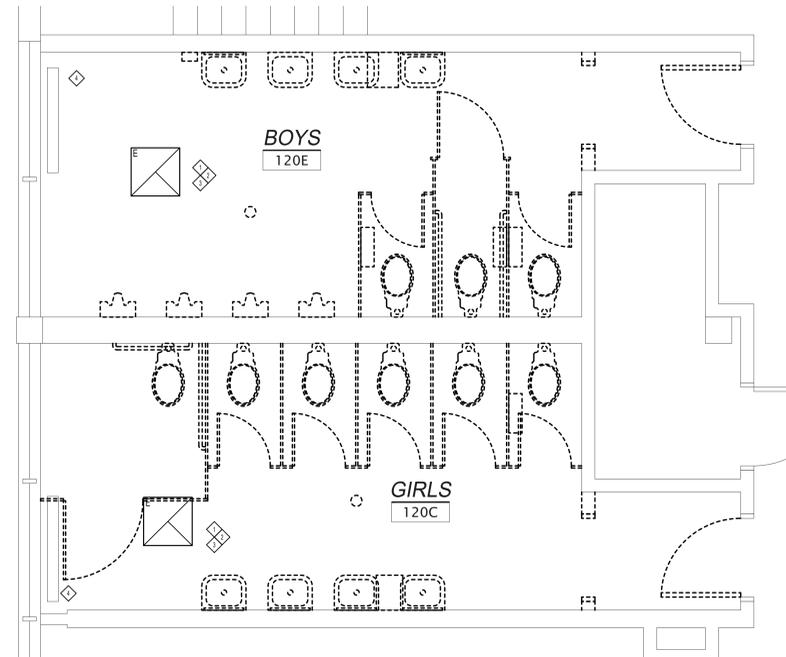
date 7/25/23



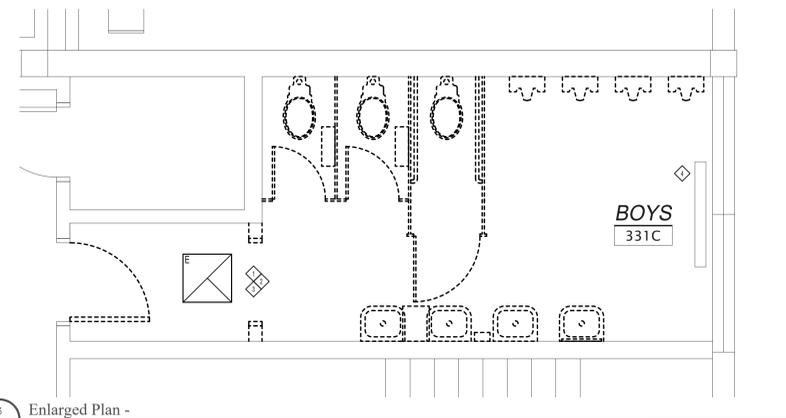
2 Enlarged Plan -  
MD3.2 Scale: 3/8" = 1'-0"



4 Enlarged Plan -  
MD3.2 Scale: 3/8" = 1'-0"



1 Enlarged Plan -  
MD3.2 Scale: 3/8" = 1'-0"



3 Enlarged Plan -  
MD3.2 Scale: 3/8" = 1'-0"

- KEYED MECHANICAL DEMOLITION NOTES**
- 1 REMOVE EXISTING EXHAUST GRILLE(S).
  - 2 REMOVE ALL ASSOCIATED DUCTWORK, SUPPORTS/HANGERS AND INSULATION BACK TO FAN OR MAIN TRUNK, AS REQUIRED TO ALLOW FOR INSTALLATION OF NEW WORK.
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  - 5 REMOVE EXISTING SUPPLY GRILLE(S).



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Enlarged Second  
Floor Mechanical  
Demolition Plans

sheet  
**MD3.2**

project no. 2231

date 7/25/23

- KEYED MECHANICAL DEMOLITION NOTES**
- 1 REMOVE EXISTING EXHAUST GRILLE(S).
  - 2 REMOVE ALL ASSOCIATED DUCTWORK, SUPPORTS/HANGERS AND INSULATION BACK TO FAN OR MAIN TRUNK, AS REQUIRED TO ALLOW FOR INSTALLATION OF NEW WORK.
  - 3 REMOVE EXHAUST FAN. CONTRACTOR TO FIELD VERIFY EXHAUST FAN DOES NOT SERVE ANY OTHER AREAS. CAP EXISTING ROOF CURB WITH INSULATED ROOF CAP.
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  - 5 REMOVE EXISTING SUPPLY GRILLE(S).



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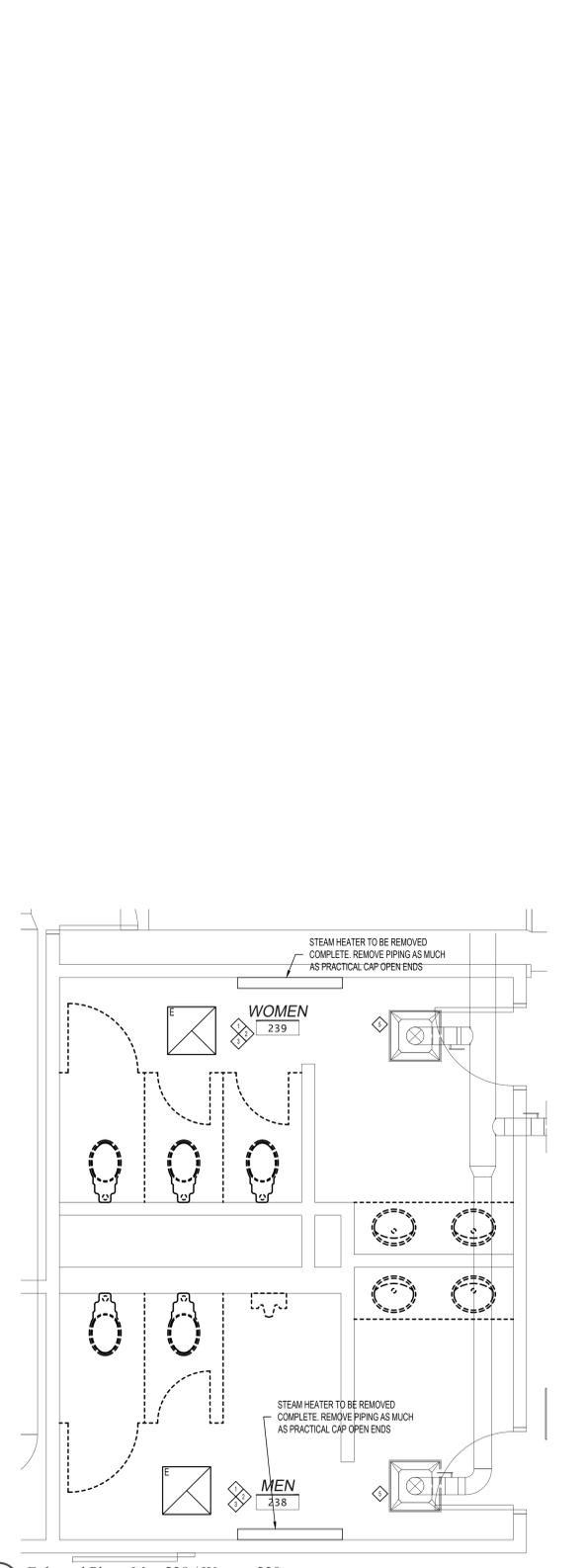
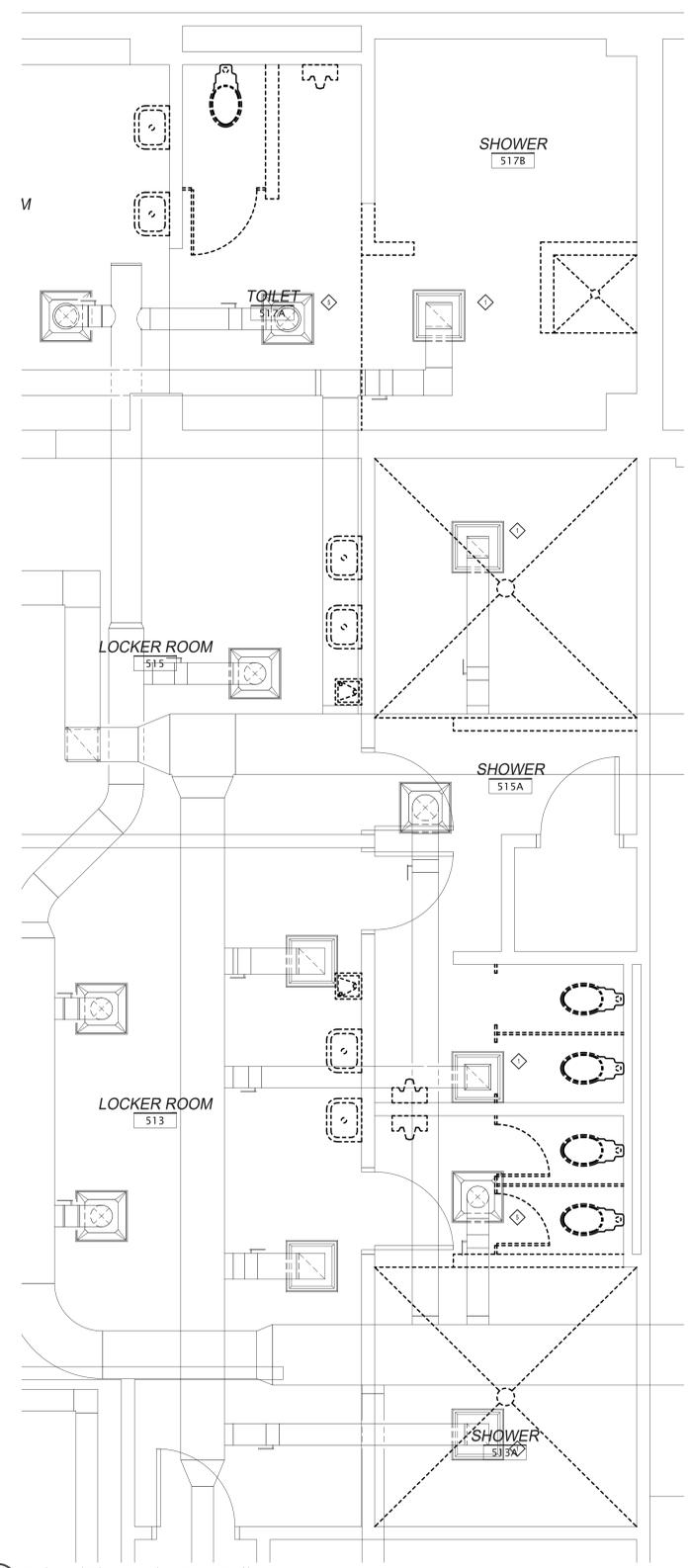
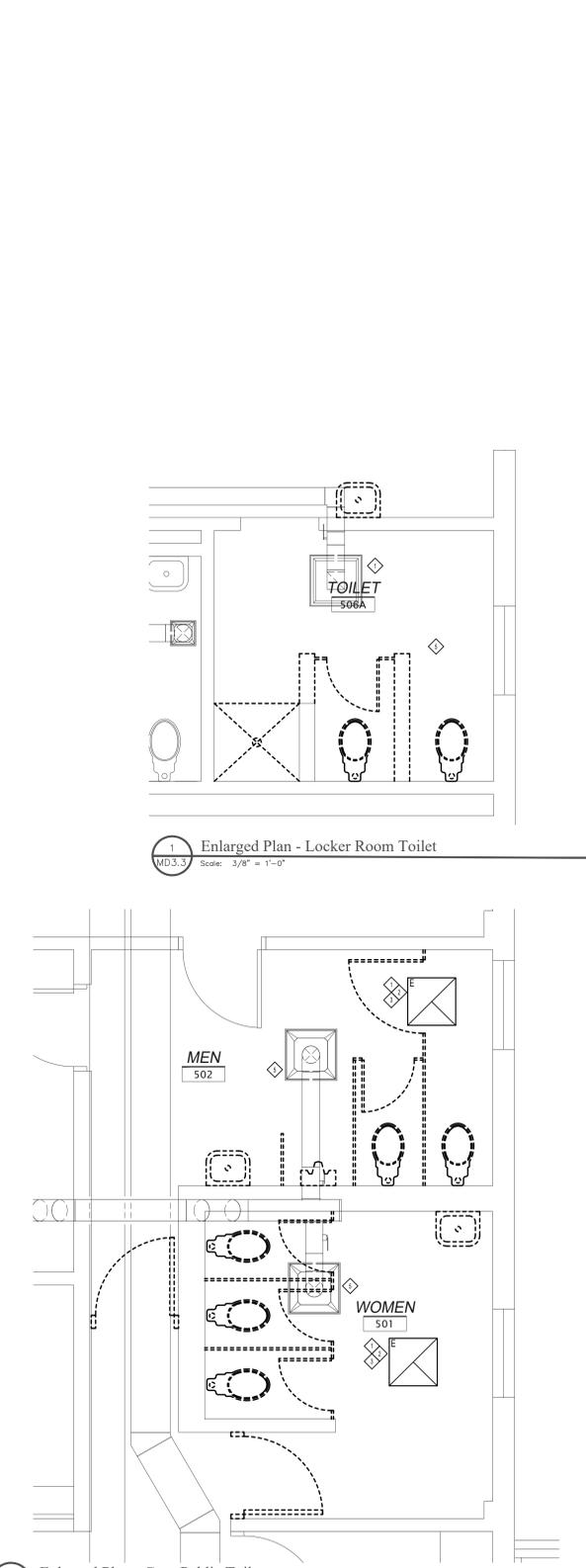
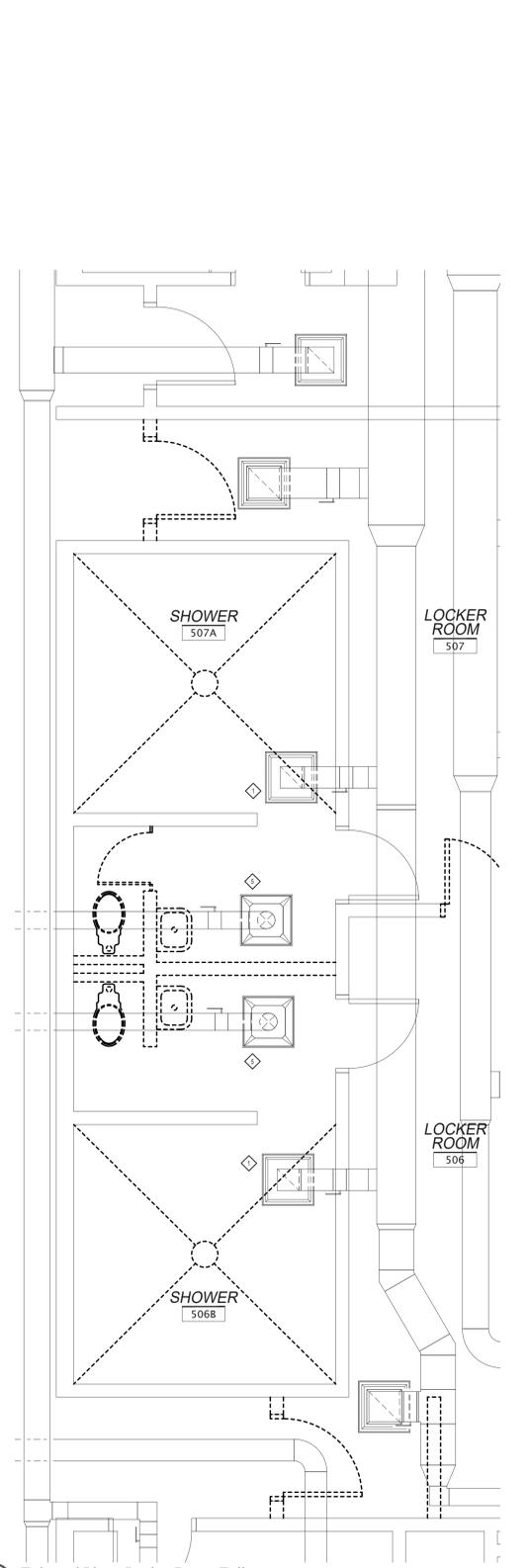
**Enlarged Second  
Floor Mechanical  
Demolition Plans**

sheet  
**MD3.3**

project no. 2231

date 7/25/23

Construction Bid Set

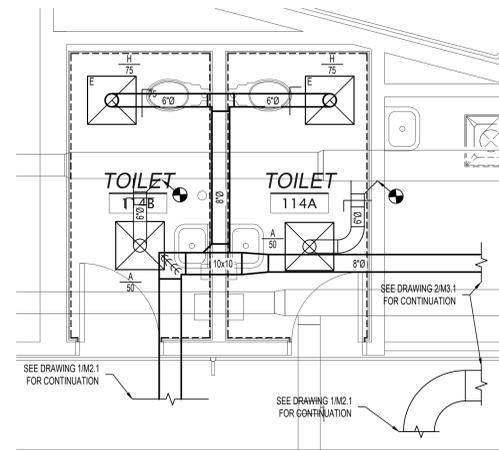


5 Enlarged Plan - Men 238 / Women 239  
MD3.3 Scale: 3/8" = 1'-0"

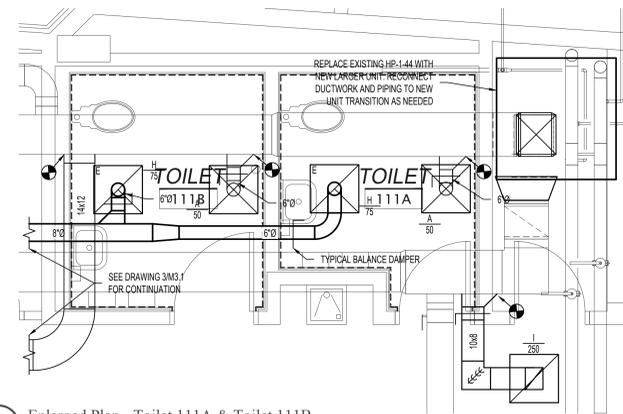
4 Enlarged Plan - Locker Room Toilets  
MD3.3 Scale: 3/8" = 1'-0"

3 Enlarged Plan - Locker Room Toilets  
MD3.3 Scale: 3/8" = 1'-0"

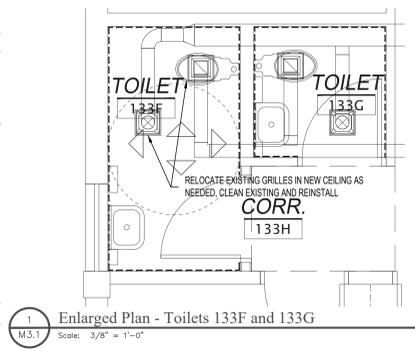
2 Enlarged Plan - Gym Public Toilets  
MD3.3 Scale: 3/8" = 1'-0"



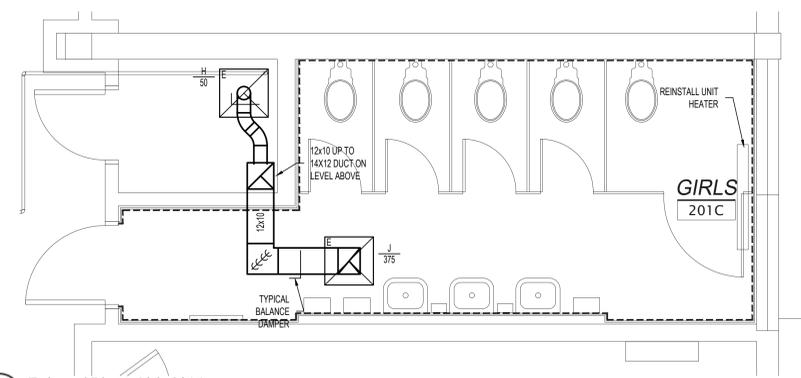
3 Enlarged Plan - Toilet 114A & 114B  
M3.1 Scale: 3/8" = 1'-0"



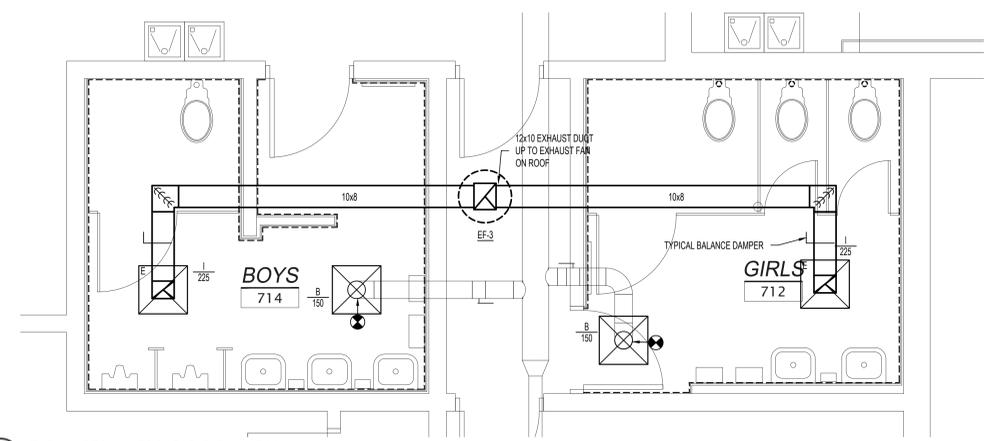
2 Enlarged Plan - Toilet 111A & Toilet 111B  
M3.1 Scale: 3/8" = 1'-0"



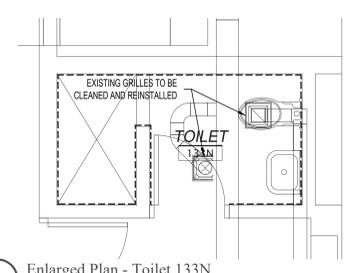
1 Enlarged Plan - Toilets 133F and 133G  
M3.1 Scale: 3/8" = 1'-0"



