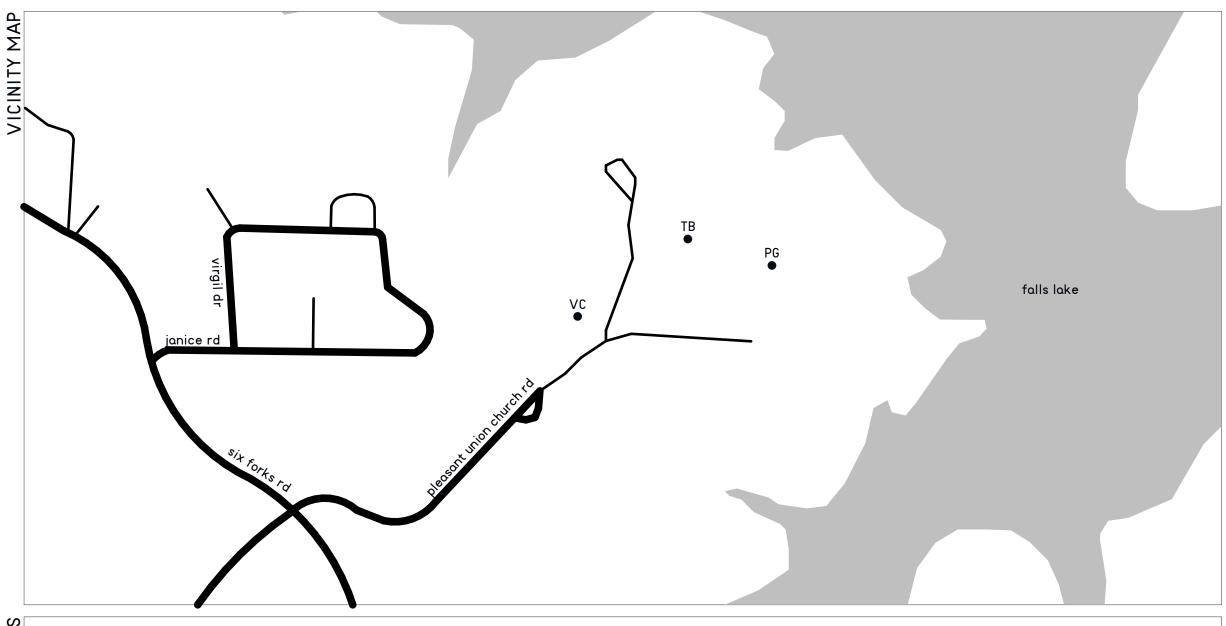
BLUE JAY POINT COUNTY PARK VISITOR CENTER RENOVATION

3200 PLEASANT UNION CHURCH RD RALEIGH, NC 27614

COVERSHEET

CBPR-130579-2024 CONSTRUCTION DRAWINGS



ATIONS	DECORATIVE GRAVEL + BOULDE	RS 610 ROUGH CARPENTRY	731 SHINGLE ROOFING	862 SKYLIGHT
O.F.C	330 CAST-IN-PLACE CONCRETE	618 GLU-LAM	762 BRAKE METAL	929 PAINTED GYPSUM BOAF
SPEC	426 BRICK VENEER	620 FINISH CARPENTRY	814 WOOD DOOR	930 TILE
ERIAL	512 STRUCTURAL STEEL	641 ARCHITECTURAL CABINETS	841 ALUMINUM STOREFRONT	968 CARPET FLOORING
1ATE	550 METAL FABRICATION	725 WATERPROOFING	852 ALUMINUM CLAD WOOD WINI	DOWS 1236 COUNTERTOPS
2				

_	A0.1.VC	COVERSILEI	01.0.V0	SENERAL STROSTORAL NOTES
j	A1.1.VC	APPENDIX B (VC)	\$1.1.VC	FOUNDATION PLAN AT VISITOR CENTER
į	A1.2.VC	APPENDIX B (VC)	\$1.2.VC	PARTIAL ATTIC/CEILING FRAMING PLAN AT
=	A1.3.VC	LIFE SAFETY PLAN (VC)		VISITOR CENTER
,	A1.5. V C	EII E GAI EITT EAN (VG)	S4.1.VC	FOUNDATION DETAILS
	A O O \/C	VC EVICTING DEFEDENCE DI ANI	S5.1.VC	FRAMING DETAILS
	A2.0.VC	VC EXISTING REFERENCE PLAN		
	A2.1.VC	VC EXISTING PLAN	P0.01	PLUMBING LEGENDS & SCHEDULES
	A2.2.VC	VC EXISTING RCP + ROOF PLAN	P1.00	PLUMBING DEMOLITION PLAN
	A2.3.VC	VC DEMO PLAN + DEMO RCP	P2.00	PLUMBING WASTE & VENT NEW WORK PLAN
	A2.4.VC	VC NEW PLAN	P2.10	PLUMBING WATER & GAS NEW WORK PLAN
	A2.5.VC	VC NEW RCP		
	A2.6.VC	VC NEW ROOF PLAN	M0.01	MECHANICAL LEGENDS & SCHEDULES
			M1.00	MECHANICAL DEMOLITION PLAN
	A3.1.VC	VC EXISTING ELEVATIONS	M2.00	MECHANICAL NEW WORK PLAN
	A3.2.VC	VC NEW ELEVATIONS	M5.00	MECHANICAL DETAILS
	A3.3.VC	INTERIOR ELEVATIONS	E0.01	ELECTRICAL LEGEND
	A3.4.VC	INTERIOR ELEVATIONS + WINDOW ELEVATIONS	E0.02	ELECTRICAL GEN. NOTES & FIXTURE SCHEDULE
			E2.00	ELECTRICAL DEMOLITION PLAN
	A4.1.VC	VC EXISTING SECTIONS	E2.01	ELECTRICAL LIGHTING PLAN
	A4.2.VC	VC NEW SECTIONS	E2.02	ELECTRICAL POWER PLAN
			E5.00	ELECTRICAL DETAILS
	A5.1.VC	VISITOR CENTER SECTION DETAILS	E5.01	ELECTRICAL DETAILS
	A6.1.VC	VISITOR CENTER PLAN DETAILS		

\$1.0.VC

GENERAL STRUCTURAL NOTES



OWNER:
WAKE COUNTY PARKS RECREATION AND OPEN SPACE
3200 PLEASANT UNION CHURCH RD
CONTACT: ERIC STAEHLE
PHONE:919 856 6369
EMAIL: ERIC.STAEHLE@WAKE.GOV

PRIME/LANDSCAPE ARCHITECT:
SURFACE 678
215 MORRIS STREET, SUITE 150
CONTACT: ERIC DAVIS
PHONE:919 282 9122
EMAIL: EDAVIS@SURFACE678.COM

ARCHITECT:
IN SITU STUDIO
704 N PERSON STREET, RALEIGH NC 27604
CONTACT: MATT GRIFFITH
PHONE:919 397 3949
EMAIL: MATT@INSITUSTUDIO.US

STRUCTURAL ENGINEER:
LYSAGHT & ASSOCIATES
120 ST MARY STREET
CONTACT: CHUCK LYSAGHT
PHONE:919 833 0495
EMAIL: CHUCK@LYSAGHTASSOCIATES.COM

SYSTEMS ENGINEER:
SIGMA ES
5909 FALLS OF NEUSE RD, SUITE 101
CONTACT: REGGIE ADAMS
PHONE:919 840 9300
EMAIL: RADAMS@SIGMAES.COM

CIVIL ENGINEER:

THE WOOTEN COMPANY
120 N. BOYLAN AVE
CONTACT: ANA WADSWORTH
PHONE: 919 828 0531
EMAIL: AWADSWORTH@THEWOOTENCOMPANY.COM

ABBREVIATIO	AFF ALUM	above finish floor aluminum
	B0	bottom of
R	CIP	cast-in-place
BB	CL	centerline
∣₹	CJ	control/construction joint
	CPT	common path of travel
	EQ	equal
	FFE	finished floor elevation
	FIN	finish
	F0	face of
	GA	gauge
	GALV	galvanized
	LOD	limits of disturbance
	MAX	maximum
	MED	maximum egress distance
	MIN	minimum
	NIC	not in contract
	NTS	not to scale
	ОС	on center
	PG	playground
	PTD	painted
	REF	reference
	REV	reverse
	SIM	similar
	SF	square feet
	SS	stainless steel
	TBF	tee-ball field
	T0	top of
	TPF-SF	tree protection fence silt fence
	TYP	typical
	UON	unless otherwise noted
	VC	visitors center
	VIF	verify in field



studio

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)

Address: 3200 Pleasant Union Chu	rch Road, Raleigh, NC		Zip Code <u>27614</u>
Owner/Authorized Agent: in situ	studio Phone # (_ 9	19) 397 - 3949	E-Mail matt@insitustudio.us
Owned By:	X City/County	☐ Private	☐ State
Code Enforcement Jurisdiction:	X City Raleigh	X County Wake	X State

DESIGNER	FIRM	NAME	LICENSE#	TELEPHONE #	E-MAIL
Architectural	in situ studio	Matthew Griffith	11446	<u>(919)397-3949</u>	matt@insitustudio.us
Civil	The Wooten Company	Ana Wadsworth	042389	<u>(919)818-0531</u>	<u>awadsworth@thew</u> ootencompany
Electrical	Sigma Engineered Solutions	Reginald Adams	19658	<u>(919)840-9300</u>	radams@sigmaes.com
Fire Alarm	Sigma Engineered Solutions	Reginald Adams	19658	<u>(919)840-9300</u>	radams@sigmaes.com
Plumbing	Sigma Engineered Solutions	Paul Romiti	026581	<u>(919)840-9300</u>	promiti@sigmaes.com
Mechanical	Sigma Engineered Solutions	Paul Romiti	026581	<u>(919)840-9300</u>	promiti@sigmaes.com
Sprinkler-Stand	lpipe NA	NA	NA	(<u>NA</u>)	NA
Structural	Lysaght & Associates	Chuck Lysaght	7929	(<u>919</u>)833-0495	chuck@lysaghtassociates.com
Retaining Wall	s >5' High <u>NA</u>	NA	NA	(<u>NA</u>)	NA
Landscape Arch.	Surface 678 (Prime)	Eric Davis	C-098	(919)419-1199	edavis@surface678.com

2018 NC BUILDING CODE:	☐ New Building	Addition	Renovation
	☐ 1 st Time Interior	Completion	
	Shell/Core - Con	tact the local ins	pection jurisdiction for possible additional
	procedures and r	equirements	
	Phased Construc	tion - Shell/Core	- Contact the local inspection jurisdiction for
	possible addition	nal procedures and	d requirements

possible additional pro	ocedures and require	rements	
2018 NC EXISTING BUILDING CODE: EXISTING:	X Prescriptive	☐ Repair	Chapter 14
Alteration:	Level I	X Level II	Level III
	☐ Historic Prop	erty	☐ Change of Use
CONSTRUCTED: (date) 1989 CURR	ENT OCCUPANO	CY(S) (Ch. 3):	A3
RENOVATED: (date) 2014 (REF A2.0) PROPO	OSED OCCUPAN	ICY(S) (Ch. 3)	: <u>A3</u>
RISK CATEGORY (Table 1604.5): Current: [I X II	III 🗌 IV	
Proposed.		ш Пи	

			Propo	osed:	I 🗌 I	I 🗌 III 🔲 IV		
BASIC BUILDING DATA								
Construction T	ype:	I-A	☐ II-A		■ III-A	A □ IV	☐ V-A	
(check all that a	pply)	☐ I-B	☐ II-B	3	☐ III-H	3	X V-B	
Sprinklers:	X No	Partial	Yes	☐ NFF	PA 13	☐ NFPA 13R	☐ NFPA 13D	
Standpipes:	X No	Yes	Class 🗌 I			☐ Wet ☐ Dry		
Fire District:	X No	Yes	Flood 1	Hazard A	Area:	☐ No ☐ Yes		
Special Inspections Required: X No Yes (Contact the local inspection jurisdiction for additional procedures and requirements.)								

2018 NC Administrative Code and Policies Revised 6/15/2020

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT FIRE RATING DETAIL# DESIGN# SHEET#FOR SHEET#

CEDADATION			PROVIDER	AND	FOR	RATED	FOR
	SEPARATION DISTANCE	REQ'D	PROVIDED *	SHEET #	RATED	PENETRATION	RATED
	(FEET)		REDUCTION)	SHEET #	ASSEMBLY	PENETRATION	JOINTS
Structural Frame,	(ILLI)		,		HOGENIBET		0011110
including columns, girders,							
trusses							
Bearing Walls	> 30'	0					
Exterior	> 30'	0					
North	> 30'	0					
East	> 30'	0					
West	> 30'	0					
South	> 30'	0					
Interior	> 30'	0					
Nonbearing Walls and Partitions	> 30'	0					
Exterior walls							
North	> 30'	0					
East	> 30'	0					
West	> 30'	0					
South	> 30'	0					
Interior walls and partitions	> 30'	0					
Floor Construction							
Including supporting beams		0					
and joists							
Floor Ceiling Assembly		0					
Columns Supporting Floors		0					
Roof Construction, including supporting beams and joists		0					
Roof Ceiling Assembly		0					
Columns Supporting Roof		0					
Shaft Enclosures - Exit		0					
Shaft Enclosures - Other		0					
Corridor Separation		0					
Occupancy/Fire Barrier Separat	ion	0					
Party/Fire Wall Separation		0					
Smoke Barrier Separation		0					
Smoke Partition		0					
Tenant/Dwelling Unit/ Sleeping Unit Separation		0					
Incidental Use Separation		0					
· · · · · · · · · · · · · · · · · · ·							

meraeman ese separation	
* Indicate section number permitting reduction	n

2018 NC Administrative Code and Policies

Gross Building Area Table						
FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL			
3 rd Floor						
2 nd Floor						
Mezzanine						
1st Floor	5,761	203	5,964			
Basement	1,878	0	1,878			
TOTAL	7,639	203	7,842			

ALLOWABLE AREA

Primary Occupancy Classification(s):
Assembly \square A-1 \square A-2 \boxtimes A-3 \square A-4 \square A-5
Business
Educational
Factory F-1 Moderate F-2 Low
Hazardous H-1 Detonate H-2 Deflagrate H-3 Combust H-4 Health H-5 HPM
Institutional
\square I-2 Condition \square 1 \square 2
\square I-3 Condition \square 1 \square 2 \square 3 \square 4 \square 5
☐ I-4
Mercantile
Residential R-1 R-2 R-3 R-4
Storage S-1 Moderate S-2 Low High-piled
Parking Garage Open Enclosed Repair Garage
Utility and Miscellaneous
Accessory Occupancy Classification(s): NA
Incidental Uses (Table 509): NA
Special Uses (Chapter 4 – List Code Sections): NA
Special Provisions: (Chapter 5 – List Code Sections): NA
Mixed Occupancy: X No Yes Separation: Hr. Exception:
X 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.

2018 NC Administrative Code and Policies Revised 6/15/2020

PERCENTAGE OF WALL OPENING CALCULATIONS

(FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
30' or greater	UP, NS	unlimited	27%

LIFE SAFETY SYSTEM REQUIREMENTS

	EIL SIN ELL SISTEM REQUIREMENTS
Emergency Lighting:	□ No X Yes
Exit Signs:	□ No X Yes
Fire Alarm:	□ No X Yes
Smoke Detection Systems:	☐ No X Yes ☐ Partial
Carbon Monoxide Detection:	□ No X Yes

LIFE SAFETY PLAN REQUIREMENTS

Fire and/or smoke rated wall locations	(Chapter '	7)

Life Safety Plan Sheet #: A1.3

Fire and/or smoke rated wan locations (Chapter 7)
Assumed and real property line locations (if not on the site plan)
Exterior wall opening area with respect to distance to assumed property lines (705.8)

X	Occupancy Use for each area as it relates to occupant loa	ad calculat	tion (Table	1004.	1.2)
X	Occupant loads for each area					
X	Exit sign locations (1013)					

X Exit access travel distances (1017) X Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1)) Dead end lengths (1020.4)

X Clear exit widths for each exit door X Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3) X Actual occupant load for each exit door

A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation

X Location of doors with panic hardware (1010.1.10) Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)

Location of doors with electromagnetic egress locks (1010.1.9.9) Location of doors equipped with hold-open devices Location of emergency escape windows (1030)

2018 NC Administrative Code and Policies

☐ The square footage of each fire area (202)

☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5) Note any code exceptions or table notes that may have been utilized regarding the items above

STORY	DESCRIPTION AND	(A)	(B)	(C)	(D)
NO.	USE	BLDG AREA PER	TABLE 506.2^4	AREA FOR FRONTAGE	ALLOWABLE AREA PER
		STORY (ACTUAL)	AREA	INCREASE ^{1,5}	STORY OR UNLIMITED ^{2,3}
0	Basement	1,878	unchanged	unchanged	unchanged
1	Main Level	5,964	6,000	0.75	10,500

¹ Frontage area increases from Section 506.3 are computed thus:

a. Perimeter which fronts a public way or open space having 20 feet minimum width = 362'-10"(F)

b. Total Building Perimeter = 362'-10" (P)

c. Ratio (F/P) = _____1 (F/P)

d. W = Minimum width of public way = ____> 30' (W)

e. Percent of frontage increase $I_f = 100[F/P - 0.25] \times W/30 = _____75$ (%)

2 Unlimited area applicable under conditions of Section 507.

³ Maximum Building Area = total number of stories in the building x D (maximum3 stories) (506.2).

⁴ The maximum area of open parking garages must comply with Table 406.5.4. ⁵ Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE ¹
Building Height in Feet (Table 504.3) ²	unchanged	unchanged	NA
Building Height in Stories (Table 504.4) ³	unchanged	unchanged	NA

¹ Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4. ² The maximum height of air traffic control towers must comply with Table 412.3.1.

³ The maximum height of open parking garages must comply with Table 406.5.4.

2018 NC Administrative Code and Policies

Revised 6/15/2020

ACCESSIBLE DWELLING UNITS (SECTION 1107)

ACCESSIBLE PARKING (SECTION 1106)

REFER TO LANDSCAPE DRAWINGS FOR PARKING REQUIREMENTS

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

											ā
USE		W	ATER CLOS	ETS	URINALS		LAVATORIES		SHOWERS	DRINKING	G FOUNTAINS
		MALE FEMALE UNISEX			MALE	E FEMALE UNISEX		/TUBS	REGULAR	ACCESSIBLE	
SPACE	EXIST'G										
	NEW	ADDED SF DOES NOT REQUIRE NEW FIXTURES									
	REQ'D										

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc., describe below)

2018 NC Administrative Code and Policies

Revised 6/15/2020

```
ENERGY SUMMARY
ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the energy code shall
also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet.
If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the
Existing building envelope complies with code: No X Yes (The remainder of this section is not applicable)
Exempt Building: X No Yes (Provide code or statutory reference):
        Climate Zone: \square 3A \boxtimes 4A \square 5A
        Method of Compliance: Energy Code Performance
                              ASHRAE 90.1 Performance Prescriptive
                                (If "Other" specify source here)___
THERMAL ENVELOPE (Prescriptive method only)
        Roof/ceiling Assembly (each assembly) small addition matches or exceeds existing, described below:
                Description of assembly: 5/8" gyp bd, 10" ceiling batts, av. 12" airspace, 3/4" deck, 30 lb. felt, 3/4" asph. shingles
               U-Value of total assembly: \frac{1}{(0.56 + 34.00 + 3.46 + 0.94 + 0.25 + 0.44)} = 0.025
               R-Value of insulation: 34.00
               Skylights in each assembly: existing
                       U-Value of skylight: existing
                total square footage of skylights in each assembly: existing
        Exterior Walls (each assembly) small addition matches or exceeds existing, described below:
               Description of assembly: 5/8" gyp bd, 3 1/2" batts, 1/2" sheathing, 30 lb. felt, 3/4" wd siding
               U-Value of total assembly: 1/(0.56 + 11.90 + 0.62 + 0.25 + 0.94) = 0.070
               R-Value of insulation: 11.90
                Openings (windows or doors with glazing)
                       U-Value of assembly:
                       Solar heat gain coefficient: 0.27
                        projection factor:
                                                  between 0.33 and 0.67
                       Door R-Values:
        Walls below grade (each assembly)
               Description of assembly: no change to existing conditions
               U-Value of total assembly:
               R-Value of insulation:
        Floors over unconditioned space (each assembly) small addition matches or exceeds existing, described below:
               Description of assembly: 15 mil VP, 3" polystyrene, 8" CMU, 4" brick
               U-Value of total assembly: 0.080
               R-Value of insulation: 10.0
        Floors slab on grade
               Description of assembly:
               U-Value of total assembly:
               R-Value of insulation:
                Horizontal/vertical requirement:
                slab heated:
```

Revised 6/15/2020

2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

MECHANICAL DESIGN

(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone
winter dry bulb: 14° F
summer dry bulb: 94° F

2018 NC Administrative Code and Policies

winter dry bulb: 70° F summer dry bulb: 75° F relative humidity: 45%

Building heating load: EXISTING

Building cooling load: EXISTING

Mechanical Spacing Conditioning System

List equipment efficiencies: EXISTING

Unitary

description of unit:

heating efficiency:

cooling efficiency:

size category of unit:

Split System Heat Pumps (EXISTING)

EXISTING

EXISTING

EXISTING

Boiler

Size category. If oversized, state reason.:

NA

Chiller

Size category. If oversized, state reason.:

NA

2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS STRUCTURAL DESIGN

(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)
DESIGN LOADS:

Wind Load: Ultimate Wind Speed 115 mph (ASCE-7) Exposure Category 1.0

SEISMIC DESIGN CATEGORY: A X B C D

Risk Category (Table 1604.5) I X II III IV

Spectral Response Acceleration

S_S 14.7 %g

Site Classification (ASCE 7) A B C X D E F

Data Source: Field Test X Presumptive Historical Data

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

Analysis Procedure: Simplified X Equivalent Lateral Force Dynamic

Architectural, Mechanical, Components anchored? Yes X No

LATERAL DESIGN CONTROL: Earthquake ☐ Wind X

Provide the following Seismic Design Parameters:

SOIL BEARING CAPACITIES:

Field Test (provide copy of test report) ______ psf
Presumptive Bearing capacity ______ 2,000 psf
Pile size, type, and capacity ______

2018 NC Administrative Code and Policies

Revised 6/15/2020

Revised 6/15/2020

2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN

(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Energy Code Performance ASHRAE 90.1 Performance Prescriptive

Lighting schedule (each fixture type)
lamp type required in fixture number of lamps in fixture ballast type used in the fixture number of ballasts in fixture total wattage per fixture

number of ballasts in fixture total wattage per fixture total interior wattage specified vs. allowed (whole building or space by space) total exterior wattage specified vs. allowed

Additional Efficiency Package Options
(When using the 2018 NCECC; not required for ASHRAE 90.1)

C406.2 More Efficient HVAC Equipment Performance
C406.3 Reduced Lighting Power Density
C406.4 Enhanced Digital Lighting Controls
C406.5 On-Site Renewable Energy
C406.6 Dedicated Outdoor Air System
C406.7 Reduced Energy Use in Service Water Heating

2018 NC Administrative Code and Policies Revised 6/15/2020 2018 NC Administrative Code and Policies

VISITOR CENTER ALTERATION PARTIAL LIFE SAFETY SUMMARY

Total Occupancy 28

Single Exit to Exterior

EXISTING BUILDING:	A-3 Assembly, Type VB Construction, (1) floor @ 5,761 SF w/ a 1,878 SF basement.
ADDITION:	203 new SF of Business use. New area does not increase egress load to rest of building because of exterior exits (one new).

EGRESS AREAS: Area A Office Suite Total Occupancy 10 Single Exit to Exterior

Egress Area A: Spaces with one exit = max 49 occupants

Area B

LIFE SAFETY PLAN

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

Occupant load = 10
Required exit width = 2.0"

Classroom

Exit width provided = 36" (72" w/ interior door)

Max egress distance = 200'-0"

Actual egress distance = 86'-0"

Max CPT = 75'-0"

Actual CPT = 42'-11"

Egress Area B: Spaces with one exit = max 49 occupants

Occupant load = 28
Required exit width = 5.6"

Required exit width = 5.6"

Exit width provided = 36" (72" w/ interior door)

Max egress distance = 200'-0"

Actual egress distance = 71'-1"

Max CPT = 75'-0"

Actual CPT = 0'-0"

USE	Area A SF	Area A OCC	Area B SF	Area B OCC
EDUCATION (20 NET)	0 SF	0	526 SF	27
BUSINESS (100 GROSS)	899 SF	9	0 SF	0
STORAGE (300 GROSS)	96 SF	1	65 SF	1
TOTAL	999 SF	10	624 SF	28

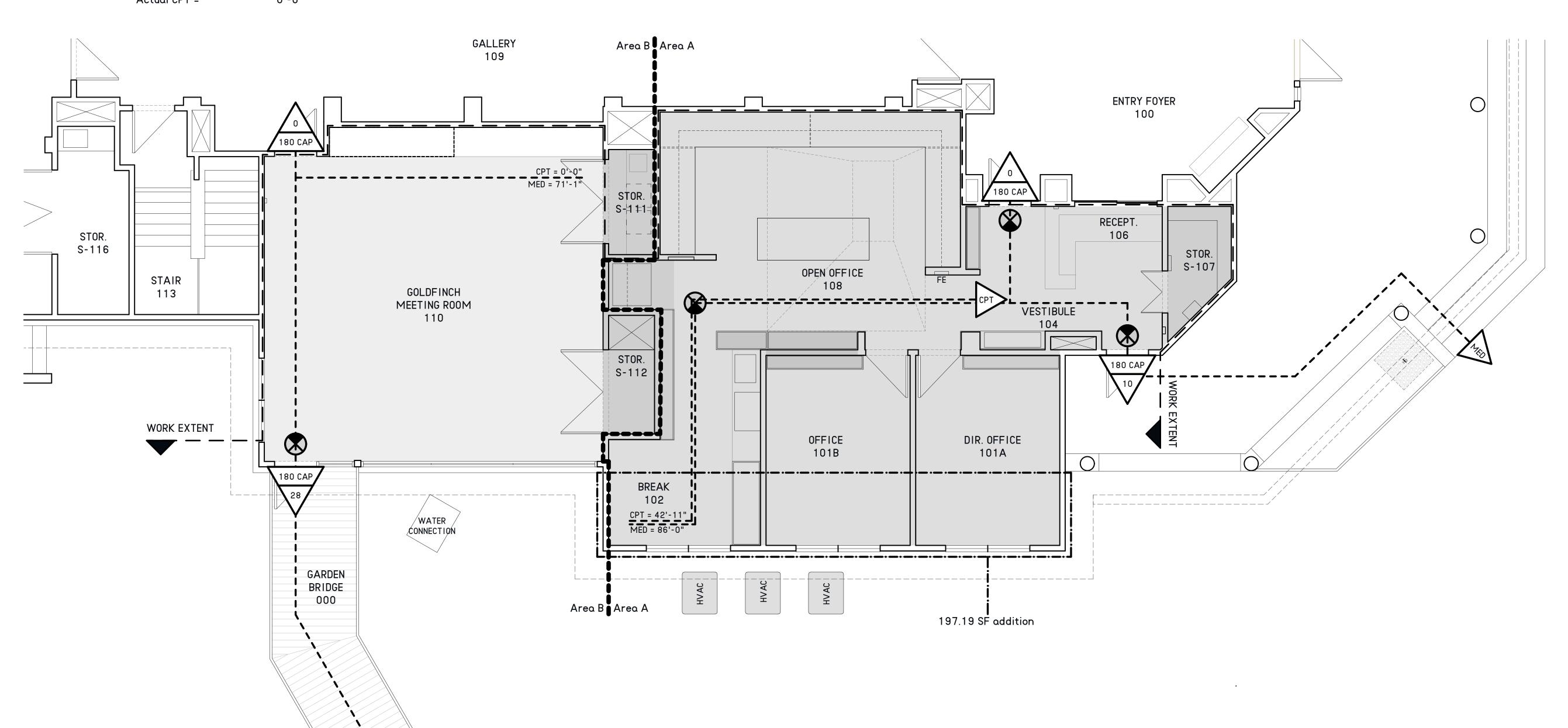


EXIT SIGN

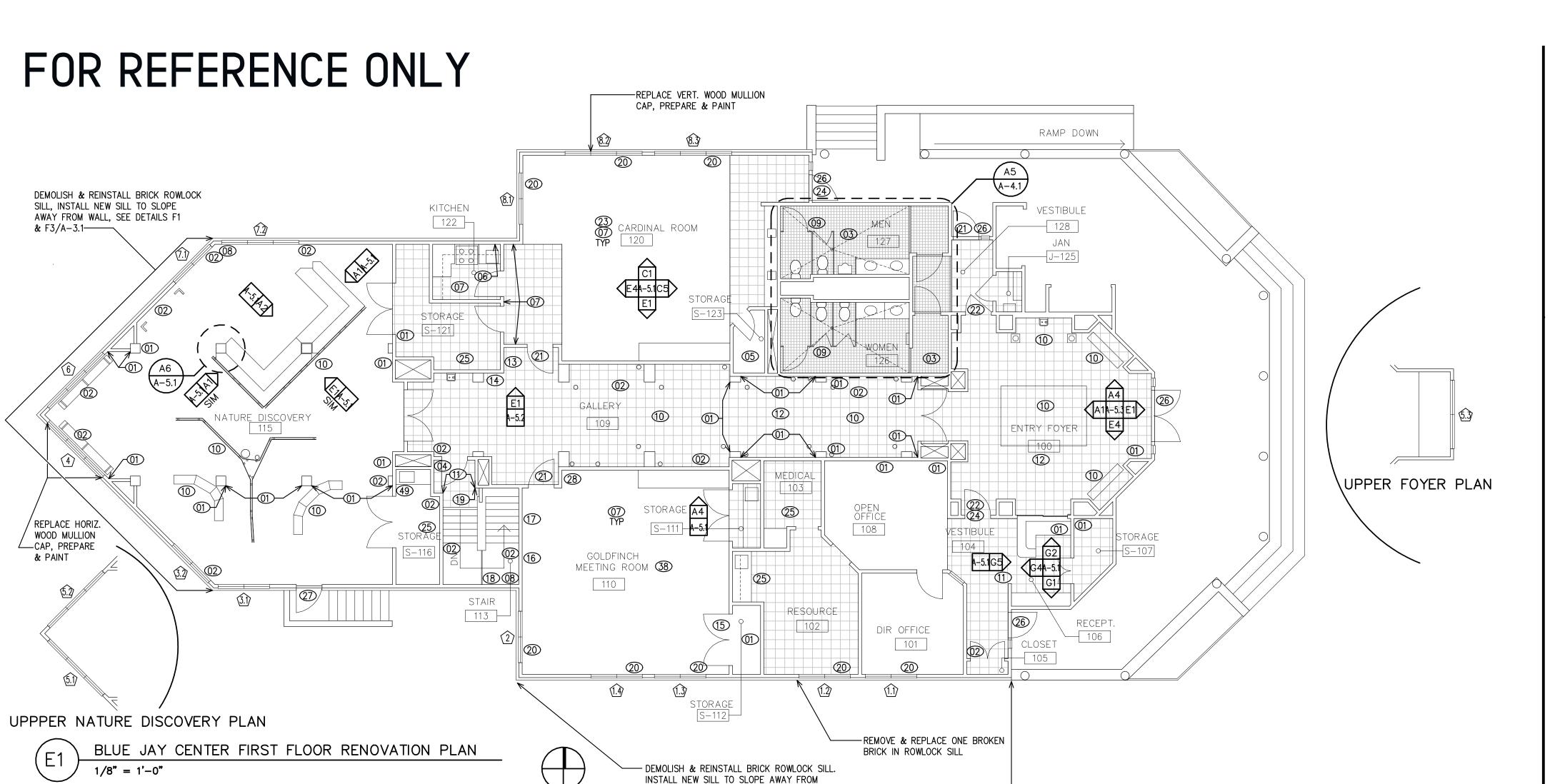
INTERIOR OCCUPANCY

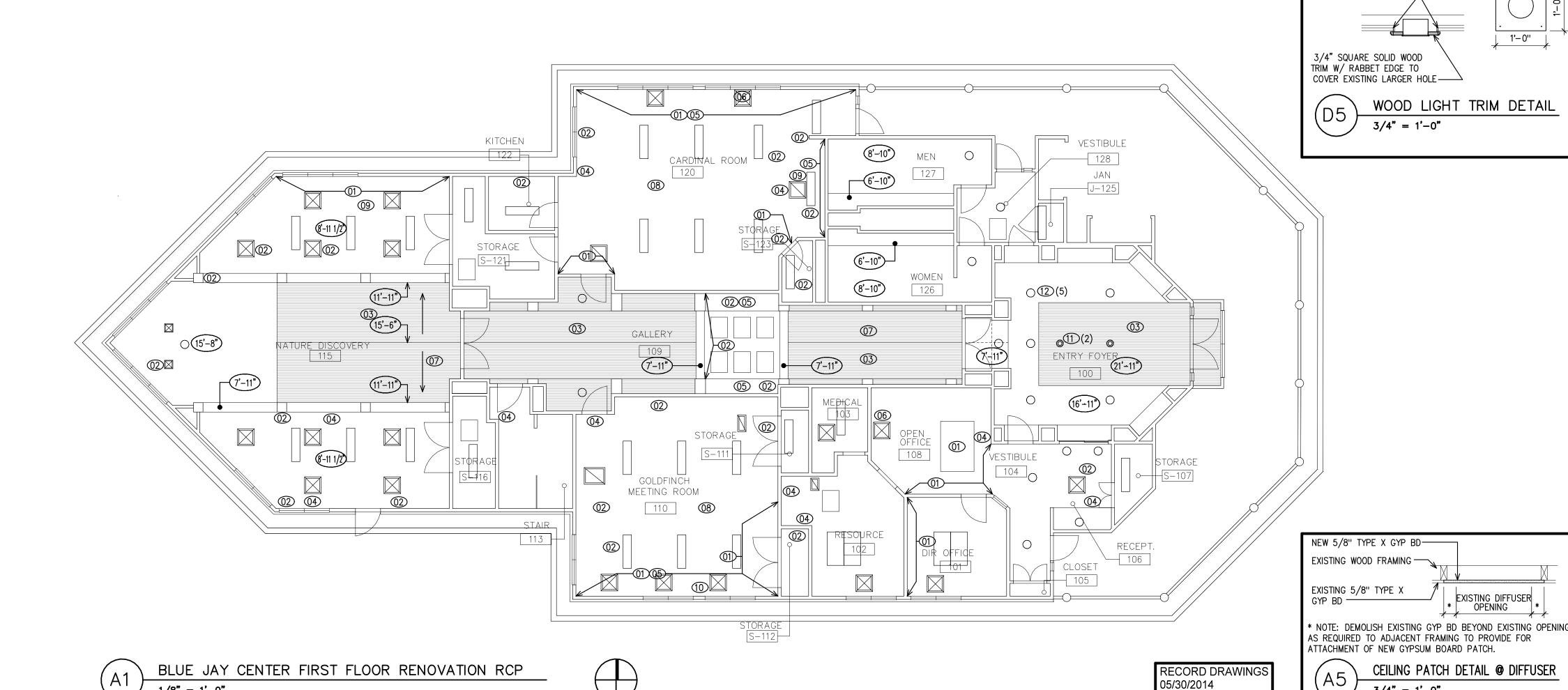


DOOR TAG









WALL, SEE DETAILS F1 & F3/A-3.1. -

RENOVATION PLAN & RCP GENERAL NOTES:

- 01. SEE MECHANICAL & ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- O2. TOTAL ALLOWANCES FOR GWB WALL AND CEILING REPAIRS INCLUDE LOCATIONS NOTED ON PLANS BY KEY NOTES AND ADDITIONAL LOCATIONS. SEE SPEECIFICATION SECTION 012100 ALLOWANCES FOR ADDITIONAL REQUIREMENTS.
- 03. INSTALL SEALANT AT JOINT BETWEEN WAINSCOT WOOD TRIM & GWB.
- 04. INSTALL NEW FLOOR UNDERLAYMENT & VAPOR BARRIER THROUGHOUT FIRST FLOOR, 3/4" THICKNESS.
- 05. INSTALL WOOD TOE MOLDING THROUGHOUT FIRST FLOOR, TYPICAL, IN BLUE JAY CENTER & LODGE.
- 07. INSTALL NEW INTERIOR WOOD WINDOW SILLS & FINISH TO MATCH EXISTING, TYPICAL, IN BLUE JAY CENTER & LODGE.
- 08. UNDERCUT ALL INTERIOR WOOD DOORS BY 1/2" TO 3/4" MAX; REMOVE KICK PLATES & REINSTALL; PATCH SCREEN
- 09. EXISTING FIRE EXTINGUISHERS AND CABINETS ARE EXISTING TO REMAIN.
- 10. NEW GYPSUM BOARD SHALL MATCH EXISTING GYPSUM BOARD TYPE AND THICKNESS. BLUE JAY CENTER EXISTING

RENOVATION PLAN KEY NOTES:

- NOTE: KEY NOTES SUPPLEMENT INFORMATION FOUND IN THE DRAWINGS. SEE PLAN FOR KEYED ITEM LOCATIONS.
- (01) REPAIR NAIL/SCREW POPS, MULTIPLE LOCATIONS; SKIM COAT ÉNTIRE WALL. SEE A6/A-3.1 FOR
- (02) PATCH AT NAIL/SCREW PO. SEE A6/A-3.1 FOR
- (03) INSTALL FLOOR TILE, TILE BASE & MARBLE

- (07) PREPARE WALLS FOR PAINT WHERE WALL
- (9) REINSTALL EXISTING TOILET PARTITIONS
- (10) REMOVE, STORE & REINSTALL ALL EXHIBIT DISPLAYS IN ENTRY FOYER, GALLERY AND NATURE DISCOVERY ROOM. GENERAL CONTRACTOR WILL MANAGE & COORDINATE ALL EXHIBIT DISPLAY ACTIVITIES WITH EXHIBIT SUBCONTRACTOR &

#6 STAINLESS TRIM

3/4" = 1'-0"

1'-0"

- (12) REFINISH WOOD BEAD BOARD WALL PANELS, BASE BOARD, DOOR, WINDOW & WALL TRIM, TYPICAL, IN ENTRY FOYER & GALLERY. SEE INTERIOR
- (13) PATCH GWB WALL OPENING WHERE MECHANICAL GRILLE IS REMOVED & INSTALL NEW BEAD BOARD WALL PANEL TO MATCH EXISTING

- O6. INTERIOR SIGNAGE WILL BE REMOVED BY CONTRACTOR & REINSTALLED BY OWNER.
- BJC SILLS RECEIVE A CLEAR FINISH. LODGE SILLS RECEIVE PAINT.
- HOLES, TYPICAL IN BLUE JAY CENTER & LODGE.
- GYPSUM BOARD WAS NOTED IN ORIGINAL CONSTRUCTION DOCUMENTS AS "ALL GWB TO BE 5/8", TYPE 'X'."
- 11. PAINT EXTERIOR HOLLOW METAL DOORS AND FRAMES IN BLUE JAY CENTER AND LODGE.

- SEE SELECTIVE RENOVATION GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.
- ADDITIONAL REQUIREMENTS.
- ADDITIONAL REQUIREMENTS.
- THRESHOLDS OVER NEW MUD BED. ADJUST FLOOR DRAIN ELEVATIONS. SEE ENLARGED PLANS FOR ADDITIONAL REQUIREMENTS.
- (SPOT REPAIR)
- (05) INSTALL NEW GWB TAPE, FULL LENGTH OF SEAM
- (06) PATCH GWB WHERE GWB WAS REMOVED BY OWNER
- COVERING WAS REMOVED
- 08) PATCH HOLE IN GWB

- (11) PATCH CRACKING AT CORNER BEAD
- ELEVATIONS FOR ADDITIONAL REQUIREMENTS.

- (14) PATCH GWB WALL WHERE THERMOSTAT IS REMOVED & INSTALL NEW BEAD BOARD WALL PANEL TO MATCH EXISTING
- 15) ADJUST DOOR LEAF TO HANG SQUARE WITHIN
- (16) REINSTALL PROJECTION SCREEN
- 17) INSTALL (12) NEW WALL HOOKS, WHITE FINISH
- (18) INSTALL WALL STOP FOR GATE, 2 1/2" DIA. CONCAVE WALL STOP, BRUSHED STAINLESS STEEL
- 19 INSTALL 48" TALL CORNERGUARD, 3" WIDE WITH SNAP ON COVER, ACROVYN SM-20N OR APPROVED
- (20) INSTALL NEW WINDOW BLINDS
- 21) CUT LEVER HARDWARE RETURN BY 1/4"-1/2"ON EACH SIDE. SAND & STAIN CHIPPED DOOR LITE TRIM. PATCH DAMAGED DOOR SURFACE ON CLASSROOM SIDE.
- 22) CUT LEVER HARDWARE RETURN BY 1/4"-1/2"ON EACH SIDE. SAND & STAIN CHIPPED DOOR LITE
- 23) REFINISH WOOD BASE & TRIM, TYPICAL, IN CARDINAL ROOM. SEE INTERIOR ELEVATIONS FOR ADDITIONAL REQUIREMENTS.
- 24) REFINISH WOOD DOOR TRIM
- 25 ADJUST EXISTING CASEWORK DOORS
- 26) REPLACE THRESHOLD & MODIFY EXTERIOR DECK BOARDS, SEE C3/A-3.1
- (27) REPLACE THRESHOLD, SEE A3/A-3.1 FOR ADDITIONAL REQUIREMENTS
- (28) REINSTALL TELEPHONE

EXTERIOR RENOVATION PLAN KEY NOTES:

NOTE: EACH ASSEMBLY LOCATED ON PLANS REFERENCES ONE OR MORE EXTERIOR KEY NOTES..

(E1) AT EACH OPERABLE SASH, REMOVE EXISTING OPERATING HARDWARE AND SEAL SASH SHUT. SASH HINGES TO REMAIN. REMOVE INTERIOR WOOD HARDWARE COVER AND INSTALL NEW COVER AS INDICATED, SEE DETAILS F5 & F7/A-3.1. INSTALL ONE STAINLESS STEEL TRIM SCREW AT EACH LOWER CORNER OF SASH ANGLED THROUGH SASH INTO FRAME WITH MINIMUM PENETRATION. PATCH HOLE IN SASH BEFORE FINISHING.

- (E2) PREPARE AND REPAINT LOWER WINDOW SASHES
- (E3) PREPARE AND REPAINT ENTIRE WINDOW ASSEMBLY INCLUDING FRAME, TRIM, SASHES (ALL COMPONENTS CURRENTLY TEAL COLOR)
- (4) PREPARE AND PAINT EXISTING EXTERIOR WOOD SILL. REMOVE SEALANT UNDER SILL AND RESEAL.
- (E5) RESHAPE, PREPARE AND REPAINT EXISTING EXTERIOR WOOD SILL. REMOVE EXISTING SEALANT UNDER SILL AND RESEAL. RESHAPE TOP SURFACE OF SILL TO ACHIEVE SLOPE AWAY FROM WINDOW, SEE DETAIL F7/A-3.1.
- (E6) AT EACH OPERABLE SASH, REMOVE SURFACE APPLIED WOOD STOP AT BOTTOM EDGE OF OPERABLE SASHES. PATCH REMAINING HOLES.
- © DEMOLISH SASH AND INSTALL NEW SASH. PREPARE AND PAINT. SASH IS DENOTED BY (L), (C) OR (R) INDICATING THE POSITION OF THE SASH AS VIEWED FROM THE EXTERIOR.

(1.1)(1.2)(1.3)(1.4)	E1 E2 E5
2	E1 E3 E4 E6
(3.1)(3.2)	E1 E3 E5 E6 E7 3.1(R) 3.2(L)
4	€1)€3)€5)€7)(x)(R)
(5.1)(5.2)(5.3)	(E3)
6	(L)\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
(7.1)(7.2)	E1 E2 E4 E6
8.1/8.2/8.3	E1 E2 E4

REFLECTED CEILING PLAN KEY NOTES:

- NOTE: KEY NOTES SUPPLEMENT INFORMATION FOUND IN THE DRAWINGS. SEE PLAN FOR KEYED ITEM LOCATIONS. SEE SELECTIVE REFLECTED CEILING GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.
- ①1 REPAIR NAIL/SCREW POPS, FULL LENGTH OF WALL. ②6 CLEAN STAIN FROM CEILING SEE A6/A-3.1 FOR ADDITIONAL REQUIREMENTS.
- ② REPAIR NAIL/SCREW POP. SEE A6/A-3.1 FOR ADDITIONAL REQUIREMENTS.
- (03) REFINISH WOOD BEAD BOARD CEILING PANELS, TYPICAL, IN ENTRY FOYER, GALLERY & NATURE

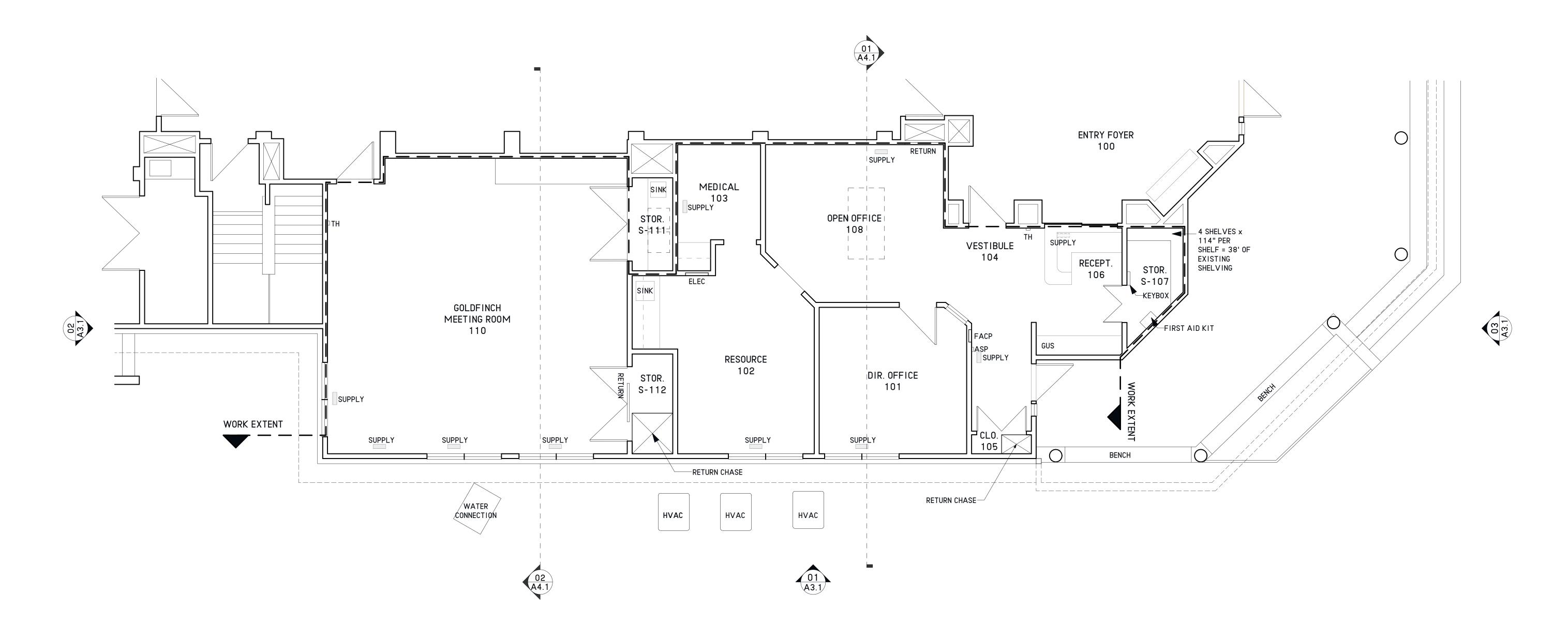
DISCOVERY ROOM.

- (04) INSTALL NEW GWB TAPE (SPOT REPAIR)
- (05) INSTALL NEW GWB TAPE, FULL LENGTH OF WALL
- (1/2" 1" DI
 - 08) PATCH OPENING IN GWB WHERE MECHANICAL CONTRACTOR SHALL ASSUME A TOTAL OF TWI

LOCATIONS. REFER TO A5/A-1.2.

- (9) REINSTALL PROJECTION SCREEN
- 10 PATCH GWB WHERE DAMAGED GWB HAS BEEN
- 11) SEE DETAIL D5/A-1.2 FOR WOOD TRIM AT NE
- 12) PATCH GWB AROUND NEW LIGHT FIXTURE WHE DEMOLISHED LIGHT FIXTURE WAS REMOVED

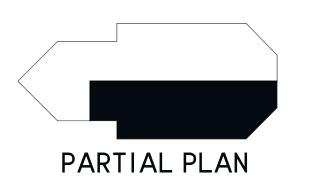




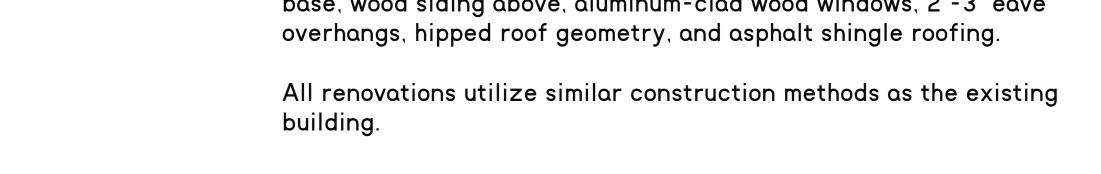
Existing drawings have been created using original design drawings and field measurements. Notify architect of any discrepancies between design dimensions and field conditions.







The existing park center is a wood-framed building with a CMU foundation, a crawlspace and partial basement, an exterior brick base, wood siding above, aluminum-clad wood windows, 2'-3' eave overhangs, hipped roof geometry, and asphalt shingle roofing.





704 N Person St Raleigh NC 27604 www.insitustudio.us

3 (prime) Company Associates

nts LA Surfo Civil The V Structural Lysa,

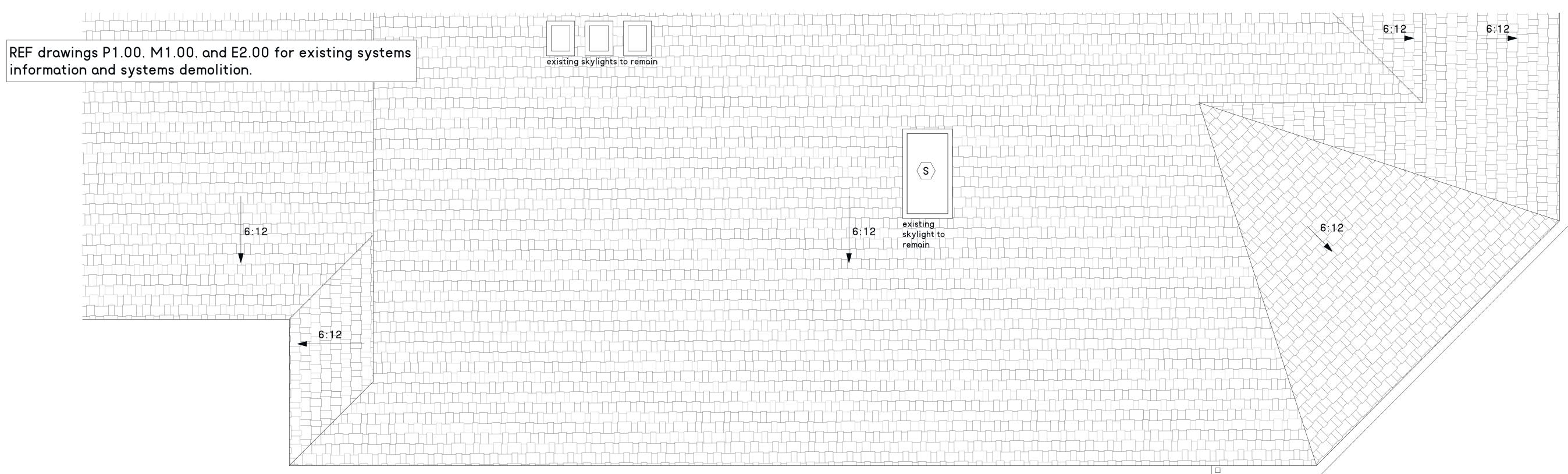
CD

03 21 25 KW + JF scale: as noted

LUE JAY POINT COUNTY PARK 200 PLEASANT UNION CHURCH RD

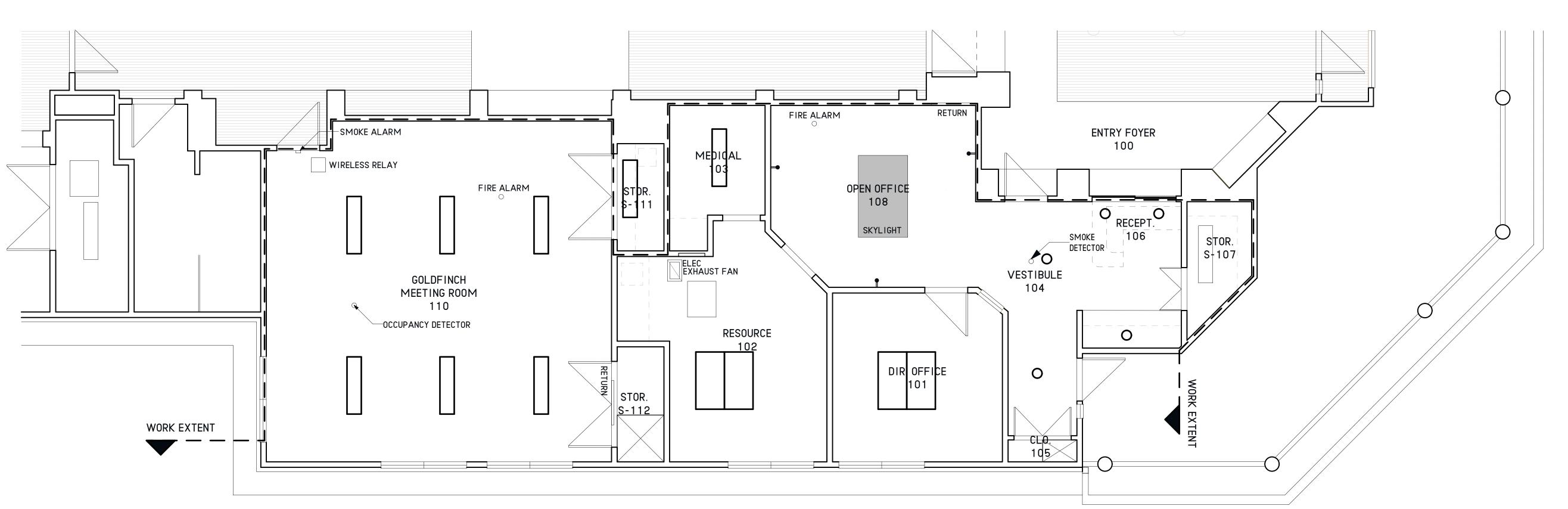
VC EXISTING RCP + ROOF PLAN





Asphalt shingle roofing to remain.





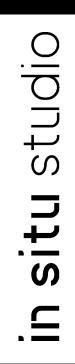
Existing drawings have been created using original design drawings and field measurements. Notify architect of any discrepancies between design dimensions and field conditions.











704 N Person St Raleigh NC 27604 www.insitustudio.us

Surface 678 (prime) The Wooten Company Lysaght & Associates

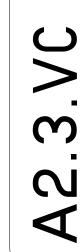
sultants LA Civil Structural

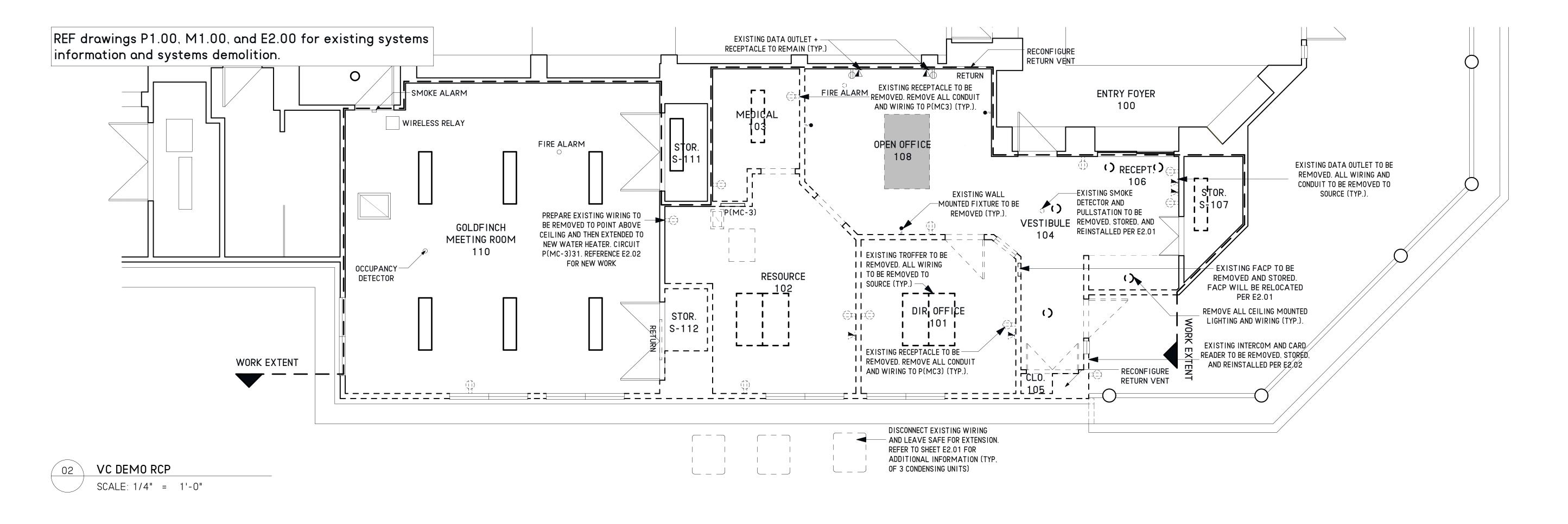
CD

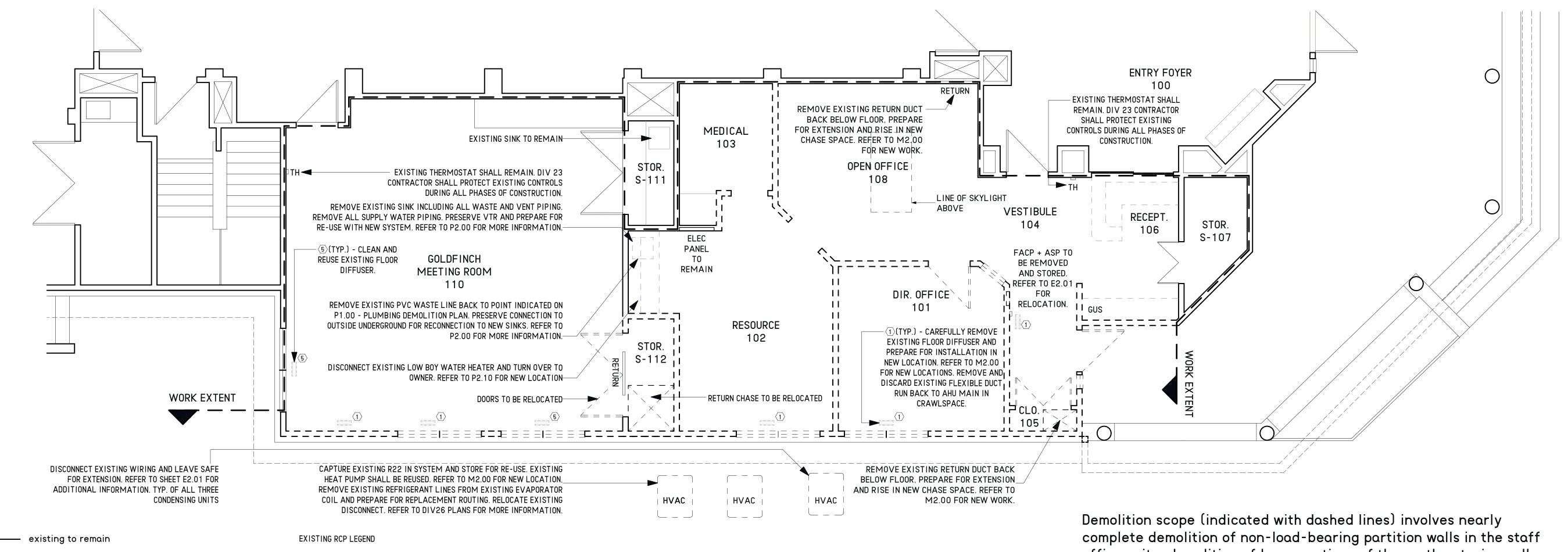
03 21 25 KW + JF scale: as noted

BLUE JAY POINT COUNTY PARK 3200 PLEASANT UNION CHURCH

VC DEMO PLAN + DEM RCP









- - - - existing to demolish





Demolition scope (indicated with dashed lines) involves nearly complete demolition of non-load-bearing partition walls in the staff office suite, demolition of large portions of the south exterior wall and windows, and relocation of the FACP and two return chases. The only structural demolition occurs at the south wall, which will need to be temporarily supported while the structure is reconfigured. Trusses will be modified in the office suite to vault the ceiling.