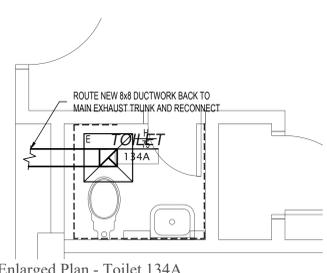
5 Enlarged Plan - Girls 201C  
M3.1 Scale: 3/8" = 1'-0"



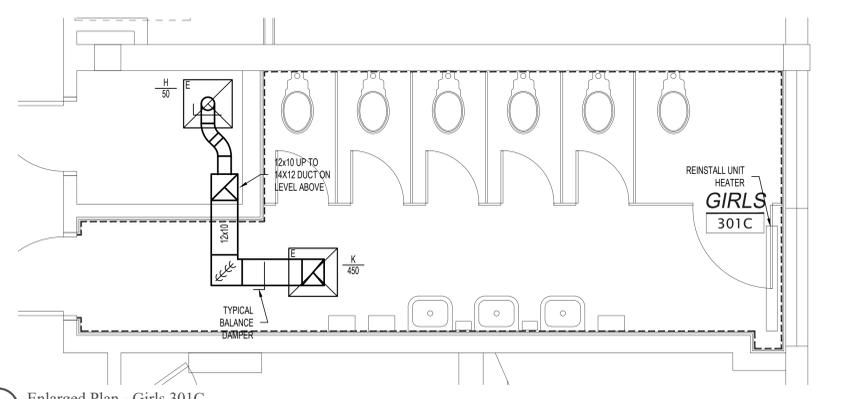
4 Enlarged Plan - Girls 712 & Boys 714  
M3.1 Scale: 3/8" = 1'-0"



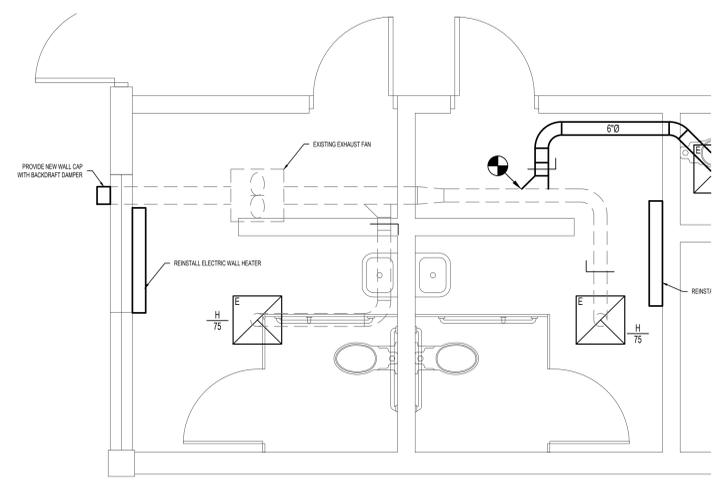
8 Enlarged Plan - Toilet 133N  
M3.1 Scale: 3/8" = 1'-0"



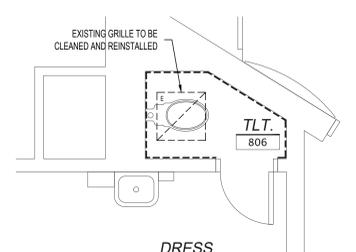
7 Enlarged Plan - Toilet 134A  
M3.1 Scale: 3/8" = 1'-0"



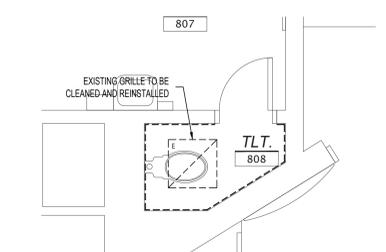
6 Enlarged Plan - Girls 301C  
M3.1 Scale: 3/8" = 1'-0"



7 Enlarged Plan - Basement Toilets  
M3.1 Scale: 3/8" = 1'-0"



10 Enlarged Plan - Toilet 806  
M3.1 Scale: 3/8" = 1'-0"



9 Enlarged Plan - Toilet 808  
M3.1 Scale: 3/8" = 1'-0"



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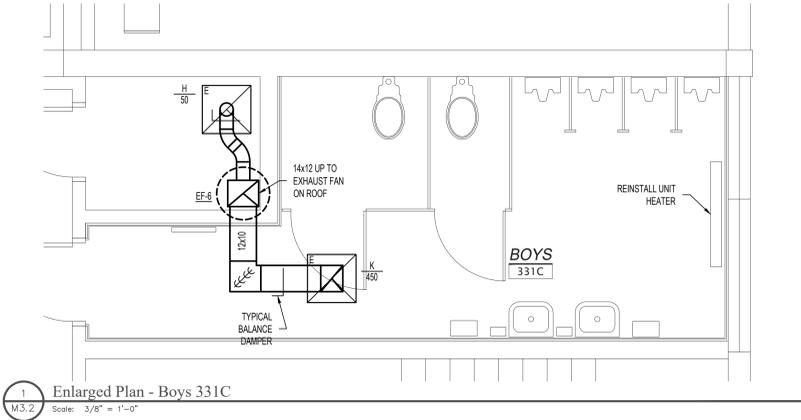
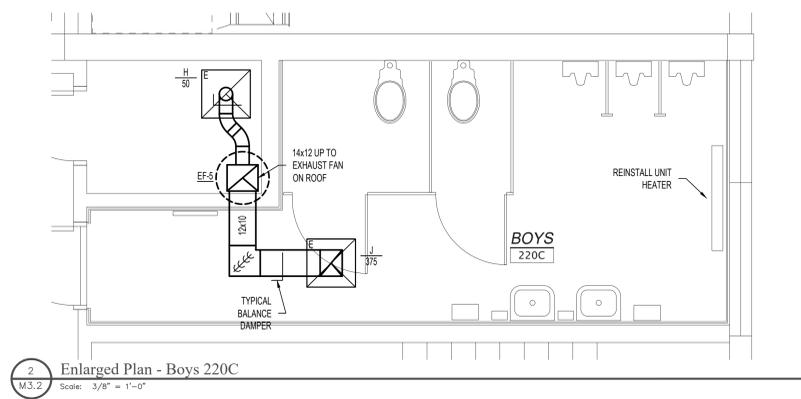
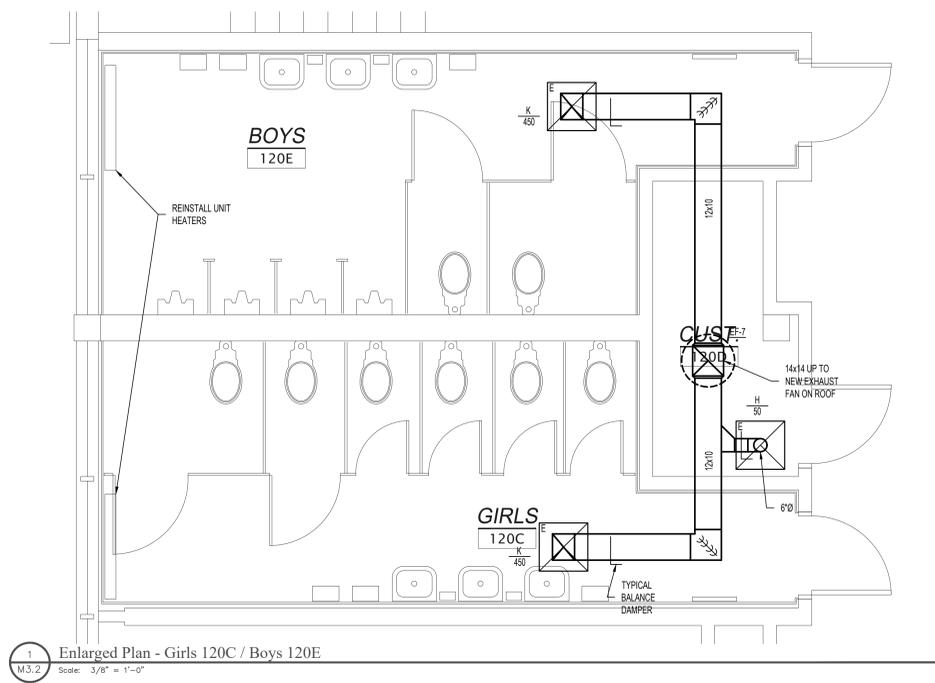
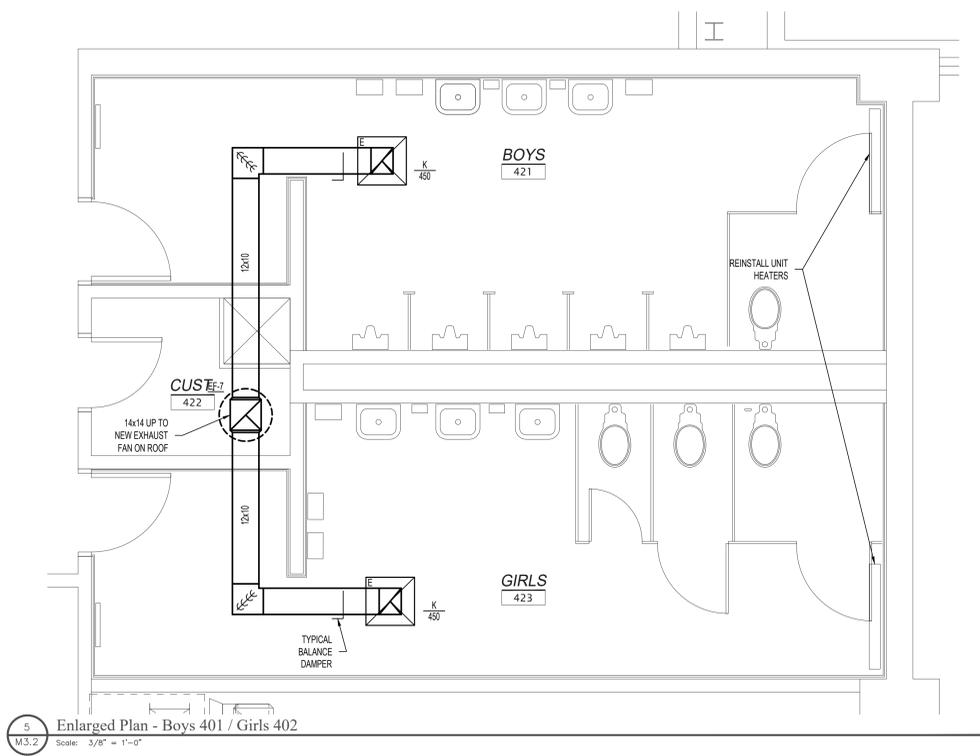
drawn	checked
MRN	JLM

Enlarged Basement  
And First Floor  
New Mechanical  
Plans

sheet  
**M3.1**

project no. 2231

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MRN JLM

Enlarged Second  
Floor New  
Mechanical Plans

sheet  
**M3.2**

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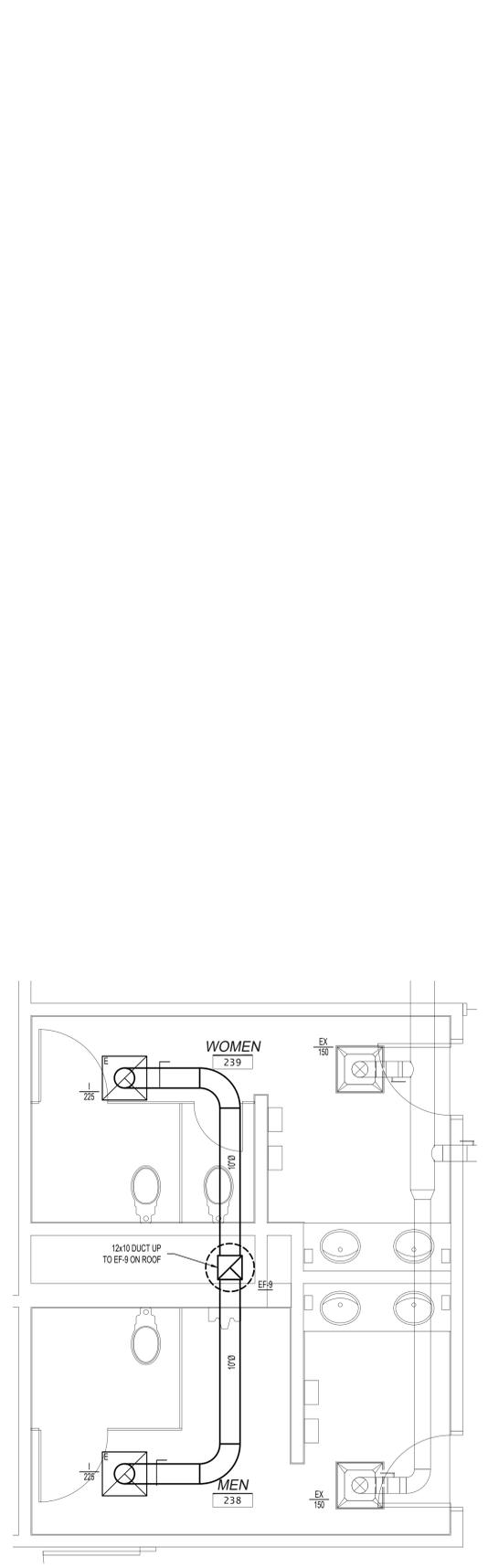
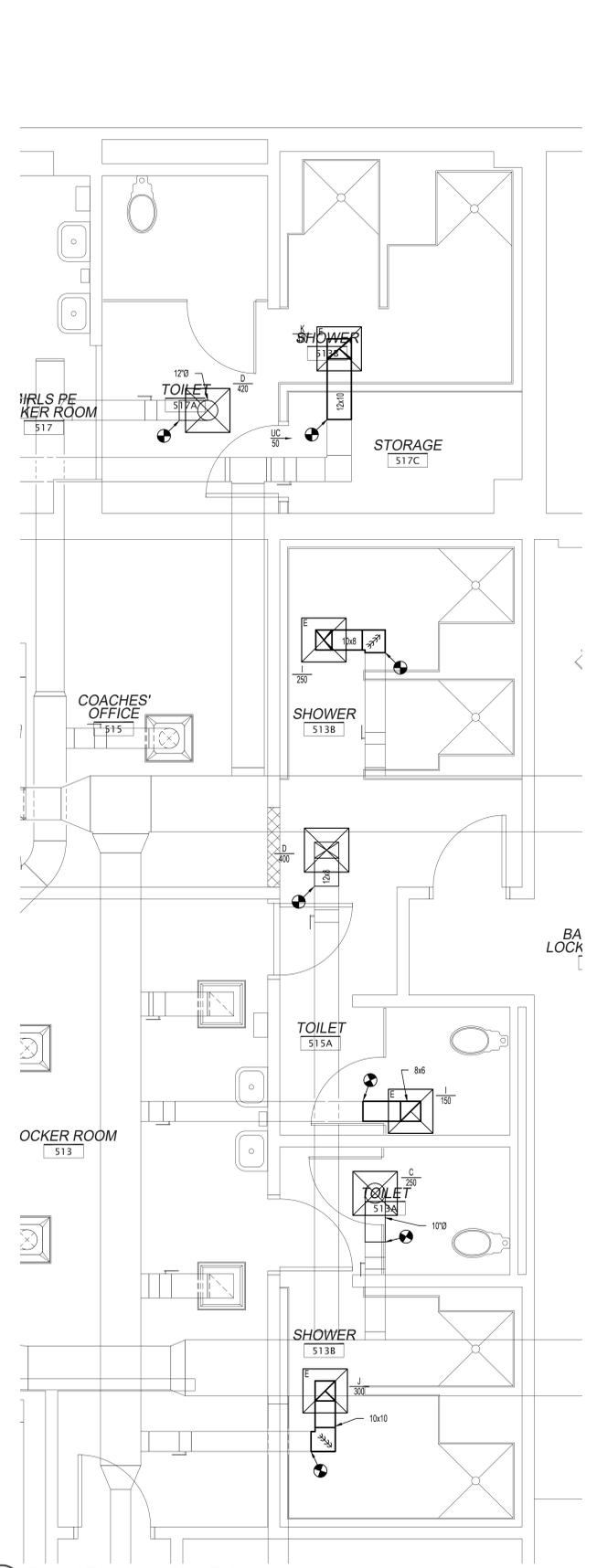
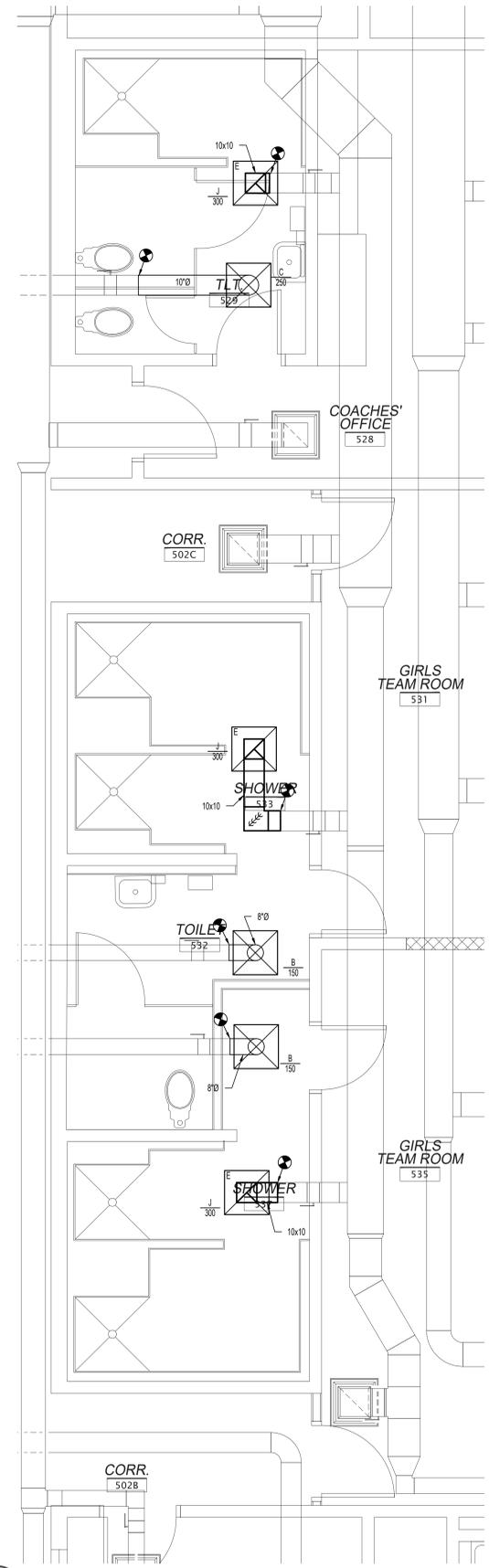
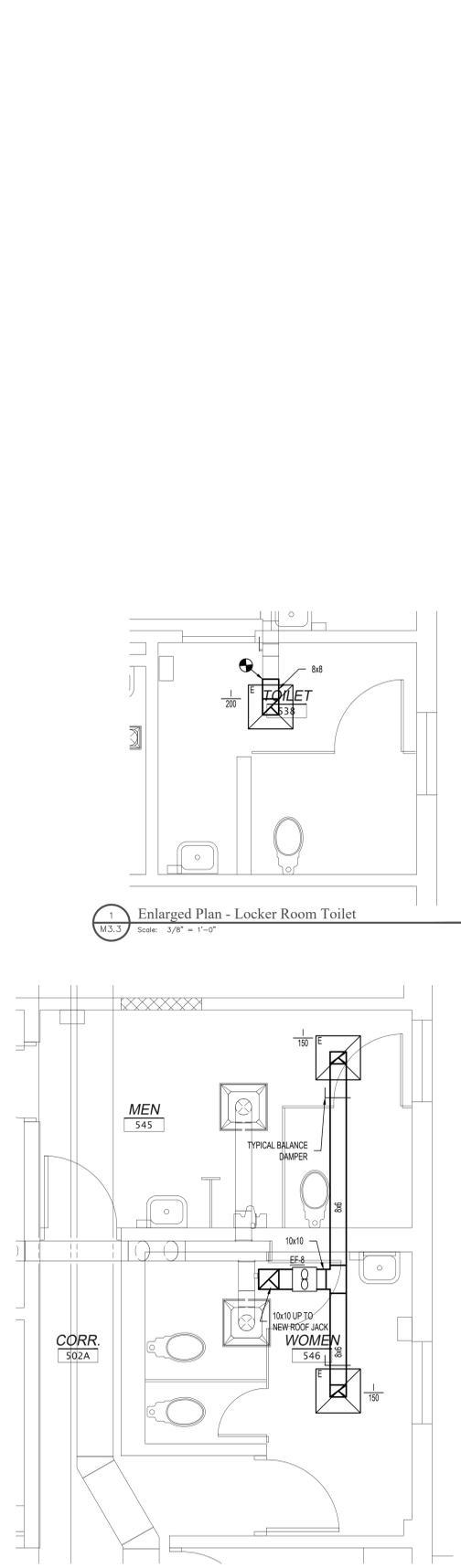
drawn checked  
MRN JLM