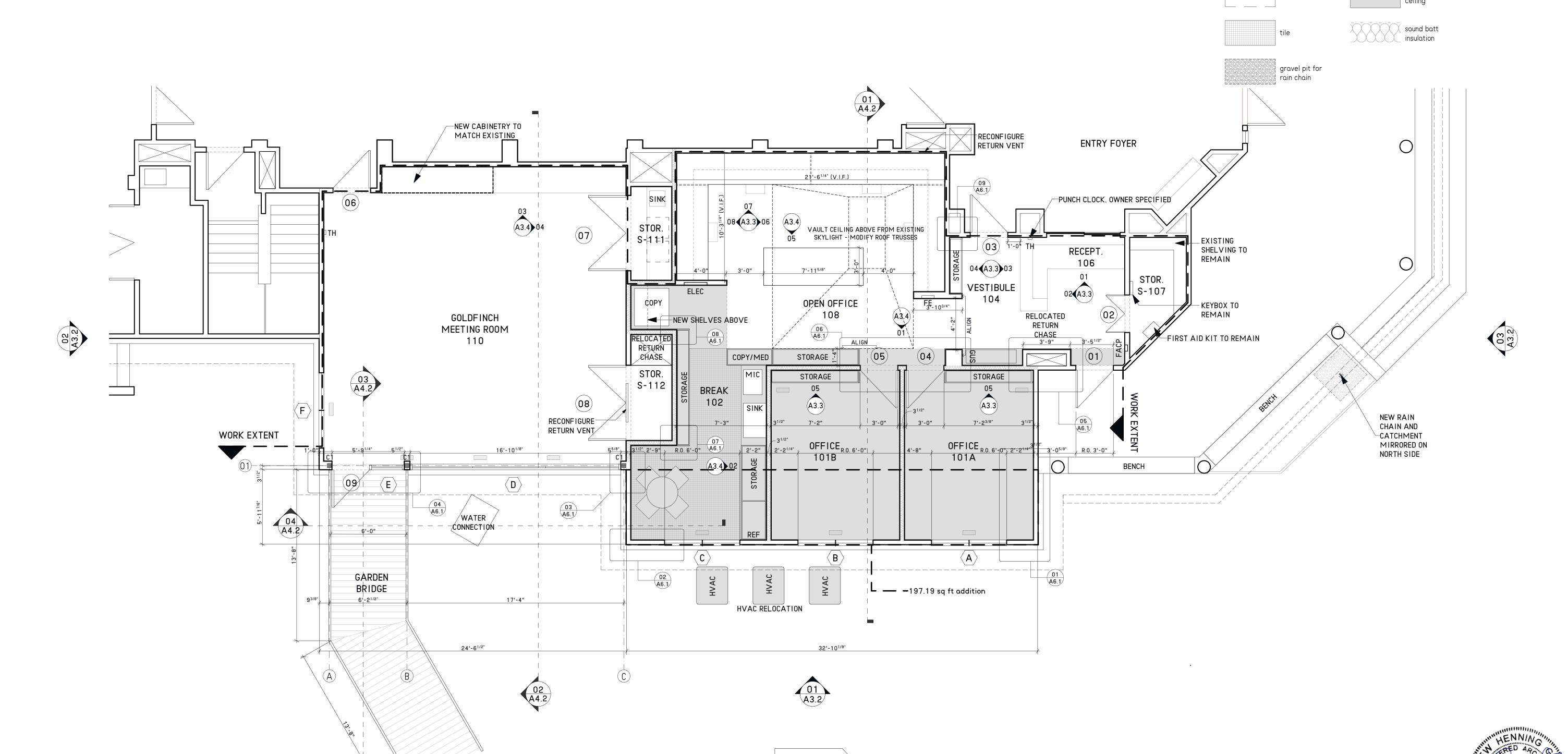
DOOF	SCHEDULE	• •								
ID	TYPE	WIDTH	HEIGHT	DOOR	FRAME	FACE	CORE	THICK	HDWE	NOTES
01	outswing	3'-0"	7'-0"	clad	clad	glass	-	1 3/4"	latch + lock	aluminum clad wood door by window manufacturer
02	double	3'-0"	7'-0"	exist.	exist.	exist.	-	1 3/8"	dummy	existing to remain
03	single	3'-0"	7'-0"	exist.	exist.	exist.	-	1 3/8"	latch + lock	existing to remain
04	single	3'-0"	8'-0"	wd	wd	flush wd	solid	1 3/8"	latch + lock	new
05	single	3'-0"	8'-0"	wd	wd	flush wd	solid	1 3/8"	latch + lock	new
06	single	3'-0"	7'-0"	exist.	exist.	exist.	-	1 3/8"	latch + lock	existing to remain
07	double	6'-0"	7'-0"	exist.	exist.	exist.	-	1 3/8"	dummy	existing to remain
08	double	6'-0"	7'-0"	exist.	exist.	exist.	-	1 3/8"	lock	existing, relocated
09	outswing	3'-0"	7'-10"	alum	alum	glass	-	1 3/8"	latch + lock	aluminum clad wood door by window manufactured w/ ADA si

FINIS	SH SCHEDULE							
ROOM	ROOM NAME	FL00R	BASE TRIM	WALL	CEILING	CEILING HT	AREA (SQFT)	NOTES
101A	office	carpet	ptd wd	ptd gyp bd. millwork, window	ptd gyp bd	8'-2"	139.19	replace all finishes
101B	office	carpet	ptd wd	ptd gyp bd. millwork, window	ptd gyp bd	8'-2"	139.19	replace all finishes
102	break	tile	tile	ptd gyp bd. millwork, window, tile	ptd gyp bd	8'-2"	149.08	replace all finishes
104	vestibule	carpet	ptd wd	ptd gyp bd. millwork	ptd gyp bd	9'-0"	56.01	replace all finishes
106	reception	carpet	ptd wd	ptd gyp bd. millwork	ptd gyp bd	9'-0"	79.96	replace all finishes
S-107	storage	carpet	ptd wd	ptd gyp bd. existing shelves	ptd gyp bd	9'-0"	33.58	existing shelves to remain
108	open office	carpet	ptd wd	ptd gyp bd. millwork	ptd gyp bd, skylight	varies	351.84	replace all finishes, vaulted ceiling
110	goldfinch mtg rm	carpet	ptd wd	ptd gyp bd. windows	ptd gyp bd	9'-0"	565.48	replace all finishes
S-111	storage	carpet	ptd wd	ptd gyp bd. millwork	ptd gyp bd	9'-0"	24.51	existing cabinets to remain
S-112	storage	carpet	ptd wd	ptd gyp bd	ptd gyp bd	9'-0"	19.62	replace all finishes

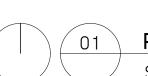
FLOOR PLAN LEGEND

area of lowered

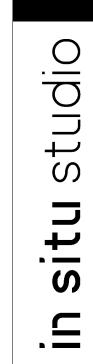
DIMENSIONS ARE TO ROUGH OPENINGS (R.O.) UNLESS OTHERWISE NOTED



PARTIAL PLAN



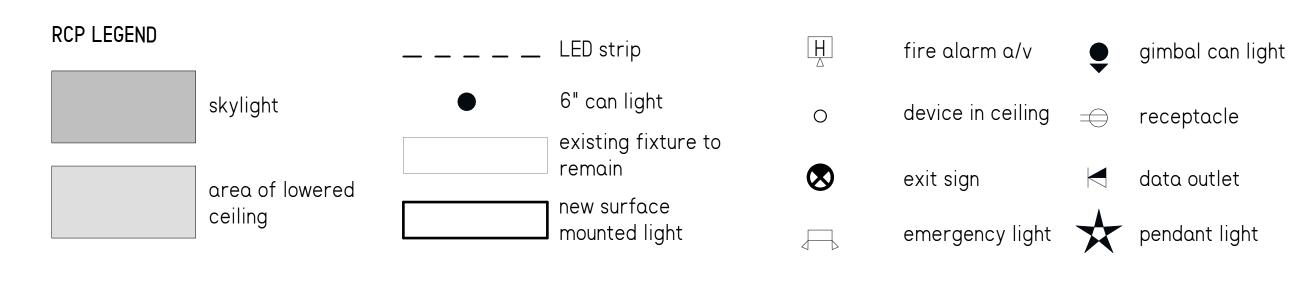
PROPOSED PLAN SCALE: 1/4" = 1'-0"

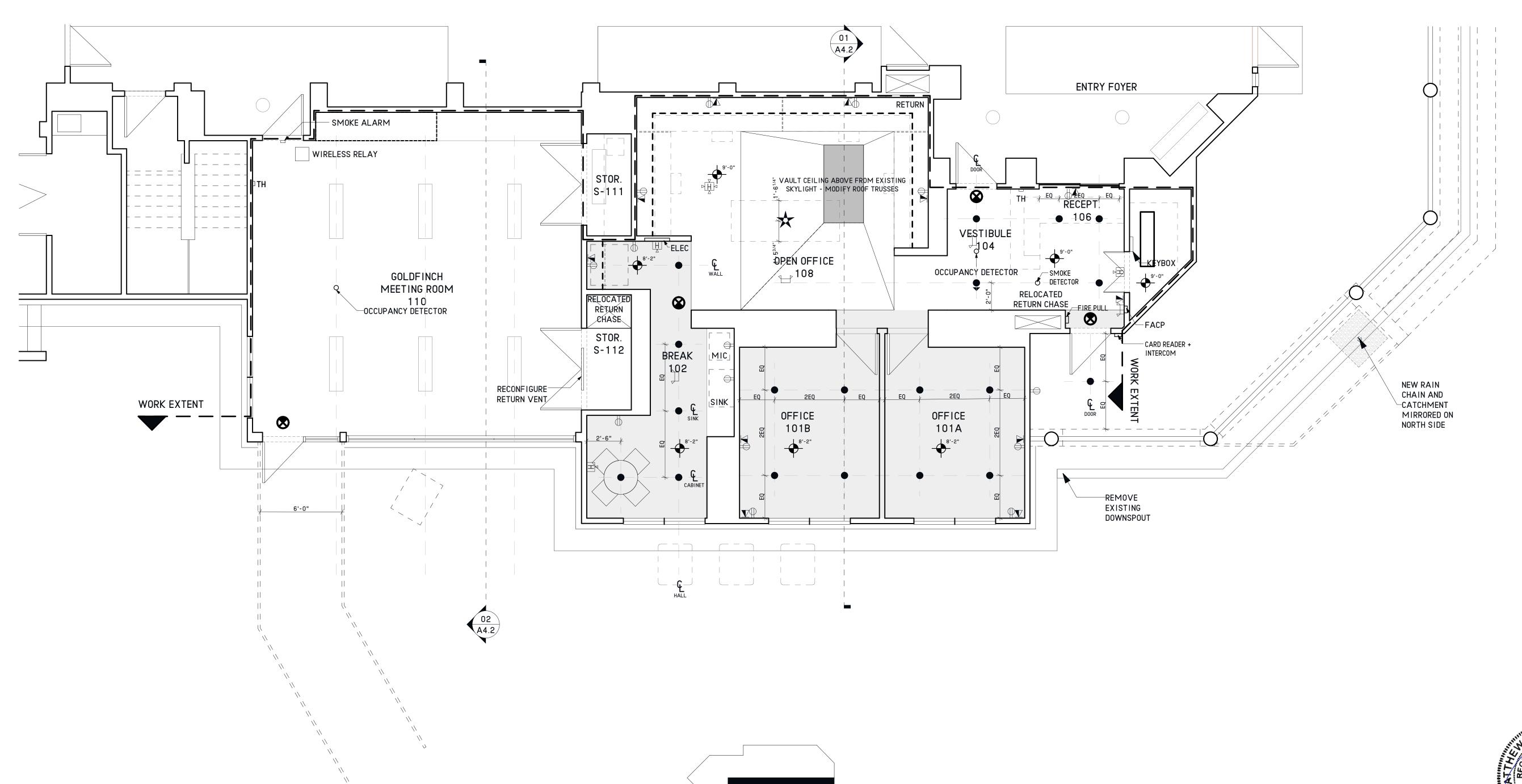


704 N Person St Raleigh NC 27604 www.insitustudio.us

> Surface 678 (prime) The Wooten Company Lysaght & Associates Sigma Engineered Solutions

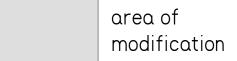
Consultants LA Civi Stru PMI



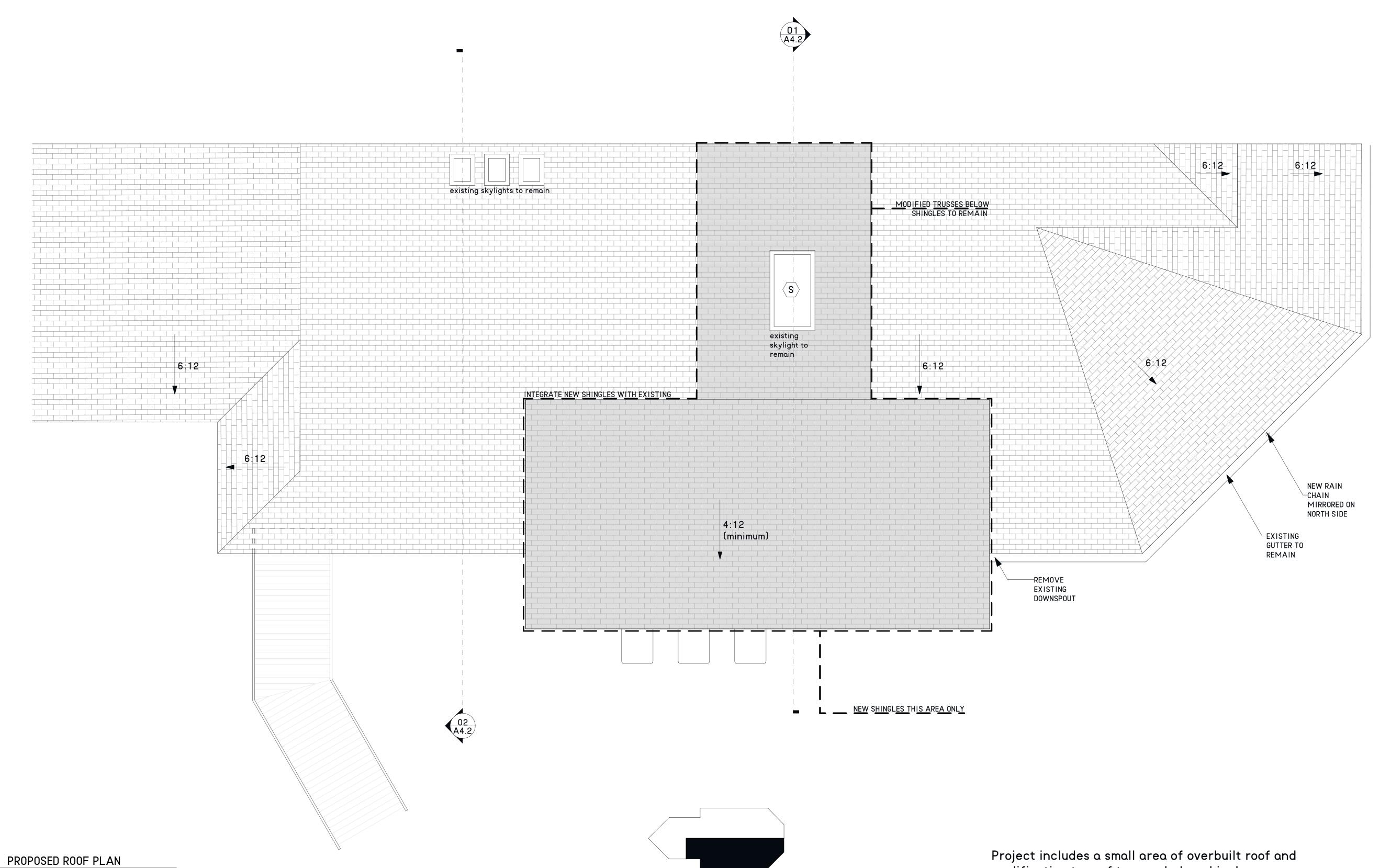


PARTIAL PLAN





asphalt shingles



PARTIAL PLAN



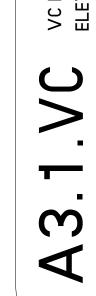
704 N Person St Raleigh NC 27604 www.insitustudio.us

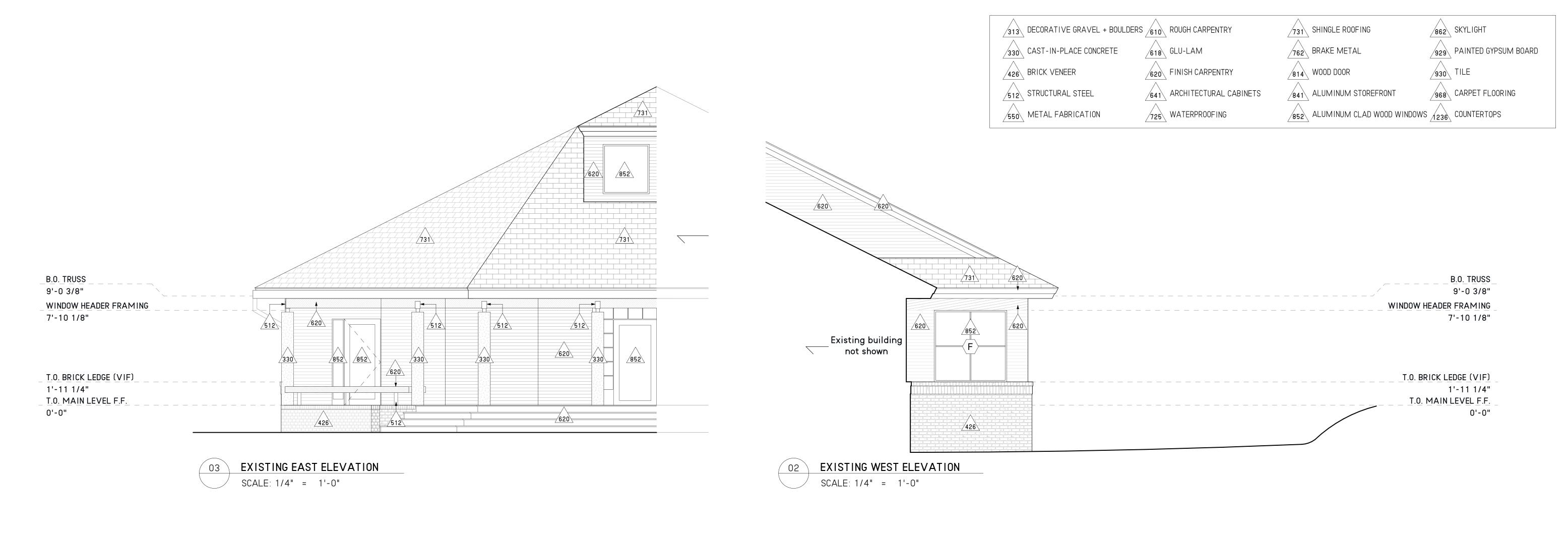
78 (prime) en Company . Associates ineered Solutions

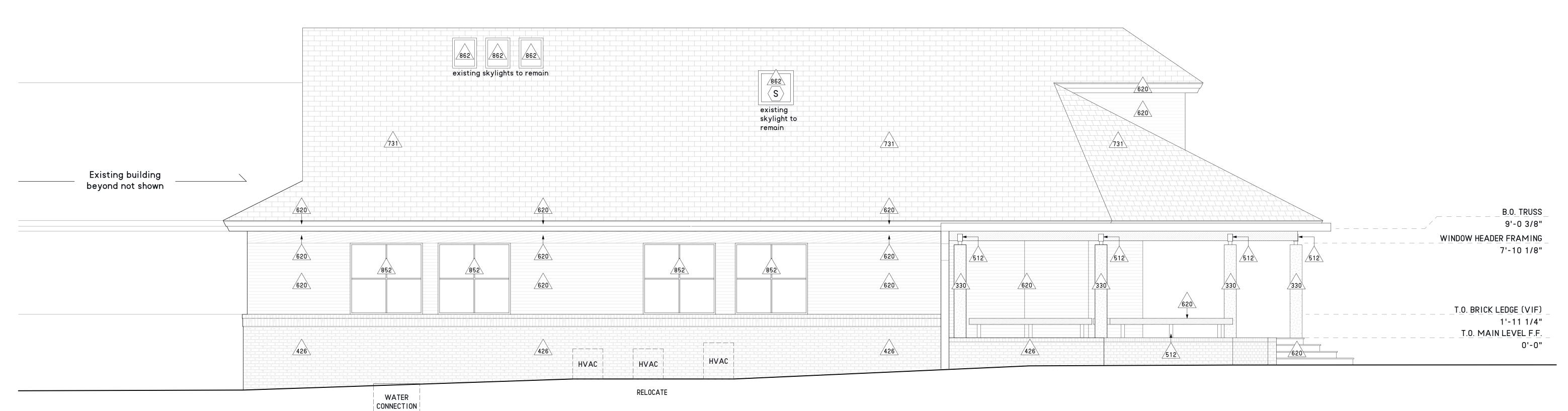
ants LA Civil Structural PME

DUNTY PARK
INION CHURCH RD
scc

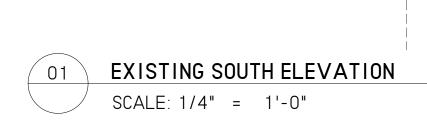
VC EXISTING ELEVATIONS

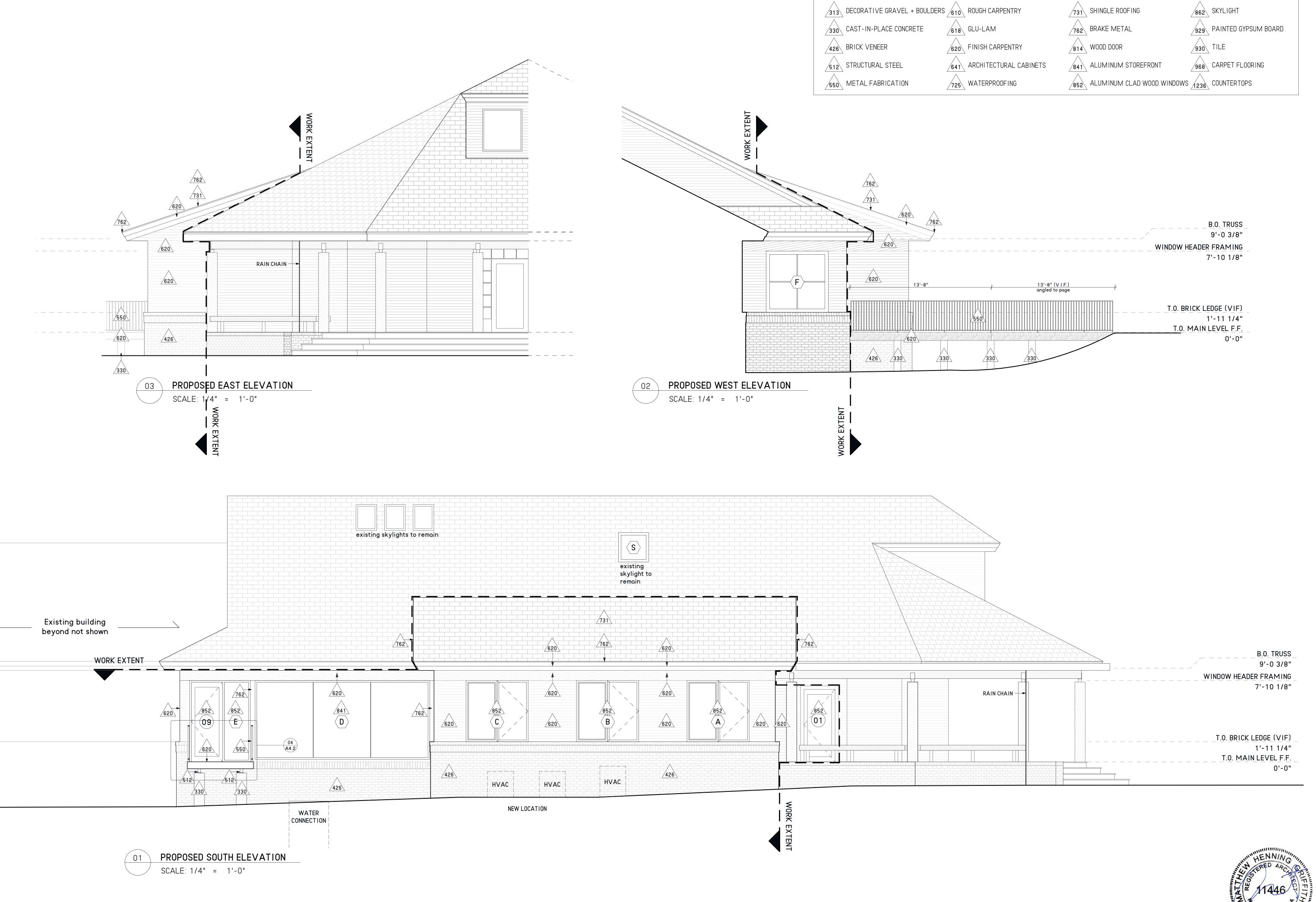






Existing drawings have been created using original design drawings and field measurements. Notify architect of any discrepancies between design dimensions and field conditions.





in situ studio

704 N Person St Raleigh NC 27604 www.insitustudio.us

> 578 (prime) en Company & Associates gineered Solutions

> Surface 678 (prir The Wooten Comp :ural Lysaght & Associ

ultants LA Civil Structural PME

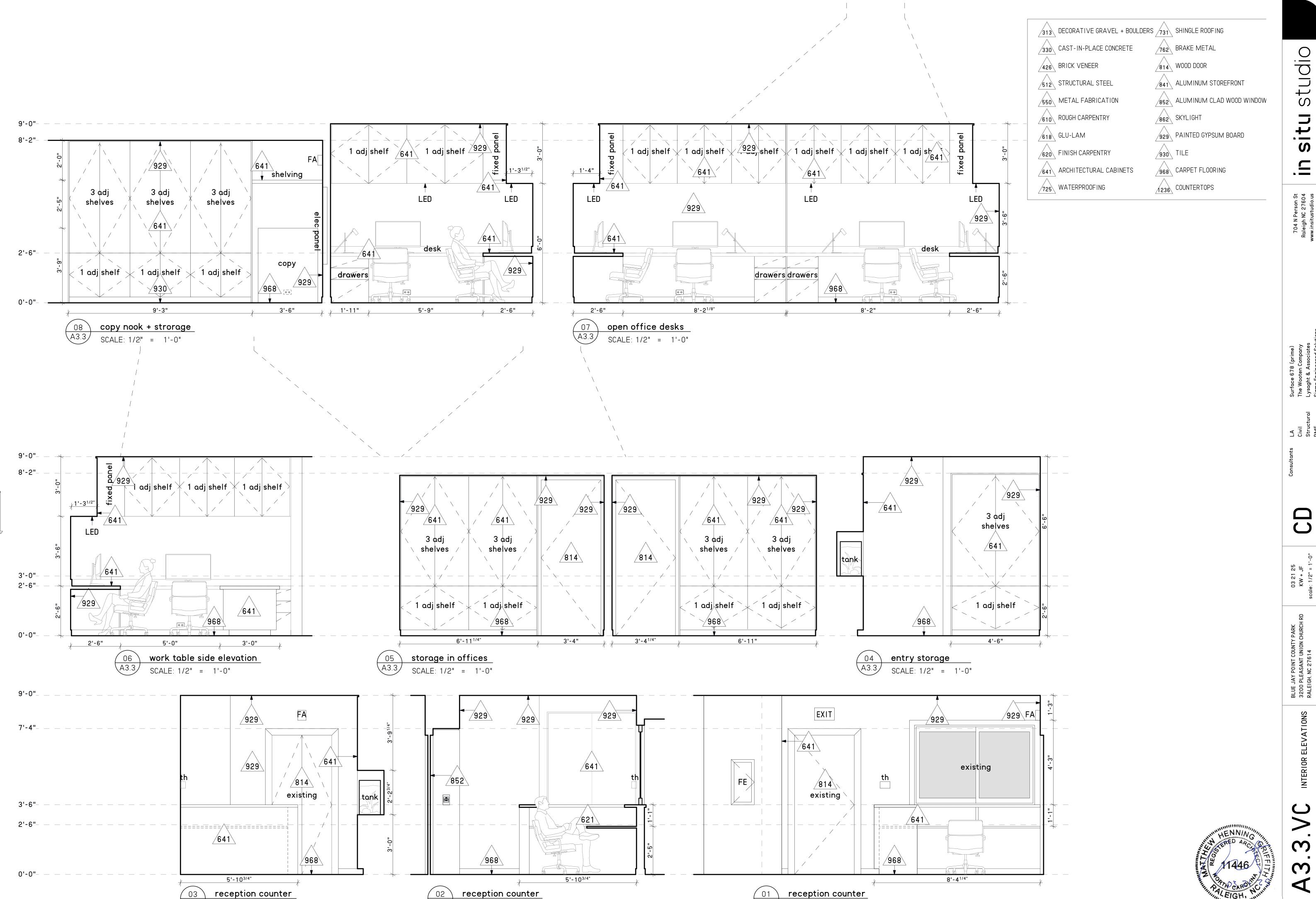
CD

03 21 25 KW + JF scale: as noted

BLUE JAY POINT COUNTY PARK 3200 PLEASANT UNION CHURCH RD RALEIGH, NC 27614

BLUE JAY POINT CO
3200 PLEASANT UN
RALEIGH, NC 27614

A3.2.VC vc



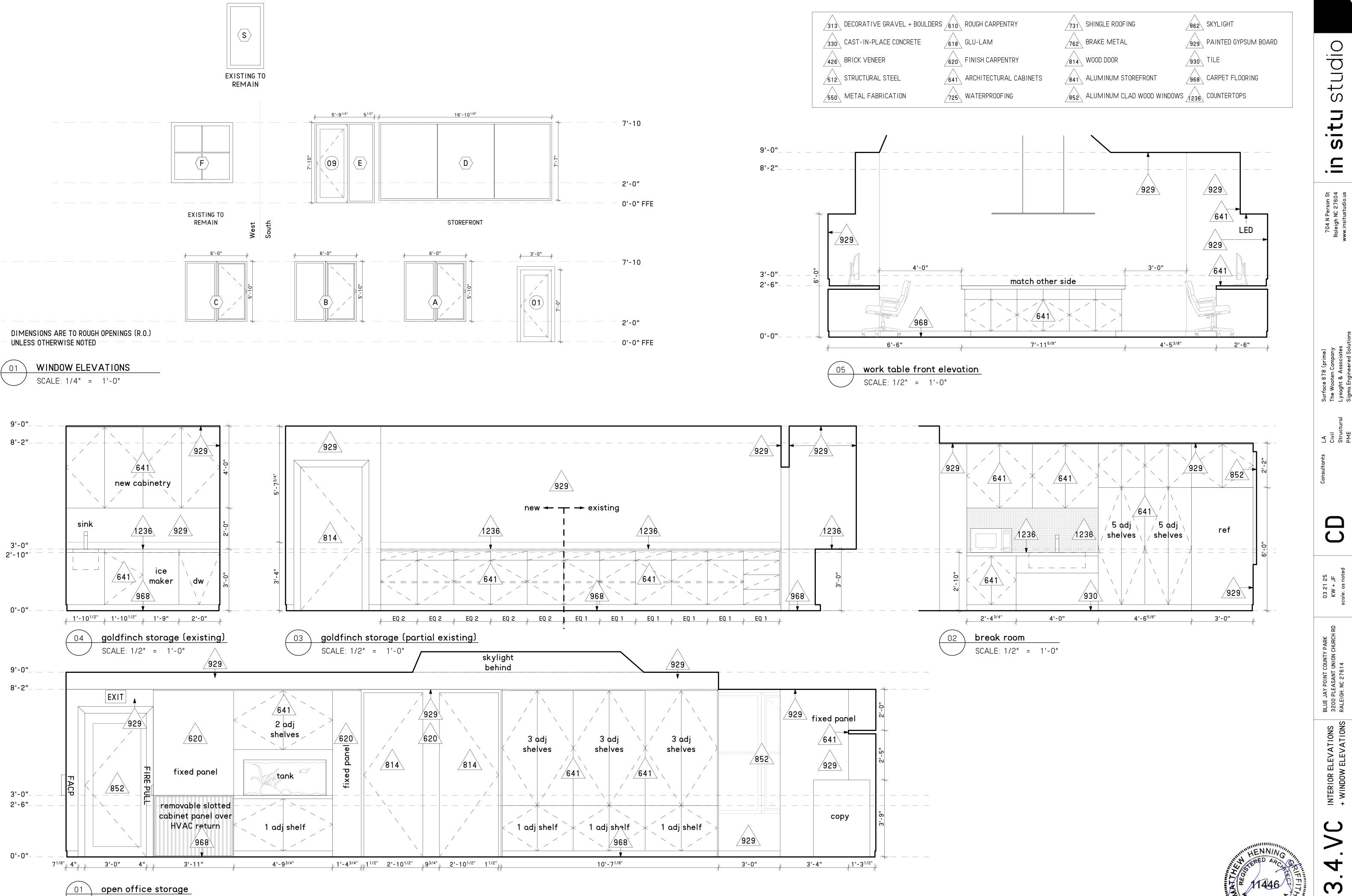
SCALE: 1/2" = 1'-0"

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

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

704 N Person St Raleigh NC 27604 www.insitustudio.us

3.VC



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

INTERIOR ELEVATIONS
3200 PLEASANT UNION CHURCH RD
+ WINDOW ELEVATIONS
RALEIGH, NC 27614 A3.4.VC

studio

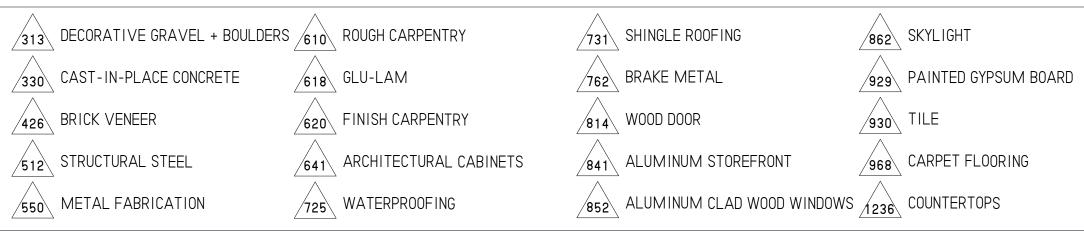
situ

.⊑

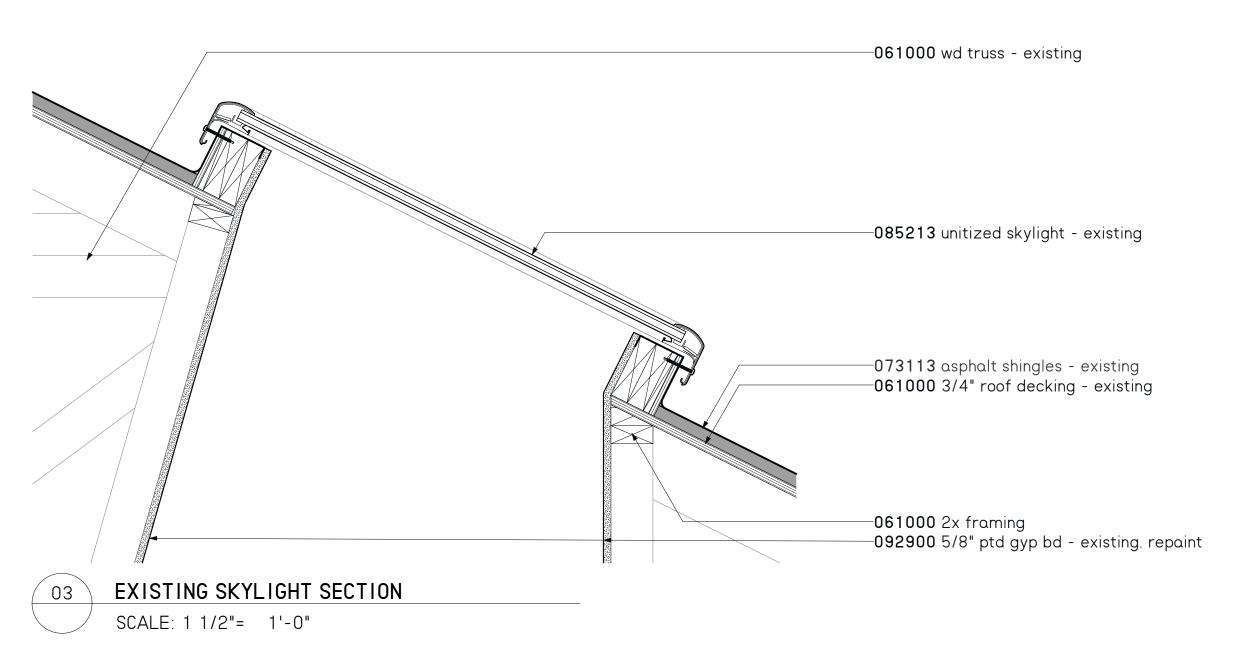
704 N Person St Raleigh NC 27604 www.insitustudio.us

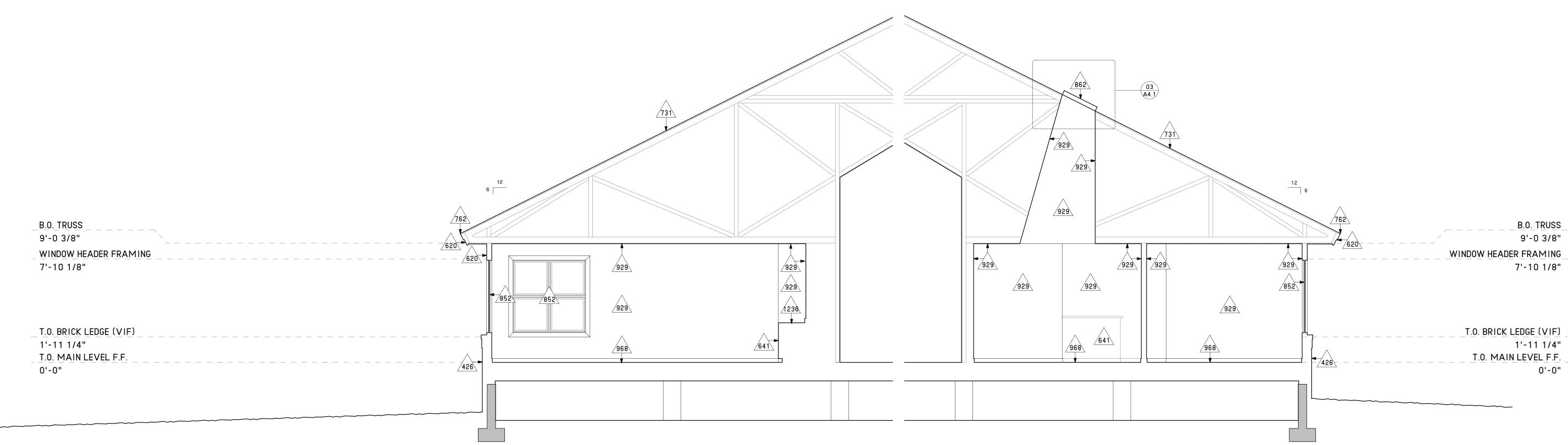
CD

03 21 25 KW + JF :ale: as noted



Existing drawings have been created using original design drawings and field measurements. Notify architect if any discrepancies between design dimensions and field conditions.

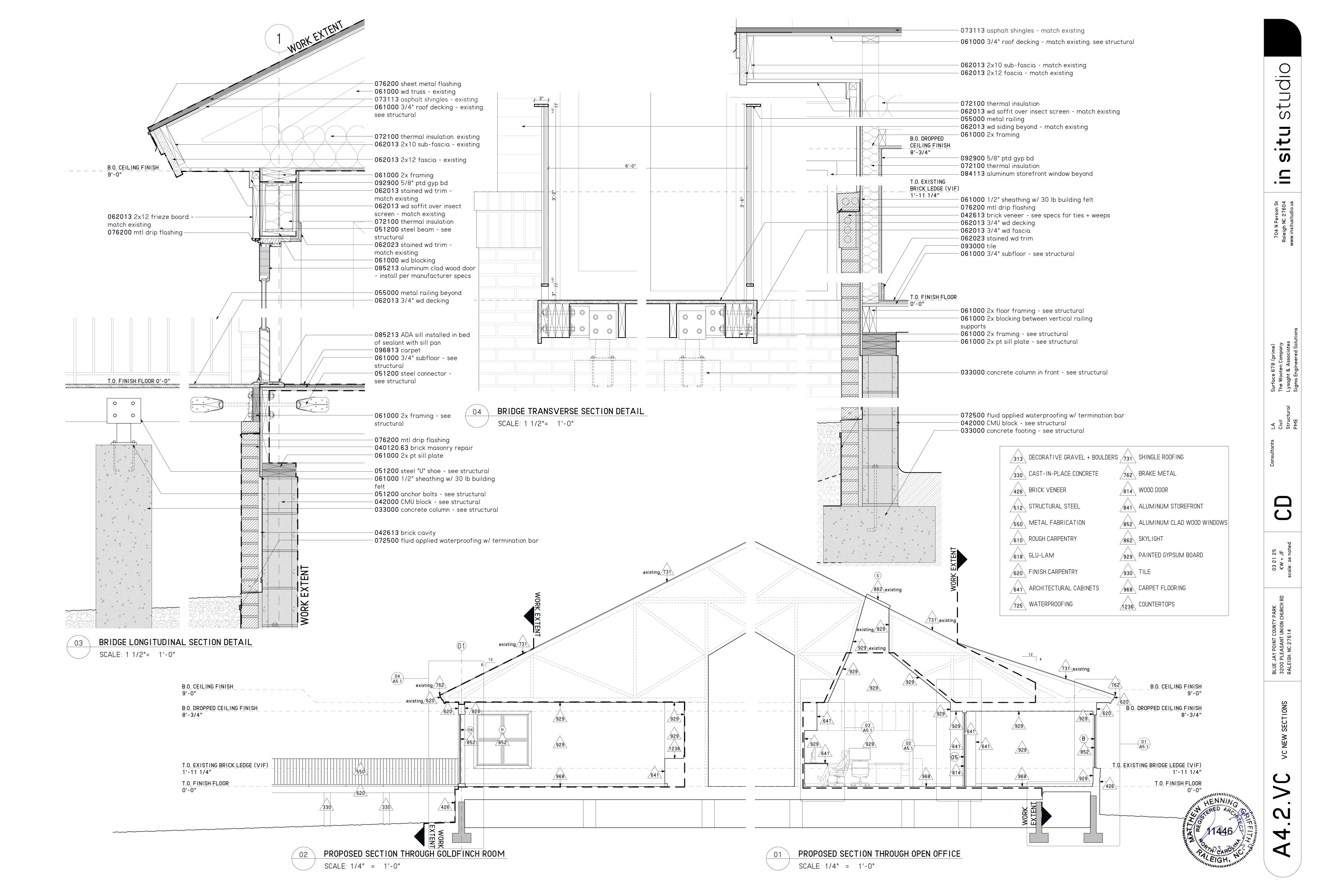


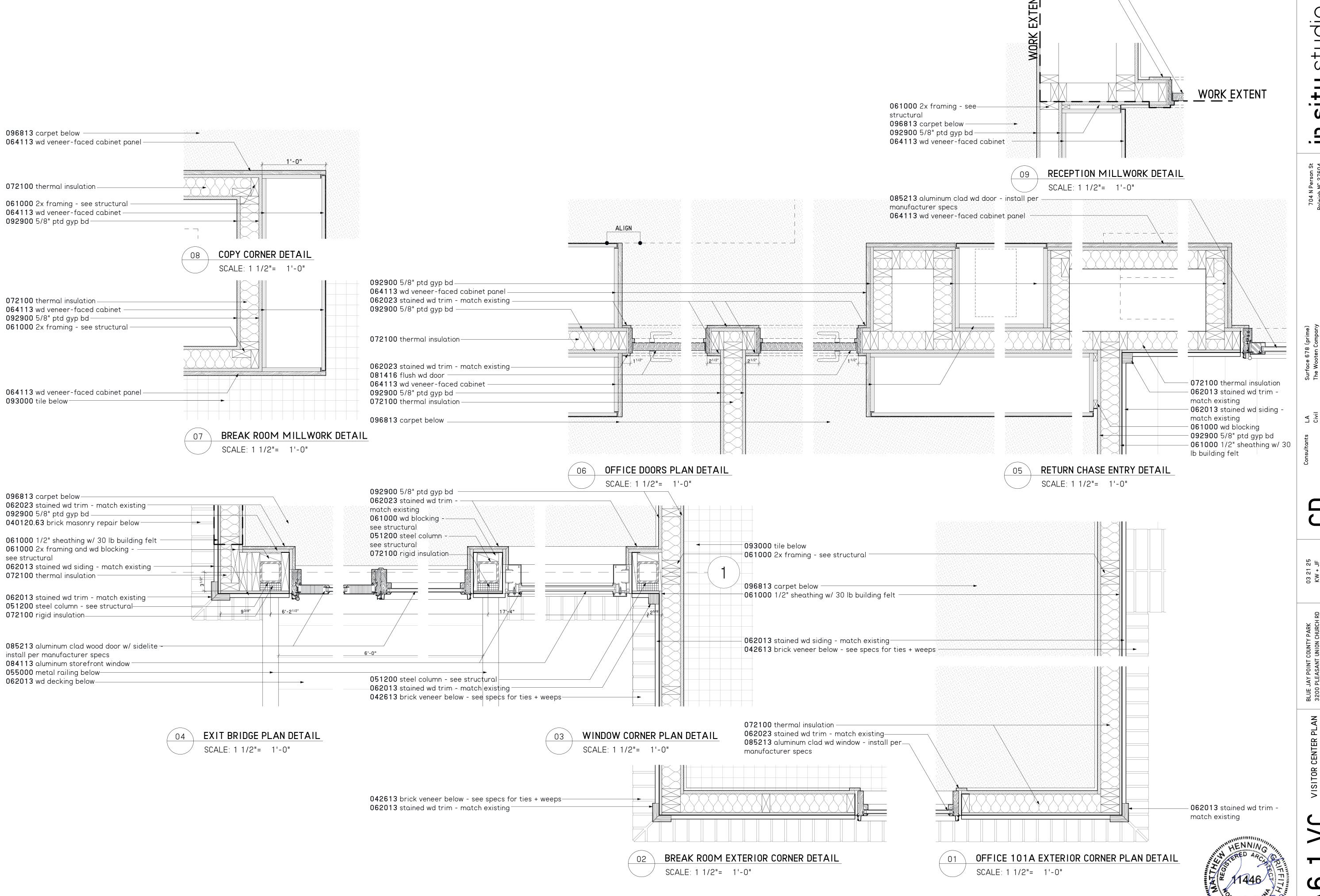












081416 flush wd door - existing 062023 stained wd trim - existing

> studio situ .⊑

704 N Person St Raleigh NC 27604 www.insitustudio.us

CD

03 21 25 KW + JF ale: as note

BLUE JAY POINT COUNTY PARK 3200 PLEASANT UNION CHURCH RD RALEIGH, NC 27614

VISITOR CENTER F DETAILS

0

GENERAL STRUCTURAL NOTES

GENERAL

THESE DRAWINGS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE THE PROPERTY OF LYSAGHT & ASSOCIATES, P.A., FOR USE SOLELY WITH THIS PROJECT AND SHALL NOT BE REPRODUCED FOR OTHER PURPOSES.

THE PROFESSIONAL ENGINEER WHOSE SEAL APPEARS ON THESE DRAWINGS IS THE PROJECT STRUCTURAL ENGINEER-OF-RECORD (SER) WHO BEARS LEGAL RESPONSIBILITY FOR THE PERFORMANCE OF THE STRUCTURAL FRAMING RELATING TO PUBLIC HEALTH, SAFETY AND WELFARE. NO OTHER PARTY, WHETHER OR NOT A PROFESSIONAL ENGINEER, MAY COMPLETE, CORRECT, REVISE, DELETE OR ADD TO THESE CONSTRUCTION DOCUMENTS OR PERFORM INSPECTIONS OF THE WORK WITHOUT THE WRITTEN PERMISSION OF THE SER.

USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH JOB SPECIFICATIONS, AND OTHER DRAWINGS.

SECTIONS AND DETAILS SHOWN SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.

ALL NON-STRUCTURAL ELEMENTS INDICATED ON THE DRAWINGS HAVE BEEN SHOWN IN GENERAL RELATIONSHIP TO THE STRUCTURAL ELEMENTS. THEY SHALL NOT BE ASSUMED TO BE ACCURATE AND REFERENCE MUST BE MADE TO THE APPROPRIATE CONSULTANT(S) PLANS AND SPECIFICATIONS.

CONTRACTOR SHALL VERIFY ALL CONDITIONS IN THE FIELD AND TAKE ALL NECESSARY FIELD MEASUREMENTS.

THE STRUCTURE SHOWN ON THESE DRAWINGS IS STRUCTURALLY SOUND ONLY IN ITS COMPLETED FORM. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BRACING TO STABILIZE THE BUILDING DURING CONSTRUCTION.

LATERAL LOAD RESISTING SYSTEM

LATERAL STABILITY FOR THE BUILDING WILL BE PROVIDED BY SHEAR WALLS AND MOMENT FRAMES AS SHOWN ON THE DRAWINGS.

DIMENSIONS

THE CONTRACTOR, BEFORE STARTING ANY WORK, SHALL CHECK ALL DIMENSIONS GIVEN ON THE STRUCTURAL DRAWINGS, RELATING TO GRID LINES, COLUMN AND WALL LOCATIONS, STRUCTURAL AND FINISHED FLOOR ELEVATIONS, MEMBER SIZES, ETC., WITH THE ARCHITECTURAL DRAWINGS. IF ANY DISCREPANCY IS NOTICED, IT SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER AND WORK SHALL NOT COMMENCE UNTIL INSTRUCTIONS ARE RECEIVED FROM THE ENGINEER.

THE CONTRACTOR SHALL SEEK INSTRUCTION FROM THE ENGINEER FOR ANY DIMENSION NOT GIVEN OR OBTAINABLE FROM THE DRAWINGS. THE CONTRACTOR SHALL NOT USE SCALE TO OBTAIN OR VERIFY ANY DIMENSION SHOWN ON THESE DRAWINGS.

SCOPE OF STRUCTURAL ENGINEERING SERVICES

THE STRUCTURAL ENGINEER HAS PERFORMED THE STRUCTURAL DESIGN AND REVIEWED THE ARCHITECTURAL PLANS FOR THIS PROJECT. SITE VISITS ARE ALSO INCLUDED IN THE FEE (IF THE ARCITECT, CONTRACTOR OR OWNER CONTACTS THE STRUCTURAL ENGINEER AT THE APPROPRIATE TIME). THE ARCHITECT, CONTRACTOR OR OWNER SHALL CONTACT THE STRUCTURAL ENGINEER AT THE FOLLOWING STAGES OF CONSTRUCTION FOR A FIELD REVIEW OF THE WORK:

- I. AFTERFOOTING EXCAVATION AND REBAR PLACEMENT, BEFORE CONCRETE IS POURED.
- 2. AFTER COMPLETION OF STEEL FRAMING SYSTEM, BEFORE INTERIOR FINISHES ARE INSTALLED.
- 3. AFTER COMPLETION OF THE WOOD FRAMING SYSTEM, BEFORE INTERIOR FINISHES ARE INSTALLED.
- 4. AT ANY STAGE OF CONSTRUCTION WHEN DESIGN OR CONSTRUCTION PROBLEMS ARE ENCOUNTERED.

A "CONSTRUCTION REVIEW REPORT" WILL BE SENT TO THE CONTRACTOR AND THE ARCHITECT FOLLOWING EACH FIELD TRIP.

THE STRUCTURAL ENGINEER IS RESPONSIBLE FOR THE DESIGN OF THE PRIMARY STRUCTURAL SYSTEM, EXCEPT FOR THE COMPONENTS NOTED ABOVE. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR ANY SECONDARY STRUCTURAL AND NON-STRUCTURAL SYSTEMS NOT SHOWN ON THE STRUCTURAL PLANS

THE STRUCTURAL ENGINEER HAS NOT DONE A SUBSURFACE INVESTIGATION (HE IS NOT A SOILS SPECIALIST). THE FOUNDATION DESIGN IS BASED UPON AN ASSUMED ALLOWABLE BEARING PRESSURE AS SHOWN IN THE "FOUNDATION" STRUCTURAL NOTES.

THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK; NOR WILL HE BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

FIELD MEASUREMENTS AND THE VERIFICATION OF FIELD DIMENSIONS ARE NOT PART OF LYSAGHT & ASSOCIATES' RESPONSIBILITY. THE CONTRACTOR SHALL CHECK ALL (ASSUMED) EXISTING CONDITIONS SHOWN ON THESE DRAWINGS FOR ACCURACY AND NOTIFY THE STRUCTURAL ENGINEER OF ANY DISCREPANCIES.

ANCHOR BOLT AFF ABOVE FINISH FLOOR ALLOWABLE STRESS DESIGN BUILT-UP B/U CENTER TO CENTER C/C CLNG CEILING COL COLUMN **DOUBLE JOIST** DOUBLE RAFTER **EXPANSION JOINT** EW **EACH WAY** FINISH FLOOR GLUED LAMINATED WOOD **HOLD DOWN** JOIST BEARING ELEVATION LBW LOAD BEARING WALL LLV LONG LEG VERTICAL LAMINATED VENEER LUMBER NTS NOT TO SCALE ON CENTER PARALLEL STRAND LUMBER (PARALLAM) PRESSURE TREATED STRUCTURAL ENGINEER-OF-RECORD S-P-F SPRUCE-PINE-FIR STD STANDARD STL STEEL SHEAR WALL SYP SOUTHERN YELLOW PINE TOF TOP OF FOOTING TOS TOP OF STEEL TYP TYPICAL **UPSIDE DOWN** UNO **UNLESS NOTED OTHERWISE**

CODE

NORTH CAROLINA STATE BUILDING CODE, 2018 EDITION

VERIFY IN FIELD

DESIGN DATA

ABBREVIATIONS

ALLOWABLE STRESS DESIGN OCCUPANCY CATEGORY	II	
FLOOR LIVE LOAD	50	PSF
ROOF DEAD LOAD		PSF
ROOF LIVE LOAD ATTIC LIVE LOAD		PSF PSF
GROUND SNOW LOAD		PSF
FLAT ROOF SNOW LOAD SNOW EXPOSURE FACTOR	15 1.0	PSF
SNOW LOAD IMPORTANCE FACTOR	1.0	
THERMAL FACTOR	1.1	
BASIC ULTIMATE WIND SPEED (3-SECOND GUST)		MPH
WIND IMPORTANCE FACTOR WIND EXPOSURE	I.0 B	
INTERNAL PRESSURE COEFFICIENT	+/- 0.18	
SEISMIC IMPORTANCE FACTOR		1.00
MAPPED SPECTRAL RESPONSE COEFFICIENT	Ss	0.147
MAPPED SPECTRAL RESPONSE COEFFICIENT	SI	0.074
SITE CLASS SPECTRAL RESPONSE COEFFICIENT	Sds	D 0.157
SPECTRAL RESPONSE COEFFICIENT	SdI	0.137
SEISMIC DESIGN CATEGORY	Sui	0.119 B

BASIC SEISMIC-FORCE-RESISTING SYSTEM (VISITOR'S CENTER): LIGHT-FRAME (WOOD) WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE AND STEEL ORDINARY MOMENT FRAMES

BASIC SEISMIC-FORCE-RESISTING SYSTEM (SHELTERS): ORDINARY REINFORCED CONCRETE MOMENT FRAMES

FOUNDATIONS

ALL FOOTINGS SHALL REST ON SOIL CAPABLE OF SAFELY SUPPORTING 2000 PSF. CONTACT STRUCTURAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE ENCOUNTERED.

FOOTINGS SHALL BE CARRIED TO A LOWER ELEVATION THAN THOSE INDICATED ON THESE DRAWINGS IF NECESSARY TO REACH FIRM UNDISTURBED SOIL.

THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 1'-4" BELOW FINISHED

ALL FILL SHALL BE PLACED IN 8" MAXIMUM LOOSE LIFTS AND SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-698 (STANDARD PROCTOR METHOD). THIS REQUIREMENT SHALL BE INCREASED TO 98 PERCENT OF ASTM D-698 IN THE FINAL FOOT BENEATH FLOOR SLABS AND PAVEMENTS.

THE SURFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE PROVIDED WITH ADEQUATE DRAINAGE AND SHALL BE GRADED SO AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS.

WHEN TOP OR SUBSOILS ARE EXPANSIVE, COMPRESSIBLE OR SHIFTING, SUCH SOILS SHALL BE REMOVED TO A DEPTH AND WIDTH SUFFICIENT TO ASSURE STABLE MOISTURE CONTENT IN EACH ACTIVE ZONE AND SHALL NOT BE USED AS FILL.

CONCRETE

CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH ACI 318, "BUILDING CODE REOUIREMENTS FOR REINFORCED CONCRETE." AND ACI 301. " SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS." ANY ADMIXTURES SHALL BE APPROVED BY THE STRUCTURAL ENGINEER.

CONCRETE SHALL BE NORMAL WEIGHT.

MINIMUM 28 DAY COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 3000 PSI.

REINFORCING STEEL

ALL DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE LATEST "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315.

REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60. CLEAR CONCRETE COVER OVER BARS SHALL BE 3" FOR FOOTINGS.

PROVIDE CORNER BARS AT ALL FOOTING STEPS AND CORNERS. BARS SHALL BE A MINIMUM OF 2'-6" LONG AND SHALL HAVE THE SAME SIZE AND SPACING AS HORIZONTAL REINFORCING.

LAP ALL SPLICES IN CONCRETE AS SPECIFICALLY CALLED FOR, BUT AT LEAST 36 BAR DIAMETERS (24" MINIMUM) FOR TENSION OR COMPRESSION, UNLESS NOTED OTHERWISE. LAP SPLICES IN GROUTED MASONRY 48 BAR DIAMETERS U.N.O.

PROVIDE DOWELS IN WALL FOOTINGS EQUIVALENT IN SIZE AND NUMBER TO VERTICAL STEEL EXTENDING 24 BAR DIAMETERS INTO FOOTING AND 36 BAR DIAMETERS INTO WALL, UNLESS NOTED OTHERWISE.

STRUCTURAL GLUED LAMINATED WOOD

MATERIALS, MANUFACTURE AND QUALITY CONTROL SHALL BE IN CONFORMANCE WITH AMERICAN NATIONAL STANDARD ANSI/AITC A 190.1 "STRUCTURAL GLUED LAMINATED

LAMINATING COMBINATIONS SHALL MEET THE REQUIREMENTS OF ANSI/AITC A 190.1, AND SHALL PROVIDE ALLOWABLE DESIGN VALUES OF 2400 PSI IN BENDING, 1700 PSI IN COMPRESSION PARALLEL TO GRAIN, 1150 PSI IN TENSION PARALLEL TO GRAIN, 450 PSI IN COMPRESSION PERPENDICULAR TO GRAIN, 200 PSI IN HORIZONTAL SHEAR, AND 1700000 PSI IN MODULUS OF ELASTICITY FOR DRY CONDITIONS OF SERVICE.

ADHESIVES SHALL MEET THE REQUIREMENTS FOR WET CONDITION OF SERVICE.

MEMBERS SHALL BE MARKED WITH QUALITY MARK, AND, IN ADDITION, A CERTIFICATE OF CONFORMANCE SHALL BE PROVIDED TO INDICATE CONFORMANCE WITH ANSI/AITC A 190.1.

THE FABRICATOR SHALL FURNISH CONNECTION STEEL AND HARDWARE FOR JOINING GLUED LAMINATED TIMBER MEMBERS TO EACH OTHER AND TO THEIR SUPPORTS EXCLUSIVE OF ANCHORAGE EMBEDDED IN MASONRY OR CONCRETE, SETTING PLATES, AND ITEMS FIELD-WELDED TO STRUCTURAL STEEL. METAL SHAPES TO HAVE ONE COAT OF SHOP APPLIED PAINT CONTAINING A RUST INHIBITOR.

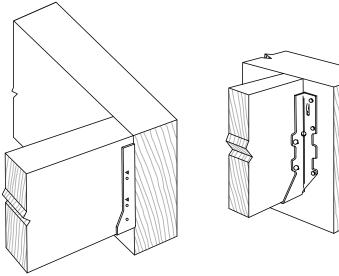
CAREFULLY UNLOAD AND HANDLE THE LAMINATED MEMBERS AT JOBSITE TO PREVENT SURFACE MARRING AND DAMAGE. IF LAMINATED WOOD IS TO BE STORED BEFORE ERECTION, PLACE IT ON BLOCKS WELL OFF THE GROUND WITH INDIVIDUAL MEMBERS SEPARATED BY STRIPS SO THAT AIR MAY CIRCULATE. COVER THE TOP AND SIDES OF STORAGE PILES WITH MOISTURE-RESISTANT COVERING. (DO NOT USE CLEAR POLYETHYLENE FILMS). WHEN HOISTING MEMBERS INTO PLACE USE PADDED OR NON-MARRING SLINGS, AND PROTECT CORNERS WITH WOOD BLOCKING. ADEQUATELY BRACE MEMBERS AS THEY ARE ERECTED TO HOLD THEM IN A SAFE POSITION UNTIL FULL STABILITY IS PROVIDED.

CONTRACTOR TO ENGAGE A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE PROJECT FOR ALL GLULAM CONNECTIONS. CONTRACTOR TO SUBMIT SIGNED AND SEALED CALCULATIONS AND SHOP DRAWINGS FOR REVIEW PRIOR TO COMMENCING FABRICATION OF GLULAM AND RELATED STEEL COMPONENTS.

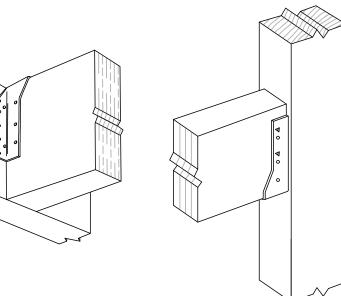
PRIOR TO FABRICATION, CONTRACTOR TO SUBMIT FOR REVIEW SHOP DRAWINGS INDICATING THE LAYOUT OF GLULAM MEMBERS, THE SPECIES AND LAMINATING COMBINATIONS, AND LARGE-SCALE DETAILS OF CONNECTIONS.

ALL GLULAM APPEARANCE GRADES TO BE ARCHITECTURAL PER AITC 110.

DO NOT CUT, DRILL, OR NOTCH GLULAM BEAMS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.



TYPICAL FACE MOUNTED HANGER TYPICAL CONCEALED HANGER



TYPICAL CONCEALED HANGER TO POST TYPICAL UPSIDE DOWN HANGER

SOLID WOOD FRAMING, HEADERS AND PLYWOOD

ALL SOLID WOOD FRAMING SHALL COMPLY WITH THE NATIONAL FOREST PRODUCTS ASSOCIATION "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION."

FLOOR AND ROOF JOISTS SHALL BE THE GRADE AND SPECIES SHOWN ON THE STRUCTURAL DRAWINGS.

PLYWOOD SHALL CONFORM TO THE AMERICAN PLYWOOD ASSOCIATION "PLYWOOD DESIGN SPECIFICATION". PLYWOOD SHALL BE CDX OR STRUCTURAL EQUIVALENT.

ALL MEMBERS SHALL BE FRAMED, ANCHORED, TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE NORTH CAROLINA STATE BUILDING CODE.

HEADERS OVER OPENINGS IN LOAD BEARING WALLS SHALL BE AS SHOWN AT THE "HEADER

USE LVL FOR ALL FLITCH BEAMS AND A36 STEEL FOR FLITCH PLATE. ATTACH THE MEMBERS TOGETHER WITH 5/8" DIAMETER BOLTS @ 16" O.C. STAGGERED, AND DOUBLE BOLTS AT BOTH ENDS. PROVIDE CONTINUOUS LATERAL SUPPORT FOR TOP OF BEAM. DO NOT SPLICE LVL BEAMS BETWEEN SUPPORT POINTS.

LVL HEADERS THAT ARE DOUBLED SHALL BE NAILED TOGETHER WITH 2 ROWS OF 16d NAILS @ 12" O.C. STAGGERED. PROVIDE CONTINUOUS LATERAL SUPPORT FOR TOP OF HEADER. STRENGTH OF LVL HEADERS SHALL BE EQUAL TO THAT PROVIDED BY MICROLAM HEADERS AS MANUFACTURED BY TRUS JOIST: $F_V = 285$ PSI, $F_D = 3100$ PSI, E = 2000 KSI.

PARALLAM, PARALLEL STRAND LUMBER (PSL), IS MADE FROM LONG, THIN STRANDS OF WOOD STRUCTURALLY BONDED TOGETHER IN A MICROWAVE PROCESS TO MAKE A LARGE CROSS-SECTION BEAMS AND COLUMNS. PARALLAM MEMBERS SHOWN ON THE DRAWINGS SHALL BE THE WIDTH SHOWN AND NOT BUILT UP FROM MULTIPLE PLIES. PARALLAM MEMBERS SHALL HAVE THE FOLLOWING MINIMUM STRUCTURAL PROPERTIES: Fv = 290 PSI, Fb = 2900 PSI, E = 2000 KSI. LVL CANNOT BE SUBSTITUTED FOR PARALLAM.

BUILT-UP STUD COLUMNS SHALL BE SECURELY NAILED TOGETHER TO ACT AS A COMPOSITE MEMBER. USE (2) 12d NAILS FOR EACH STUD AT 9" O.C. WITH NAILS INSTALLED ON ALTERNATE SIDES OF COLUMN.

THE HEIGHT OF STUD BEARING WALLS IS LIMITED TO 10' BETWEEN LATERAL BRACING UNLESS NOTED OTHERWISE ON THE DRAWINGS. CONTACT STRUCTURAL ENGINEER FOR STUD HEIGHTS GREATER THAN 10'-0". STUDS SHALL NOT BE SPLICED AT TALL WALLS, EXCEPT AT POINTS OF LATERAL SUPPORT.

AN EXTRA JOIST SHALL BE PLACED UNDER NON-LOAD BEARING PARTITIONS WHICH ARE ADDED DURING THE RENOVATION AND RUN PARALLEL TO THE FLOOR JOISTS. (THIS NOTE GOVERNS OVER INFORMATION SHOWN ON THE FRAMING PLANS.)