Enlarged Second  
Floor New  
Mechanical Plans

sheet  
**M3.3**

project no. 2231

date 7/25/23



5 Enlarged Plan - Men 238 / Women 239  
Scale: 3/8" = 1'-0"

4 Enlarged Plan - Locker Room Toilets  
Scale: 3/8" = 1'-0"

3 Enlarged Plan - Locker Room Toilets  
Scale: 1/2" = 1'-0"

2 Enlarged Plan - Boys 220C  
Scale: 3/8" = 1'-0"

1 Enlarged Plan - Locker Room Toilet  
Scale: 3/8" = 1'-0"

ELECTRICAL SPECIFICATIONS
IT IS THE INTENT OF THESE SPECIFICATIONS FOR THE ELECTRICAL CONTRACTOR TO FURNISH A COMPLETE ELECTRICAL SYSTEM, FULLY ADJUSTED, AND READY FOR USE.
ALL ELECTRICAL WORK TO BE DONE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE OBSERVING ALL STATE AND LOCAL CODES.
ELECTRICAL CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS AND PAY ALL SALES TAXES, UTILITY COMPANY CHARGES FOR SERVICE, PERMITS, FEES, AND OTHER COSTS IN CONNECTION WITH HIS WORK.
ELECTRICAL CONTRACTOR TO ENSURE THAT ALL MATERIAL AND EQUIPMENT FURNISHED FOR THIS PROJECT WHICH CAN BE U.L. LISTED SHALL BE.
THE MATERIAL AND EQUIPMENT HAS BEEN CAREFULLY SELECTED FOR THIS PROJECT AND THE ELECTRICAL CONTRACTOR IS EXPECTED TO PROVIDE ALL ITEMS AS CLOSELY AS POSSIBLE TO THE SPECIFICATIONS AND AS CALLED FOR ON THE DRAWINGS.
ELECTRICAL CONTRACTOR SHALL SUBMIT THREE (3) SETS OF EQUIPMENT DATA SHOP DRAWINGS TO THE ENGINEER FOR ALL ITEMS TO BE FURNISHED AND INSTALLED FOR APPROVAL.
ELECTRICAL CONTRACTOR SHALL INCLUDE IN THE WORK WITHOUT EXTRA COST TO THE OWNER, ANY LABOR, MATERIALS, SERVICES, APPARATUS, DRAWINGS, INCIDENTAL CONSTRUCTION WORK, ETC., IN ORDER TO COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, AND REGULATIONS, WHETHER OR NOT SHOWN ON DRAWINGS AND/OR SPECIFIED. NO CLAIM FOR EXTRAS WILL BE APPROVED WITHOUT PRIOR COORDINATION FOR CONFLICTS BY CONTRACTOR, AND WRITTEN REQUEST AND APPROVAL PRIOR TO PERFORMING WORK.
ALL WORK AND EQUIPMENT TO BE GUARANTEED BY CONTRACTOR FOR ONE (1) YEAR.
UPON COMPLETION OF ALL WORK AND ALL TESTS, ELECTRICAL CONTRACTOR SHALL INSTRUCT THE OWNER OR HIS REPRESENTATIVE FULLY IN THE OPERATIONS, ADJUSTMENTS, AND MAINTENANCE OF EQUIPMENT FURNISHED. ELECTRICAL CONTRACTOR SHALL PROVIDE OWNER WITH MAINTENANCE SCHEDULE FOR THE PRINCIPAL ITEMS OF EQUIPMENT FURNISHED. MANUFACTURERS ADVERTISING LITERATURE OR CATALOGS WILL NOT BE ACCEPTABLE.
ALL MATERIALS AND EQUIPMENT TO BE INSTALLED PER MANUFACTURERS INSTRUCTIONS AND GOOD RECOMMENDED PRACTICES.
ELECTRICAL CONTRACTOR SHALL GIVE FULL COOPERATION TO OTHER TRADES WHERE THE WORK OF ELECTRICAL CONTRACTOR WILL BE INSTALLED CLOSE PROXIMITY TO, OR WILL INTERFERE WITH WORK OF OTHER TRADES. THEY SHALL ASSIST IN WORKING OUT SPACE CONDITIONS TO MAKE SATISFACTORY ADJUSTMENTS. ELECTRICAL CONTRACTOR INSTALLS HIS WORK BEFORE COORDINATING WITH OTHER TRADES. HE SHALL MAKE THE NECESSARY CHANGES IN HIS WORK TO CORRECT THE CONDITION WITHOUT EXTRA CHARGE.
THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. THE DRAWINGS ARE NOT TO BE SCALED.
EXISTING INFORMATION SHOWN ON DRAWINGS TAKEN FROM OWNER FURNISHED AS BUILT DRAWINGS AND LIMITED SITE SURVEY. CONTRACTOR TO FIELD VERIFY ALL EXISTING EQUIPMENT, CIRCUITS, AND WIRING.
ELECTRICAL CONTRACTOR TO VERIFY EXACT LOCATION OF EQUIPMENT, ROUTING PIPE, ETC., AND WORK CLOSELY WITH OTHER TRADES TO AVOID CONFLICTS.
ELECTRICAL CONTRACTOR TO LOCATE AND INSTALL ELECTRICAL CONTROL PANELS IN SUITABLE LOCATION WITH APPROPRIATE CLEARANCES & OVERLOAD PROTECTION FOR ALL ITEMS REQUIRED.
ELECTRICAL CONTRACTOR MAY COMBINE CONDUITS WHERE APPLICABLE, BUT MUST HOOK UP ITEMS TO PROPER CIRCUITS AS SHOWN.
THE OWNER, ARCHITECT AND ELECTRICAL CONTRACTOR TO COORDINATE FOR PROPER CUTOFF HOLES, ALL STUB-UPS AND JUNCTION BOXES, AND TO VERIFY LOCATIONS.
ALL CONDUCTORS, THROUGH 10 AWG, TO BE SOLID COPPER WITH TYPE THW/THHN OR XHHW INSULATION UNLESS NOTED OTHERWISE.
ALL CONDUCTORS, #8 AWG AND LARGER, TO BE CLASS B STRANDED COPPER WITH TYPE THW/THHN OR XHHW INSULATION UNLESS NOTED OTHERWISE.
THE COLOR CODE FOR CONDUCTORS SHALL BE BLACK, RED, WHITE, ORANGE (120/240V, 3ø Y).
THE COLOR CODE FOR CONDUCTORS SHALL BE BLACK, RED, WHITE (120/240V, 1ø Y).
THE COLOR CODE FOR CONDUCTORS SHALL BE BLACK, RED, BLUE, WHITE (120/208V, 3ø Y).
THE COLOR CODE FOR CONDUCTORS SHALL BE BROWN, YELLOW, ORANGE, GRAY (480/277V, 3ø Y).
PROVIDE GREEN GROUNDING CONDUCTOR WITH ALL CIRCUITS.
PVC CONDUIT SHALL NOT BE USED IN AREAS OF ASSEMBLY.
ALL WIRING TO BE IN CONDUIT OR APPROVED RACEWAY.
ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL STAINLESS STEEL DEVICE PLATES TYPE 302, 9X300 SERIES HUBBELL, BRYANT, LEYTON, OR APPROVED EQUAL. EXTERIOR MOUNTED BOXES SHALL HAVE APPROVED WEATHERPROOF PLATES AND/OR COVERS. ALL SURFACE INSTALLED BOXES SHALL HAVE STAMPED STEEL DEVICE PLATES.

GENERAL ELECTRICAL NOTES
1. THIS CONTRACTOR SHALL COORDINATE WITH ALL OTHER CONTRACTORS AND TRADES TO LOCATE HIS WORK TO AVOID CONFLICTS.
2. THIS CONTRACTOR SHALL NOT UTILIZE "THRU" TYPE OUTLET BOXES WHERE DEVICES ARE SHOWN BACK TO BACK IN SOUND INSULATED OR SOUND SECURE AREAS, TYPICAL.
3. SMOKE DETECTORS FOR AIR HANDLING UNITS SHALL BE LOCATED IN AIR DUCTS OBSERVING ALL APPLICABLE CODES AND ORDINANCES. ELECTRICAL CONTRACTOR SHALL COORDINATE THE EXACT LOCATION AND REQUIREMENTS OF INSTALLATION WITH MECHANICAL CONTRACTOR PRIOR TO CUTTING DUCTWORK. LOCATE THE DETECTOR INDICATOR/RESET DEVICE IN AN ACCESSIBLE LOCATION AS DIRECTED BY THE ARCHITECT AND LABEL AS TO AREA AND ROOFTOP UNIT SERVED, TYPICAL.
4. SMOKE DETECTORS SHOULD NOT BE LOCATED IN A DIRECT AIRFLOW OR CLOSER THAN 36" FROM AN AIR SUPPLY DIFFUSER OR RETURN AIR OPENING. SUPPLY OR RETURN SOURCES LARGER THAN THOSE COMMONLY FOUND IN RESIDENTIAL AND SMALL COMMERCIAL ESTABLISHMENTS CAN REQUIRE GREATER CLEARANCE TO SMOKE DETECTORS. SIMILARLY, SMOKE DETECTORS SHOULD BE LOCATED FARTHER AWAY FROM HIGH VELOCITY AIR SUPPLIES.
5. THIS CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS AND PLACEMENT OF LIGHT FIXTURES, OUTLET BOXES, DEVICES, AND EQUIPMENT WITH SITE AND ARCHITECTURAL DRAWINGS, INCLUDING REFLECTED CEILING PLANS, INTERIOR AND EXTERIOR ELEVATIONS, DETAILS AND SECTIONS. PRIOR TO ROUGH-IN, OR RELOCATE AS DIRECTED BY THE DESIGNER AT NO ADDITIONAL COST TO THE OWNER. ELECTRICAL DRAWINGS ARE NOT TO BE SCALED FOR SUCH LOCATIONS.
6. MOUNTING HEIGHTS GIVEN ARE TO TOP OF OUTLET BOX, UNLESS OTHERWISE NOTED. HEIGHTS MAY BE ADJUSTED TO MATCH MASONRY JOINTS, AND MUST COMPLY WITH NORTH CAROLINA STATE BUILDING CODE VOLUME 1-C.
7. LIGHT FIXTURE WHIPS SHALL NOT EXCEED 6" IN LENGTH.
8. ALL CONDUITS, SLEEVES, INSERTS, OUTLET BOXES, AND OTHER ROUGH-IN MATERIALS SHALL BE INSTALLED AS BUILDING CONSTRUCTION PROGRESSES.
9. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTALLATION INSTRUCTIONS.
10. IN MECHANICAL ROOMS AND OTHER AREAS WHERE LIGHT FIXTURES ARE SPECIFIED, AIR DUCT WORK AND PIPING IS INSTALLED, ELECTRICAL CONTRACTOR SHALL INSTALL LIGHT FIXTURES AFTER INSTALLATION OF MECHANICAL CONTRACTORS DUCT WORK AND PIPING.
11. PROVIDE POWER FOR HAY BOXES FROM NEAREST RECEPTACLE CIRCUIT. COORDINATE QUANTITIES AND LOCATIONS WITH MECHANICAL CONTRACTOR.

EXISTING BUILDING NOTES
REMOVE ALL CONDUIT, WIRING, AND ELECTRICAL EQUIPMENT, INCLUDING PREVIOUSLY ABANDONED, RENDERED USELESS BY CONSTRUCTION.
LOCATIONS SHOWN FOR EXISTING LIGHTING FIXTURES, DEVICES, WIRING, ETC. ARE TAKEN FROM BUILDING AS-BUILT DRAWINGS & WALK THRU SITE VISIT, AND ARE GENERALLY SHOWN FOR PURPOSES OF REFERENCE AND INTENT ONLY. VERIFY EXACT CONDITIONS, QUANTITIES, LOCATIONS, CIRCUITRY, CONDUIT ROUTING, ETC., IN FIELD.
EXISTING DEVICES, ARE SHOWN WITH LIGHTER TEXT AND DASHED OUTLINE.
EXISTING WIRING AND RACEWAYS TO BE REUSED WHERE POSSIBLE OR PRACTICAL, AND EXISTING WIRING IS FOUND TO BE IN GOOD CONDITION, REPLACE ANY EXISTING WIRING FOUND TO BE IN POOR CONDITION. ALL NEW INSTALLATIONS SHALL USE NEW WIRE, TYPICAL. ALL MATERIALS REMOVED AND NOT TO BE REUSED ARE TO BE DISPOSED OF PER OWNER'S INSTRUCTIONS.

GENERAL NOTES FOR ELECTRICAL DEMOLITION
1. FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES ON DRAWINGS.
2. UNLESS OTHERWISE NOTED, THE OWNER RETAINS THE RIGHT TO RETAIN ALL ITEMS AND/OR MATERIALS IN GOOD CONDITION FOLLOWING REMOVAL AND/OR DEMOLITION. OTHERWISE, THE CONSTRUCTION MANAGER SHALL DISPOSE OF ALL OTHER ITEMS AND MATERIALS IN A LEGAL FASHION.
3. IF ANY ASBESTOS-CONTAINING MATERIAL IS SUSPECTED, G.C. SHALL STOP DEMOLITION AND CONTACT THE OWNER'S REPRESENTATIVE IMMEDIATELY. THE OWNER SHALL CONTRACT WITH AN ASBESTOS ABATEMENT CONTRACTOR UNDER A SEPARATE CONTRACT FOR THE REMOVAL OF ALL EXISTING ASBESTOS-CONTAINING MATERIAL, SHOULD ANY BE ENCOUNTERED.
4. FOR WALL MOUNTED DEVICES, TYPICALLY RECEPTACLES, DATA I/O OUTLETS, NURSE CALL, SECURITY ACCESS & LIGHT SWITCHES) UNLESS SPECIFICALLY IDENTIFIED BY DEMOLITION NOTE, WALL MOUNTED DEVICES ARE TO REMAIN.
5. FOR CEILING MOUNTED DEVICES (TYPICALLY LIGHTING FIXTURES EXIT LIGHTS, DOME LIGHTS, WIRELESS TRANSMITTERS, CAMERAS, SMOKE DETECTORS, SPEAKERS, ETC.) UNLESS NOTED OTHERWISE IN DEMOLITION NOTES, CEILING DEVICES ARE TO BE REMAIN.
6. LIGHTING, POWER, DATA, INTERCOM, SECURITY AND NURSE CALL SYSTEMS- CONTRACTOR MAY REUSE EXISTING CONDUIT AND WIRING TO THE EXTENT POSSIBLE IN PROVIDING A COMPLETE AND OPERABLE SYSTEM. CONTRACTOR IS TO PROVIDE ALL LABOR & MATERIALS, INCLUDING BUT NOT LIMITED TO DEVICES, BOXES, CONDUIT, POWER BOOSTERS, EXPANSION MODULES, AND WIRING FROM ALL DEVICES TO APPROPRIATE CONTROL PANEL OR POWER SUPPLY IN ORDER TO PROVIDE A COMPLETE AND OPERABLE SYSTEM. CONTRACTOR TO FIELD VERIFY ALL EXISTING QUANTITIES AND LOCATIONS & COORDINATE CLOSELY WITH OWNER.
7. FIRE ALARM SYSTEM- CONTRACTOR MAY REUSE EXISTING CONDUIT AND WIRING TO THE EXTENT POSSIBLE IN PROVIDING A COMPLETE AND OPERABLE ADDRESSABLE FIRE ALARM SYSTEM THAT WILL BE UL COMPLIANT. CONTRACTOR IS TO PROVIDE ALL LABOR MATERIALS, INCLUDING BUT NOT LIMITED TO DEVICES, BOXES, CONDUIT, POWER BOOSTERS, EXPANSION MODULES, AND WIRING FROM ALL DEVICES TO APPROPRIATE CONTROL PANEL OR POWER SUPPLY IN ORDER TO PROVIDE A COMPLETE AND OPERABLE SYSTEM. CONTRACTOR TO FIELD VERIFY ALL EXISTING QUANTITIES AND LOCATIONS & COORDINATE CLOSELY WITH OWNER.
8. E.C. TO TAKE CARE IN REMOVING, TAGGING, & STRONG DEVICES DURING DEMO PHASE. RE-AGING DEVICES TO BE REUSED DURING NEW CONSTRUCTION PHASE. EXISTING CEILING MOUNTED DEVICES TO BE REINSTALLED AS CLOSE AS POSSIBLE TO ORIGINAL LOCATION. PROVIDE MATERIAL AND LABOR FOR EXTENDING CONDUIT & WIRING, AS REQUIRED, FOR REINSTALLATION. ENSURE PROPER OPERATION AFTER CONSTRUCTION.
9. WHERE RECEPTACLES ARE REMOVED, ELECTRICAL CONTRACTOR TO REMOVE EXISTING RECEPTACLE DEVICE, BOX, CONDUIT AND WIRING BACK TO ITS SOURCE, WHERE CIRCUIT FEEDING RECEPTACLE TO BE REMOVED ALSO FEEDS RECEPTACLES THAT ARE TO REMAIN. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, WIRING AND BOXES AS REQUIRED TO REFEED EXISTING RECEPTACLES, AS REQUIRED, FOR PROPER OPERATION. SEE INSTALLATION DRAWINGS AND PANEL SCHEDULES FOR ADDITIONAL CIRCUITING INFORMATION.
10. WHERE LIGHTING FIXTURES AND ASSOCIATED SWITCHING ARE REMOVED, ELECTRICAL CONTRACTOR TO REMOVE EXISTING FIXTURE, SWITCH, SWITCH BOX, CONDUIT AND WIRING BACK TO ITS SOURCE, WHERE CIRCUIT FEEDING FIXTURE(S) TO BE REMOVED ALSO FEEDS FIXTURE(S) THAT ARE TO REMAIN. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, WIRING AND BOXES AS REQUIRED TO REFEED EXISTING FIXTURE(S), AS REQUIRED, FOR PROPER OPERATION. SEE INSTALLATION DRAWINGS AND PANEL SCHEDULES FOR ADDITIONAL CIRCUITING INFORMATION.
11. WHERE JB'S, PULL BOXES, CONDUIT, OR OTHER ELECTRICAL DEVICES ARE FOUND WITH WIRING AND WITHOUT COVERS, E.C. TO PROVIDE COVERS, AND/OR CAPS, WHERE JB'S, PULL BOXES, CONDUIT, OR OTHER ELECTRICAL DEVICES ARE FOUND WITHOUT WIRING, E.C. TO REMOVE BACK TO SOURCE OR NEAREST POPULATED JUNCTION.

RECEPTACLES		
SYMBOL	DESCRIPTION	MOUNTING
	TAMPER RESISTANT GROUND FAULT CIRCUIT INTERRUPTING RECEPTACLE, 20 AMP, FEED THRU TYPE, SELF TEST, EXTRA HEAVY DUTY INDUSTRIAL SPECIFICATION GRADE, LEYTON #8392 TE	1'-6" AFF OR AS NOTED
	GFI RECEPTACLE, #8392 TE, FOR ELECTRIC WATER COOLER, POSITION RECEPTACLE BEHIND WATER COOLER SO AS TO BE HIDDEN FROM SIGHT. COORDINATE EXACT MOUNTING, E.C. SHALL ALSO PROVIDE WATER-RESISTANT WATER COOLER RECEPTACLE & MOUNT AT 1'-6" AFF OUTSIDE OF WATER COOLER OUTLINE TO MAINTAIN ACCESSIBILITY.	1'-6" AFF OR AS NOTED
	DUPLEX RECEPTACLE, TAMPER RESISTANT, 20 AMPERE RATED, GROUNDING TYPE, EXTRA HEAVY DUTY INDUSTRIAL SPECIFICATION GRADE, LEYTON #8392 SGE	1'-6" AFF OR AS NOTED
	RECEPTACLE, SAME AS ABOVE, EXCEPT MOUNTING HEIGHT.	42" AFF OR AS NOTED

POWER, WIRING & CONDUIT		
SYMBOL	DESCRIPTION	MOUNTING
	ELECTRICAL PANELBOARD, PANEL SCHEDULE FOR DESCRIPTION.	6'-0" TO TOP
	DISCONNECT SWITCH, 600V, WHERE EXPOSED TO WEATHER SHALL BE NEMA 3R	AS REQD, NO HIGHER THAN 6'-0" AFF
	WEATHER SWITCH, 250 VAC SIZE AS SHOWN, WHERE EXPOSED TO WEATHER SHALL BE NEMA 3R, SHALL BE SQUARE "S" SAFETY SWITCH OR EQUAL.	AS REQD, NO HIGHER THAN 6'-0" AFF
	EXHAUST FAN MOTOR	MECH, DWGS
	PUMP MOTOR	PLUMBING & MECH, DWGS
	MOTOR	MECH, DWGS
	HOME RUN TO PANELBOARD, ARROWHEADS INDICATE NUMBER OF CIRCUITS, WIRE & CONDUIT AS SPECIFIED.	AS REQD
	JUNCTION BOX (JB) AS MANUFACTURED BY RACO, STEEL, CITY, OR UNIVERSAL, SIZE AS APPLICABLE OR REQUIRED, E.C. TO MAKE FINAL CONNECTIONS TO FURNITURE SYSTEMS AND/OR EQUIPMENT, AS REQUIRED.	WALL MNTD, AS REQD
	JUNCTION BOX, AS ABOVE, FOR HVAC CONTROLS PROVIDE BOX, CONDUIT, AND WIRING AS INDICATED ON PLANS. COORDINATE EXACT MOUNTING POSITIONING W/ ARCHITECTURAL PLANS.	ABOVE ACCESSIBLE CEILING
	JUNCTION BOX, AS ABOVE, FOR HVAC CONTROLS PROVIDE BOX, CONDUIT, AND WIRING AS INDICATED ON PLANS. COORDINATE EXACT LOCATION WITH M.C. PRIOR TO ROUGH IN.	COORD. ARCHITECTURAL PLANS
	JUNCTION BOX, AS ABOVE, FOR HVAC CONTROLS PROVIDE BOX, CONDUIT, AND WIRING AS INDICATED ON PLANS. COORDINATE EXACT LOCATION WITH M.C. PRIOR TO ROUGH IN.	3'-0" AFF OR AS NOTED

FIRE ALARM		
WHERE FIRE ALARM SYSTEM EXISTS, ALL COMPONENTS TO BE U.L. LISTED AND TO MATCH EXISTING SYSTEM, OTHERWISE PROVIDE SYSTEM AS DESCRIBED BELOW. ALL SYMBOLS MAY NOT BE USED.		
SYMBOL	DESCRIPTION	MOUNTING GIVEN TO TOP UNO
	SMOKE DETECTOR, MULTI-SENSOR TYPE, NP-A100(A) SERIES IN B210(LP/A) BASE	CEILING SURFACE
	MULTI-CRITERIA DETECTOR (FIRE/CARBON MONOXIDE/HEAT/SMOKE), NOTIFIER FCO-651(A) WITH SOUNDER	CEILING SURFACE
	MANUAL PULL STATION, NOTIFIER #NOT-8GF12LX.	4'-0" AFF
	AUDIO (CHIME) STROBE ALARM, FIELD CONFIGURABLE 15, 30, 75, 95 CANDELLA AND SELECTABLE HIGH/LOW DB OUTPUT, SPECTRALERT CHR SERIES WFLUSH MOUNT BACK BOX.	WALL 80"-90" AFF OR 6" BELOW CEILING (MIN) WHICHEVER IS LOWER
	STROBE ALARM, FIELD CONFIGURABLE 15, 30, 75, 95 CANDELLA, WALL-SPECTRALERT SERIES SR WFLUSH MOUNT BACK BOX, CEILING-SPECTRALERT SERIES SCR WFLUSH MOUNT BACK BOX.	WALL 80"-90" AFF OR 6" BELOW CEILING (MIN) WHICHEVER IS LOWER
NOTE: PROVIDE IN EACH ADDITIONAL SMOKE DETECTOR, PULL STATIONS, HORN STROBES, & STROBE DEVICES, TO BE INSTALLED AT THE DISCRETION OF THE A/E.		
NOTE: CONTRACTOR IS TO SELECT CANDELLA SETTINGS FOR STROBES PER NFPA-72 REQUIREMENTS. INDICATE SETTINGS ON WIRING DIAGRAM SUBMITTALS AND INCLUDE IN REQUIRED BATTERY CALCULATIONS. ENSURE ALL AUDIBLE DEVICES ARE SET TO A MINIMUM OF 60db, WHERE INDICATED. SUBSCRIPTOR INDICATES C/L LEVEL SETTING, ALL AUDIBLE DEVICES TO BE SET AT 60db MINIMUM. VERIFY COLOR (RED/WHITE) WITH OWNER/ARCHITECT.		