STRUCTURAL REQUIREMENTS IN 115 MPH WIND ZONE

FOUNDATIONS IN THE 115 MPH WIND ZONE SHALL BE AT LEAST 10" DEEP X 24" WIDE, REINFORCED WITH (3) #4'S OR (2) #5'S LOCATED 3" ABOVE THE BOTTOM OF FOOTING. THE REBARS SHALL BE CONTINUOUS WITH 18" MINIMUM LAPS AT SPLICES AND

PRESERVATIVE TREATED WOOD SILLS ON CONTINUOUS FOUNDATION WALLS SHALL BE ANCHORED WITH 1/2" BOLTS WITH 2 X 2 X 1/8 WASHERS SPACED NOT MORE THAN 4'-0" APART AND WHICH ARE EMBEDDED AT LEAST 8" IN CONCRETE OR 16" IN MASONRY UNITS. INSTALL TWO ANCHOR BOLTS WITHIN 6" OF THE CORNERS OF THE BUILDING, AT EACH DOOR AND WINDOW JAMB AND WITHIN 12" OF EACH END AT

INSTALL THREE STUDS (MIN) AT EVERY CORNER OF AN EXTERIOR WALL.

ALL EXTERIOR WALLS, AND INTERIOR SHEAR WALLS, SHALL BE FULLY SHEATHED WITH 7/16" STRUCTURAL SHEATHING TO PROVIDE LATERAL STRENGTH FOR WIND LOADS AND TO PROVIDE A CONTINUOUS TIE FROM ROOF DOWN TO THE FOUNDATION WALL. SHEATHING SHALL BE ATTACHED TO THE STUDS WITH 8d NAILS AT 4" O.C. ALONG THE PANEL EDGES AND 12" O.C. AT INTERMEDIATE LOCATIONS. BLOCK BETWEEN STUDS AT PLYWOOD JOINTS.

EACH RAFTER/ROOF JOIST, AND/OR ROOF TRUSS SHALL BE ATTACHED TO THE EXTERIOR WALL AND ANY BEARING WALL WITH A SIMPSON HURRICANE TIES.

SIZE	HANGER	ALLOW. LOAD
2 X 6	LUS26, LUC26Z	710#
(2) 2 X 6	HU26-2, HUC26-2	1190#
(3) 2 X 6	HU26-3, HUC26-3	1190#
2 X 8	LUS26, LUC26Z	710#
(2) 2 X 8	HU26-2, HUC26-2	1190#
(3) 2 X 8	HU26-3, HUC28-2	1190#
2 X 10	LUS210, LUC210Z	1150#
(2) 2 X 10	HU210-2, HUC210-2	2085#
(3) 2 X 10	HU210-3, HUC210-3	2085#
2 X 12	LUS210, LUC210Z	1150#
(2) 2 X 12	HU212-2, HUC212-2	2385#
(3) 2 X 12	HU212-3, HUC212-3	2385#
1 3/4 X 9 1/4 (9 1/2) LVL	HU9, HU C Q1.81/9-S DS	2000#
3 1/2 X 9 1/4 (9 1/2) LVL OR PSL	HGUS410, HUCQ410-SDS	9100#, 4500#
5 1/4 X 9 1/4 (9 1/2) LVL OR PSL	HGUS5.5/10, HUCQ610-8D8	5635#, 4680#
1 3/4 X 11 1/4 (11 7/8) LVL	HU11, HUC Q1.81/11-SDS	2500#
3 1/2 X 11 1/4 (11 7/8) LVL OR PSL	HG US412, HUC Q412-SDS	9400#, 5045#

1. LOAD VALUES SHOWN IN THE TABLE ABOVE DO NOT INCLUDE THE LOAD DURATION FACTOR.

2. USE HANGER PER SCHEDULE ABOVE UNLESS SPECIFIED DIFFERENTLY ON FRAMNG PLAN. ALL FLUSH WOOD/WOOD CONNECTIONS SHALL BE MADE WITH HANGERS. OTHER HANGERS MAY BE SUBSTITUTED FOR THOSE SHOWN IF DESIGN VALUES ARE EQUAL TO OR GREATER THAN THOSE IN THE TABLE.

3. IN STALL HANGERS PER MAN UFACTURER'S SPECIFICATIONS.

USE STAINLESS STEEL HANGERS IF EXPOSED TO THE ELEMENTS OR IN CONTACT WITH TREATED WOOD. (GALVANIZED HANGERS MAY BE USED IN LIEU OF STAINLESS STEEL IF SPECIFICALLY RECOMMENDED BY SIMPSON AND THE TREATING COMPANY.)



声画: 55 S **—** • • • Ш 뚭

O Δ $\mathbf{\Omega}$

DATE: 03/21/25 GTH DRAWN:

CHECKED: APPROVED: CAL

FLOOR FRAMING NOTES

- I. REFER TO ARCHITECTURAL PLANS FOR ALL DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
- 2. SUBFLOOR SHALL BE 3/4" T&G PLYWOOD WITH A 40/24 APA RATING. USE SOUTHERN PINE, CDX OR STRUCTURAL EQUIVALENT.
- 3. ALL EXTERIOR WALLS ARE LOAD BEARING. INTERIOR LOAD BEARING WALLS ARE SHADED. JOISTS MAY BE SPLICED OVER LOAD BEARING WALLS, BUT SHALL NOT BE SPLICED OVER NON-LOAD BEARING WALLS.
- 4. FLUSH HEADER TO HEADER CONNECTIONS SHALL BE WITH STEEL HANGERS. SEE SCHEDULE AND DETAILS.
- 5. USE A DOUBLE JOIST UNDER ALL NON-LOAD BEARING WALLS THAT RUN PARALLEL TO THE JOISTS.

FOOTING	SCHEDULE		
MK#	SIZE	REINFORCING	NOTES
WF2.0	2'-0" WIDE X 12" THICK	(3) #4 OR (2) #5 CONT.	AT FOUNDATION WALL
F2.0	2'-0" × 2'-0" × 10"	UNREINFORCED	PIER FOOTING
F3.0	3'-0" × 3'-0" × 10"	UNREINFORCED	PIER FOOTING
BF26	2'-0" X 6'-0" X I2"	SEE DETAIL 01/S4.1 AND 04/S4.1	BRIDGE FOOTING

NOTES

I. REINFORCING TO BE LOCATED 3" CLEAR FROM BOTTOM OF FOOTING AND 2" CLEAR FROM TOP.

STEEL COLUMN SCHEDULE									
MK#	COLUMN SIZE		BASE PLATE		A.B.'S	A.B.	NOTES		
I'IN#	COLOMIN SIZE	WIDTH	LENGTH	THICK.	A.D. 3	PATTERN			
CI	HSS 4 X 4 X 3/8	7	12	0.75	(4)1/2"	9 X 4	1, 2, 3		

NOTES

- I. TUBE COLUMNS ARE ASTM A500 (Fy = 46 KSI)
- 2. USE F1554 (GRADE 36) A.B.'S WITH WASHERS AND HEAVY HEX NUTS BOTH ENDS.
- 3. A.B.'S SHALL HAVE 16" MIN. PROJECTION IN SOLID GROUTED CMU.

FIRST FLO	OR FRAMING	SCHEDULE		
MK#	SIZE	MATERIAL	GRADE	NOTE
FJI	2 X 6	SYP	#2	I
ВЈІ	2 X 8	SYP	#2	1, 2
FGI	(4) 2 X I2	SYP	#2	I
BGI	(3) 2 X 8	SYP	#2	1, 2

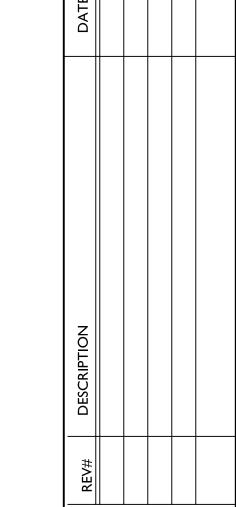
END REA	CTIONS
RyL	RyS
0.3	0.3
0.3	0.3
3.7	3.7
2.1	2.1

NOTES

- I. SIZE SHOWN IS NOMINAL
- 2. MATERIAL SHALL BE PRESSURE TREATED FOR EXTERIOR USE.



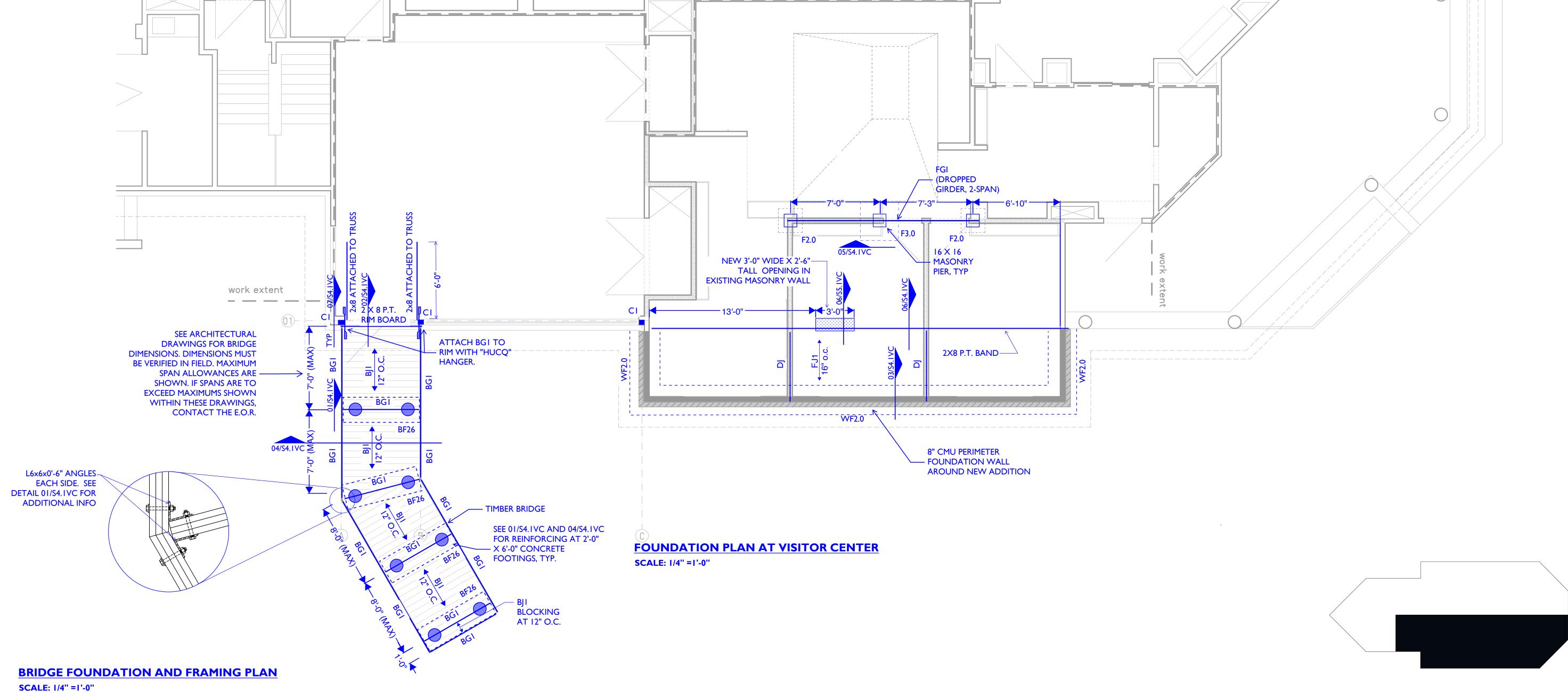




COUNT POINT

BLUE DRAWN: CHECKED: __

APPROVED: CAL



ROOF FRAMING NOTES

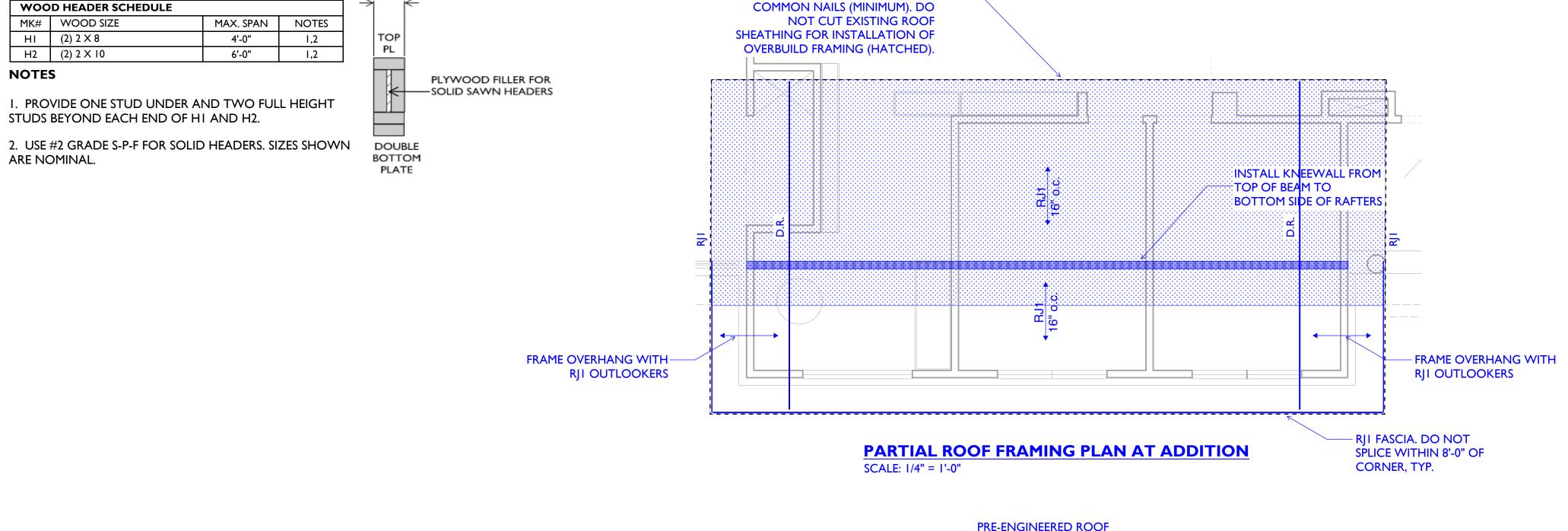
- I. SEE ARCHITECTURAL PLANS FOR ROOF PITCH. REFER TO ARCHITECTURAL PLANS FOR ALL DIMENSIONS.
- 2. USE APA RATED ROOF SHEATHING: 32/16, 5/8" MINIMUM THICKNESS. USE 8d NAILS AT 6" OC ALONG THE PANEL EDGES AND 12" OC ALONG INTERMEDIATE SUPPORTS. PANELS SHALL BE CONTINUOUS OVER TWO OR MORE ROOF JOISTS WITH THE LONG DIMENSION (STRENGTH AXIS) ACROSS THE ROOF JOISTS.
- 3. COORDINATE OPENINGS IN THE ROOF FRAMING WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS. OPENINGS LARGER THAN 6" BUT LESS THAN 14" SHALL BE FRAMED ON ALL SIDES WITH 2 X 4 HEADERS. CONTACT STRUCTURAL ENGINEER FOR OPENINGS GREATER THAN 14" WIDE.
- 4. BUY FULL LENGTH RAFTERS; DO NOT SPLICE.

5. AT INTERSECTIONS BETWEEN JOISTS AND FLUSH BEAMS, JOIST SHALL BE ATTACHED TO FLUSH BEAM WITH SIMPSON FACE HANGERS, INSTALLED PER MANUFACTURER SPECIFICATIONS.

STUD C	STUD COLUMN SCHEDULE										
2 X	4 STUD WA	ALLS									
MK#	SIZE	NOTES									
4SC2	(2) 2 X 4	I									
4SC3	(3) 2 X 4	I									
4SC4	(4) 2 X 4	1									

HEADER.

- I. BUILT-UP STUD COLUMNS SHALL BE SECURELY NAILED TOGETHER TO ACT AS A
- COMPOSITE MEMBER. USE (2) 12d NAILS FOR EACH STUD AT 10" O.C.
- NOTES

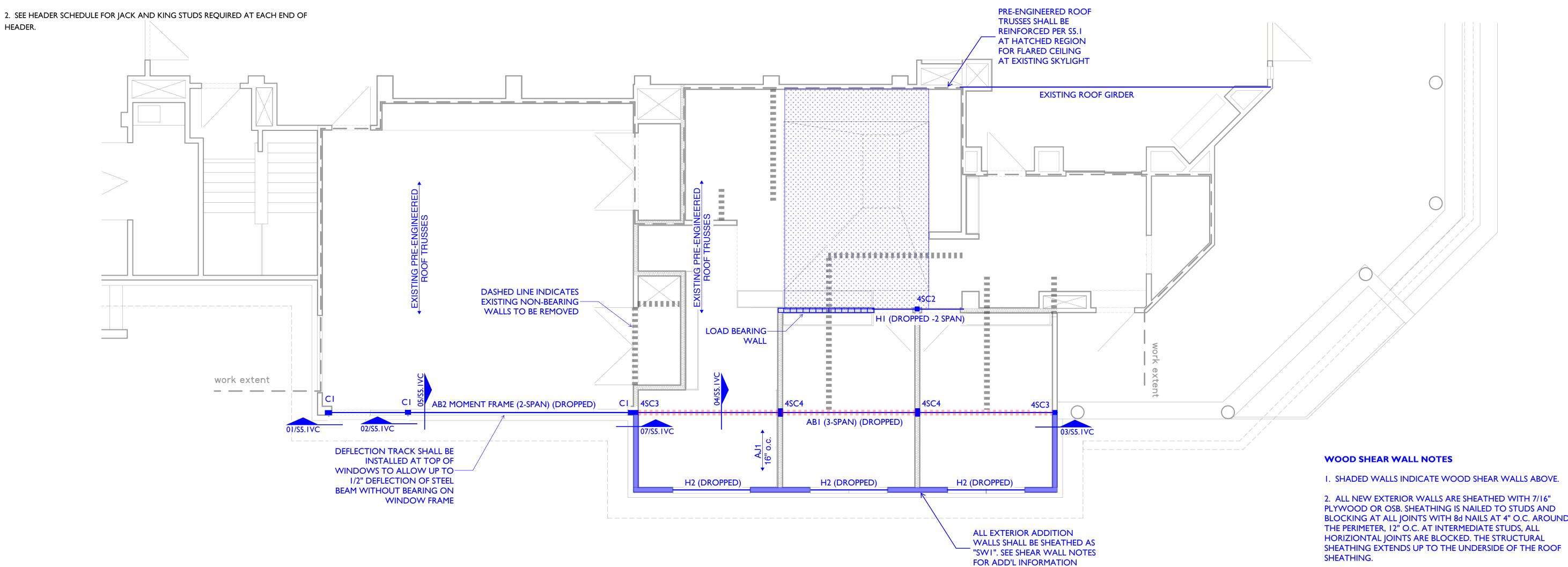


FLAT 2XI0 PLATE FASTENED TO -

EACH TRUSS WITH (3)16d

2 X 4

WALL



OOF FRAM	IING SCHEDULE		END REA	CTIONS			
MK#	MK# SIZE		GRADE	NOTE RyL		RyL	RyS
AJI	2 X 6	S-P-F	#2	I	Γ	0.1	0.1
RJI	2 X 6	S-P-F	#2	I		0.2	0.2
ABI	3.5 X 9.25	LVL	3100F	2		3.6	3.6
AB2	W10 X 26	STEEL	A992	3	Ι Γ	5.8	5.8

NOTES

- I. SIZE SHOWN IS NOMINAL
- 2. SIZE SHOWN IS ACTUAL
- 3. STEEL BEAM SHALL BE SHOP FABRICATED WITH 9/16" DIAMETER HOLES IN TOP AND BOTTOM FLANGE AT 24" O.C. STAGGERED FOR ATTACHMENT OF 2X6 WOOD PLATE WITH 1/2" DIAMETER BOLTS. NUTS/WASHERS SHALL BE COUNTERSUNK 0.5" INTO PLATE FOR FLUSH ATTACHMENT. IN ADDITION, FABRICATE BEAM WITH 9/16" DIA HOLES AT 24" O.C. STAGGERED AT BEAM WEB FOR ATTACHMENT OF WEB BLOCKING AS REQUIRED
- FOR ATTACHMENT OF FINISHES.





BLUE DRAWN: CHECKED: _ APPROVED: CAL

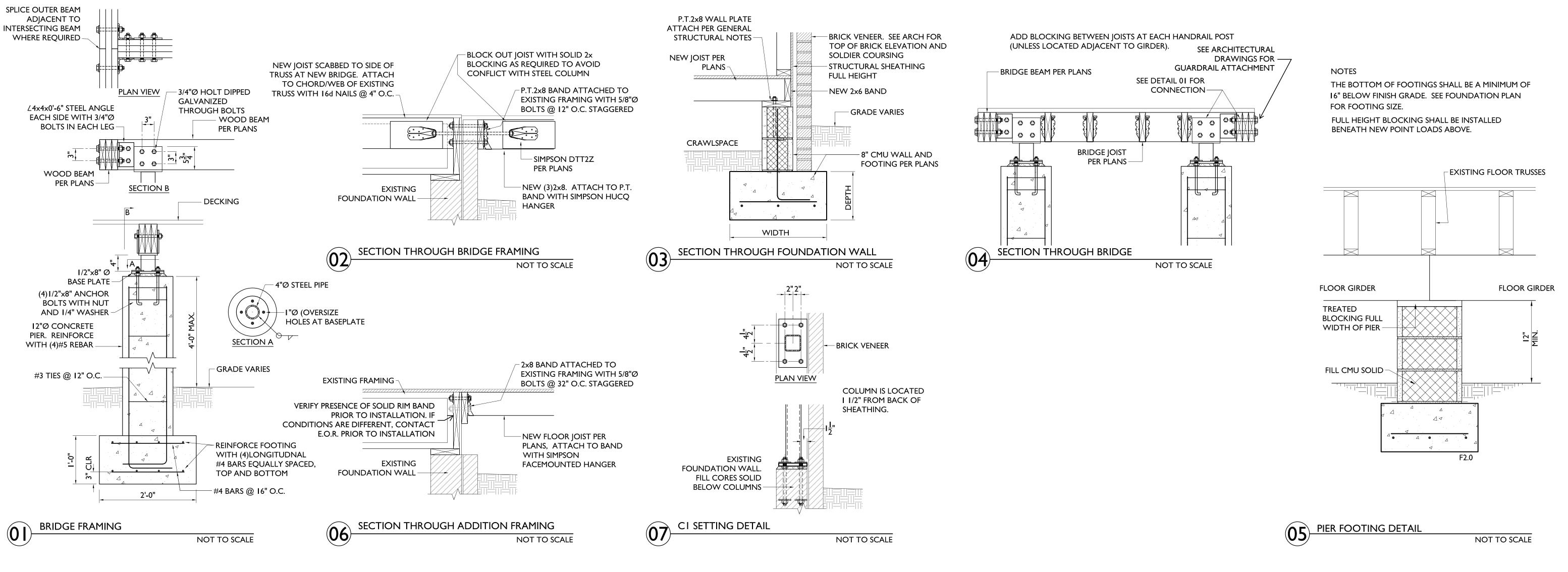
NOO

s Street 27605 0 4 9 5 ates.com - 0 6 2 1

CHTES CIRTES

1055H 1055H 1055H

뜮





BLUE JAY POINT COUNTY PARK

DATE: 03/21/25

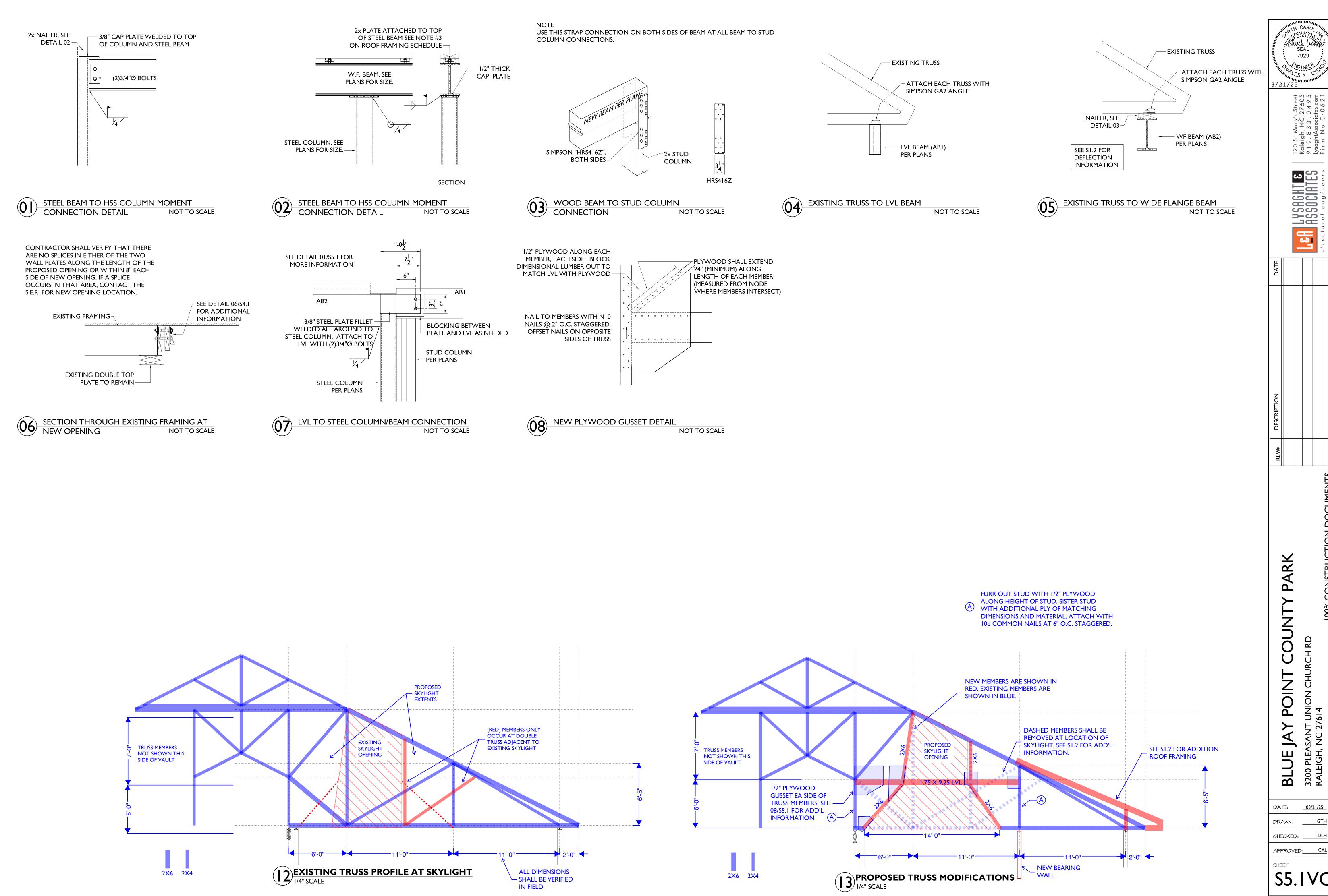
DRAWN: GTH

CHECKED: DLH

APPROVED: CAL

SHEET

S4. IVC



Docusign Envelope ID: 4225CD6F-E426-496B-B05C-5A9CA6D425D2

PLUMBING LEGEND SYMBOL SCHEDULE ABBREVIATIONS → DOMESTIC COLD WATER ABOVE FINISH CEILING HD **HUB DRAIN** GCO GRADE CLEANOUT AFF ABOVE FINISH FLOOR ■ DOMESTIC HOT WATER SUPPLY HWS HOT WATER SUPPLY AFG ABOVE FINISH GRADE ———— DOMESTIC HOT WATER RETURN AFH ANTI-FREEZE HYDRANT HWR HOT WATER RETURN AIR ADMITTANCE VALVE IW INDIRECT WASTE AAV BELOW FINISHED FLOOR BFF LAV LAVATORY CAST IRON NON-POTABLE CO CLEANOUT TYPICAL CW COLD WATER URINAL DNT DO NOT TAP VENT VTR VENT THRU ROOF **EWC** ELECTRIC WATER COOLER WASTE (EX) / (E) EXISTING FCO WATER CLOSET FLOOR CLEANOUT FD FLOOR DRAIN WALL CLEANOUT PIPE ELBOW TURNS DOWN; UP FDP FLOOR DRAIN PARKING WATER HAMMER FPHB FREEZE-PROOF HOSE BIBB ARRESTOR PIPE TEES DOWN; UP GPH GALLONS PER HOUR YARD CLEANOUT YCO HB HOSE BIBB PIPE CAP CONNECT TO EXISTING BALL VALVE POINT OF DEMOLITION CHECK VALVE CIRCUIT SETTER FLOOR CLEANOUT END-OF-LINE CLEANOUT CLEANOUT AT FINISH WALL

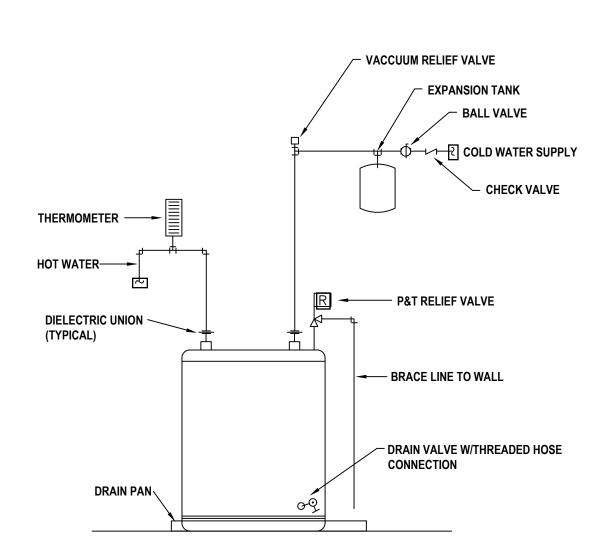
	PLUMBING FIXTURE SCHEDULE											
MARK	FIXTURE	FIXTU	RE				FAUC	ET			REMARKS	COMPLIES WITH
IVIAIXIX	TIXTOIL	SPECIFICATION/DESCRIPTION	SAN	VENT	PICTURE	DESCRIPTION	COLD WATER	HOT WATER	FLOW RATE	PICTURE	INLIVIANNO	ADA
<u>KS-1</u>	KITCHEN SINK	RUVANTI RVH8003, 33"X22"X9", SINGLE BOWL, 16 GA STAINLESS STEEL CONSTRUCTION, TOP MOUNT, REAR DRAIN, BOTTOM RINSE GRID	1½"	1½"		DELTA 9659T-DST OR EQUAL SINGLE HANDLE KITCHEN FAUCET WITH SPRAY. 1.5GPM SPOUT. CHROME FINISH. PROVIDE WITH VANDAL-PROOF AERATOR.	1/2"	½"	1.5GPM		PROVIDE TURN BALL VALVES, AND P-TRAP W/CLEANOUT. PROVIDE CASEWORK COORDINATION DRAWING WITH SUBMITTAL DATA TO VERIFY PROPOSED SINK AND TRAP CAN BE PROPERLY INSTALLED WITHOUT MODIFICATIONS.	Ğ

PLUMBING FAUCETS SPECIFIED ARE GENERALLY DELTA. FAUCETS AS MANUFACTURED BY T&S BRASS OR CHICAGO MAY BE SUBMITTED FOR APPROVAL PROVIDED THE SELECTION IS STRICTLY APPROVED EQUIVALENT.

	ELECTRIC WATER HEATER SCHEDULE												
MARK	SPECIFICATION/DESCRIPTION SPECIFICATION/DESCRIPTION GALLON CAPACITY GALLON CAPACITY FIRST HOUR RATING GAL./HR ANN. GALLONS FIRST HOUR RATING GAL./HR MIN. GALLONS FIRST HOUR RATING GAL./HR MIN. GALLONS FOR TOTAL SERVICE DIMENSIONS DIME						REMARKS]						
EWH-1	BREAKROOM 102	AO SMITH PROLINE EJCS-20	19	17	ST	11	120	1	2500	24	24	18	COORDINATE INSTALLATION WITH NEW CASEWORK. REFER TO ARCH. PLANS

NOTES:

1. WATER HEATERS BY RHEEM, SIEBEL, AND STATE SHALL BE CONSIDERED EQUALS.



ELECTRIC WATER HEATER DETAIL Scale: NONE

GENERAL PLUMBING NOTES

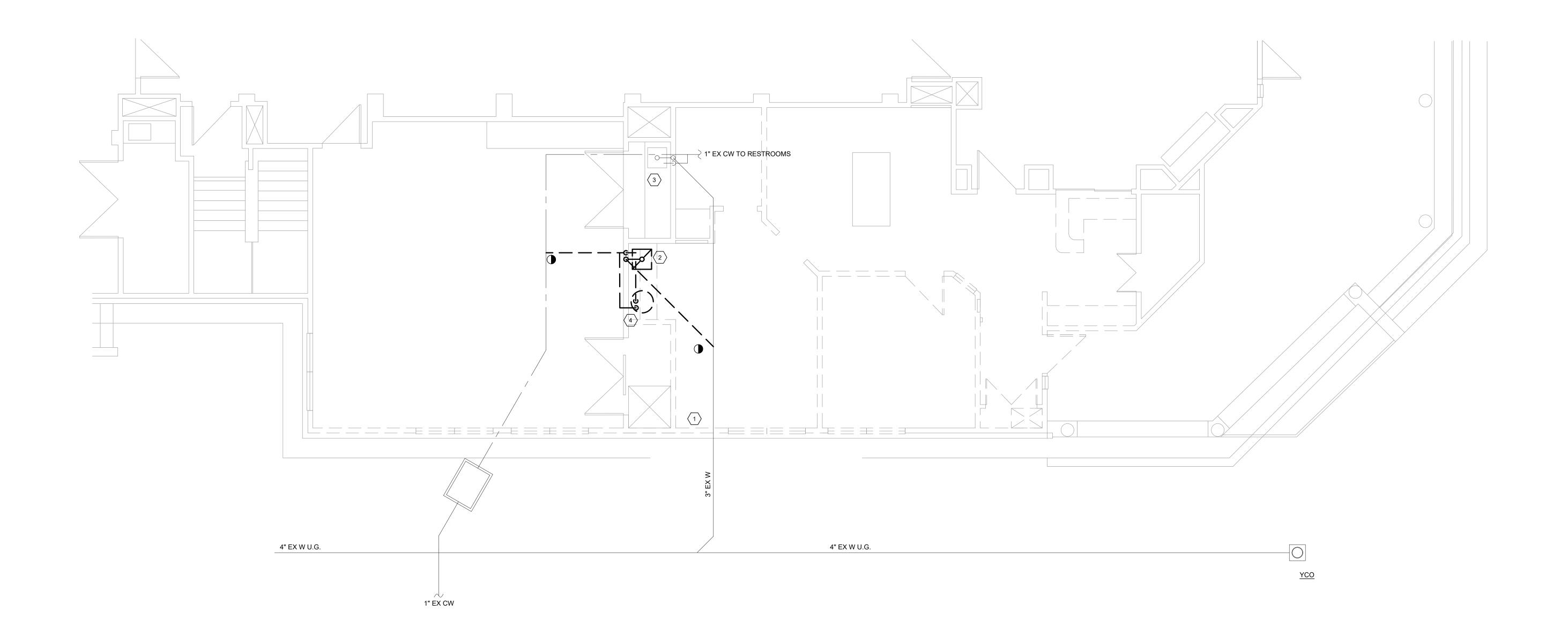
- NOT ALL SYMBOLS AND ABBREVIATIONS SHOWN ON THIS DRAWING MAY BE USED ON THIS PROJECT
- ALL PLUMBING WORK SHALL BE FURNISHED AND INSTALLED PER THE STATE OF NORTH CAROLINA BUILDING CODE: PLUMBING CODE 2018.
- UNLESS OTHERWISE NOTED ON DRAWINGS, ALL 1½"-2½" SANITARY WASTE AND VENT PIPING SHALL BE RUN AT ¼" PER FT SLOPE. ALL 3"-6" SANITARY WASTE AND VENT PIPING SHALL BE RUN AT %" PER FT SLOPE. ALL WASTE AND VENT PIPING 8" OR LARGER SHALL BE RUN AT 1/16" PER FT SLOPE. ALL STORM DRAINAGE PIPING SHALL BE RUN AT 1/2" PER FT
- THE DESIGN/DETAIL/SCHEDULE SHOWN IS BASED ON (MANUFACTURER, MODEL) EQUIPMENT AND IS INTENDED ONLY TO SHOW THE GENERAL SIZE, CONFIGURATION, LOCATION, CONNECTIONS, AND/OR SUPPORT FOR EQUIPMENT OR SYSTEMS SPECIFIED WITH RELATION TO THE OTHER BUILDING SYSTEMS.
- INSTALL ALL PIPING AT THE MAXIMUM ELEVATION POSSIBLE. PROVIDE ALL FITTINGS, TRANSITIONS AND MATERIALS REQUIRED TO ACHIEVE MAXIMUM ELEVATION. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO THE START OF WORK TO AVOID CONFLICTS.
- CONTRACTOR SHALL FURNISH ALL DISCONNECTS REQUIRED FOR PLUMBING EQUIPMENT.
- CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL MANUFACTURER SUBSTITUTIONS OF PLUMBING EQUIPMENT. SUBMIT A DESCRIPTION OF ANY/ALL CHANGES REQUIRED BY THE SUBSTITUTION, INCLUDING ELECTRICAL AND MECHANICAL CONNECTIONS, SIZES, WEIGHTS, AND CLEARANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL COST ASSOCIATED WITH THE SUBSTITUTION.
- THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS. THE CONTRACTOR SHALL INFORM THE ARCHITECT AND/OR ENGINEER OF ANY CONFLICTS AS SOON AS THEY ARE DETECTED.
- CONTRACTORS MUST CAREFULLY COORDINATE THE ARRANGEMENT AND INSTALLATION OF THE DUCT, PIPING, AND CONDUIT IN THE MECHANICAL CHASES PRIOR TO THE START OF WORK. ALL PENETRATIONS SHALL BE SLEEVED AND FIRE-PROOFED.
- 10. ALL WORK SHALL BE NEW AND PROVIDED UNDER THIS CONTRACT UNLESS SPECIFICALLY MARKED "EX", "EXISTING", OR "EXIST.".
- 11. VERIFY LOCATIONS AND DIMENSIONS OF ALL EXISTING EQUIPMENT AND COORDINATE ALL WORK PRIOR TO THE START OF CONSTRUCTION.
- 12. THESE DRAWINGS ARE NECESSARILY DIAGRAMMATIC IN NATURE. NOT ALL FITTINGS, OFFSETS, VENTS, OR DRAINS ARE SHOWN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING AND INCLUDE ALL FITTINGS, OFFSETS, VENTS, AND DRAINS AS REQUIRED TO PROVIDE A COMPLETE AND FUNCTIONING SYSTEM.

SPECIFICATIONS: REFER TO PROJECT MANUAL FOR COMPLETE JOB REQUIREMENTS

- 1.1 VIBRATION CONTROL AND SEISMIC-RESTRAINT DEVICE INSTALLATION
- A. Installation of vibration isolators must not cause any change of position of equipment, piping, or ductwork resulting in stresses or misalignment.
- B. Equipment Restraints:
- 1. Install seismic snubbers on plumbing equipment mounted on vibration isolators. Locate snubbers as close as possible to vibration isolators and bolt to equipment base and supporting structure.
- 2. Install resilient bolt isolation washers on equipment anchor bolts where clearance between anchor and adjacent surface exceeds 0.125 inch (3.2 mm).
- 3. Install seismic-restraint devices using methods approved by an agency acceptable to authorities having jurisdiction that provides required submittals for
- E. Piping Restraints:
- 1. Comply with requirements in MSS SP-127.
- Space lateral supports a maximum of 40 feet (12 m) o.c., and longitudinal supports a
- 2. Brace a change of direction longer than 12 feet (3.7 m).
- F. Install cables so they do not bend across edges of adjacent equipment or building
- G. Install bushing assemblies for anchor bolts for floor-mounted equipment, arranged to
- provide resilient media between anchor bolt and mounting hole in concrete base. H. Install bushing assemblies for mounting bolts for wall-mounted equipment, arranged to provide resilient media where equipment or equipment-mounting channels are attached to wall.
- I. Attachment to Structure: If specific attachment is not indicated, anchor bracing to structure at flanges of beams, at upper truss chords of bar joists, or at concrete members.
- J. Drilled-in Anchors:
- 1. Identify position of reinforcing steel and other embedded items prior to drilling holes for anchors. Do not damage existing reinforcing or embedded items during coring or drilling. Notify the structural engineer if reinforcing steel or other embedded items are encountered during drilling. Locate and avoid prestressed
- tendons, electrical and telecommunications conduit, and gas lines. 2. Do not drill holes in concrete or masonry until concrete, mortar, or grout has
- achieved full design strength. 3. Wedge Anchors: Protect threads from damage during anchor installation. Heavy-duty sleeve anchors shall be installed with sleeve fully engaged in the structural element to which anchor is to be fastened.
- 4. Set anchors to manufacturer's recommended torque, using a torque wrench.
- 5. Install zinc-coated steel anchors for interior and stainless-steel anchors for exterior applications.

- 2.1 SUPPLY WATER PIPING SCHEDULE
- A. Transition and special fittings with pressure ratings at least equal to piping rating may be used in applications below unless otherwise indicated.
- B. Flanges and unions may be used for aboveground piping joints unless otherwise
- C. Under-building-slab, domestic water, building service piping, NPS 3 and smaller, shall be the following:
- 1. Soft copper tube, ASTM B 88, Type K; wrought-copper solder-joint fittings; and
- 2. Concrete-lined DIP with integral flanges. "Mega Lug" type fittings will not be
- D. Aboveground domestic water piping, NPS 1" and smaller except for flush valves shall be the following:
- 1. Hard copper tube, ASTM B 88, Type L wrought-copper solder-joint fittings; and soldered joints.
- Aboveground domestic water piping, NPS 11/4" and larger and for all flush valves shall be the following:
- 1. Hard copper tube, ASTM B 88, Type M copper with brazed joints and fittings.
- 2.1 WASTE AND VENT PIPING APPLICATIONS
 - A. Special pipe fittings with pressure ratings at least equal to piping pressure ratings may be used in applications below, unless otherwise indicated.
 - B. Above ground Waste, Vent piping
 - 1. Hub and Spigot Schedule 40 Cast Iron.

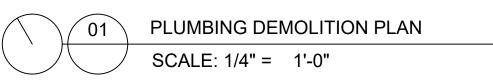
 - C. Roof leader and storm piping shall be 1. Hub and Spigot Schedule 40 Cast Iron.
 - D. Underground, storm drain, soil, waste, and vent piping NPS 5 (DN 125) and smaller shall be the following:
 - 1. Hub and Spigot Schedule 40 Cast Iron.
- 3.1 INDOOR PIPING INSULATION SCHEDULE
- A. Domestic Hot and Recirculated Hot Water: Insulation shall be one of the following:
- Flexible Elastomeric:
- a. Pipes 1" and larger 1 inch (25 mm) thick.
- 2. Mineral-Fiber, Preformed Pipe Insulation, Type I: a. Pipes 1" and larger 1 inch (25 mm) thick.
- B. Domestic Cold Water (Potable): Insulation shall be one of the following:
- 1. Flexible Elastomeric: 1 inch (25 mm)] thick.
- 2. Mineral-Fiber, Preformed Pipe Insulation, Type I: 1 inch (25 mm) thick.
- C. Stormwater and Overflow: Insulation shall be one of the following:
- 1. Flexible Elastomeric: 1 inch (25 mm) thick. 2. Mineral-Fiber, Preformed Pipe Insulation, Type I: 1 inch (25 mm) thick.
- D. Roof Drain and Overflow Drain Bodies: Insulation shall be one of the following:
- 1. Flexible Elastomeric: 1 inch (25 mm)] thick.
- 2. Mineral-Fiber, Preformed Pipe Insulation, Type I: 1 inch (25 mm) thick.

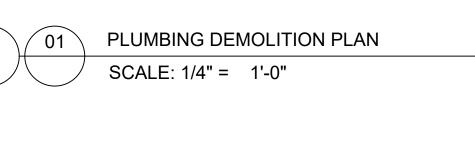


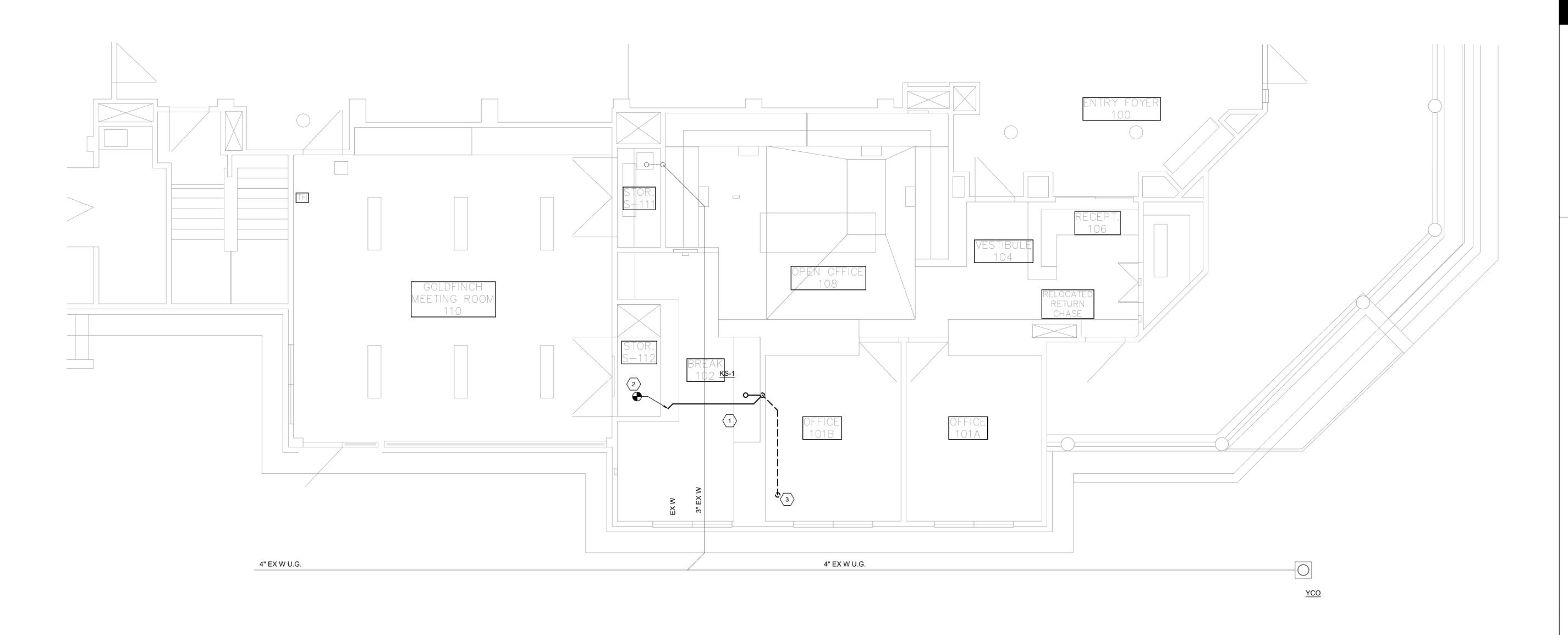
GENERAL NOTES:

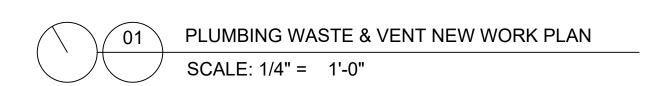
CONTRACTOR SHALL FIELD VERIFY ALL EXISTING HVAC SERVICES AND EQUIPMENT PRIOR TO DEMOLITION.

- REMOVE EXISTING PVC WASTE LINE BACK TO POINT INDICATED. PRESERVE CONNECTION TO OUTSIDE UNDERGROUND FOR RECONNECTION TO NEW SINKS REFER TO P200 FOR MORE INFORMATION.
- REMOVE EXISTING SINK INCLUDING ALL WASTE AND VENT PIPING. REMOVE ALL SUPPLY WATER PIPING. PRESERVE VTR AND PREPARE FOR RE-USE WITH NEW SYSTEM. REFER TO P200 FOR MORE INFORMATION
- 3 EXISTING SINK TO REMAIN.
- CAREFULLY DISCONNECT AND REMOVE EXISTING LOW BOY WATER HEATER AND TURN OVER TO OWNER.





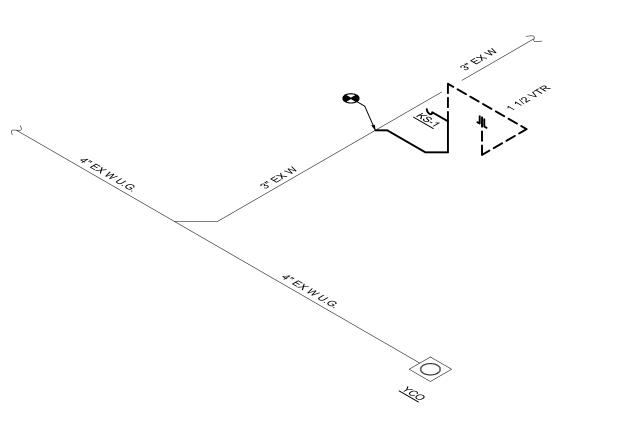




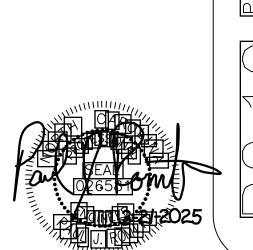
GENERAL NOTES:

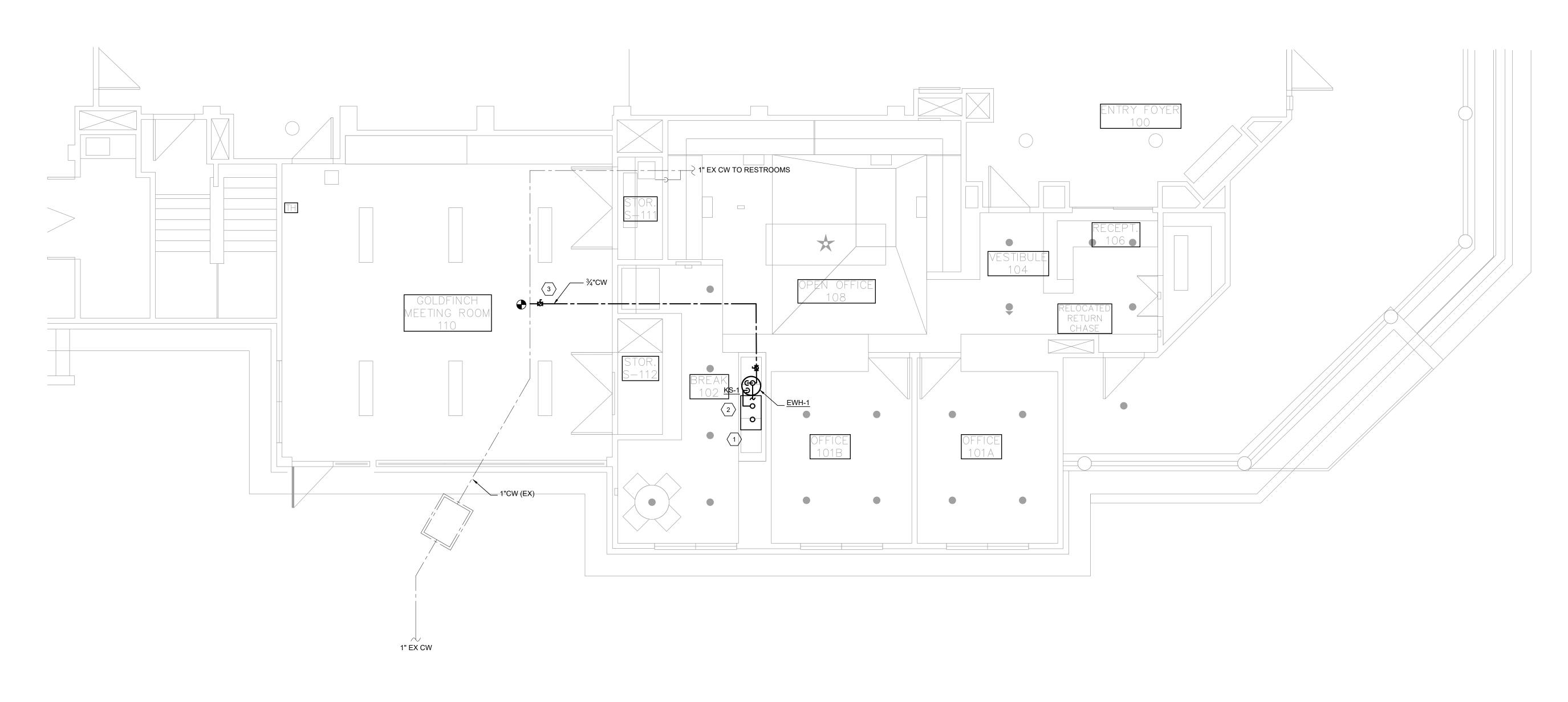
 CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PLUMBING SERVICES AND EQUIPMENT PRIOR TO DEMOLITION.
 G.C. AND DIV 22 CONTRACTOR SHALL COORDINATE LOCATION OF ALL EQUIPMENT, DEVICES, AND PENETRATIONS WITH ARCHITECT PRIOR TO INSTALLATION.

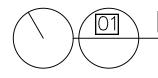
- INSTALL NEW FIXTURE WHERE INDICATED. ALL WATER PIPING SHALL BE NEW ALL VENT PIPING SHALL BE NEW AND CONNECTED TO EXISTING VTR IN AREA.
- CONNECT NEW PVC SANITARY WASTE IN APPROXIMATELY THIS LOCATION, PRIOR TO TURN DOWN BELOW GRADE.
- ROUTE NEW 1½ VENT OVER TO NEW ROOF AND VTR. COORDINATE LOCATION WITH ARCHITECT.











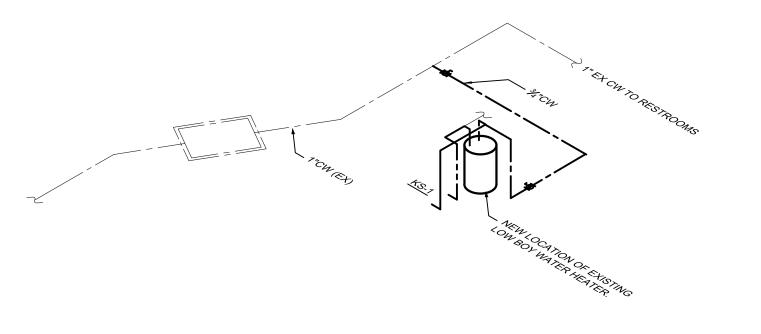
PLUMBING WATER & GAS NEW WORK PLAN

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

GENERAL NOTES:

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PLUMBING SERVICES AND EQUIPMENT PRIOR TO DEMOLITION.
 G.C. AND DIV 22 CONTRACTOR SHALL COORDINATE LOCATION OF ALL EQUIPMENT, DEVICES, AND PENETRATIONS WITH ARCHITECT PRIOR TO INSTALLATION.

- 1) INSTALL NEW FIXTURE WHERE INDICATED. ALL WATER PIPING SHALL BE NEW ALL VENT PIPING SHALL BE NEW AND CONNECTED TO EXISTING VTR IN AREA. INSTALL NEW ISOLATION VALVE AT CONNECTION TO EXISTING AND ON BRANCH LINE TO NEW BREAK ROOM FIXTURE.
- 2 INSTALL NEE LOW-BOY WATER HEATER BELOW NEW SINK.
 RECONNECT EXISTING COLD WATER FROM MAIN,
 RECONNECT ETR SINK TO HOT WATER AT NEW LOCATION.
 CONNECT NEW KS-1 TO WATER HEATER.
- 3) INSTALL NEW ¾" BALL VALVE AND TAP INTO EXISTING WATER LINE IN THIS LOCATION.





EAN 2025

MECHANICAL SYSTEMS ENERGY CODE COMPLIANCE

ENERGY COST BUDGET:

PRESCRIPTIVE:

THERMAL ZONE: 4A

EXTERIOR DESIGN CONDITIONS:

WINTER DRY BULB: 14°F SUMMER DRY BULB: 94°F SUMMER WET BULB: 76°F

INTERIOR DESIGN CONDITIONS:

WINTER DRY BULB: 70°F SUMMER DRY BULB: 75°F

AREA HEAT LOAD: EXISTING

AREA COOLING LOAD: EXISTING

MECHANICAL CONDITIONING SYSTEM:

HEATING OUTPUT: EXISTING

COOLING OUTPUT: EXISTING

DESCRIPTION OF UNIT: SPLIT SYSTEM HEAT PUMPS
(EXISTING)
HEATING EFFICIENCY: EXISTING
COOLING EFFICIENCY: EXISTING

BOILER OUTPUT: N/A
CHILLER TOTAL CAPACITY: N/A

DESIGNER STATEMENT:

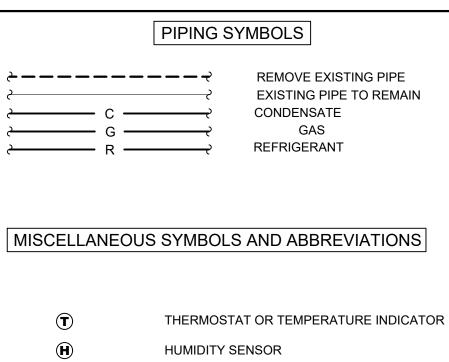
TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT REQUIREMENTS OF THE NORTH CAROLINA STATE BUILDING CODE, 2018 ENERGY CONSERVATION CODE.

SIGNED:

NAME: PAUL J ROMITI, PE

TITLE MECHANICAL ENGINEER

MECHANICAL LEGEND



CARBON DIOXIDE SENSOR

DEVICES WITH OPERABLE CONTROLS SUCH AS THERMOSTATS

SHALL BE MOUNTED BETWEEN 44" AND 48" A.F.F COMPLIANT WITH

ADA HEIGHTS COORDINATE WITH OTHER DEVICES.

\(\frac{\pm}{\pm} \)

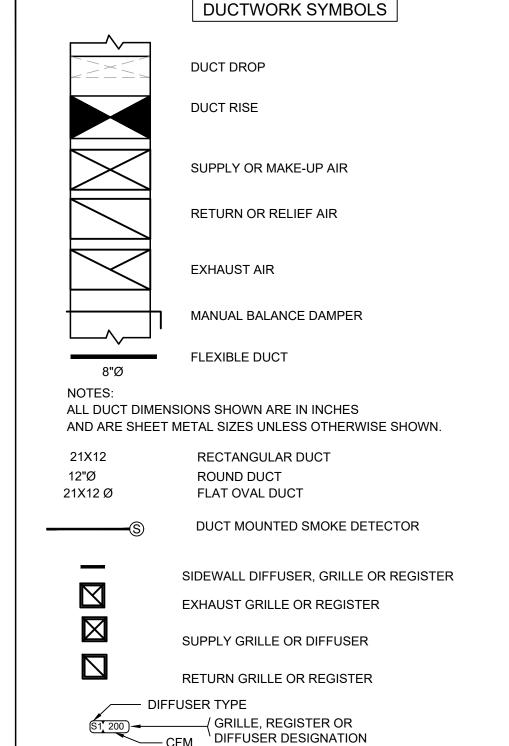
SPECIFIC OR NEW WORK NOTES

•

CONNECT TO EXISTING
POINT OF DEMOLITION

REVISION NOTES

SUBJECT OF DEMOLITION



AIRFLOW DIRECTION

BTU	British Thermal Unit	M&V	Measurement and Verification
BTUH	Brtish Thermal Units / Hour	MA	Mixed Air
CAV	Constant Air Volume	MAT	Mixed Air Temperature
CFC	ChloroFluoroCarbon	MC	Mechanical Contratror (Div 23)
CC	Cooling Coil	MCC	Motor Control Center
CFM	Cubic Feet per Minute	MUA	Make-up Air Unit
COP	Coefficient Of Performance	MVD	Manual Volume Damper
CRAC	Computer Room Air Conditioner	MZ	Multi-Zone
CV	Constant Volume	N/A	Not Applicable
DA	Discharge Air	NEMA	National Electrical Manufacturers
DB	Dry Bulb	OA	Association
DH	Duct Heater		Outside Air Temperature
DN	Down	OAT	Outside Air Temperature
DP	Dew Point	OC	On Center
ΟX	Direct Expansion	ODP	Open Drip Proof
EAT	Entering Air Temperature	PC	Plumbing Contratror (Div 22)
EC	Electrical Contratror (Div 26, 27 or 28)	PH	Pre-Heat
ECM	Electronically Commutated Motor	PHC	Pre-heat Coil
EDH	Electric Duct Heater	PTAC	Packaged Terminal Air Conditioner
EER	Energy Efficiency Ratio	QTY	Quantity
EF	Exhaust Fan	RA	Return Air
<u>-'</u> EH	Electric Heater	REF	Refrigerant
EHC	Electric Heating Coil	RF	Return Fan
		RH	Reheat
ESP	External Static Pressure Existing to Remove	RH	Relative Humidity
ETR		RHC	Re-heat Coil
EUH	Electric Unit Heater	RPM	Revolutions Per Minute
ΞX	Existing	RTD	Resistance Temperature Detector
-C	Forward Curve	RTU	Roof Top Unit
-CU	Fan Coil Unit	SA	Supply Air
-LA	Full Load Amps	SAT	Supply Air Temperature
-PM	Feet Per Minute	SC	Shading Coefficient
=W	Feed Water	SEER	Seasonal Energy Efficiency Ratio
GC	General Contractor	SF	Supply Fan
GPM	Gallons Per Minute	SHFG	Solar Heat Gain Factor
GUI	Graphical User Interface	TEV	Thermostatic Expansion Valve
HCFC	Hydrochlorocfuorocarbon	TSP	Total Static Pressure
HEPA	High Efficiency Particulate Arresting	TXV	Thermostatic Expansion Valve
HFC	HydroFluoroCarbon	UC	Undercut
HL .	High Limit	UH	Unit Heater
HP	Horsepower	UV	UltraViolet
HR	Heat Recovery	UV	Unit Ventilator
HRU	Heat Recovery Unit	VAV	Variable Air Volume
HRV	Heat Recovery Ventilator	VFD	Variable Frequency Drive
HSPF	Heating Seasonal Performance Factor	VSD	Variable Speed Drive
HVAC	Heating Ventilation and Air Conditioning	WB	Wet Bulb
HX	Heat Exchanger	WC	Water Column
/O	Input Output	XFER	Transfer
IAQ	Indoor Air Quality	/ SI = I \	
IR	Infra-Red		