ELECTRICAL SYMBOL SCHEDULE		
ALL SYMBOLS MAY NOT BE USED.		
NOTE: ALL ELECTRICAL DEVICES SHALL BE IVORY IN COLOR WITH STAINLESS STEEL COVER PLATES. EXISTING SYMBOLS ARE SHOWN SIMILAR EXCEPT WITH A LIGHTER LINE WEIGHT AND DASHED.		
SWITCHING		
SYMBOL	DESCRIPTION	MOUNTING
	SWITCH, SINGLE POLE, 20 AMP, COMMERCIAL DUTY, HUBBELL #HB1221, 120/277 VOLT RATED, IVORY COLOR.	4'-0" AFF TO TOP OR AS NOTED
	SWITCH, SINGLE POLE, 20 AMP, COMMERCIAL DUTY, HUBBELL #HB1222, 120/277 VOLT RATED, IVORY COLOR.	4'-0" AFF TO TOP OR AS NOTED
	SWITCH, 4-WAY, 20 AMP, COMMERCIAL DUTY, 120/277 VOLT RATED, HUBBELL #HB1224, IVORY COLOR.	4'-0" AFF TO TOP OR AS NOTED
	SWITCH, SINGLE POLE, 20 AMP, COMMERCIAL DUTY, HUBBELL #HB1221L, 120/277 VOLT RATED, BLACK COLOR.	4'-0" AFF TO TOP OR AS NOTED
	WALL SWITCH, SINGLE RELAY, DUAL TECHNOLOGY, OCCUPANCY SENSOR, WATT STOPPER #85V-301, WIRE PER MFG'S RECOMMENDATIONS.	4'-0" AFF TO TOP OR AS NOTED

LIGHT FIXTURES	
REFER TO LIGHTING FIXTURE SCHEDULE FOR LETTER DESIGNATIONS AND MOUNTING	
SYMBOL	DESCRIPTION
	RECESSED LINEAR FIXTURE ON NORMAL CIRCUIT.
	DOWN LIGHT ON NORMAL CIRCUIT.
	VANDAL RESISTANT EMERGENCY LIGHT ON BATTERY OR GENERATOR.
	EXIT SIGN ON BATTERY OR GENERATOR SUPPLIED CIRCUIT.

ABBREVIATIONS		
(X)	EXISTING	HP HORSE POWER
(N)	NEW	HVAC HEATING, VENTILATION, AIR CONDITIONING
(D)	DEMOLISH	IS ISOLATED GROUND
(R)	RELOCATE	JB JUNCTION BOX
A	AMPS	KK KIRK KEY
AC	AIR CONDITIONING UNIT	KL KLOVOLT AMPS
ACT	ABOVE COUNTER TOP	KW KLOWATT
AD	AUTOMATIC DOOR	LRA LOCKED ROTOR AMPS
AF	ABOVE FINISHED FLOOR	LRF LINE REACTOR/HARMONIC TRAP FILTER
AFG	ABOVE FINISHED GRADE	LS LIFE SAFETY BRANCH
AFR	ABOVE FINISHED ROOF	LT LIGHT
AHJ	AUTHORITY HAVING JURISDICTION	LTG LIGHTING
AV	AUDIO VISUAL	MKB MAXIMUM
B	BOILER	MCC MECHANICAL CONTRACTOR
BAS	BUILDING AUTOMATION SYSTEM	MCC MOTOR CONTROL CENTER
BC	BYPASS CONTACTOR	MCB MOLDED CASE CIRCUIT BREAKER
BLDG	BUILDING	MIN MINIMUM
BFG	BELOW FINISHED GRADE	MLO MAIN LUG ONLY
C	CONDUIT	MT MOUNT
CB	CIRCUIT BREAKER	MTO MOUNTED
CH	CHILLER	MC MECHANICAL CONTRACTOR
CKT	CIRCUIT	NC NORMALLY CLOSED
CLS	CEILING	NO NOT IN CONTRACT
CO	CONDUIT ONLY	NO NORMALLY OPEN
COMP	COMPRESSOR	NYS NOT TO SCALE
CPT	CONDENSATE PUMP	OL OVERLOAD RELAY
CPT	CONTROL POWER TRANSFORMER	P PUMP
CR	CRITICAL BRANCH	PB PUSH BUTTON
CT	CURRENT TRANSFORMER	PC PLUMBING CONTRACTOR
CU	COPPER	PHS PHASE
CUH	CABINET UNIT HEATER	PNL PANEL
DF	DISTRIBUTION PANEL	PWR POWER
DWG	DRAWING	RF RETURN AIR FAN
EC	ELECTRICAL CONTRACTOR	RTU ROOFTOP UNIT
EDP	EMERGENCY DISTRIBUTION PANEL	SF SUPPLY AIR FAN
EF	EXHAUST FAN	SC SPECIFICATION
EI	ELECTRICAL INTERLOCK	SC SOUND SYSTEM CONSULTANT
EM	EMERGENCY	SW SWITCH
END	END OF LINE RESISTOR	TCC TEMPERATURE CONTROL CONTRACTOR
EP	EXPLOSION PROOF	TYP TYPICAL
EQ	EQUIPMENT BRANCH	UG UNDERGROUND
EW	ELECTRIC WATER COOLER	UH UNIT HEATER
EXIST	EXISTING	UL UNDERWRITERS' LABORATORIES, INC.
FOU	FAN COIL UNIT	UNO UNLESS NOTED OTHERWISE
FOS	FUSED DISCONNECT SWITCH	V VOLTS
FLO	FULL LOAD AMPS	VA VOLT AMPS
FL	FLOOR	VFD VARIABLE FREQUENCY DRIVE
FZ	FREELZE/STAY	W WATTS
GC	GENERAL CONTRACTOR	W/O WITH OUT
GFI	GROUND FAULT INTERRUPTER	WP WEATHERPROOF
GFP	GROUND FAULT PROTECTION	WXR TRANSFORMER
GND	GROUND	
HOA	HANDS-OFF/AUTO SELECTOR SWITCH	

ELECTRICAL FIXTURE SCHEDULE						
SYMBOL	DESCRIPTION	LAMPS	MOUNTING	WATTS	BALLAST	#
<b>A</b>	STRIP LIGHT, 4' LED WITH CURVED LENS, IN ROWS SHOWN END TO END INCLUDE ROW CONNECTOR TO CREATE CONTINUOUS ROWS. SLG LIGHTING #TSP-4-BL-G1-3K-8PC-TSG-G1	500K 5600 lm LED	CEILING OR CHAIN HUNG RAFF	46	LED DRIVER INCLUDED	1
<b>A2</b>	STRIP LIGHT, 2' LED WITH CURVED LENS.	500K 2000 lm LED	WALL MOUNTED	14	LED DRIVER INCLUDED	1
<b>B</b>	VAPOR TIGHT STRIP LIGHT, 4' LED WITH WET RATING.	500K 6450 lm LED	CEILING	60	LED DRIVER INCLUDED	1
<b>C *</b>	2X2 FLAT PANEL, WITH SELECTABLE CCT SET TO 500K	500K 3383 lm LED	CEILING RECESSED	30	LED DRIVER INCLUDED	1
<b>F</b>	MAXILITE #MLFFP 22BL 30 CCS	400K 6500 lm LED	WALL MOUNTED 10' OR NOTED	56	LED DRIVER INCLUDED	1
<b>G</b>	WALL PACK, LED, TYPE IV DISTRIBUTION, W/ PHOTO CELL, XX + FINISH BY ARCHITECT, 2160lm IN EMERGENCY MODE. N.S. LIGHTING #N-175-6AL-1-40K7JUNV-AM-XX-PC-EMH4	400K 2295 lm LED	WALL MOUNTED 10' OR NOTED	205	LED DRIVER INCLUDED	1
<b>H</b>	POLE LIGHT, LED, TYPE V DISTRIBUTION, W/ PHOTO CELL, XX + FINISH BY ARCHITECT, AND 10 FT U.L. RATED POLE. N.S. LIGHTING #N-175-6AL-1-40K7JUNV-DPS3-XX-LPER	400K 25420 lm LED	10' POLE	205	LED DRIVER INCLUDED	1
<b>EB</b>	VANDAL RESISTANT EMERGENCY EGRESS LIGHT, DUAL HEAD FIXTURE WITH W/BACK BATTERY BACKUP, IP66 OR WET RATED, WITH SELF DIAGNOSTICS. ISOLITE #BZN-NCB@ISSW-MBC-ES-SD	INCLUDED	7'-6" AFF	22	N/A	N/A

NOTE: ELECTRICAL CONTRACTOR TO FURNISH AND MAKE PROVISIONS FOR THE INSTALLATION OF (6) ADDITIONAL TYPE "E" FIXTURES \* WHERE FIXTURES ARE INSTALL IN G/WB, E.C. TO PROVIDE APPROPRIATE INSTALLATION KIT, COORDINATE WITH ARCHITECTURAL RCP.



222 cloister court chapel hill, nc 27514 919.401.8586 www.cra-a-e.com



Reece, Noland & McElrath, Inc. 290 Main Street, Canton, North Carolina 28716



Orange High School Renovations and Addition Orange County Schools 500 Orange High School Road Hillsborough, North Carolina



no. revisions

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Electrical Details, Notes, and Specifications

sheet

E1.0

project no. 2231

date 7/25/23



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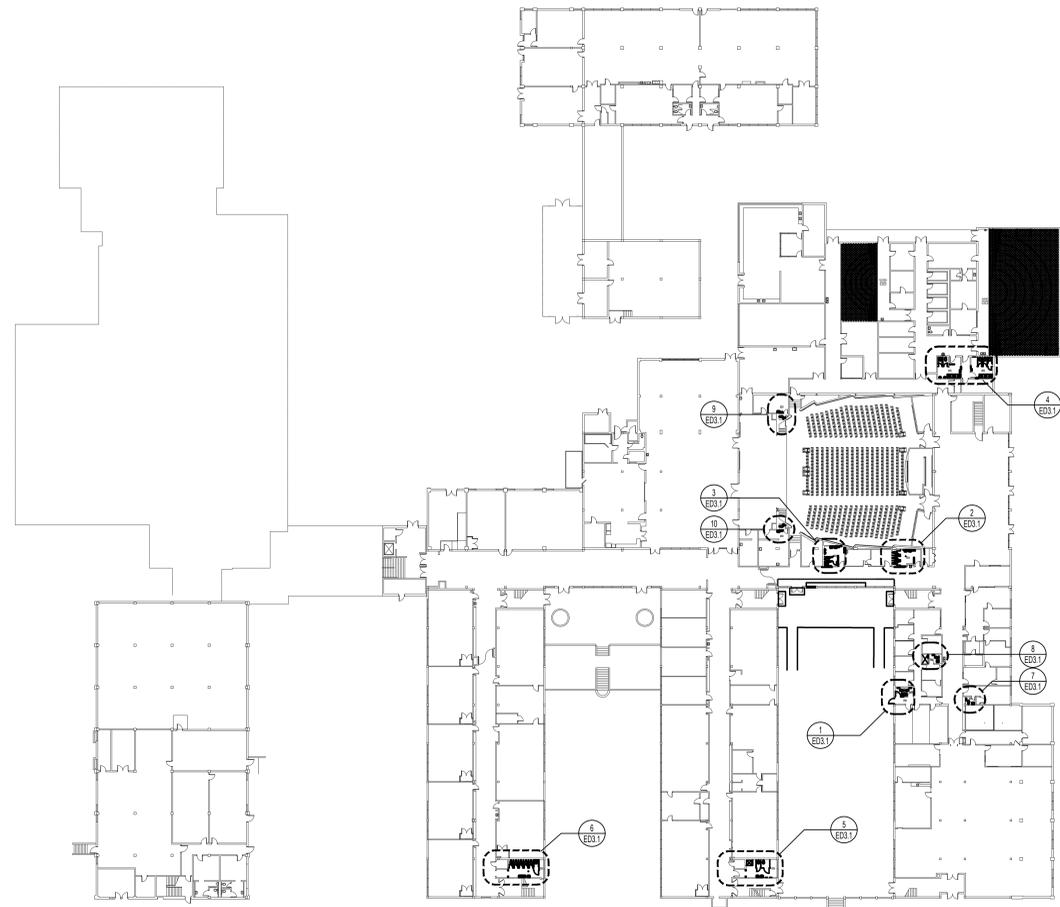
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Overall  
Electrical Demolition  
Plans

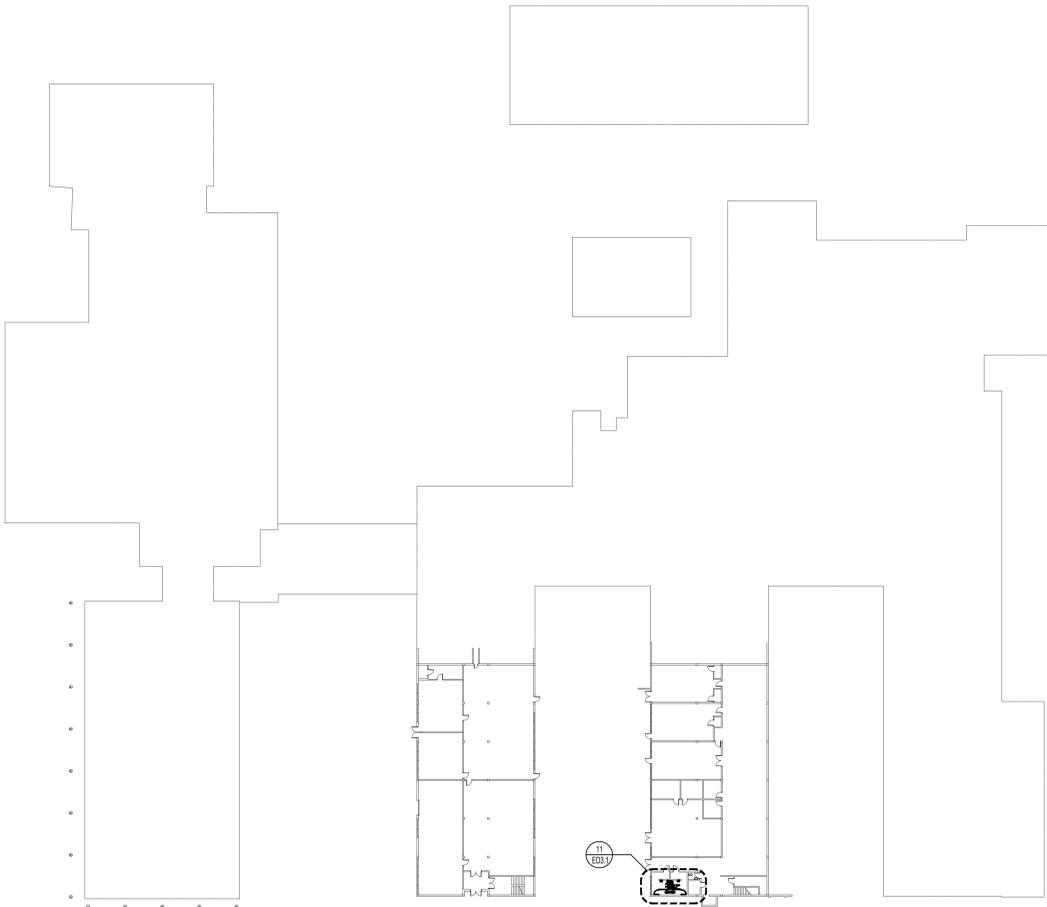
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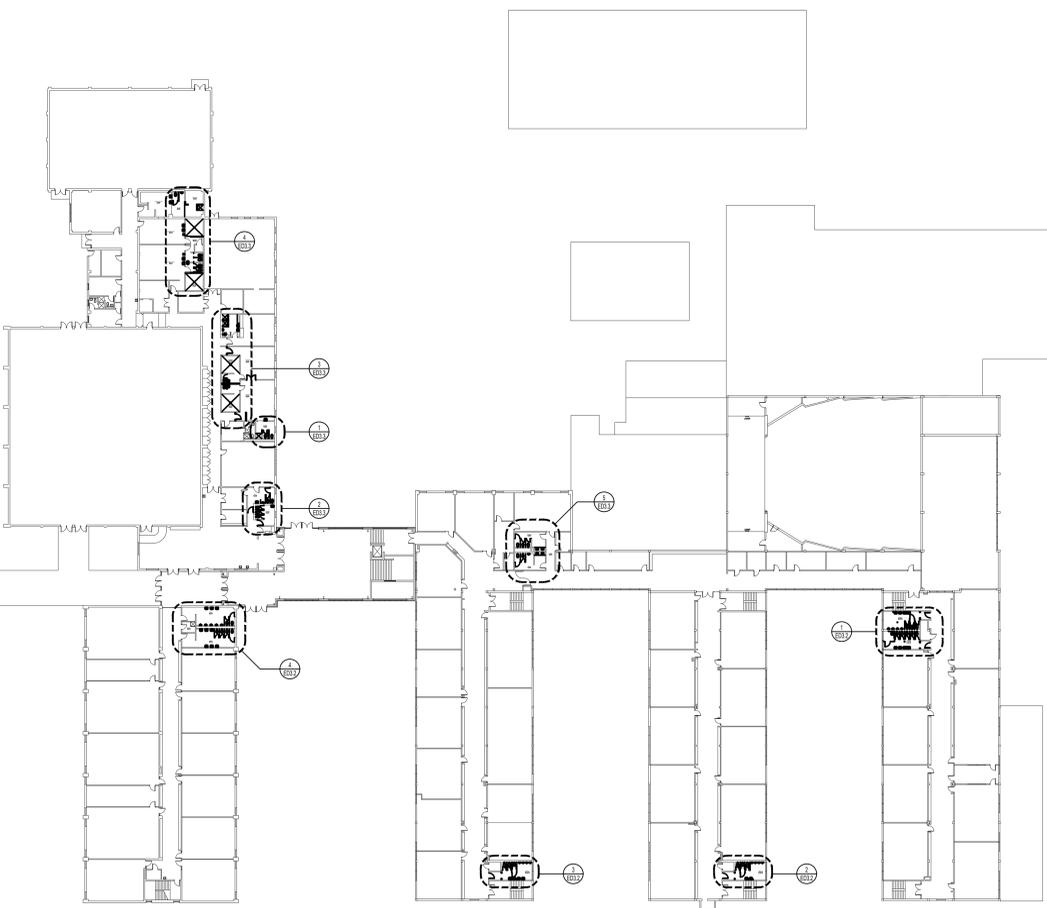
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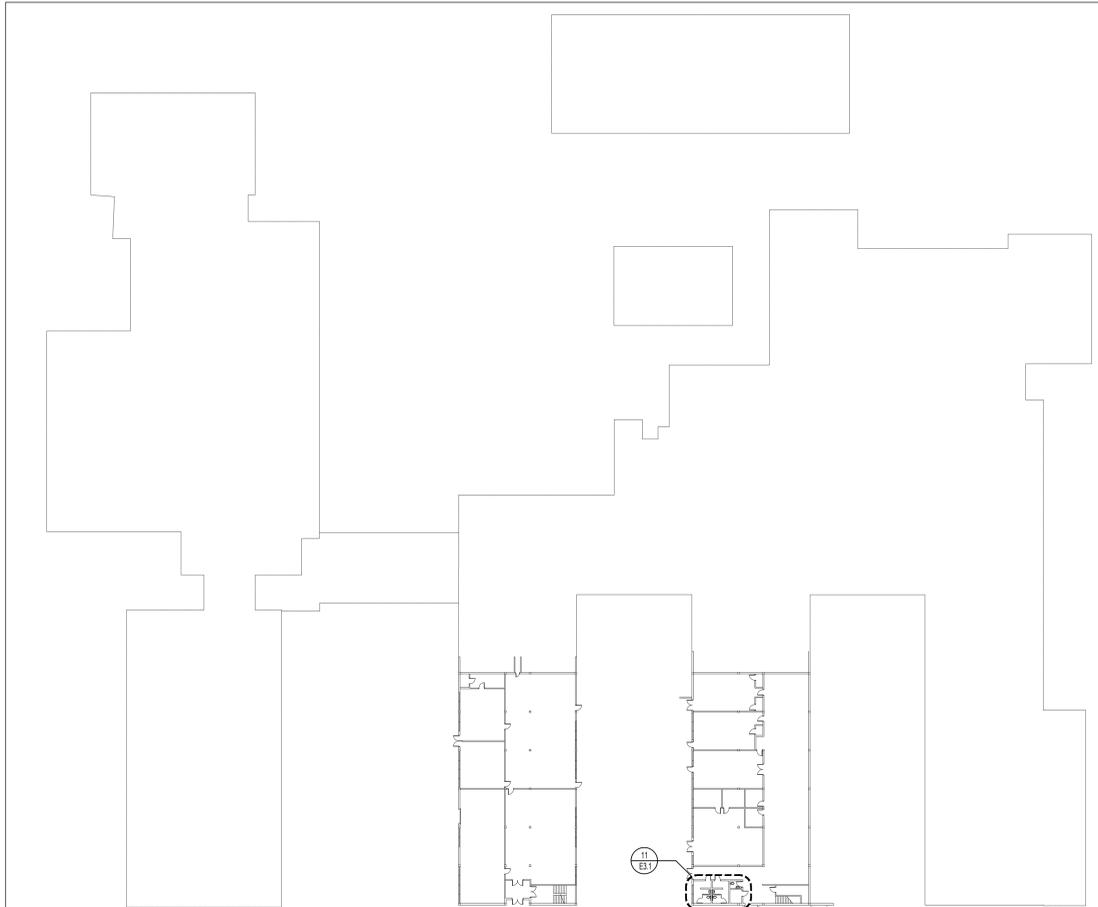
2 Overall First Floor Electrical Demolition Floor Plan  
Scale: 1" = 40'-0"



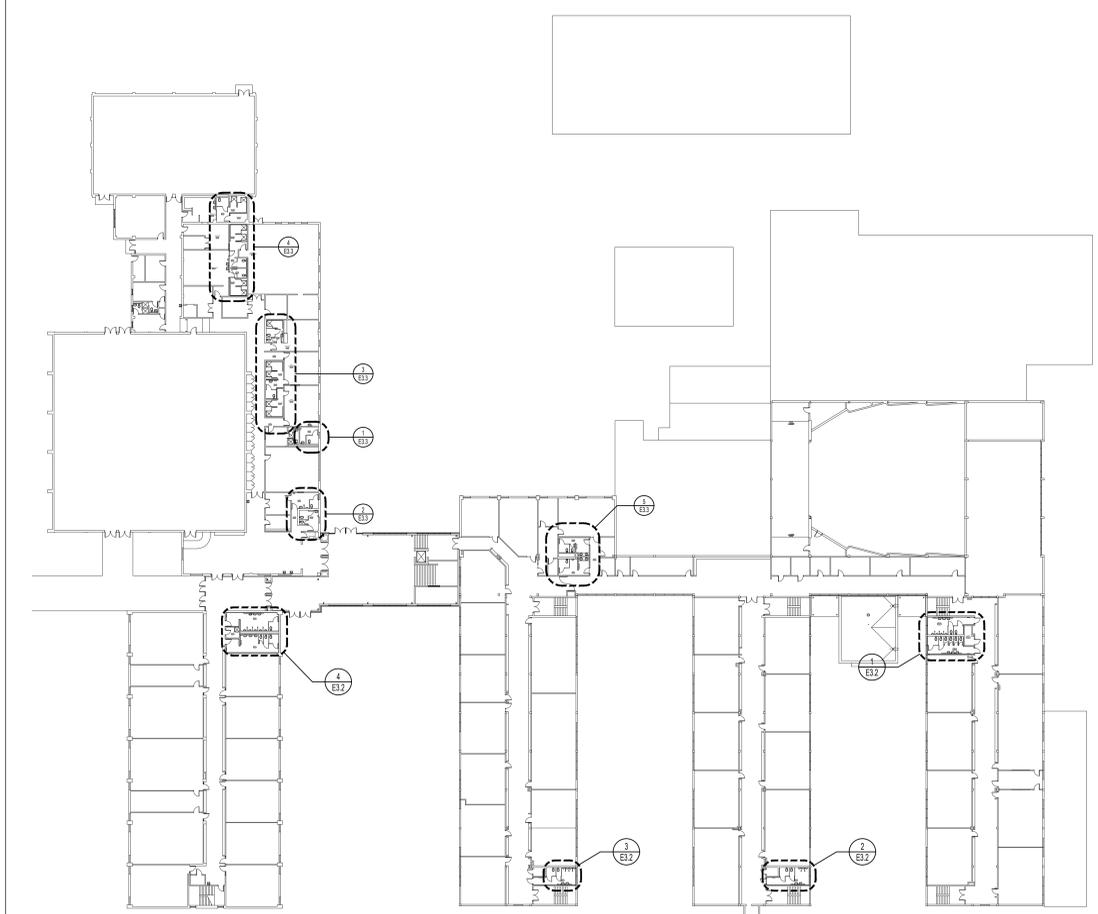
1 Overall Basement Floor Electrical Demolition Floor Plan  
Scale: 1" = 40'-0"



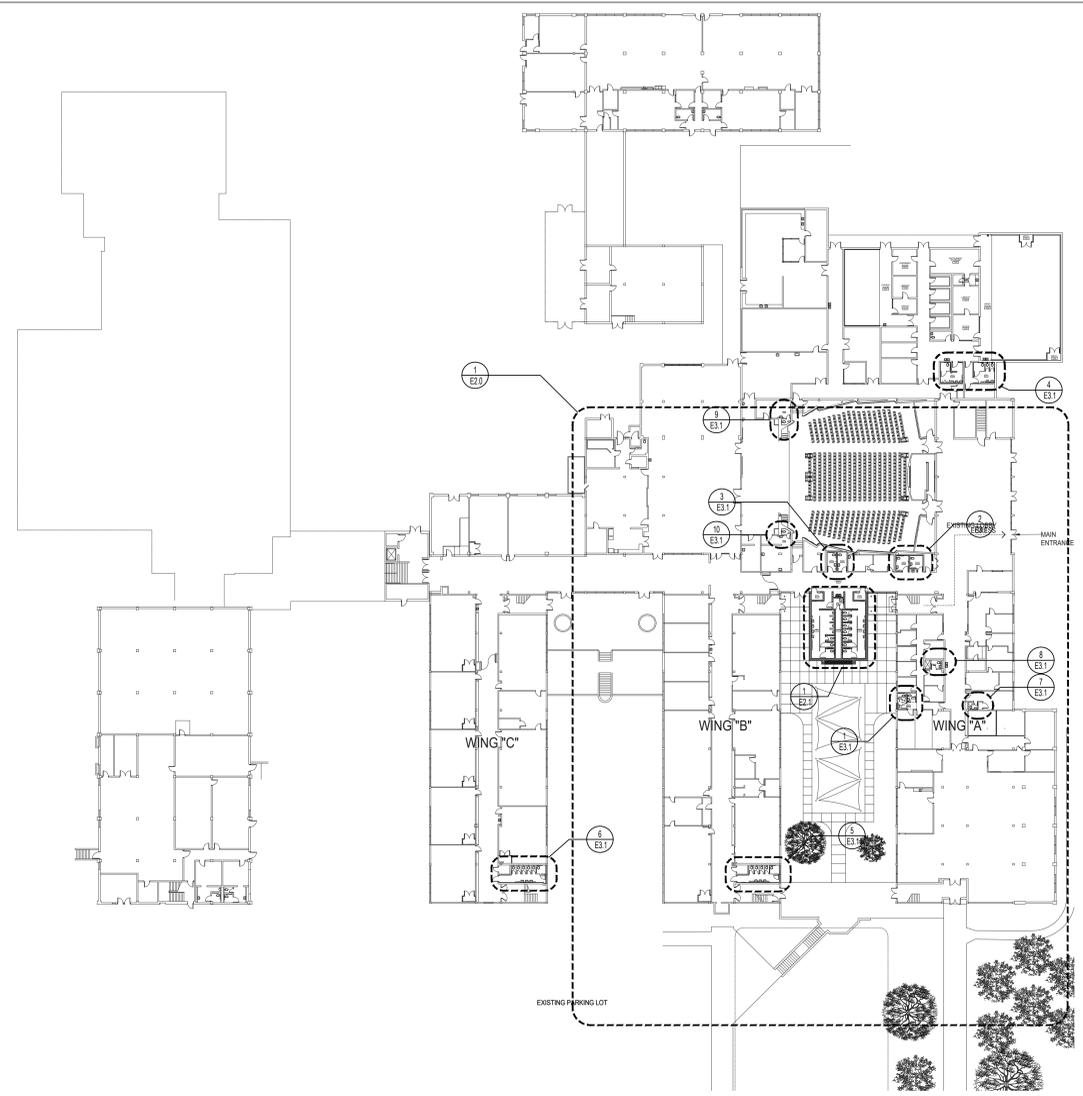
3 Overall Second Floor Electrical Demolition Floor Plan  
Scale: 1" = 40'-0"



1 Overall Basement Floor New Electrical Floor Plan  
E1.2 Scale: 1" = 40'-0"



3 Overall Second Floor New Electrical Floor Plan  
E1.2 Scale: 1" = 40'-0"



2 Overall First Floor New Electrical Floor Plan  
E1.2 Scale: 1" = 40'-0"



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court chapel  
hill, nc 27514  
919.401.8586  
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Renovations and Addition  
Orange County Schools  
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Hillsborough, North Carolina



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Overall  
New Electrical  
Plans

sheet  
**E1.2**

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date 7/25/23

**KEYED ELECTRICAL CONSTRUCTION NOTES**

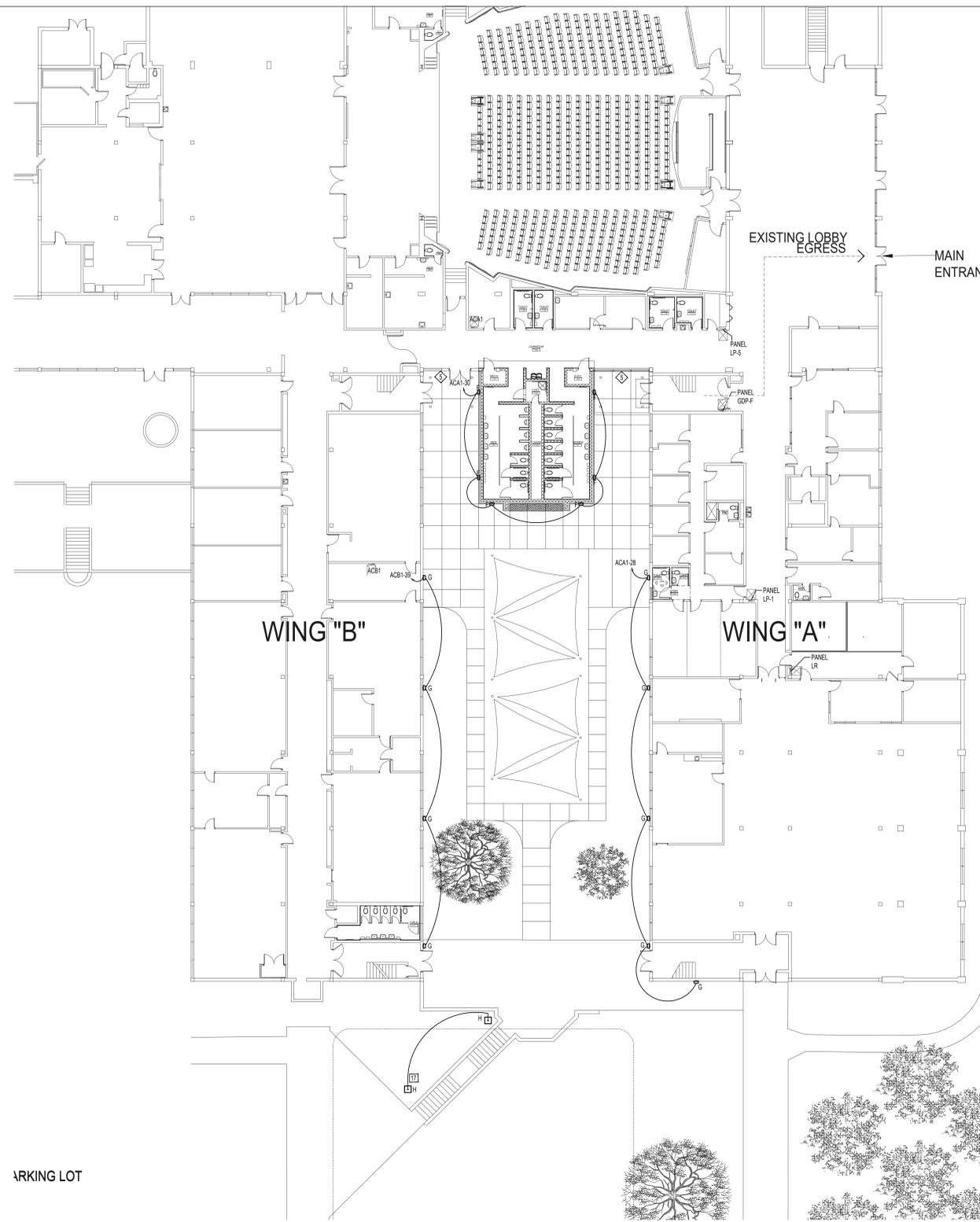
NOTES APPLY TO ELECTRICAL SHEETS ONLY; NOT ALL NOTES MAY BE APPLICABLE TO THIS SHEET

- 1 RE-INSTALL ALL WALL AND CEILING MOUNTED DEVICES STORED DURING DEMOLITION AS CLOSE TO ORIGINAL POSITIONS AS POSSIBLE.
- 2 EC SHALL EXTEND EXISTING LIGHTING CIRCUIT IN THIS AREA TO POWER AND SWITCH NEW FIXTURES AS SHOWN.
- 3 EC SHALL CIRCUIT EB LIGHT AHEAD OF ALL SWITCHING.
- 4 EC SHALL JUNCTION AND EXTEND AS NECESSARY EXISTING HAND DRYER CIRCUIT TO NEW HAND DRYER LOCATION.
- 5 ALL RECEPTACLES IN BATHROOM SHOULD BE CHANGED TO GFCI TAMPER RESISTANT TYPE (LEVITON 60302) TO WITH PLATES AND DEVICE TO MATCH EXISTING COLOR.
- 6 EC SHALL PROVIDE PROPER APPROX 12" GRILL W/ 10X10 NECK AND PLASTER FRAME WITHIN 3' OF EXHAUST GRILL. EC SHALL ROUTE 1/2" EMT CONDUIT W/ PULL STRING FROM LOCATION OF GRILL TO AN AREA WITH OPEN OR ACCESSIBLE CEILING.
- 7 EC SHALL JUNCTION AND EXTEND AS NECESSARY EXISTING EXHAUST FAN CIRCUIT TO NEW EXHAUST FAN.
- 8 ALL WALL MOUNTED DEVICES AFFECTED BY WALL AND DOORWAY CHANGES SHALL BE REINSTALLED AS CLOSE TO ORIGINAL POSITION AS PRACTICAL.
- 9 EC SHALL CIRCUIT TO LF1 PANEL LOCATED IN CORRIDOR 109 WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 10 EC SHALL CIRCUIT TO M2 PANEL LOCATED IN ROOM AT END OF CORRIDOR BETWEEN BOYS 714 & STORAGE 116 WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 11 EC SHALL CIRCUIT TO UNNAMED PANEL LOCATED IN CORRIDOR 201 BETWEEN ROOMS 216 & 217 WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 12 EC SHALL CIRCUIT TO H21 PANEL LOCATED IN STAIR 120A WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 13 EC SHALL CIRCUIT TO FA PANEL LOCATED IN CORRIDOR 412 NEAR SCIENCE LAB 405 WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 14 EC SHALL CIRCUIT TO H42 PANEL LOCATED IN STAIR 120A WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 15 EC SHALL CIRCUIT TO H52 PANEL LOCATED IN STAIR 220A WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 16 EC SHALL CIRCUIT TO H22 PANEL LOCATED IN STAIR 331A WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 17 EC SHALL INTERCEPT JUNCTION AND EXTEND EXISTING SITE LIGHTING CIRCUIT TO NEW POLE LIGHTS.
- 18 EC SHALL INTERCEPT JUNCTION AND EXTEND NEAREST RECEPTACLE CIRCUIT TO NEW SWITCH, SINGLE POLE, 20 AMP, COMMERCIAL DUTY, HUBBELL #H1221, 120/277 VOLT RATED FOR PCS RECIRCULATING PUMP. COORDINATE CLOSELY WITH PC FOR EXACT LOCATION.

**KEYED ELECTRICAL DEMOLITION NOTES**

NOTES APPLY TO ELECTRICAL SHEETS ONLY; NOT ALL NOTES MAY BE APPLICABLE TO THIS SHEET

- ◇ EXISTING LIGHTING FIXTURES IN THIS ROOM TO BE REMOVED AND DISPOSED OF AS DIRECTED BY OWNER. EC SHALL REMOVE ASSOCIATED SWITCHING AND PROVIDE JUNCTION BOX ABOVE NEW CEILING HEIGHT AT ACCESS PANEL LOCATION FOR EXISTING LIGHTING CIRCUIT TO BE TO BE REUSED FOR NEW FIXTURE AND SWITCHING LAYOUT.
- ◇ ALL WALL MOUNTED DEVICES SHALL BE REMOVED AND STORED FOR REINSTALLATION, OR DISPOSED OF AS DIRECTED BY OWNER.
- ◇ EC SHALL DISCONNECT EXISTING EXHAUST FAN AND MAKE SAFE FOR REMOVAL BY OTHERS.
- ◇ ALL WALL MOUNTED DEVICES AFFECTED BY WALL AND DOORWAY CHANGES SHALL BE REMOVED AND STORED FOR REINSTALLATION, OR DISPOSED OF AS DIRECTED BY OWNER.
- ◇ ALTERNATE 1 - DEMOLISH EXTERIOR LIGHTS THAT CONFLICT WITH CANOPY. REMOVE CIRCUIT AND CONDUIT BACK TO SOURCE.



1 Courtyard - Electrical Plan  
Scale: 1/16" = 1'-0"



222 cloister  
court chapel  
hill, nc 27514  
919.401.8586  
www.cra-ae.com



900 Main Street  
Canton, North Carolina 28716  
PHONE: 828.467.1111 FAX: 828.467.1112  
WWW.RNMEENGINEERS.COM



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Courtyard  
Electrical Plans

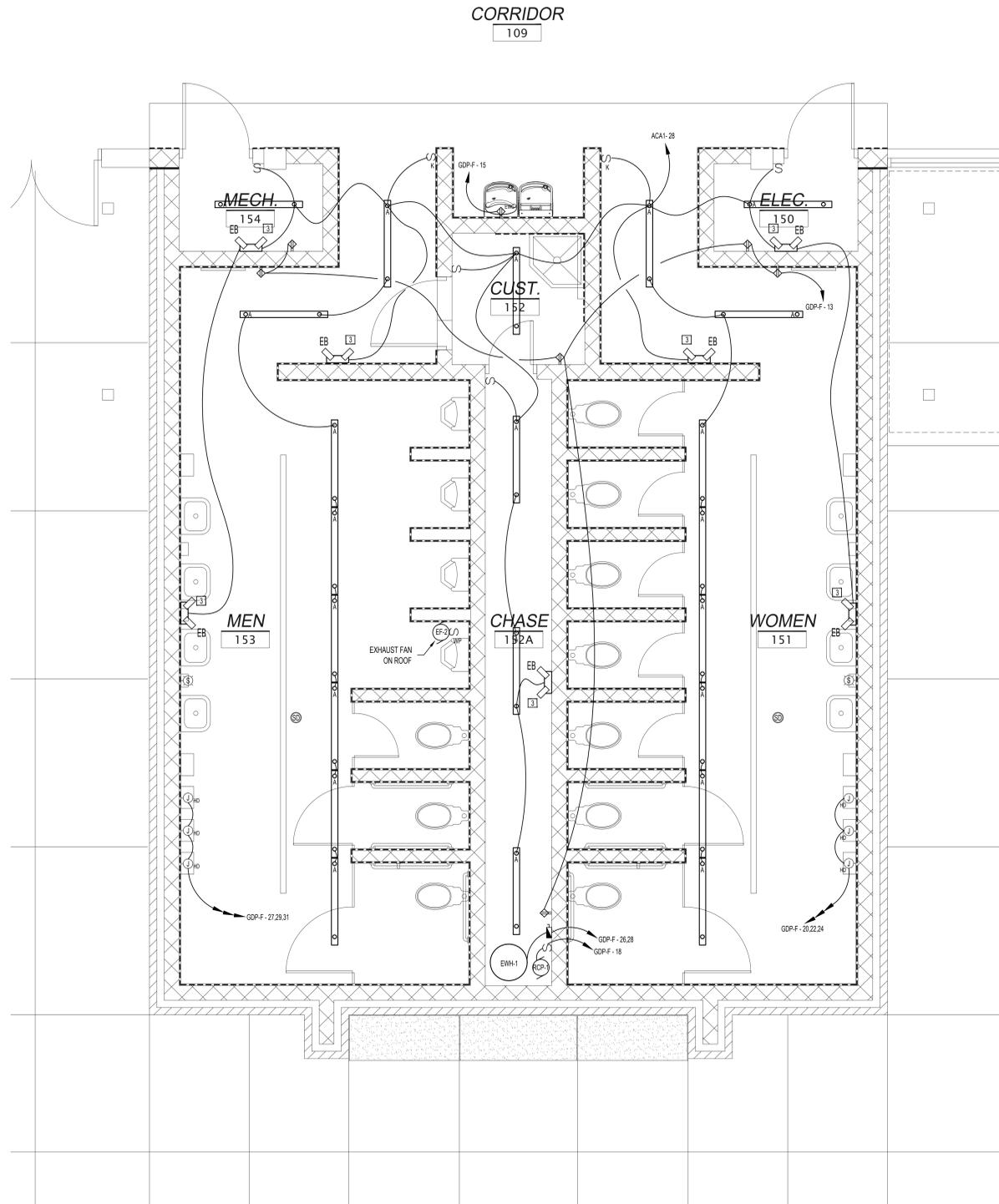
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project no. 2231