MECHANICAL ABBREVIATIONS

LWBT

Air Conditioning

Air Handling Unit

Backward Incline

Air Changes per Hour

Association of Energy Engineers

Adjustable Frequency Drive

Annual Fuel Efficiency Ratio

Leaving Air Temperature

Local Operating Network

Leaving Wet Bulb Temperature

Leaving Water Temperature

Low Limit

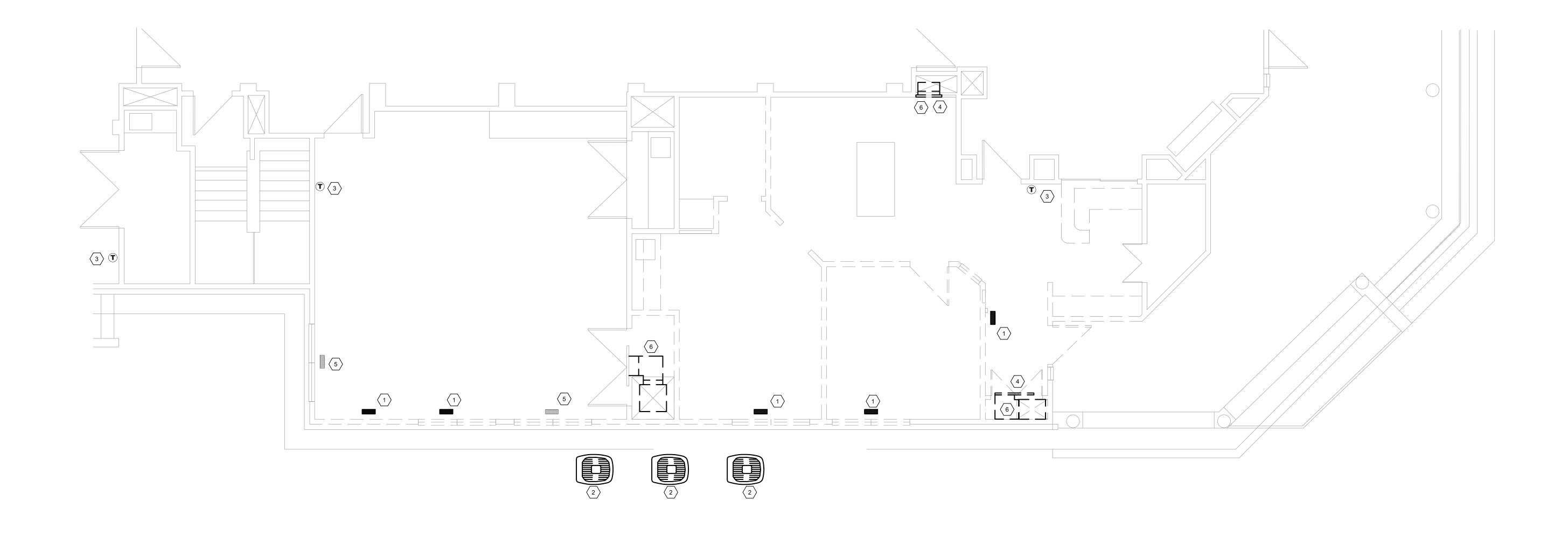
Low Pressure

Locked Rotor Amps

GENERAL NOTES:

- 1. THE DRAWINGS SHOW THE GENERAL ARRANGEMENT AND LOCATION OF EQUIPMENT, DUCTWORK, PIPING, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE MECHANICAL INSTALLATION WITH THE STRUCTURE AND OTHER TRADES AND SHALL PROVIDE ADDITIONAL OFFSETS AND FITTINGS AS NECESSARY.
- 2. PRIOR TO BIDDING, THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL VISIT THE JOB SITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED AND SHALL INCLUDE IN THE BID ALL WORK REQUIRED FOR A COMPLETE JOB. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE DRAWINGS AND EXISTING FIELD CONDITIONS A MINIMUM OF FIVE DAYS PRIOR TO BID.
- 3. THE HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS SHALL COMPLY WITH THE 2018 NORTH CAROLINA MECHANICAL CODE AND NFPA 90A.
- 4. DUCT DIMENSIONS ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS.
- 5. THE CONTRACTOR SHALL CHECK AND VERIFY ALL CLEARANCES PRIOR TO FABRICATION OR INSTALLATION OF EQUIPMENT, DUCTWORK, AND PIPING SYSTEMS. WHERE CONDITIONS REQUIRE A CHANGE IN DUCT OR PIPE ROUTING, NOTIFY THE ENGINEER FOR AN ACCEPTABLE ALTERNATIVE METHOD. AVOID ROUTING DUCTWORK DIRECTLY OVER LIGHT FIXTURES, DIFFUSERS, AND OTHER CEILING MTD. DEVICES. LOCATE ALL MECHANICAL EQUIPMENT SO THAT FILTERS AND COMPONENTS REQUIRING ACCESS (SERVICE AND MAINTENANCE) ARE FULLY ACCESSIBLE.
- PROVIDE CURVED RADIUS ELBOW AT FIRST SUPPLY & RETURN FITTING FOR ALL HVAC UNITS. PROVIDE TURNING VANES IN ALL 90 DEGREE ELBOWS IN ALL RECTANGULAR SUPPLY/RETURN/EXHAUST DUCT SYSTEMS. ANY OFFSETS REQUIRED IN DUCT SYSTEMS SHALL BE INSTALLED PER SMACNA STANDARDS. SHARP ANGLED TRANSITIONS OR OFFSETS WILL NOT BE ALLOWED. PROVIDE DUCT ACCESS DOORS AT LOCATIONS SPECIFIED.
- 7. INSTALL ALL DUCT MOUNTED DEVICES (DAMPERS, ACCESS DOORS, ETC.) AND PIPING SPECIALTIES IN EASILY ACCESSIBLE LOCATIONS. ADVISE THE ENGINEER IN ADVANCE OF INSTALLATION IF ACCESS WILL BE HINDERED SO AN ALTERNATE LOCATION CAN BE SELECTED.

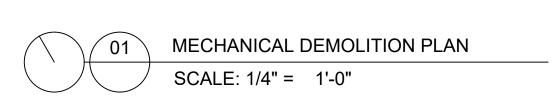
- 8. ALL MECHANICAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS WITH PRESCRIBED CLEARANCES FOR SERVICE AND MAINTENANCE. THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER IF RECOMMENDED CLEARANCES ARE NOT POSSIBLE BEFORE INSTALLING EQUIPMENT.
- 9. ALL ROTATING MECHANICAL EQUIPMENT SHALL BE PROVIDED WITH VIBRATION ISOLATION. PROVIDE FLEXIBLE NEOPRENE DUCT CONNECTORS BETWEEN DUCTWORK AND ISOLATED MECHANICAL EQUIPMENT.
- 10. THE CONTRACTOR SHALL FIRESTOP ALL PENETRATIONS OF FIRE RATED WALLS/FLOORS/CEILINGS BY DUCTWORK PIPING, ETC., WITH U.L. LISTED FIRE STOPPING MATERIAL TO MAINTAIN FIRE RATING OF THE BARRIER.
- 11. BALANCE ALL AIR DISTRIBUTION DEVICES, EXHAUST FANS, AND OUTSIDE AIR QUANTITIES AS SCHEDULED OR SHOWN ON THE DRAWINGS. PROVIDE MARKERS AT ALL DAMPER LOCATIONS SHOWING FULL OPEN/CLOSED POSITIONS AND DAMPER SETTING FOR REQUIRED AIRFLOW. PROVIDE FINAL TEST AND BALANCE REPORT ALONG W/ SCHEMATIC DRAWINGS SHOWING DIFFUSER LOCATION W/ DESIGN AND ACTUAL CFM. THE DIFFUSER TAGS ON THE DRAWINGS SHALL CORRESPOND TO THE DIFFUSER TAGS ON THE REPORT. THIS REPORT SHALL BE SUBMITTED BEFORE THE FINAL INSPECTION IS PERFORMED. SEE SPECIFICATION SECTIONS FOR FURTHER INFORMATION. DO NOT BALANCE FOR DIVERSITY.
- WHERE PIPING CONTAINING FLAMMABLE AND COMBUSTIBLE GAS IS TO BE REMOVED, PROCEDURE OF NCGC 406.7.1.1 ALONG WITH NFPA 54 7.2.7 AND 8.3.1 SHALL BE OBSERVED. THE LINE SHALL BE FIRST DISCONNECTED FROM ALL SOURCES OF GAS PRESSURE, VENTED TO THE OUTDOORS, AND THEN THOROUGHLY PURGED WITH AIR, WATER, OR INERT GAS BEFORE ANY CUTTING OR WELDING IS DONE.
- 13. THERMOSTATS AND SENSORS CONTAINING MERCURY SHALL BE DISPOSED IN ACCORDANCE WITH EPA RESOURCE CONSERVATION AND RECOVERY ACT (RCRA). CONTRACTOR SHALL REFER TO EPA WEBSITE FOR HANDLING PROCEDURES FOR DISPOSAL AND SPILL MANAGEMENT OF PRODUCTS CONTAINING MERCURY.
- 14. IN THE AREA OF WORK, ANY "OPEN" DUCTWORK INCLUDING INLET AND OUTLET REGISTERS AND DIFFUSERS SHALL BE COVERED WITH FILTRATING MATERIAL OR VISQUINE TO PROTECT INSIDE OF THE SYSTEM AGAINST DUST AND
- 15. ANY DAMAGE OF EXTERIOR PIPE AND DUCT INSULATION CAUSED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED AND RESTORED AT NO EXTRA COST TO THE OWNER.

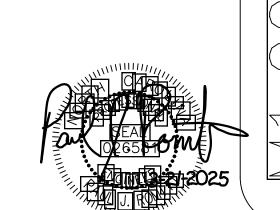


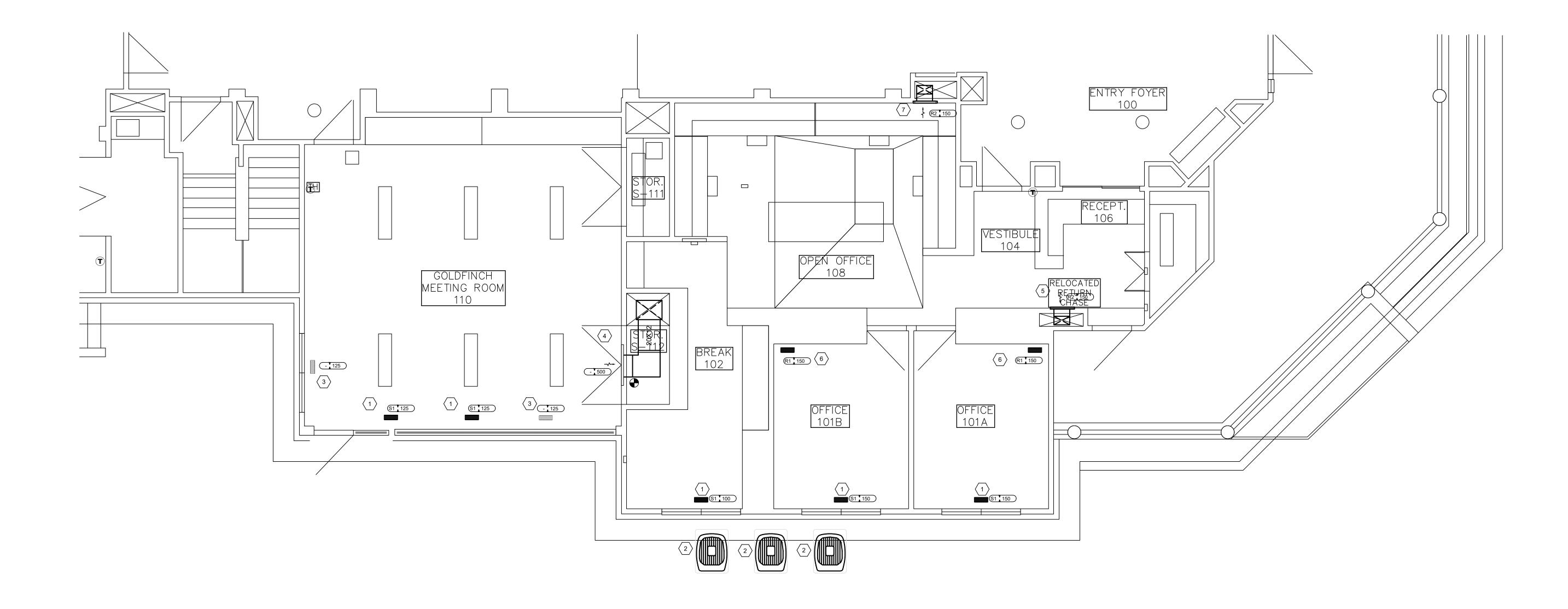
GENERAL NOTES:

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING HVAC SERVICES AND EQUIPMENT PRIOR TO DEMOLITION.

- CAREFULLY REMOVE EXISTING FLOOR DIFFUSER AND PREPARE FOR INSTALLATION IN NEW LOCATION. REFER TO M200 FOR NEW LOCATIONS. REMOVE AND DISCARD EXISTING FLEXIBLE DUCT RUN BACK TO AHU MAIN IN CRAWLSPACE.
- CAPTURE EXISTING R22 IN SYSTEM AND STORE FOR RE-USE. EXISTING HEAT PUMP SHALL BE REUSED. REFER TO M200 FOR NEW LOCATION. REMOVE EXISTING REFRIGERANT LINES FROM EXISTING EVAPORATOR COIL AND PREPARE FOR REPLACEMENT ROUTING. RELOCATE EXISTING DISCONNECT. REFER TO DIV26 PLANS FOR MORE INFORMATION.
- 3 EXISTING THERMOSTAT SHALL REMAIN. DIV 23 CONTRACTOR SHALL PROTECT EXISTING CONTROLS DURING ALL PHASES OF CONSTRUCTION.
- 4 REMOVE EXISTING RETURN GRILLE AND PREPARE FOR RE-INSTALLATION IN NEW LOCATION.
- $\langle 5 \rangle$ CLEAN AND REUSE EXISTING FLOOR DIFFUSER.
- 6 REMOVE EXISTING RETURN DUCT BACK BELOW FLOOR, PREPARE FOR EXTENSION AND RISE IN NEW CHASE SPACE. REFER TO M200 FOR NEW







GENERAL NOTES:

- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING HVAC SERVICES AND EQUIPMENT PRIOR TO DEMOLITION.
- G.C. AND DIV 23 CONTRACTOR SHALL COORDINATE LOCATION
 OF ALL EQUIPMENT, AIR DISTRIBUTION DEVICES, AND
 PENETRATIONS WITH ARCHITECT PRIOR TO INSTALLATION
- PENETRATIONS WITH ARCHITECT PRIOR TO INSTALLATION.

 3. REFER TO ARCHITECTURAL FLOOR PLANS AND SECTIONS FOR COORDINATION WITH CASEWORK AND OTHER ELEMENTS.

KEYED NOTES:

- 1 NEW LOCATION OF EXISTING FLOOR GRILLE. ALL FLEXIBLE DUCT BACK TO AHU MAIN SHALL BE REPLACED WITH NEW 8". INSTALL NEW BALANCING DAMPER AT EXISTING TAP. REBALANCE FLOOR GRILLE TO NEW
- 2 NEW LOCATION OF EXISTING HEAT PUMP. INSTALL NEW EQUIPMENT PAD. ALL REFRIGERANT PIPING SHALL BE NEW AND REPLACED BETWEEN INDOOR AND OUTDOOR COILS. RECLAIM AND RE-USE R-22 REFRIGERANT. INSTALL NEW TXV AND FILTER/DRIER.
- 3 EXISTING FLOOR GRILLE. ALL FLEXIBLE DUCT BACK TO AHU MAIN SHALL BE REPLACED WITH NEW 8". INSTALL NEW BALANCING DAMPER AT EXISTING TAP. REBALANCE FLOOR GRILLE TO NEW AIRFLOWS INDICATED.
- REROUTE RETURN DUCT FROM BASEMENT UP IN NEW CHASE AND CONNECT TO EXISTING LOUVER.
- The second of the second second of the secon
- 6 NEW FLOOR GRILLE, CONNECT TO EXISTING AHU-RETURN WITH 8" FLEXIBLE DUCT AND INSTALL BALANCING DAMPER
- IN THE SPIN-IN. BALANCE TO AIRFLOW INDICATED.

 The mount new return grille under desk of new casework. Top of grille approximately 30" aff. mount such that that all access to filter removal is maintained.

AIR DISTRIBUTION SCHEDULE

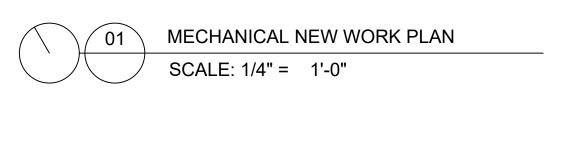
TAG	*MANUF	ACTURER/MODEL	FACE SIZE	MOUNT	MATERIAL	FINISH	DAMPER	TYPE	POWER	NC	NOTES
S1	PRICE	LBPH	14X4	FLOOR	ALUM	ALUM	NONE	LINEAR BAR	NONE	< 20	1, 2
R1	PRICE	LBPH/15A CORE	14x8	FLOOR	ALUM	ALUM	NONE	LINEAR BAR	NONE	< 20	1, 2
R2	PRICE	530FF	24X12	WALL	ALUM	WHITE	OBD	LOUVERED/FILTER FACE	NONE	< 20	3

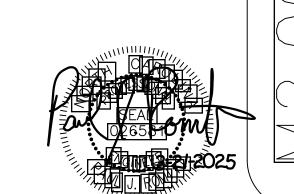
* TITUS, METALAIRE, NAILOR SHALL BE CONSIDERED EQUALS

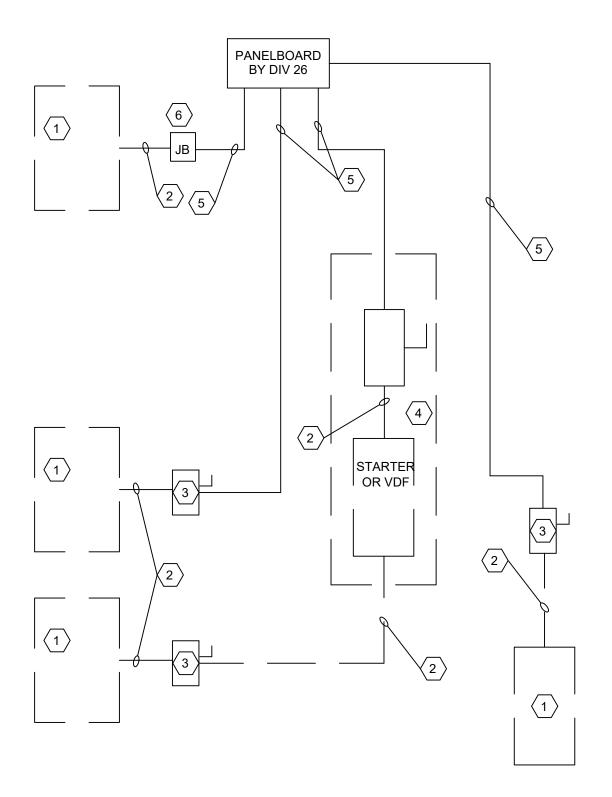
NOTES: 1. SEE PLANS FOR NECK SIZE

SEE PLANS FOR NECK SIZE
 BALANCE DAMPER TO BE INSTALLED IN THE BRANCH TAKE-OFF.

3. INSTALL HORIZONTAL LOUVERS ANGLED UP







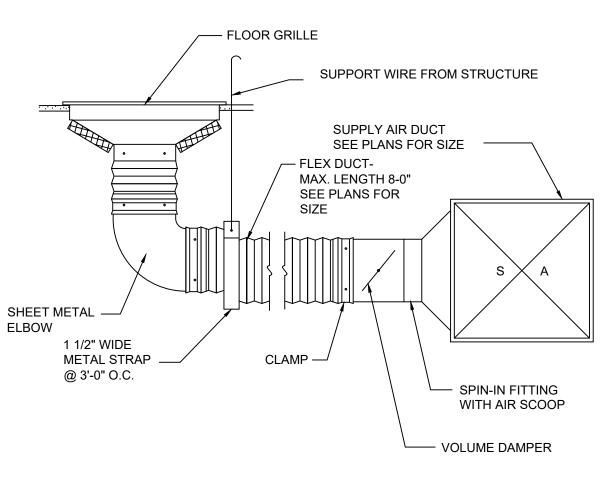
- igg(1igg) EQUIPMENT BY THE DIVISION 22 (PLUMBING) AND DIVISION 23 (HVAC) CONTRACTOR.
- CONDUIT & WIRING BY THE DIVISION 26 (ELECTRICAL) CONTRACTOR COORDINATED WITH THE DIVISION 22 (PLUMBING) AND DIVISION 23 (HVAC) CONTRACTOR.
- 3 IF AN ADDITIONAL DISCONNECT IS REQUIRED BY THE NATIONAL ELECTRICAL CODE, IT SHALL BE FURNISHED BY THE DIVISION 22 (PLUMBING) AND DIVISION 23 (HVAC) CONTRACTOR AND INSTALLED BY THE DIVISION 26 (ELECTRICAL) CONTRACTOR.
- A COMBINATION STARTER OR VFD MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER, LOCATED ADJACENT TO EQUIPMENT. STARTERS AND VFD FURNISHED BY THE DIVISION 22 (PLUMBING) AND DIVISION 23 (HVAC) CONTRACTOR AND INSTALLED BY THE DIVISION 26 (ELECTRICAL) CONTRACTOR.
- 5 FEEDER CIRCUIT WIRING AND CONDUIT FURNISHED AND INSTALLED BY THE DIVISION 26 (ELECTRICAL) CONTRACTOR. SEE PANELBOARD SCHEDULES FOR WIRE AND BREAKER SIZES.
- JUNCTION BOX MAY BE SHOWN ON ELECTRICAL PLANS FOR SOME EQUIPMENT. IF NO STARTER OR DISCONNECT IS SUPPLIED, A JUNCTION BOX SHALL BE INSTALLED ADJACENT TO EQUIPMENT. THE DIVISION 26 (ELECTRICAL) CONTRACTOR SHALL FURNISH AND INSTALL LINE SIDE WIRING TO THE JUNCTION BOX. LOAD SIDE WIRING WILL BE FURNISH AND INSTALL BY THE DIVISION 26 (ELECTRICAL) CONTRACTOR COORDINATED WITH THE DIVISION 22 (PLUMBING) AND DIVISION 23 (HVAC) CONTRACTOR.

NOTES:

THE DIVISION 22 (PLUMBING) AND DIVISION 23 (HVAC) CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER DIRECTION OF ROTATION FOR ALL THREE PHASE MOTORS AND EQUIPMENT.

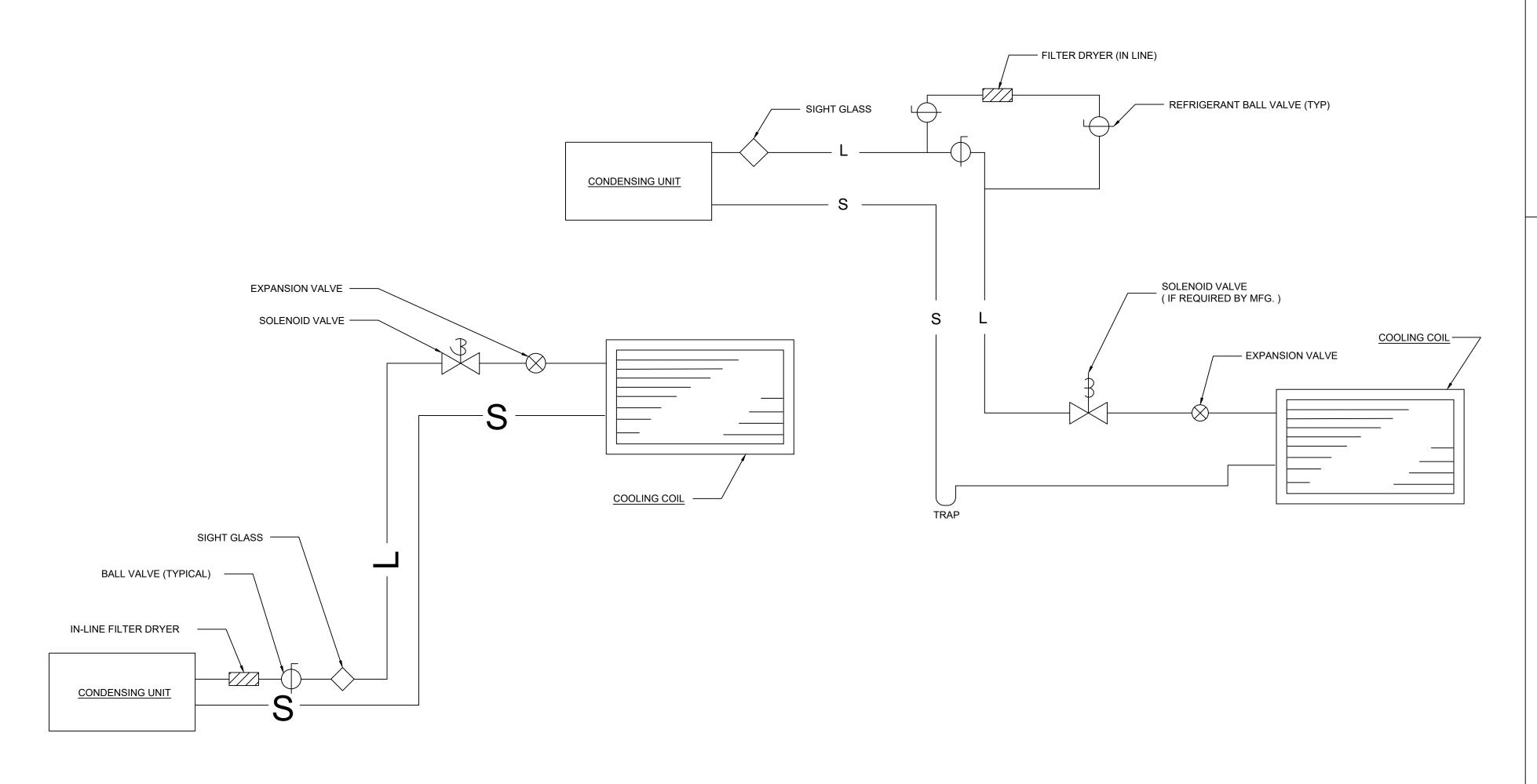
IN ALL CASES THE DIVISION 22 (PLUMBING) AND DIVISION 23 (HVAC) CONTRACTOR SHALL BE CONTRACTUALLY OBLIGATED TO INSURE ALL FINAL CONNECTIONS, START UP, AND TESTING OF EQUIPMENT IS PROVIDED PER THE MANUFACTURERS' STRICT INSTRUCTIONS; HOWEVER ALL FINAL CONNECTIONS SHALL FURNISHED AND INSTALLED BY THE DIVISION 26 (ELECTRICAL) CONTRACTOR

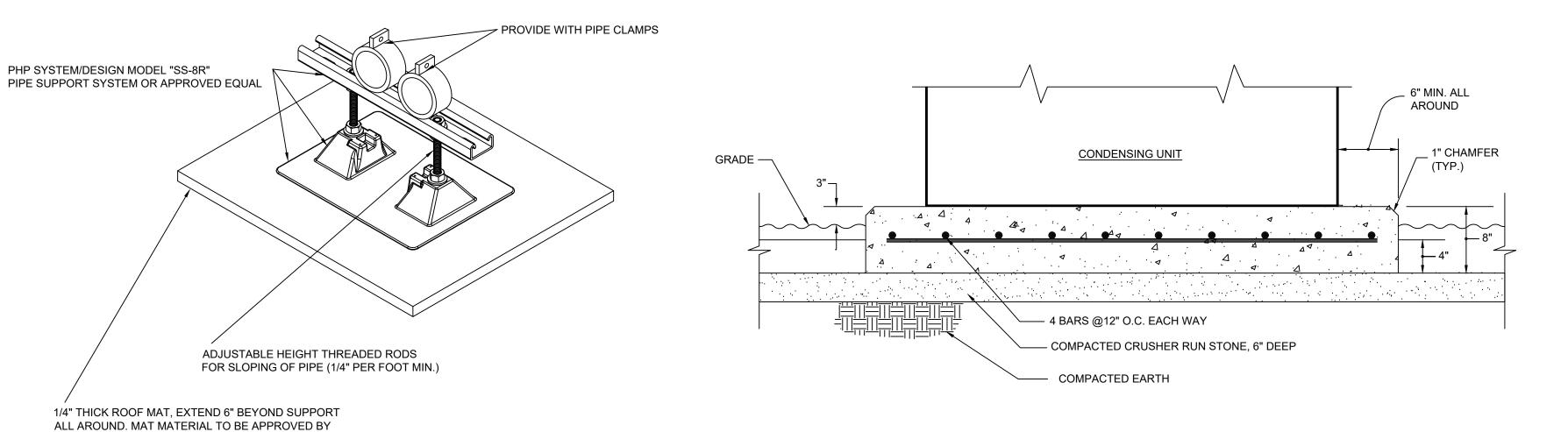
1 MECHANICAL ELECTRICAL DIVISION OF LABOR M500 Scale: NONE



NOTES:
ALL RIGID SHEET METAL DUCT WHICH
IS NOT INTERNALLY
INSULATED, DIFFUSER NECKS,
DIFFUSER BACKS, ELBOWS,
& FITTINGS SHALL BE WRAPPED WITH
2" THICK, 1 1/2# DENSITY DUCT WRAP
WITH VAPOR BARRIER.



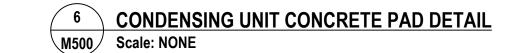






ROOFING MANUFACTURER AND SHALL BE CONSISTENT

WITH ROOFING MATERIAL.



REFRIGERANT PIPING DETAIL

	LIGHTING SYMBOLS	
$\overline{\otimes}$	WALL OR CEILING MTD EXIT SIGN WITH SELF CONTAINED BATTERY	
▼	BACK-UP, SINGLE FACE. ARROW WHEN USED INDICATES DIRECTION. WALL OR CEILING MTD EXIT SIGN WITH SELF CONTAINED BATTERY BACK-UP, DOUBLE FACE. ARROW WHEN USED INDICATES DIRECTION.	
	SUSPENDED OR SURFACE MTD LED LIGHTING FIXTURE AND OUTLET, LETTER INDICATES FIXTURE TYPE; NUMBER INDICATES CIRCUIT	
	SUSPENDED OR SURFACE MTD LED LIGHTING FIXTURE LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT INSTALLED WITH EMERGENCY DRIVER ON NITE-LITE CIRCUIT	
•	CEILING MTD OR LAY-IN TYPE LED LIGHTING FIXTURE AND OUTLET, LETTER INDICATES FIXTURE TYPE; NUMBER INDICATES CIRCUIT	
	CEILING MTD OR LAY-IN LED LIGHTING FIXTURE LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT INSTALLED WITH EMERGENCY DRIVER ON NITE-LITE CIRCUIT	יַן
·	CEILING MTD OR LAY-IN TYPE LED LIGHTING FIXTURE AND OUTLET, LETTER INDICATES FIXTURE TYPE; NUMBER INDICATES CIRCUIT	
	CEILING MTD OR LAY-IN LED LIGHTING FIXTURE LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT INSTALLED WITH EMERGENCY DRIVER ON NITE-LITE CIRCUIT	
0	CEILING/PENDENT MTD/RECESSED LIGHTING FIXTURE AND OUTLET, LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT	
•	CEILING/PENDENT MTD/RECESSED LIGHTING FIXTURE LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT INSTALLED WITH/ON EMERGENCY DRIVER ON NITE-LITE CIRCUIT	
	SURFACE MOUNTED WALL LUMINAIRE OUTLET, LETTER INDICATES FIXTURE TYPE; NUMBER INDICATES CIRCUIT	
	SURFACE MOUNTED WALL LUMINAIRE LETTER DESIGNATES FIXTURE TYPE AND NUMBER INDICATES CIRCUIT INSTALLED WITH EMERGENCY DRIVER ON NITE-LITE CIRCUIT	
₩	EMERGENCY WALL BATTERY PACK UNIT WITH NUMBER OF LAMPS AS INDICATED. LETTER NEXT TO FIXTURE ON PLANS INDICATES FIXTURE TYPE. CONNECT UNSWITCHED TO INDICATED BRANCH CIRCUIT.	
SOR SDT S S3 S4 SD SD(x) SOS SD/O	SWITCH TYPE OCCUPANCY SENSOR WITH BUILT-IN OVERRIDE SWITCH	٧S
Sa S	COVER PLATE b LOWER CASE SUBSCRIPT INDICATE WHICH LIGHTS THE SWITCH	
()\$()	IS TO BE CONNECTED TO. DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR; A/V DESIGNATES SENSOR PROVIDED AS PART OF DIMMING OR A/V PACKAGE U/H DESIGNATES ULTRA-SONIC DEVICE RATED FOR HALLWAY INSTALL	
(SW)	WALL MOUNTED OCCUPANCY SENSOR NOTE ON OCC SENSORS: SENSORS SHALL PROVIDE COVERAGE TO 1000 SF AND SWITCH LOAD OFF AFTER 20 MIN.	
PC-x	120 VOLT PHOTOCELL	
TC-x	24/7/365 ASTRONOMICAL TIME CLOCK FIRE ALARM SYMBOLS	
⊳∀ H 75cd	CEILING MOUNTED FIRE ALARM AUDIO/VISUAL DEVICE	
√V √ 75cd	CEILING MOUNTED FIRE ALARM VISUAL-ONLY DEVICE	
F FACP	WALL MTD FIRE ALARM PULL STATION	
$\langle s \rangle$	WALL MTD FIRE ALARM CONTROL PANEL SMOKE DETECTOR, CEILING OR WALL MTD	
(H)	HEAT DETECTOR, CEILING OR WALL MTD	
CONV.(H)	NON ADDRESSABLE HEAT DETECTOR, CEILING OR WALL MTD	
—(D)	DUCT MOUNTED SMOKE DETECTOR	
MD	MAGNETIC DOOR HOLD	
MM	MONITOR MODULE	
СМ	CONTROL MODULE	
IM	ISOLATION MODULE	
SP	SURGE PROTECTOR	
$\overline{\mathbb{V}}$	FIRE ALARM VISUAL DEVICE	

FIRE ALARM AUDIO/VISUAL DEVICE

REMOTE INDICATOR LAMP WITH TEST SWITCH

POWER SYMBOLS

FLUSH MOUNTED QUADRUPLEX RECEPTACLE AND OUTLET

FLUSH MOUNTED QUADRUPLEX RECEPTACLE AND OUTLET 20A, 125V, 3W, INSTALLED 4" ABOVE BACKSPLASH OR

FLOOR BOX. BOX TO BE FLUSH MOUNTED IN CONCRETE FLOORS. (X)-X REPRESENTS NUMBER OF CABLES.