date 7/25/23

**KEYED ELECTRICAL CONSTRUCTION NOTES**

- NOTES APPLY TO ELECTRICAL SHEETS ONLY. NOT ALL NOTES MAY BE APPLICABLE TO THIS SHEET
- 1 RE-INSTALL ALL WALL AND CEILING MOUNTED DEVICES STORED DURING DEMOLITION AS CLOSE TO ORIGINAL POSITIONS AS POSSIBLE.
  - 2 EC SHALL EXTEND EXISTING LIGHTING CIRCUIT IN THIS AREA TO POWER AND SWITCH NEW FIXTURES AS SHOWN.
  - 3 EC SHALL CIRCUIT EB LIGHT AHEAD OF ALL SWITCHING.
  - 4 EC SHALL JUNCTION AND EXTEND AS NECESSARY EXISTING HAND DRYER CIRCUIT TO NEW HAND DRYER LOCATION.
  - 5 ALL RECEPTACLES IN BATHROOM SHOULD BE CHANGED TO GFCI TAMPER RESISTANT TYPE (LEVITON 60362) TO WITH PLATES AND DEVICE TO MATCH EXISTING COLOR.
  - 6 EC SHALL PROVIDE PRICES APPROX 12" GRILLE W/ 10X10 NECK AND PLASTER FRAME WITHIN 3" OF EXHAUST GRILL. EC SHALL ROUTE 1/2" EMT CONDUIT W/ PULL STRING FROM LOCATION OF GRILL TO AN AREA WITH OPEN OR ACCESSIBLE CEILING.
  - 7 EC SHALL JUNCTION AND EXTEND AS NECESSARY EXISTING EXHAUST FAN CIRCUIT TO NEW EXHAUST FAN.
  - 8 ALL WALL MOUNTED DEVICES AFFECTED BY WALL AND DOORWAY CHANGES SHALL BE REINSTALLED AS CLOSE TO ORIGINAL POSITION AS PRACTICAL.
  - 9 EC SHALL CIRCUIT TO L1-F PANEL LOCATED IN CORRIDOR 109 WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
  - 10 EC SHALL CIRCUIT TO M2 PANEL LOCATED IN ROOM AT END OF CORRIDOR BETWEEN BOYS 714 & STORAGE 116 WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
  - 11 EC SHALL CIRCUIT TO UNNAMED PANEL LOCATED IN CORRIDOR 201 BETWEEN ROOMS 216 & 217 WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
  - 12 EC SHALL CIRCUIT TO H1 PANEL LOCATED IN STAIR 301 WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
  - 13 EC SHALL CIRCUIT TO PA PANEL LOCATED IN CORRIDOR 412 NEAR SCIENCE LAB 405 WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
  - 14 EC SHALL CIRCUIT TO H2 PANEL LOCATED IN STAIR 120A WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
  - 15 EC SHALL CIRCUIT TO H2 PANEL LOCATED IN STAIR 220A WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
  - 16 EC SHALL CIRCUIT TO H2 PANEL LOCATED IN STAIR 331A WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
  - 17 EC SHALL INTERCEPT JUNCTION AND EXTEND EXISTING SITE LIGHTING CIRCUIT TO NEW POLE LIGHTS.
  - 18 EC SHALL INTERCEPT JUNCTION AND EXTEND NEAREST RECEPTACLE CIRCUIT TO NEW SWITCH, SINGLE POLE, 20 AMP, COMMERCIAL DUTY, HUBBELL #H1221, 120/277 VOLT RATED FOR PCS RECIRCULATING PUMP. COORDINATE CLOSELY WITH PC FOR EXACT LOCATION.



EXISTING PANEL SCHEDULE WITH NEW LOADS SHOWN SOLID AND DARKER

PANEL	SCHEDULE	DESCRIPTION/REMARKS:	LOCATED IN							
<b>GDP-F</b>		PANEL RATING 120/208V-100A # PHASES 3 # WIRES 4	LOCATED IN STAIR 101A FED FROM							
Connected Load:	KVA	EXISTING LOAD DESCRIPTION INFORMATION TAKEN FROM EXISTING PANEL SCHEDULES. FIELD VERIFY PRIOR TO DE-ENERGIZING AND/OR ENERGIZING.								
Wire:		REUSE EXISTING BREAKERS AS PRACTICAL. ADD OR REPLACE AS REQUIRED TO PROVIDE INDICATED CIRCUIT PROTECTION. PROVIDE HACR CIRCUIT BREAKERS FOR RTUS.								
Conduit:		* DENOTES GROUNDING CONDUCTOR ** DENOTES GFCI BREAKER								
DESCRIPTION	COND.	WIRE	LOAD	BREAKER	CIRCUIT NUMBERS	BREAKER	LOAD	WIRE	COND.	DESCRIPTION
EXISTING LOAD			20	1	A 2	20				RECEP COMPUTER LAB
EXISTING LOAD			20	3	B 4	20				RECEP COMPUTER LAB
EXISTING LOAD			20	5	C 6	20				RECEP COMPUTER LAB
RECEP COMPUTER LAB A WING			20	7	A 8	20				RECEP COMPUTER LAB
RECEP COMPUTER LAB A WING			20	9	B 10	20				RECEP COMPUTER LAB
EXISTING LOAD			20	11	C 12	20				RECEP COMPUTER LAB
REC'PS RMS 150-154 BR ADDITION	1/2"	2#12#12G	1.92	20	13	A 14	20			FIRE ALARM BOOSTER PANEL
WATER COOLER	1/2"	2#12#12G	0.5	20	15	B 16	20			SPARE
SPARE			20	17	C 18	20	0.06	2#12#12G	1/2"	RECIRCULATING PUMP RCP-1
SPARE			20	19	A 20	20	1.92	2#12#12G	1/2"	** WOMEN 151 HAND DRYER
SPARE			30	21	B 22	20	1.92	2#12#12G	1/2"	** WOMEN 151 HAND DRYER
SPARE			20	23	C 24	20	1.92	2#12#12G	1/2"	** WOMEN 151 HAND DRYER
SPARE			30	25	A 26	20	4.5	2#12#12G	1/2"	ELECTRIC WATER HEATER EWH-1
** MENS 153 HAND DRYER	1/2"	2#12#12G	1.92	20	27	B 28	25			xx
** MENS 153 HAND DRYER	1/2"	2#12#12G	1.92	20	29	C 30	xx			xx
** MENS 153 HAND DRYER	1/2"	2#12#12G	1.92	20	31	A 32	xx			xx
xx			xx	33	B 34	xx				xx
xx			xx	35	C 36	xx				xx
xx			xx	37	A 38	xx				xx
xx			xx	39	B 40	xx				xx
xx			xx	41	C 42	xx				xx

EXISTING PANEL SCHEDULE WITH NEW LOADS SHOWN SOLID AND DARKER

PANEL	SCHEDULE	DESCRIPTION/REMARKS:	LOCATED IN							
<b>ACA1</b>		PANEL RATING 480/277V-250A # PHASES 3 # WIRES 4	LOCATED IN FED FROM MSB							
Connected Load:	136.61 KVA	EXISTING LOAD DESCRIPTION INFORMATION TAKEN FROM EXISTING PANEL SCHEDULES. FIELD VERIFY PRIOR TO DE-ENERGIZING AND/OR ENERGIZING.								
Wire:	4#3/0, 1#6"	REUSE EXISTING BREAKERS AS PRACTICAL. ADD OR REPLACE AS REQUIRED TO PROVIDE INDICATED CIRCUIT PROTECTION. PROVIDE HACR CIRCUIT BREAKERS FOR RTUS.								
Conduit:	2"	* DENOTES GROUNDING CONDUCTOR								
DESCRIPTION	COND.	WIRE	LOAD	BREAKER	CIRCUIT NUMBERS	BREAKER	LOAD	WIRE	COND.	DESCRIPTION
HP-1-55-MECH 135	1"		36.54K	3P	1 A 2	3P				HP-1-2-COMP LAB 135F
			1810'		3 B 4		9.13K	1#12"	1/2"	
					5 C 6	20				
					7 A 8	3P				
HP-1-1-COMP LAB 135F	1/2"		9.97K	3P	9 B 10		9.96K	1#12"	1/2"	HP-1-3-COMP LAB 135F
					11 C 12	20				
					13 A 14	3P				
HP-1-58 CAFETERIA	1"		39.8K	3P	15 B 16		9.96K	1#12"	1/2"	HP-1-51-CAFETERIA 800
					17 C 18	20				
					19 A 20	1P-20	3K	3#12"	1/2"	WH-1
HP-1-44-STORE RM GIRLS 111	1/2"		9.13K	3P	21 B 22	1P-20	3K	3#12"	1/2"	WH-2
					23 C 24	1P-20	2K	3#12"	1/2"	WH-22
					25 A 26	1P-20	2K	3#12"	1/2"	WH-23
HP-1-58-AUDITORIUM	1/2"		3.78K	3P	27 B 28					LIGHTING RMS 150-154 BR ADDITION
					29 C 30					SPACE
SPACE					31 A 32					SPACE
SPACE					33 B 34					SPACE
SPACE					35 C 36					SPACE
SPACE					37 A 38					SPACE
SPACE					39 B 40					SPACE
SPACE					41 C 42					SPACE

1 Enlarged Plan - Toilet Room Addition  
Scale: 3/8" = 1'-0"



222 cloister  
court chapel  
hill, nc 27514  
919.401.8586  
www.cra-ae.com



Reece, Noland & McElrath, Inc.  
390 Main Street  
Canton, North Carolina 28716



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Enlarged First  
Floor New  
Electrical Plan

sheet

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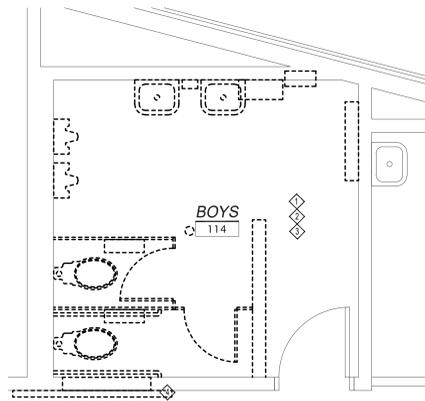
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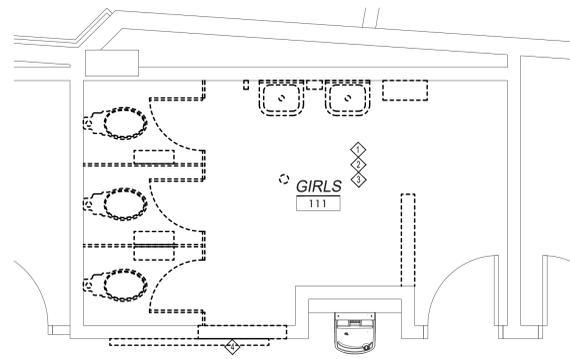
**KEYED ELECTRICAL DEMOLITION NOTES**

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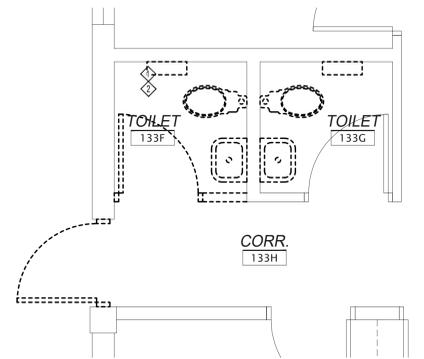
- ◆ EXISTING LIGHTING FIXTURES IN THIS ROOM TO BE REMOVED AND DISPOSED OF AS DIRECTED BY OWNER. EC SHALL REMOVE ASSOCIATED SWITCHING AND PROVIDE JUNCTION BOX ABOVE NEW CEILING HEIGHT AT ACCESS PANEL LOCATION FOR EXISTING LIGHTING CIRCUIT TO BE REUSED FOR NEW FIXTURE AND SWITCHING LAYOUT.
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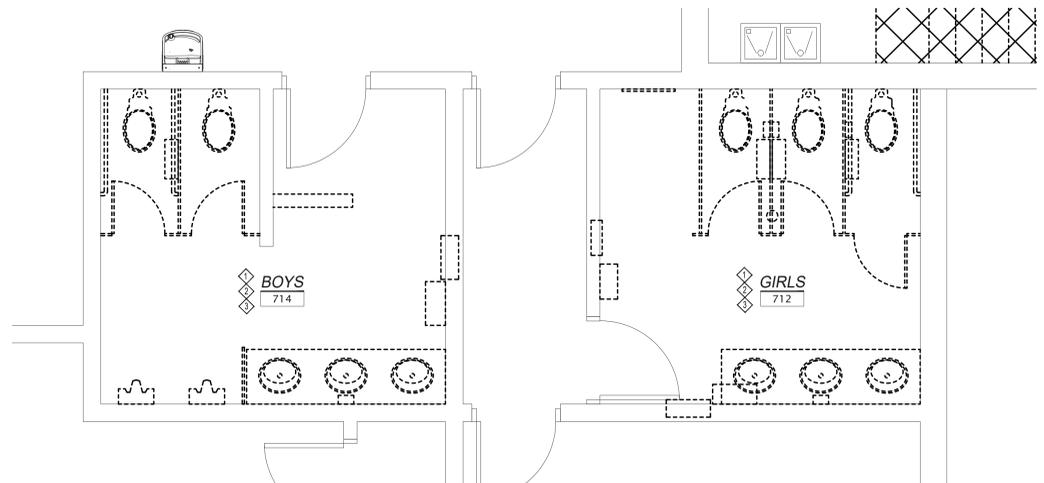
3 Enlarged Plan - Toilets 114A and 114B  
ED3.1 Scale: 3/8" = 1'-0"



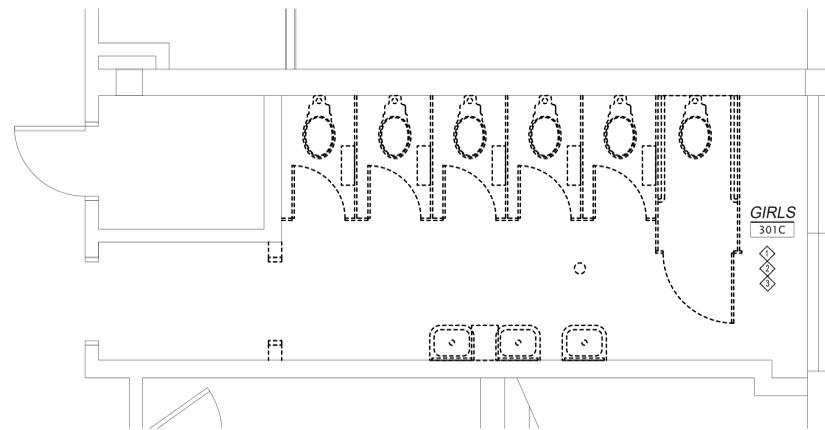
2 Enlarged Plan - Toilets 111A and 111B  
ED3.1 Scale: 3/8" = 1'-0"



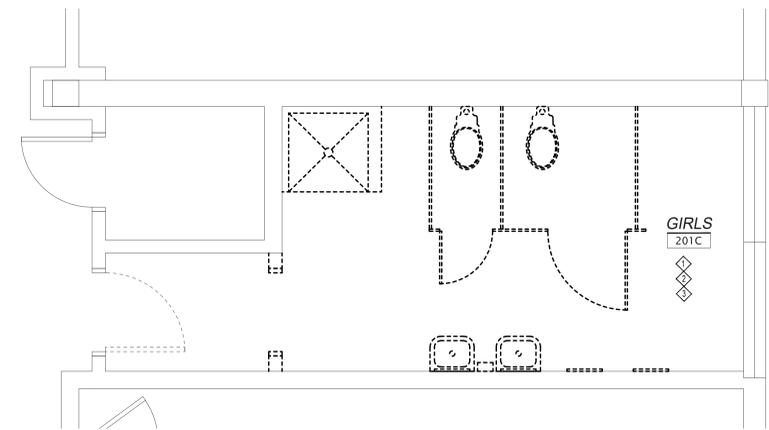
1 Enlarged Plan - Toilets 133F and 133G  
ED3.1 Scale: 3/8" = 1'-0"



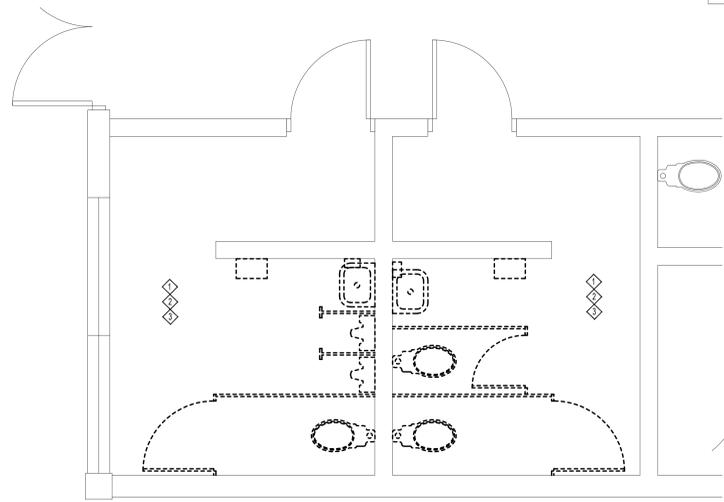
4 Enlarged Plan - Girls 712 & Boys 714  
ED3.1 Scale: 3/8" = 1'-0"



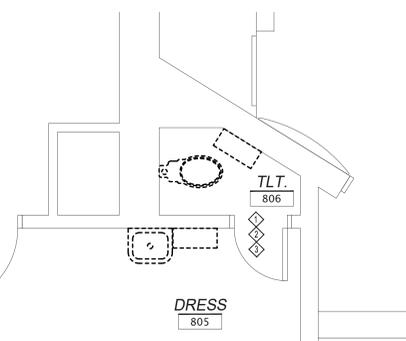
6 Enlarged Plan - Girls 301C  
ED3.1 Scale: 3/8" = 1'-0"



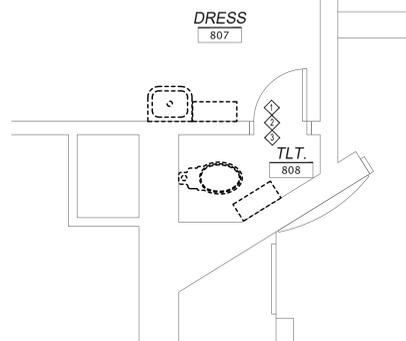
5 Enlarged Plan - Girls 201C  
ED3.1 Scale: 3/8" = 1'-0"



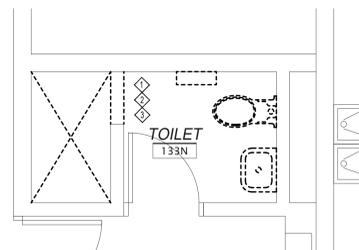
11 Enlarged Plan - Basement Bathroom  
ED3.1 Scale: 3/8" = 1'-0"



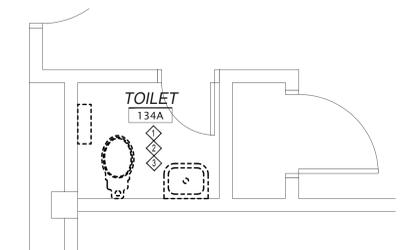
10 Enlarged Plan - Toilet 806  
ED3.1 Scale: 3/8" = 1'-0"



9 Enlarged Plan - Toilet 808  
ED3.1 Scale: 3/8" = 1'-0"



8 Enlarged Plan - Toilet 133N  
ED3.1 Scale: 3/8" = 1'-0"



7 Enlarged Plan - Toilet 134A  
ED3.1 Scale: 3/8" = 1'-0"



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Enlarged Basement  
And First Floor  
Electrical  
Demolition Plans

sheet

**ED3.1**

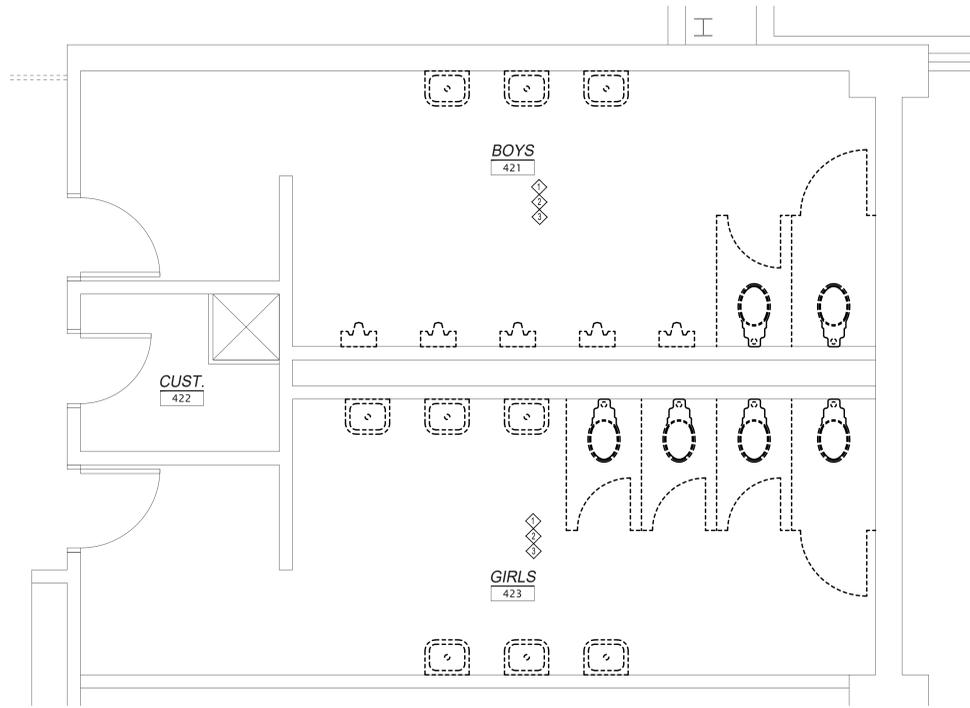
project no. 2231

date 7/25/23

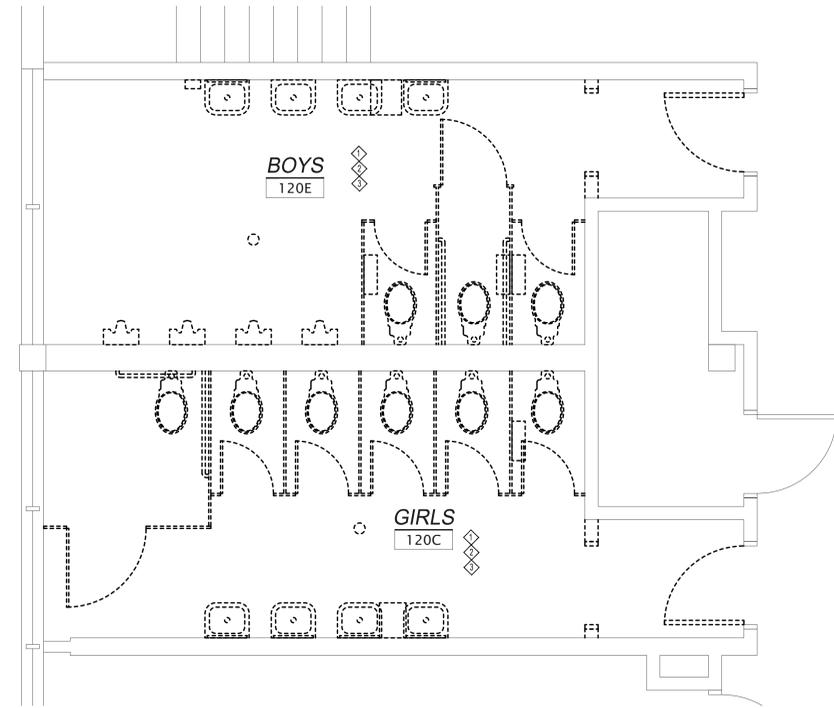
**KEYED ELECTRICAL DEMOLITION NOTES**

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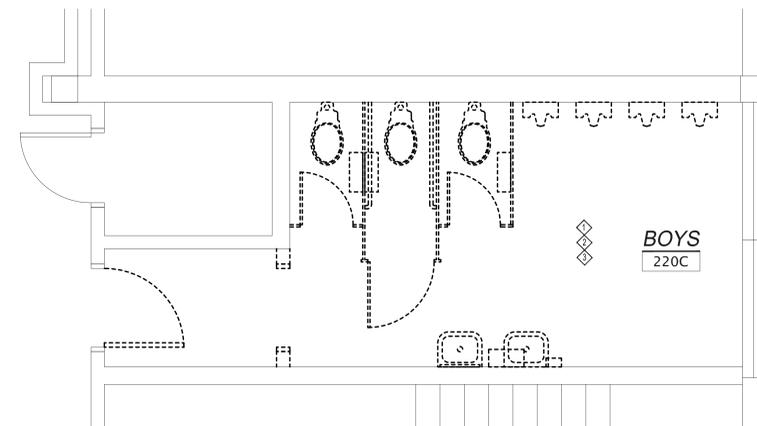
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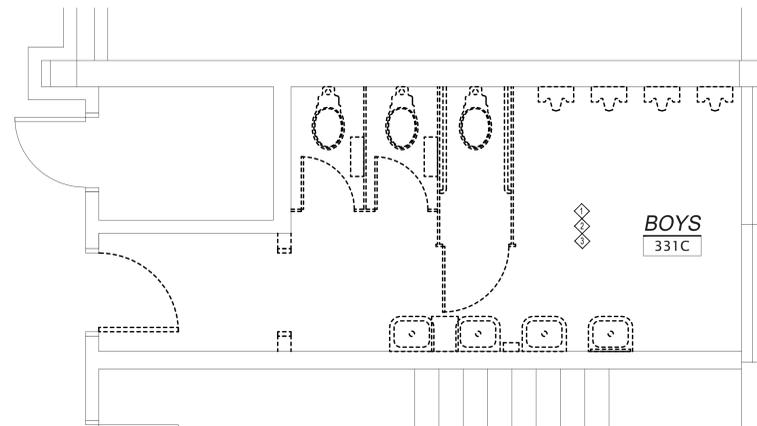
4 Enlarged Reno Plan - Boys 401/Girls 402  
ED3.2 Scale: 3/8" = 1'-0"



1 Enlarged Reno Plan - Girls 120C/Boys 120E  
ED3.2 Scale: 3/8" = 1'-0"



2 Enlarged Reno Plan - Boys 220C  
ED3.2 Scale: 3/8" = 1'-0"



3 Enlarged Reno Plan - Boys 331C  
ED3.2 Scale: 3/8" = 1'-0"



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Enlarged Second  
Floor Electrical  
Demolition Plans

sheet  
**ED3.2**

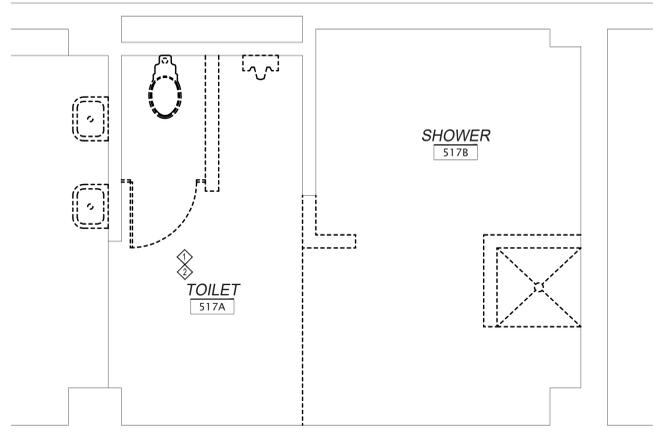
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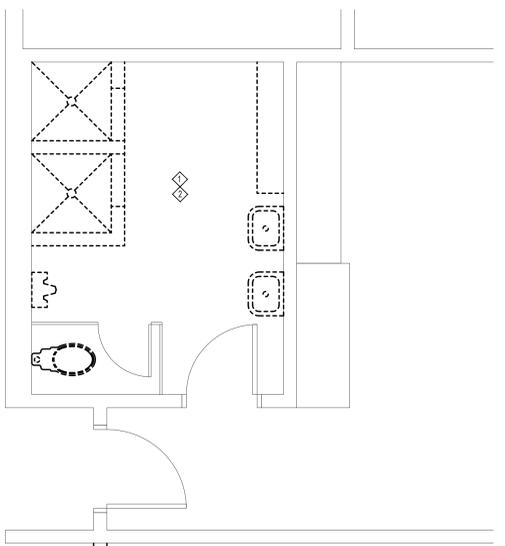
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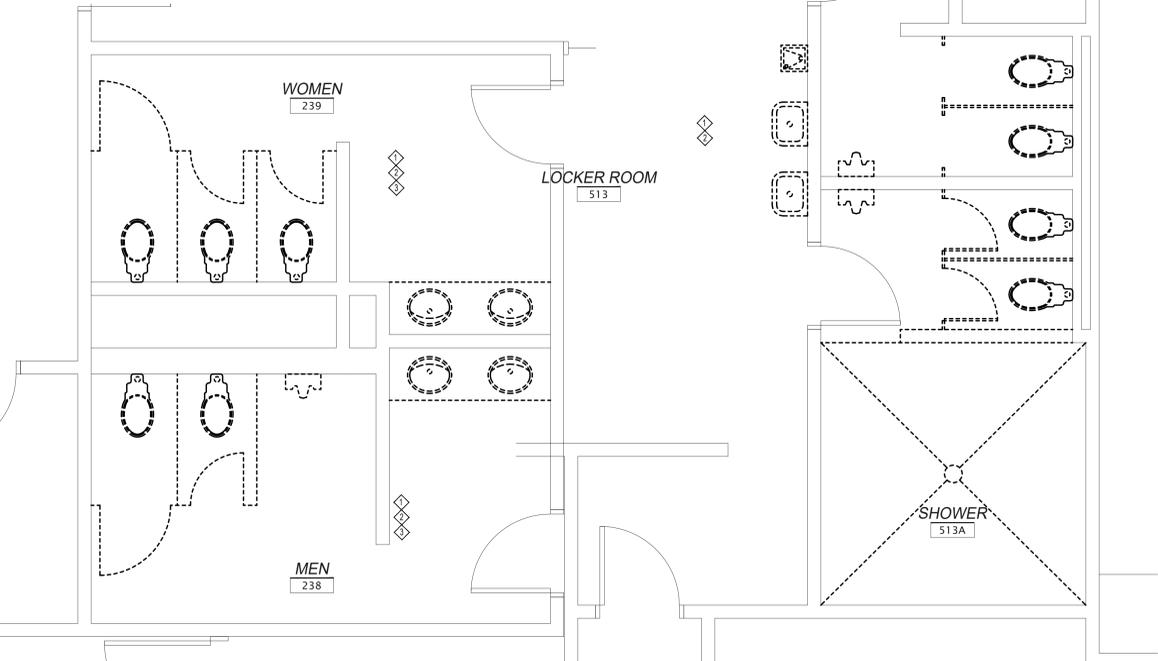
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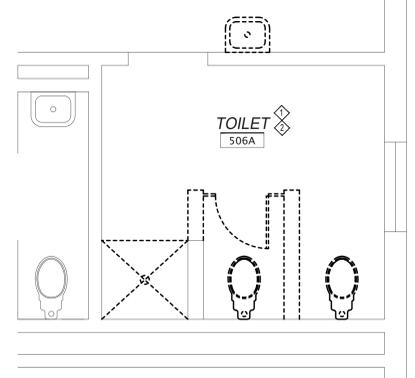
4 Enlarged Reno Plan - Locker Room Toilets  
ED3.3 Scale: 3/8" = 1'-0"



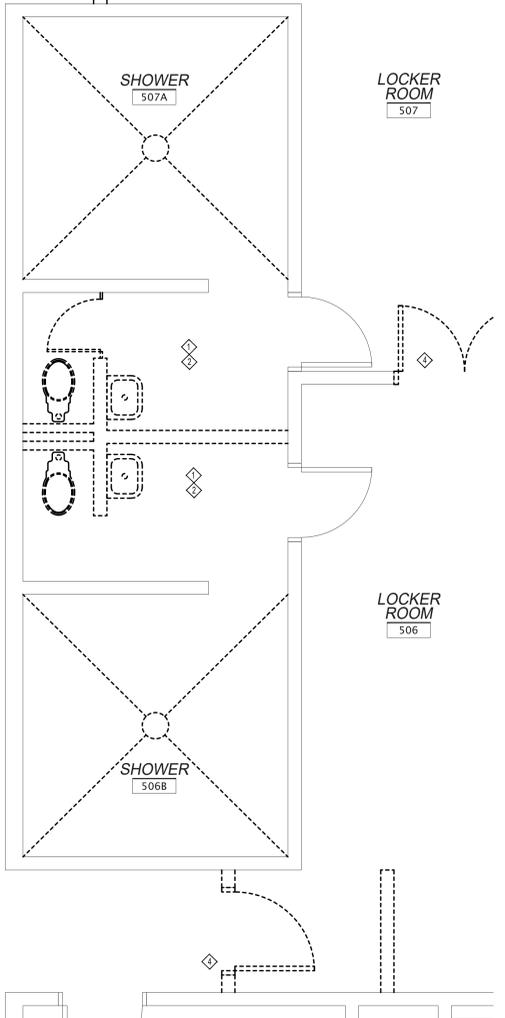
3 Enlarged Reno Plan - Locker Room Toilets  
ED3.3 Scale: 3/8" = 1'-0"



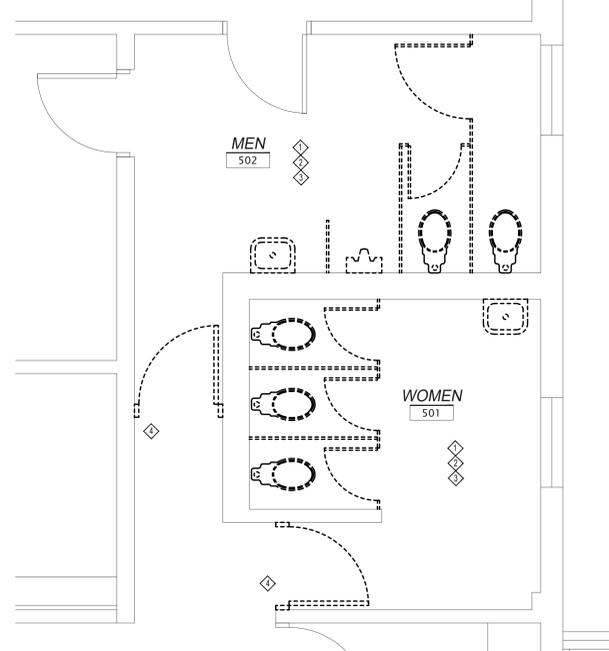
5 Enlarged Reno Plan - Mens 238/ Womens 239  
ED3.3 Scale: 3/8" = 1'-0"



1 Enlarged Reno Plan - Locker Room Toilet  
ED3.3 Scale: 3/8" = 1'-0"



2 Enlarged Reno Plan - Gym Public Toilets  
ED3.3 Scale: 3/8" = 1'-0"



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Enlarged Second  
Floor Electrical  
Demolition Plans

sheet  
**ED3.3**

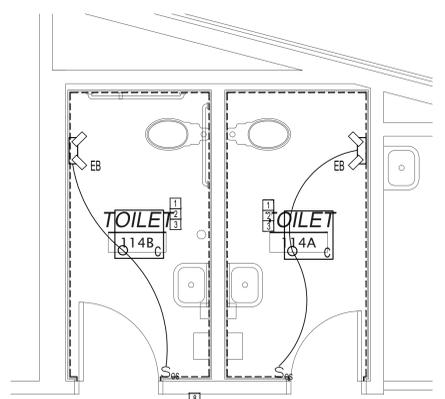
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date 7/25/23

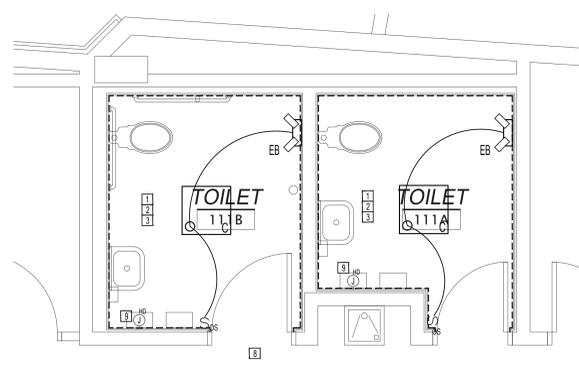
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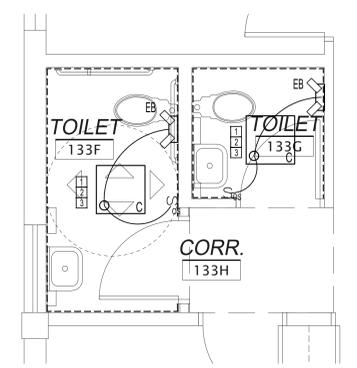
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- 16 EC SHALL CIRCUIT TO H22 PANEL LOCATED IN STAIR 331A WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
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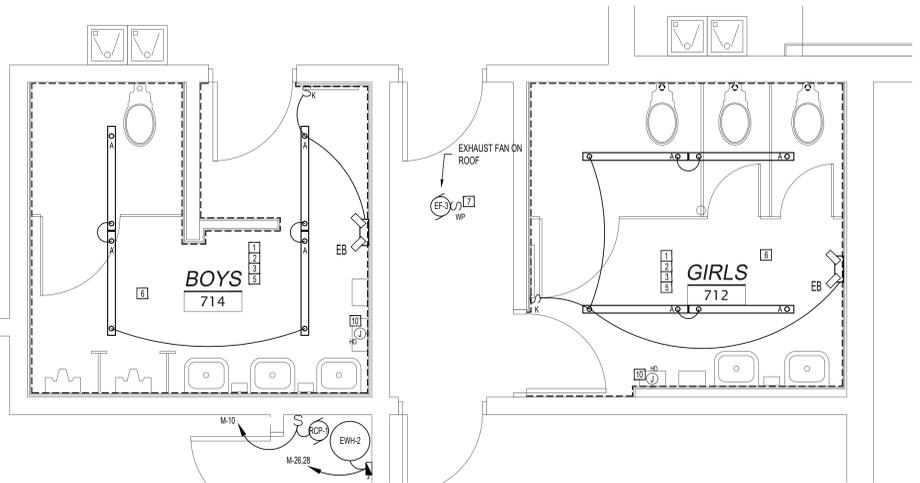
3 Enlarged Plan - Toilets 114A and 114B  
E3.1 Scale: 3/8" = 1'-0"



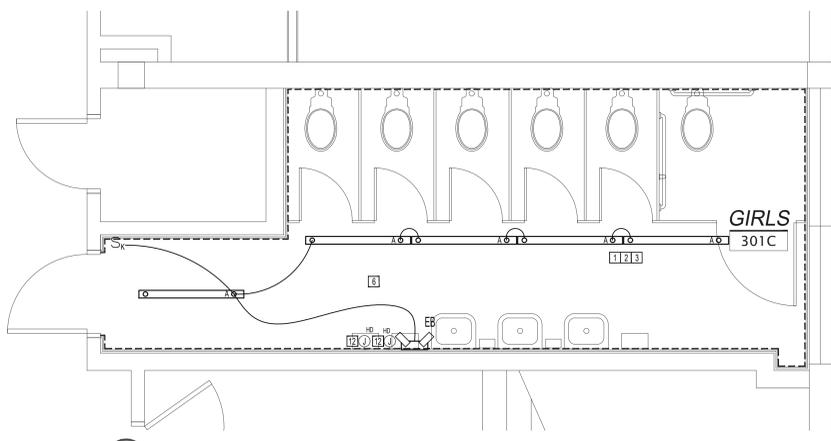
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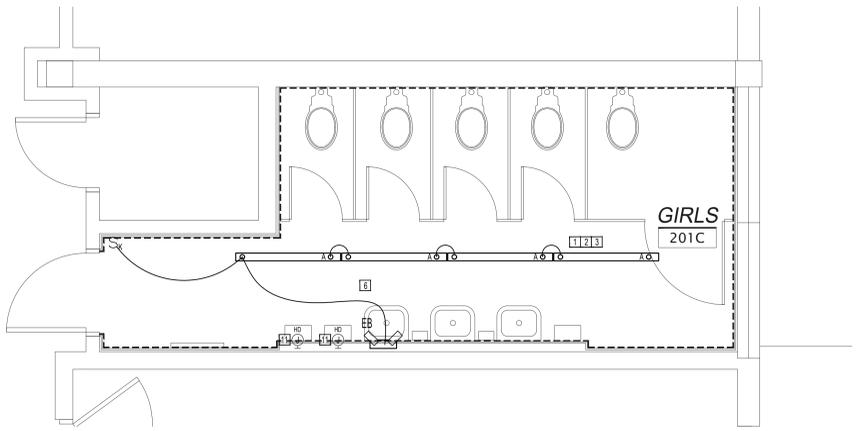
1 Enlarged Plan - Toilets 133F and 133G  
E3.1 Scale: 3/8" = 1'-0"



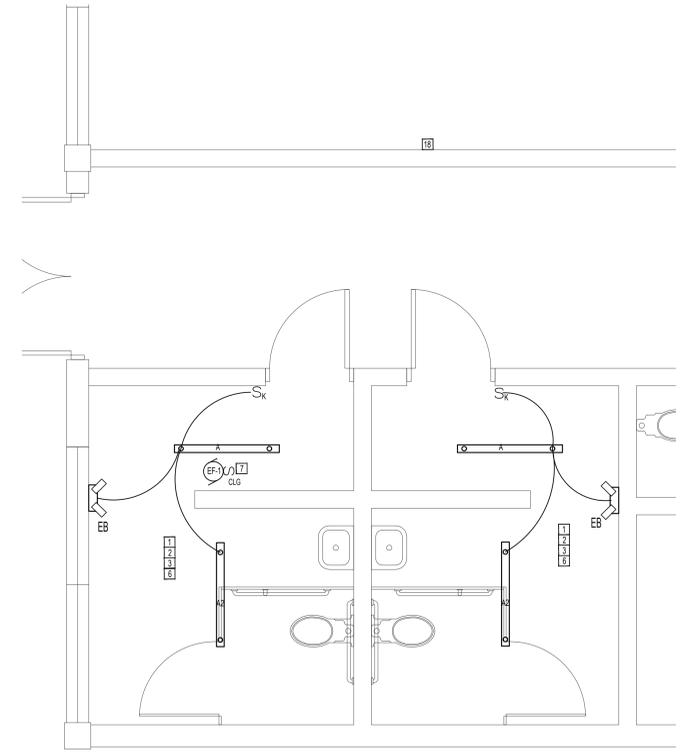
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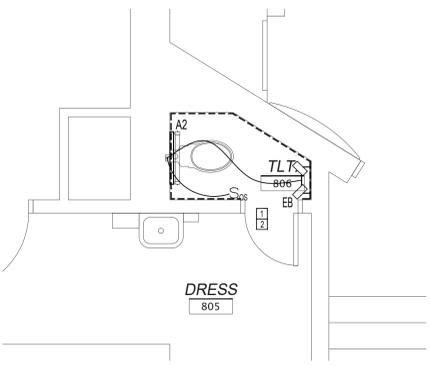
6 Enlarged Plan - Girls 301C  
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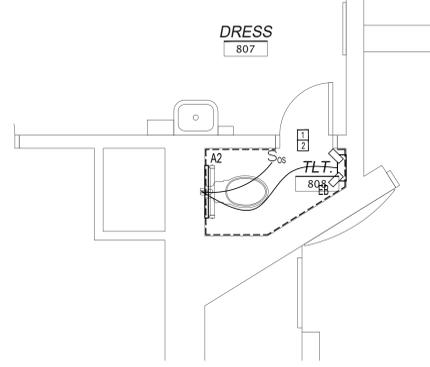
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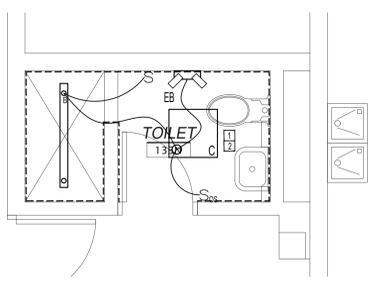
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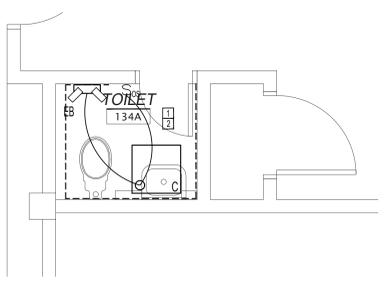
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E3.1 Scale: 3/8" = 1'-0"



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E3.1 Scale: 3/8" = 1'-0"



7 Enlarged Plan - Toilet 134A  
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Enlarged Basement And First Floor New Electrical Plans	

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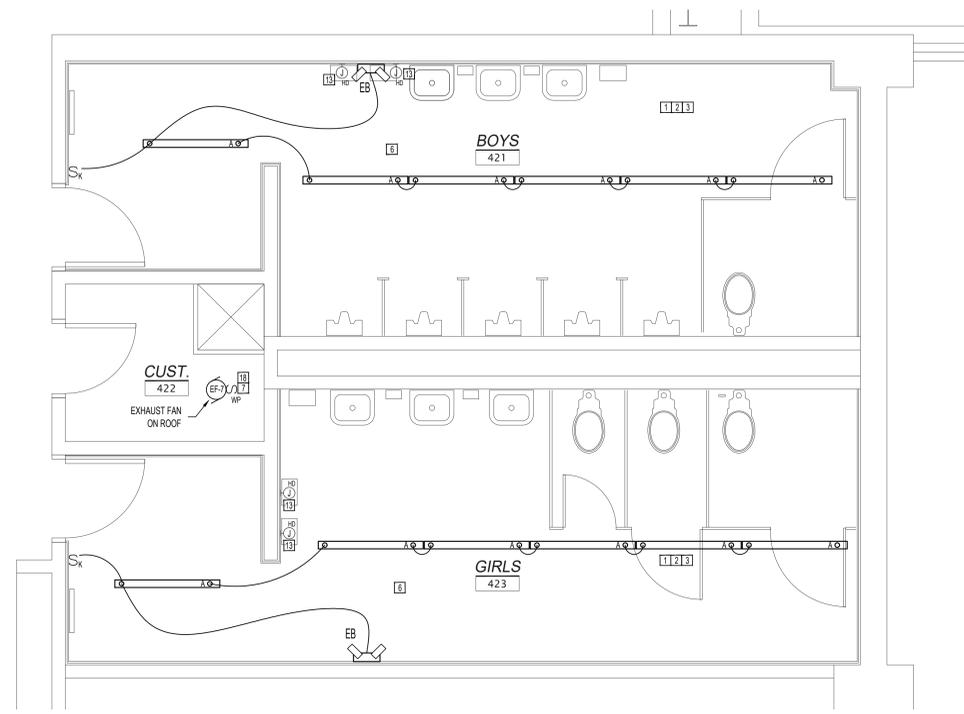
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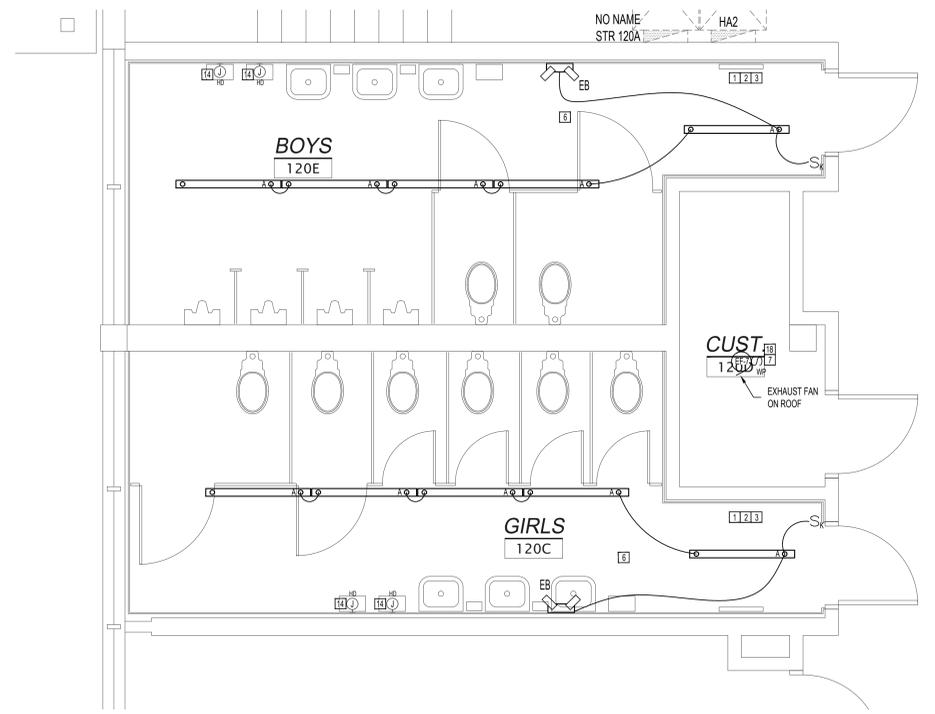
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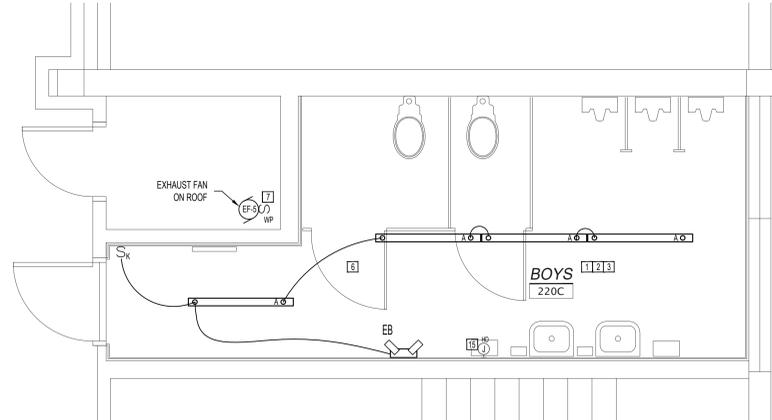
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- 17 EC SHALL INTERCEPT JUNCTION AND EXTEND EXISTING SITE LIGHTING CIRCUIT TO NEW POLE LIGHTS.
- 18 EC SHALL INTERCEPT JUNCTION AND EXTEND NEAREST RECEPTACLE CIRCUIT TO NEW SWITCH, SINGLE POLE, 20 AMP, COMMERCIAL DUTY, HUBBELL #H1221, 120/277 VOLT RATED FOR PCS RECIRCULATING PUMP. COORDINATE CLOSELY WITH PC FOR EXACT LOCATION.



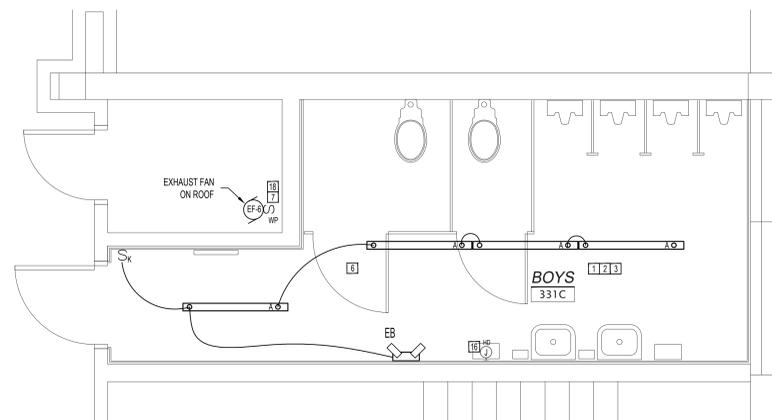
4 Enlarged Reno Plan - Boys 401/Girls 402  
E.3.2 Scale: 3/8" = 1'-0"



1 Enlarged Reno Plan - Girls 120C/Boys 120E  
E.3.2 Scale: 3/8" = 1'-0"



2 Enlarged Reno Plan - Boys 220C  
E.3.2 Scale: 3/8" = 1'-0"



3 Enlarged Reno Plan - Boys 331C  
E.3.2 Scale: 3/8" = 1'-0"



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Orange High School  
Renovations and Addition  
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no. revisions

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SMC JSD

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Floor New  
Electrical Plans

sheet  
**E3.2**

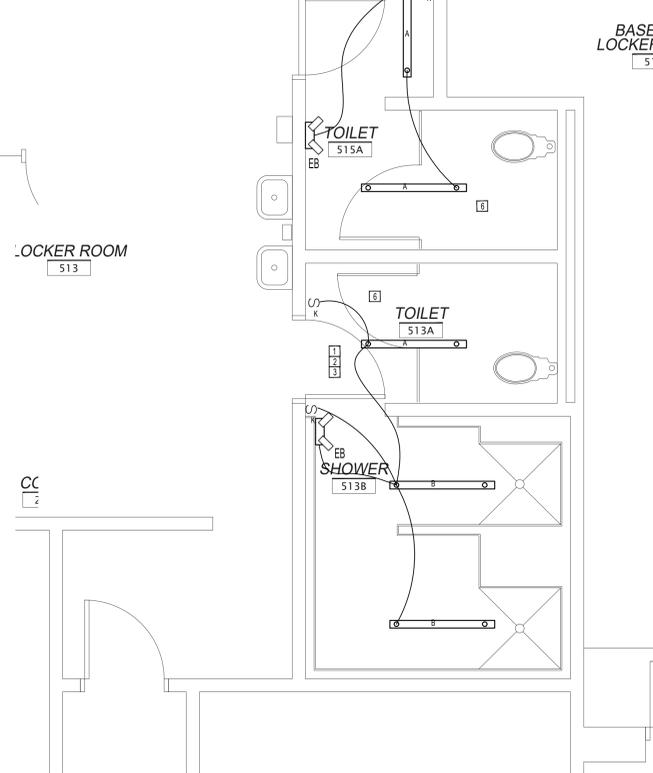
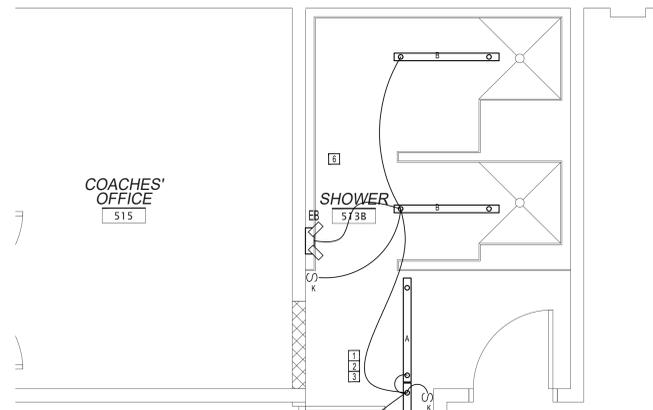
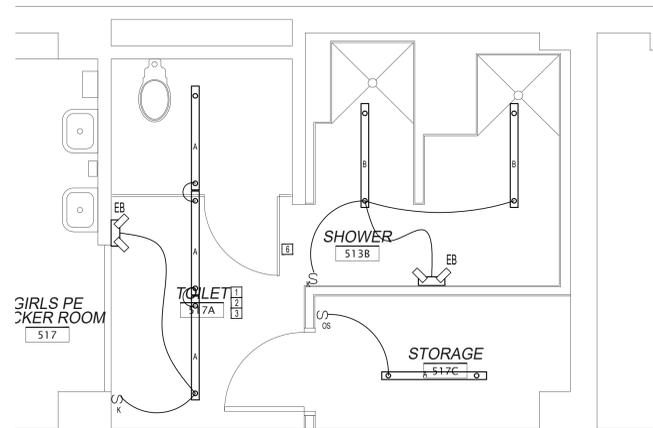
project no. 2231

date 7/25/23

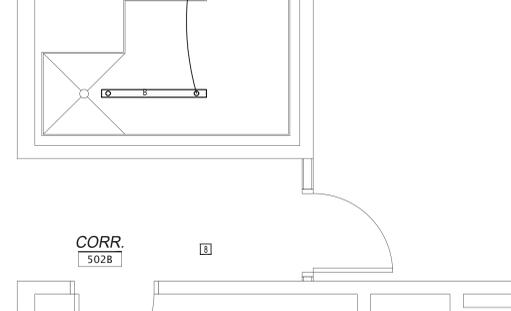
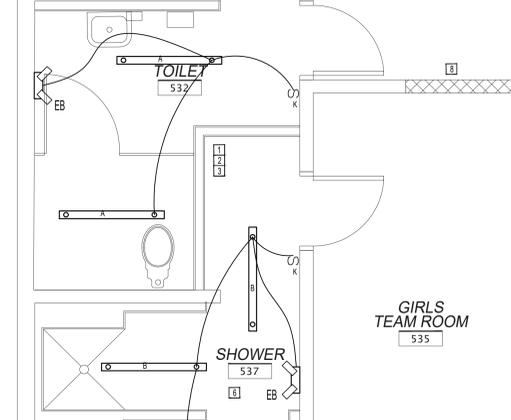
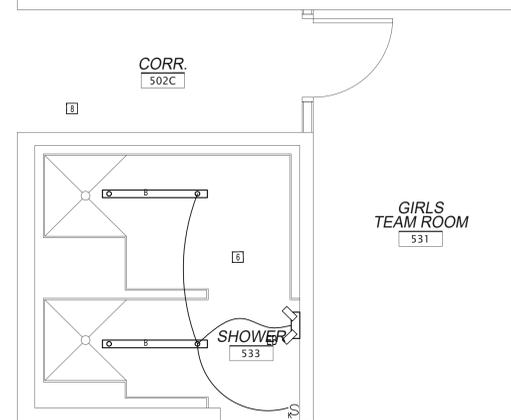
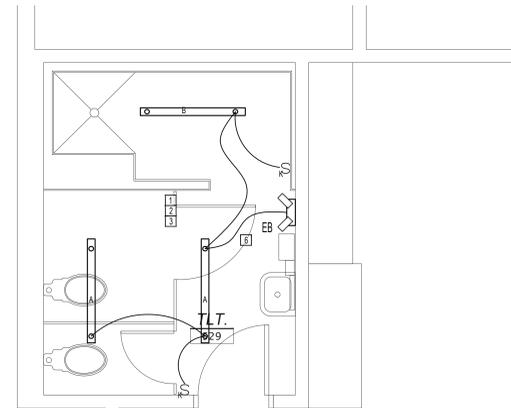
**KEYED ELECTRICAL CONSTRUCTION NOTES**

NOTES APPLY TO ELECTRICAL SHEETS ONLY. NOT ALL NOTES MAY BE APPLICABLE TO THIS SHEET

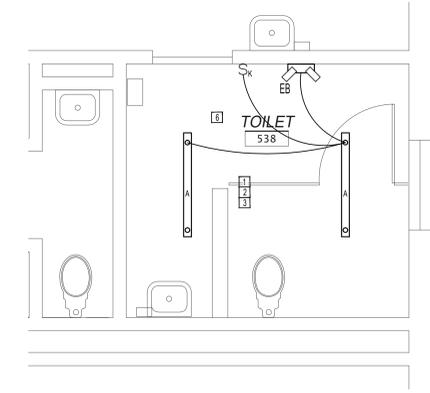
- 1 RE-INSTALL ALL WALL AND CEILING MOUNTED DEVICES STORED DURING DEMOLITION AS CLOSE TO ORIGINAL POSITIONS AS POSSIBLE.
- 2 EC SHALL EXTEND EXISTING LIGHTING CIRCUIT IN THIS AREA TO POWER AND SWITCH NEW FIXTURES AS SHOWN.
- 3 EC SHALL CIRCUIT EB LIGHT AHEAD OF ALL SWITCHING.
- 4 EC SHALL JUNCTION AND EXTEND AS NECESSARY EXISTING HAND DRYER CIRCUIT TO NEW HAND DRYER LOCATION.
- 5 ALL RECEPTACLES IN BATHROOM SHOULD BE CHANGED TO GFCI TAMPER RESISTANT TYPE (LEVITON 60002) TO MATCH EXISTING COLOR.
- 6 EC SHALL PROVIDE PRICES APPROX 12" GRILLE W/ 10X10 NECK AND PLASTER FRAME WITHIN 3" OF EXHAUST GRILL. EC SHALL ROUTE 1/2" EMT CONDUIT W/ PULL STRING FROM LOCATION OF GRILL TO AN AREA WITH OPEN OR ACCESSIBLE CEILING.
- 7 EC SHALL JUNCTION AND EXTEND AS NECESSARY EXISTING EXHAUST FAN CIRCUIT TO NEW EXHAUST FAN.
- 8 ALL WALL MOUNTED DEVICES AFFECTED BY WALL AND DOORWAY CHANGES SHALL BE REINSTALLED AS CLOSE TO ORIGINAL POSITION AS PRACTICAL.
- 9 EC SHALL CIRCUIT TO LF1 PANEL LOCATED IN CORRIDOR 109 WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 10 EC SHALL CIRCUIT TO M2 PANEL LOCATED IN ROOM AT END OF CORRIDOR BETWEEN BOYS 714 & STORAGE 116 WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 11 EC SHALL CIRCUIT TO UNNAMED PANEL LOCATED IN CORRIDOR 201 BETWEEN ROOMS 216 & 217 WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 12 EC SHALL CIRCUIT TO H1 PANEL LOCATED IN STAIR 301 WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 13 EC SHALL CIRCUIT TO FA PANEL LOCATED IN CORRIDOR 412 NEAR SCIENCE LAB 405 WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 14 EC SHALL CIRCUIT TO H2 PANEL LOCATED IN STAIR 120A WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 15 EC SHALL CIRCUIT TO H52 PANEL LOCATED IN STAIR 220A WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 16 EC SHALL CIRCUIT TO H2 PANEL LOCATED IN STAIR 331A WITH 2#12, 1#12GND IN 3/4" PROVIDING A 1P-20A GFCI BREAKER IN EXISTING SPACE, OR BY REMOVAL OF EXISTING SPARE IN PANEL.
- 17 EC SHALL INTERCEPT JUNCTION AND EXTEND EXISTING SITE LIGHTING CIRCUIT TO NEW SWITCH, SINGLE POLE, 20 AMP, COMMERCIAL DUTY, HUBBELL #H1221, 120/277 VOLT RATED FOR PCS RECIRCULATING PUMP. COORDINATE CLOSELY WITH PC FOR EXACT LOCATION.



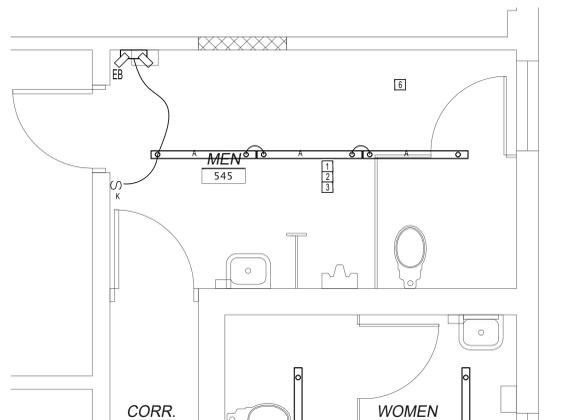
4 Enlarged Reno Plan - Locker Room Toilets  
E3.3 Scale: 3/8" = 1'-0"



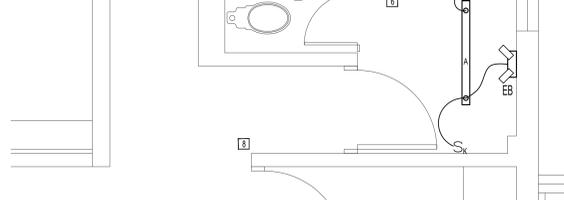
3 Enlarged Reno Plan - Locker Room Toilets  
E3.3 Scale: 3/8" = 1'-0"



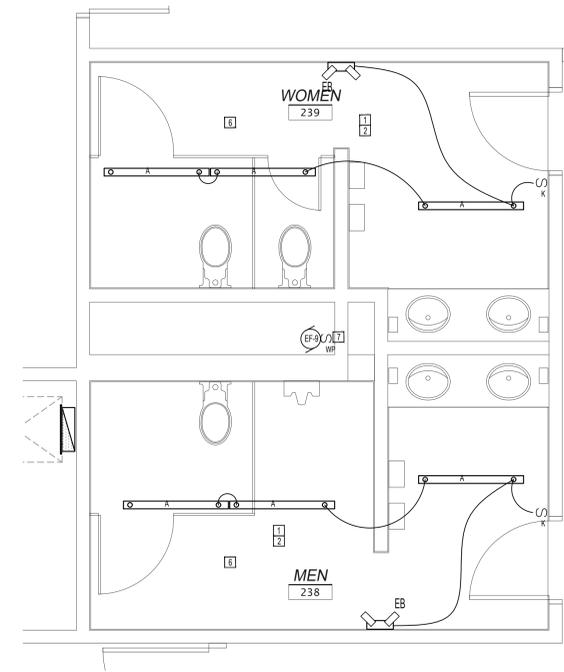
1 Enlarged Reno Plan - Locker Room Toilet  
E3.3 Scale: 3/8" = 1'-0"



2 Enlarged Reno Plan - Gym Public Toilets  
E3.3 Scale: 3/8" = 1'-0"



2 Enlarged Reno Plan - Gym Public Toilets  
E3.3 Scale: 3/8" = 1'-0"



5 Enlarged Reno Plan - Mens 238/ Womens 239  
E3.3 Scale: 3/8" = 1'-0"



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**E3.3**

project no. 2231

date 7/25/23