POKE-THRU. TO BE FLUSH MOUNTED IN FLOORS. (X)-X

1. SUBSCRIPT EWC INDICATES GROUND FAULT TYPE RECEPTACLE FOR

2. SUBSCRIPT WP INDICATES GROUND FAULT TYPE RECEPTACLE WITH

4. SUBSCRIPT VEN INDICATES GROUND FAULT TYPE RECEPTACLE FOR

6. SUBSCRIPT SL INDICATES SHORELINE INSTALLATION PER DETAILS.

9. SUBSCRIPT MF INDICATES GFI RECEPTACLE MOUNTED BELOW SINK

9. SUBSCRIPT MD INDICATES CONNECTION TO MOTORIZED DAMPER.

TELE/COMM OUTLET 4" SQ. BOX WITH 1"C PER RISER. CABLING

ABOVE BACKSPLASH OR AS NOTED. CABLING BY DIVISION 27.

1. SUBSCRIPT WAP DESIGNATES WIRELESS ACCESS POINT MOUNTED IN CEILING

7. SUBSCRIPT ER DESIGNATES EMERGENCY RESPONSE PHONE WITH DEDICATE

POLES AND VOLTAGE PER CIRCUIT FED. BOTTOM NUMBER REPRESENTS SIZE.

30 AMP NON-FUSED, WEATHERPROOF NEMA 3R DISCONNECT SWITCH.

8. SUBSCRIPT AV DESIGNATES 1"C TO ABOVE CEILING FOR AV CONNECTION.

DISCONNECT SWITCH-PROVIDE 30A, NON-FUSED U.O.N.

30 AMP FUSED DISCONNECT SWITCH, FUSED AT 20 AMP.

NUMBER OF POLES AND VOLTAGE PER CIRCUIT FED.

NUMBER OF POLES AND VOLTAGE PER CIRCUIT FED.

FVNR COMBINATION DISCONNECT SWITCH AND MAGNETIC

MANUAL MOTOR RATED SWITCH WITHOUT OVERLOAD HEATERS

30 AMP NON-FUSED, NEMA 4X SS DISCONNECT SWITCH. NUMBER OF POLES AND VOLTAGE PER CIRCUIT FED.

OR WALL. WALL MOUNTED DEVICES SHALL BE PROVIDED AT 84" AFF. 2. SUBSCRIPT FA DESIGNATES CONNECTION FOR FIRE ALARM DIAL OUT. 3. SUBSCRIPT EL DESIGNATES CONNECTION FOR ELEVATOR PHONES. 4. SUBSCRIPT W DESIGNATES WALL MOUNTED PHONE MOUNTED AT 48" AFF.

7. SUBSCRIPT USB INDICATES COMBINATION 20A OUTLET AND USB PORT.

10. SUBSCRIPT DW INDICATES DISHWASHER CONNECTION. PROVIDE WITH

120 VOLT 20 AMPERE SWITCH ABOVE COUNTER FOR DISCONNECT.

20A, 125V, 3W, INSTALLED 4" ABOVE BACKSPLASH OR

COUNTER IF NO BACKSPLASH EXISTS.

COUNTER IF NO BACKSPLASH EXISTS.

REPRESENTS NUMBER OF CABLES.

STEEL LOCKABLE CLOSED WEATHERPROOF COVER.

8. SUBSCRIPT HD INDICATES HAND DRYER CONNECTION.

BY DIVISION 27. (X)-X REPRESENTS NUMBER OF CABLES.

(X)-X REPRESENTS NUMBER OF CABLES.

NOTE TO ALL TELECOM OUTLETS:

TELE/COMM OUTLET 4" SQ. BOX WITH 1"C PER RISER. MOUNT 4"

5. SUBSCRIPT DC DESIGNATES DOOR COUNTER CONNECTION. 6. SUBSCRIPT SEC DESIGNATES CONNECTION FROM DROP 1.

9 SUBSCRIPT BAS DESIGNATES 1"C TO MDF FOR BAS PANEL.

NON-FUSED DISCONNECT SWITCH. NUMBER OF

30 NUMBER OF POLES AND VOLTAGE PER CIRCUIT FED.

NEMA 4X SS ENCLOSED CIRCUIT BREAKER.

MOTOR STARTER OR VFD (IF MARKED VFD)

A.C. MOTOR, NUMERAL INDICATES HP "F" INDICATES FRACTIONAL HP

PANEL BOARD, SURFACE MOUNTED

CONCEALED RACEWAY. INDICATES HOMERUN TO PANEL IN MIN. 3/4" CONDUIT-WIRE PER PANEL SCHEDULES.

ELECTRICAL SYMBOL NOTES

1. SYMBOLS AND ABBREVIATIONS MAY NOT ALL BE

3. MOUNTING HEIGHT GIVEN IN THE ELECTRICAL SPECIFICATIONS IS TO THE CENTERLINE OF THE

2. SYMBOLS NOT LISTED IN THIS ELECTRICAL SYMBOL LEGEND ARE IDENTIFIED ON THE DRAWINGS WHERE

DEVICE AND SHALL BE FOLLOWED UNLESS OTHERWISE

UTILIZED FOR THIS PROJECT.

THEY OCCUR.

PANEL BOARD, FLUSH MOUNTED

HANDICAPPED DOOR OPERATOR

FOR ELECTRIC METERED FAUCET CONNECTION.

3. SUBSCRIPT GF INDICATES GROUND FAULT TYPE RECEPTACLE.

5. SUBSCRIPT TV INDICATES RECEPTACLE FOR TV MOUNTED IN

20 AMPERE, 250 VOLT OUTLET

NOTE TO ALL RECEPTACLES/JUNCTION BOXES:

ELECTRIC WATER COOLER.

VENDING MACHINE.

BRACKET.

OUTLET BOX WITH BLANK COVER - LOCATE AS REQUIRED TO WALL MOUNTED TV. PROVIDE T/C AND HDMI OUTLETS FOR EQUIPMENT SERVED. MOUNT AT 84" AFF PER DETAIL. FLUSH MTD DUPLEX RECEPTACLE AND OUTLET, 20A, 125V, 3W FLUSH MTD QUADRUPLEX RECEPTACLE AND OUTLET, 20A, 125V, 3W

SECURITY SYSTEM SYMBOLS AV SYSTEM SYMBOLS

DURESS BUTTON.

CAMERA. PROVIDE 1-1"C TO DROP

CAMERA. PROVIDE 1-1"C TO DROP

DROP X AMPERE, AMMETER KILOWATTS REFER TO E701 FOR ROUGH-IN INFORMATION KW AFF ABOVE FINISHED FLOOR LIGHTING CONTACTOR AMPERES INTERRUPTING CAPACITY LIGHTING INVERTER CARD READER. LIV AIR HANDLING UNIT LTG LIGHTING CARD READER DOOR ROUGH IN. AUTOMATIC TRANSFER SWITCH LOW VOLTAGE AV,A/V AUDIO-VISUAL METER BASE ELECTRIC LOCK ROUGH IN AND POWER. BFG BELOW FINISHED GRADE MECHANICAL CONTRACTOR C/CON. CONDUIT MAIN CIRCUIT BREAKER MOTOR CONTROL CENTER CATV CABLE (COMMUNITY) ANTENNA TELEVISION DOOR CONTACT. MANHOLE CTC CT CABINET MAIN LUGS ONLY COPPER CU GLASS BREAK. NON FUSED DISC DISCONNECT NOT IN CONTRACT ELECTRICAL CONTRACTOR ECB ENCLOSED CIRCUIT BREAKER NIGHT LIGHT INTERCOM **EQUIPMENT GROUNDING CONDUCTOR** EGC POLE, PHASE SECURITY CONNECTION AT KNOX BOX. ELECTRIC VEHICLE CHARGING STATION **EVCS** PULL BOX SECURITY CONNECTION AT REFRIGERANT **EWC** ELECTRIC WATER COOLER PLUMBING CONTRACTOR MONITORING SYSTEM. **EXISTING** P/BD, PNL PANELBOARD FA, F/A FIRE ALARM SECURITY TELEPHONE. PHOTO-VOLTAIC FIRE ALARM ANNUNCIATOR PANEL PHOTO-VOLTAIC DISCONNECT PVD FACP FIRE ALARM CONTROL PANEL MOTION DETECTOR. GEC GROUNDING ELECTRODE CONDUCTOR SOLID NEUTRAL G,GND GROUND SWITCH

IG, ISG

KVA

GENERAL CONTRACTOR

HANDHOLE

INNERDUCT

HORSEPOWER

JUNCTION BOX

ISOLATED GROUND

KILOVOLT-AMPERES

GROUND FAULT INTERRUPTER

GROUND FAULT EQUIP. PROTECTOR

ABBREVIATIONS

SWBD

T/C

UG

UON

SWITCHBOARD

UNDERGROUND

WEATHERPROOF

TRANSFORMER

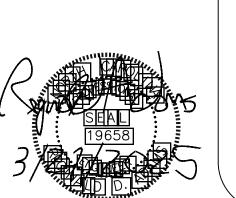
UNLESS OTHERWISE NOTED

TELECOM

VOLT



03 ale



GENERAL NOTES

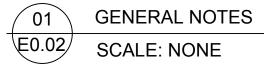
- 1. ALL WORK ON THIS PROJECT SHALL CONFORM TO THE 2020 NEC, ALL LOCAL AND STATE CODES, STATE BUILDING CODE AND REQUIREMENTS BY THE AUTHORITY HAVING JURISDICTION.
- 2. SYMBOLS AND ABBREVIATIONS MAY NOT ALL BE UTILIZED FOR THIS PROJECT.
- 3. UNLESS OTHERWISE INDICATED THE CONTRACTOR, IS RESPONSIBLE FOR ALL CUTTING, CORE- DRILLING AND PATCHING REQUIRED TO INSTALL ELECTRICAL RELATED WORK.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ELECTRICAL RELATED WORK WITH OTHER TRADES. THE CONTRACTOR IS CAUTIONED THAT IT IS TOTALLY HIS RESPONSIBILITY TO COORDINATE HANGERS AND SUPPORTS WITH OTHER TRADES. ADDITIONAL REQUIRED HANGERS & SUPPORTS MUST BE IN PLACE PRIOR TO APPLICATION OF FIRE PROOFING MATERIAL. ANY DAMAGE INCURRED ON FIRE PROOFING MATERIAL DUE TO INSTALLATION OF ELECTRICAL HANGERS WILL BE REPAIRED BY FIRE PROOFING SUB-CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 5. UTILITIES SERVING AREAS OF THIS PROJECT STILL OCCUPIED BY THE OWNER DURING DEMOLITION AND NEW CONSTRUCTION SHALL BE MAINTAINED UNTIL THE OWNER VACATES THE AREA. UNLESS OTHERWISE NOTED.
- 6. ALL SHUTDOWNS WILL BE COORDINATED AND APPROVED THROUGH THE OWNER'S PROJECT MANAGER AND THE BUILDING MANAGER AND WILL REQUIRE ADVANCE NOTICE OF 10 WORKING DAYS EXCLUDING WEEKEND. THIS TIME LENGTH MAY BE LONGER OR SHORTER FOR SOME SHUTDOWNS AT THE OWNER'S DISCRETION. THE SCHEDULING OF SUCH SHUTDOWNS MAY TAKE TWO WEEKS OR MORE AND THE CONTRACTOR MUST BE PREPARED TO WORK SECOND OR THIRD SHIFT, SATURDAY OR SUNDAY AS NECESSARY TO PERFORM THE WORK. FURTHERMORE, IN SOME CASES AN ALTERNATE POWER SOURCE MAY BE REQUIRED, THE CONTRACTOR MUST BE PREPARED TO MAKE TAPS, INSTALL CIRCUIT BREAKERS, ETC., WHILE EXISTING EQUIPMENT IS ENERGIZED. ALL SHUTDOWNS WILL BE INITIATED AND CONTROLLED BY OWNER.
- 7. VISIT THE SITE PRIOR TO BID DATE AND EXAMINE ALL AREAS TO BE DEMOLISHED AND RENOVATED. THOROUGHLY FAMILIARIZE YOURSELF WITH EXISTING CONDITIONS. NO EXTRA COMPENSATION WILL BE GIVEN FOR FAILURE TO THOROUGHLY EXAMINE EXISTING CONDITIONS TO DETERMINE THE EXACT SCOPE OF DEMOLITION WORK. "KEYED" NOTES ON THE DEMOLITION DRAWINGS ARE PROVIDED TO ASSIST BIDDERS TO DETERMINE THE SCOPE OF DEMOLITION WORK.
- 8. EXISTING AREAS WHETHER WITHIN OR WITHOUT THE "GENERAL LIMITS OF CONSTRUCTION", SHALL BE REPAIRED WHERE ANY DAMAGE HAS OCCURRED DUE TO CONSTRUCTION BY THE CONTRACTOR.
- 9. ALL AREAS OUTSIDE THE PROJECT LIMITS IN WHICH WORK MUST TAKE PLACE WILL BE CLEANED AND RETURNED TO NORMAL (INCLUSIVE OF CEILING TILE REPLACEMENT) AT THE END OF EACH DAY. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE EACH DAY BEFORE LEAVING THE CONTRACT PROJECT LIMITS REGARDING THE CLEANLINESS OF THE AREA IN WHICH WORK TOOK PLACE OUT SIDE OF THE PROJECT LIMITS.
- 10. WHERE WORK IS TAKING PLACE OUTSIDE THE PROJECT LIMITS CANNOT ALLOW A RETURN TO NORMAL APPEARANCE OF WALLS, CEILING, ETC., AT THE END OF EACH DAY DUE TO ITS EXTENSIVE NATURE; THE CONTRACTOR SHALL ERECT A BLACK PLASTIC CURTAIN AROUND HIS WORK. SUCH A CURTAIN SHALL REMAIN IN PLACE UNTIL THE WORK IS COMPLETE. SUCH CURTAINS WILL HAVE CAUTIONARY SIGNS AFFIXED INDICATING CONSTRUCTION ACTIVITY WITHIN.
- 11. PROVIDE 4" HIGH CONCRETE HOUSEKEEPING PADS WITH CHAMFERED EDGES UNDER ALL FLOOR MOUNTED ELECTRICAL EQUIPMENT.
- 12. DO NOT MOUNT ANY WALL RECEPTACLES OR TELEPHONE/COMPUTER OUTLETS BACK TO BACK.
- 13. USE 3/4" DEEP MUD RINGS ON BOXES IN 5/8" DRYWALL SO FACE OF RING IS FLUSH WITH FACE OF DRYWALL. PROVIDE CADDY #RLC ADAPTER ON ALL OUTLETS WHERE DRYWALL IS CUT IN EXCESS OF 1/8" LARGER THAN MUD RING OR WHERE THE DEVICE "EARS" ARE NOT SUPPORTED BY THE DRYWALL.
- 14. 20A BRANCH CIRCUIT WIRE SIZING SHALL BE IN ACCORD WITH THE FOLLOWING TABLE:

DISTANCE	(FIRST DEVICE)	REMAINDEF OF CIRCUIT
0' - 50'	#12	#12
50' - 100'	#10	#12
100' - 150'	# 8	#10
	0' - 50' 50' - 100'	0' - 50' #12 50' - 100' #10

- 15. THE ELECTRICAL CONTRACTOR SHALL VERIFY LOCATION OF LIGHTS, ETC. IN MECHANICAL ROOMS WITH MECHANICAL CONTRACTOR BEFORE ROUGH-IN TO AVOID CONFLICT WITH DUCT WORK.
- 16. ALL CONDUCTORS SHALL BE COPPER WITH A MINIMUM SIZE OF #12 AWG EXCEPT FOR FIRE ALARM.

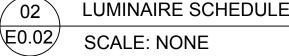
TO EXISTING ITEMS AS JUNCTION BOXES, VALVES, FILTERS OR SERVICE ACCESS TO EQUIPMENT.

- 17. ALL BRANCH CIRCUIT BREAKERS SHALL BE 20A, 1P, WITH 2 #12 AWG 1#12 GND IN 3/4" MINIMUM CONDUIT, UNLESS OTHERWISE NOTED. EXTERIOR CONDUIT OR UNDERGROUND/SLAB CONDUIT SHALL BE 1"C MINIMUM.
- 18. ALL WIRING LUGS THROUGHOUT THE PROJECT, INCLUDING BUT NOT LIMITED TO BREAKERS, PANELBOARD/SWITCHBOARD LUGS, SAFETY SWITCH LUGS, AND TRANSFORMER LUGS, SHALL BE RATED FOR USE WITH 75 DEGREE CONDUCTORS SIZED IN ACCORDANCE WITH NEC TABLE 310-16.
- 19. ALL RACEWAYS SHALL BE METAL UNLESS SPECIFICALLY NOTED OR APPROVED OTHERWISE. ANY RACEWAY IN POURED CONCRETE SHALL BE RIGID METAL (HEAVY WALL). REFER TO SPECIFICATIONS FOR ALL OTHERS. ALL CONDUIT AND BOXES SHALL BE PROVIDED IN COLORS NOTED ON SHEET E001.
- 20. CONTRACTOR SHALL MINIMIZE NUMBER OF HOME RUN CONDUITS. CONTRACTOR MAY COMBINE UP TO THREE CIRCUITS PER HOME RUN IN A SINGLE CONDUIT; WHERE MORE THAN THREE (3) CONDUCTORS ARE PROVIDED PER RACEWAY MINIMUM CONDUIT SIZE SHALL BE 3/4".
- 21. IN GENERAL ALL ELECTRICAL CONDUIT WILL BE RUN AT THE ELEVATION JUST BELOW THE BOTTOM OF THE STRUCTURAL BEAMS. THE CONTRACTOR SHALL OFFSET THE ELECTRICAL CONDUIT TO AVOID INTERFERENCE WITH ANY DUCTWORK, SPRINKLER OR MECHANICAL PIPING. THE CONTRACTOR SHALL COORDINATE HIS CONDUIT AND RACEWAY LOCATIONS WITH ALL OTHER TRADES BEFORE INSTALLATION.
- 22. THE ROUTING FOR THE RACEWAY SHOWN ON THE DWGS. IS DIAGRAMMATIC ONLY, BASED ON CURSORY FIELD SURVEY BY DESIGNER. CONTRACTOR IS CAUTIONED THAT SPACE ABOVE CLG. IS VERY CONGESTED WITH EXISTING MECHANICAL, ELECTRICAL & PLUMBING ITEMS, AND WORK SPACE IS LIMITED. CONTRACTOR IS REQUIRED TO VISIT THE SITE PRIOR TO BID DATE AND LOOK ABOVE THE CLG. OF THE PROPOSED ROUTING TO FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS. PROVIDE ANY AND ALL ADDITIONAL JB'S, OFFSETS, CONDUITS AND FITTINGS AS REQUIRED TO AVOID ANY EXIST. OBSTRUCTIONS ALONG THE PROPOSED ROUTING. ANY SHUTDOWNS CAUSED BY RELOCATING EXISTING EQUIPMENT SHALL BE COORDINATED WITH OWNER. FAILURE TO EXAMINE EXISTING CONDITIONS AND COORDINATE THE EXACT CONDUIT ROUTING WILL NOT EXCUSE CONTRACTOR FROM PERFORMING ALL DUTIES NECESSARY TO COMPLETE THE WORK. DO NOT ROUTE CONDUIT IN A MANNER THAT WILL BLOCK ACCESS
- 23. ELECTRICAL PLANS ARE DIAGRAMMATIC. THE CONTRACTOR SHALL ALIGN FIXTURES, FIRE ALARM DETECTORS, CEILING DIFFUSERS, ETC. AS REQUIRED TO PROVIDE A PATTERN OF UNIFORMITY. AT NO TIME SHALL A SMOKE DETECTOR BE LOCATED WITHIN 3'-0" OF A SUPPLY OR RETURN GRILLE.
- 24. WIRE AND CIRCUIT BREAKERS ARE SIZED FOR SPECIFIC EQUIPMENT. BEFORE ORDERING WIRE, BREAKERS AND CONDUIT FOR THIS PROJECT, THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS ON THE JOB AND SHALL VERIFY THE ELECTRICAL DATA FOR EQUIPMENT WHICH WILL ACTUALLY BE INSTALLED BY THE OTHER CONTRACTORS AND RECOMPUTE WIRE AND BREAKER SIZES IF REQUIRED TO COMPLY WITH THE N.E.C.
- 25. REFER TO MECHANICAL DRAWINGS AND COORDINATE VERTICAL RUNS OF WIRE AND CONDUIT WITH MECHANICAL PIPING. COORDINATE WITH MECHANICAL CONTRACTORS. (NOTE: STACK RUNS OF CONDUIT AND PROVIDE OFFSETS AS NECESSARY.)
- 26. LABEL ALL CONDUITS TERMINATING IN THE CEILING CAVITIES.
- 27. LIGHTING & POWER PANELS ARE DESIGNED AROUND SQUARE "D" "NQOD" WITH A MAXIMUM DEPTH OF 5 3/4" AND WIDTH OF 20".
- 28. THE MOUNTING HEIGHTS AND LOCATIONS OF ALL WALL MOUNTED OUTLETS, JUNCTION BOXES AND DISCONNECT SWITCHES SHALL BE REVIEWED AND COORDINATED WITH CASEWORK DRAWINGS AND ACTUAL EQUIPMENT LOCATION, PRIOR TO INSTALLATION. ANY DIFFERENCES SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- 29. THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL CEILING TYPES AND FINISHES BEFORE PURCHASE OF ANY LIGHT FIXTURES SO THAT THE PROPER TRIM WILL BE PROVIDED FOR THE CEILING TO BE INSTALLED. ANY DIFFERENCES SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- 30. EACH CONTRACTOR SHALL PROVIDE HIS OWN SUPPORT OF ALL DEVICES AND EQUIPMENT PROVIDED BY HIM AND SHALL SUPPORT SUCH EQUIPMENT PER APPROVED GOVERNING CODES OR PER APPROVAL OF THE ENGINEER. UNACCEPTABLE WORKMANSHIP OR MATERIALS SHALL BE REPLACED AT THE REQUEST OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- 31. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR FLOOR PLAN DIMENSIONS. DO NOT SCALE THESE DRAWINGS.
- 32. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ANY AND ALL WORK WITH OTHER TRADES INVOLVED IN THE PROJECT, PRIOR TO THE INSTALLATION OF HIS EQUIPMENT, SO AS TO AVOID CONFLICTS DURING CONSTRUCTION AND TO ALLOW FOR OPTIMUM MAINTENANCE AND WORKING SPACE. PROVIDE COORDINATION DRAWINGS TO THE ENGINEER FOR APPROVAL. ANY REWORK THAT NEEDS TO BE DONE DO TO CONFLICTS BETWEEN TRADES SHALL BE DONE AT THIS CONTRACTORS EXPENSE.
- 33. ALL LIGHT FIXTURES SHALL BE SUPPORTED INDEPENDENTLY OF THE SUSPENDED CEILING SYSTEM. REFER TO THE SPECIFICATIONS FOR MORE DETAILED INFORMATION.
- 34. WHERE ELECTRICAL EQUIPMENT PENETRATES EXTERIOR WALLS OR THE ROOF, THEY SHALL BE PROPERLY SEALED WITH METHODS APPROVED BY THE ENGINEER. SUBMIT DETAIL OF PROPOSED WORK.
- 35. IN ALL AREAS WHERE THE FIRE RATED WALLS, FLOORS AND CEILINGS ARE INSTALLED OR ARE EXISTING, ALL PENETRATIONS OF ELECTRICAL CONDUITS OR OTHER RELATED ELECTRICAL MATERIALS SHALL BE PROPERLY SEALED WITH APPROVED FIRE RATED MATERIALS TO MAINTAIN THE RATINGS OF THE BUILDING CONSTRUCTION.
- 36. ALL FUSES, DISCONNECT SWITCHES AND BREAKER SIZES, SHOWN FOR MECHANICAL EQUIPMENT, SHALL BE VERIFIED BEFORE THE PURCHASE OR INSTALLATION OF SAID EQUIPMENT, WITH THE EQUIPMENT SUPPLIER AND MECHANICAL CONTRACTOR.
- 37. UPON COMPLETION OF WORK ALL KEYS TO ELECTRICAL POWER PANELS SHALL BE TURNED OVER TO THE OWNER AND A SIGNED RECEIPT SHALL BE OBTAINED.
- 38. ALL MULTIWIRE BRANCH CIRCUITS NEED TO HAVE SEPARATE NEUTRAL CONDUCTORS TO COMPLY WITH NEC 2020 ARTICLE 210.4. NO SHARED NEUTRAL CONDUCTORS PERMITTED ON THIS PROJECT.
- 41. ANY RECEPTACLE WITH-IN 6'-0" OF A SINK SHALL BE A GROUND FAULT TYPE (GFI) RECEPTACLE.
- 42. ALL WORK ON THIS PROJECT SHALL BE INSTALLED IN COMPLIANCE WITH ANSI A117.1, ADA STANDARDS FOR ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES.



D/DE	DECORPORA		ANALISE OF IPER OUT II	11150	200 (50			DE # DV0	
YPE	DESCRIPTION	MANUF.	MANUFACTURER CAT #	LAMPS	DRIVER	INPUT	VOLT	REMARKS	
111	STRIP MOUNTED LED LIGHTING, X-DESIGNATES LENGTH AS	CALI	LLED8000-CMC-CL-3.6-10V-35K-DRY-TBD-X						
LAx	SHOWN ON DRAWINGS.	EQUAL MAN.		LED	LED DRIVER	3.6	24	PROVIDE REMOTE DRIVERS AS REQU	
		EQUAL MAN.							
		ACUITY	LDN6-AL02-SWW1-L06-CTBD-CTBD-CTBD-UGZ						
RA	NEW RECESSED CEILING DOWNLIGHT	KIRLIN	EQUAL		LED DRIVER	25	U		
		PHILIPS	EQUAL						
		ACUITY	LDN6-AL02-SWW1-LW6-CTBD-CTBD-CTBD-UGZ						
RA1	NEW RECESSED CEILING WALL WASHER	KIRLIN	EQUAL	LED	LED DRIVER	25	U		
		PHLIPS	EQUAL						
		ACUITY	N/06S-D-10LM-35K-80CRI-MD-MN10-120-ZT-RM-WL-P-CTBD- CTBD-F					PROVIDE WITH REMOTE EMERGENC' INVERTER	
RBE	LENSED DAMP LOCTION 4" DOWNLIGHT	KIRLIN	EQUAL	LED	LED DRIVER	15	U		
		PHLIPS	EQUAL						
PA	LED LINEAR PENDANT	STARTEK	BEAMDI-XX-775-475-SD-BW-35K-CTBD-TBD-U-DM						
		ACUITY	EQUAL	LED	LED DRIVER	36	U		
		PHILIPS	EQUAL						
- 1		ACUITY	FMLWL48 835 ZT						
SA	SURFACE MOUNTED LED	EQUAL MAN.	EQUAL	LED	LED DRIVER	40	U		
		PHILIPS	EQUAL						
= 7	EMERGENCY EGRESS FIXTURE	DUALITE	EVHC-12-06L		LED DRIVER		0.51	-	
EM1		ACUITY	EQUAL	LED		12	U	WALL MOUNTED UNIT	
		PHILIPS	EQUAL						
	EMERGENCY EGRESS FIXTURE	DUALITE	EVHC-12-06L		LED DRIVER		U		
EM2		ACUITY	EQUAL	LED		12		CELING MOUNTED UNIT	
		PHLIPS	EQUAL						
		BARRON	S900U-WB-SR-TBD-TBD						
EX	EXIT SIGN	ACUITY	EQUAL	LED	LED DRIVER	5	U		
		PHILIPS	EQUAL				100		
			EXTERIOR LIGHTING FIXTURE SCHEDUL	E					
		SPI LIGHTING	TING EIP12300						
XA	PENDANT MOUNTED DAMP LOCATION FIXTURE	ACUITY	EQUAL	LED	LED DRIVER	184	U		
		PHILIPS	EQUAL						
XA1		KIM	ALT1-28L-40-35K8-3-UNV-TBD-TBD						
	PEDESTRIAN POLE MOUNTED LED	ACUITY	EQUAL	LED	LED DRIVER	60	U	PROVIDED ON 20'-0" POLE. BUG=102	
		PHLIPS	EQUAL						
		KIM	RTA-K-20-X-B-KX-CTBD						
XA1- POLE	20'-0" TAPERED BLACK ALUM POLE	ACUITY	EQUAL						
OLL		PHILIPS	EQUAL						

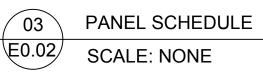
TBD-OPTION TO BE DECIDED BASED ON FIELD CONDITIONS.
 X-AS REQUIRED BY THE INSTALLATION

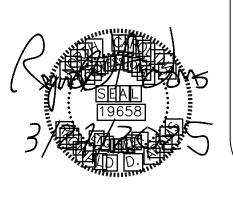


F	PANEL "P(MC	-3)"	BUS SI					ZE : 225A			MOUNTING:				FLUSH			
	•						VOLTA	GE: 2	208Y/12	0V	MINIM	UM AI	C:				10,000	
скт	LOAD SERVED	TRIP	POLE	WIRE*	GND	COND	kVA	kVA	PER PH	IASE	kVA	COND	GND	WIRE*	POLE	TRIP	LOAD SERVED	СК
OKI	LOAD OLIVED	Trail	I OLL	WIILE	CITE	COND	NVA	Α	В	С	N.A.	COND	OND	WINCE	, oll	TIXII	LOADOLKVLD	- OK
1	PORCH LIGHTS	20	1	EX	EX	EX	0.50	1.10	1=0		0.60	EX	EX	EX	1	20	FOYER LTS	2
3	FRONT LTS	20	1	EX	EX	EX	0.40		1.20		0.80	EX	EX	EX	1	20	LTS RM#6	4
5	MEET RM LTS	20	1	EX	EX	EX	0.80		1 = 1	2.00	1.20	3/4"	#12	#12	1	20	LIGHTING	6
7	REC	20	1	EX	EX	EX	0.56	1.06			0.50	EX	EX	EX	1	20	BATH LTS	8
9	KIT LTS	20	1	EX	EX	EX	1.00		1.60		0.60	EX	EX	EX	1	20	LTS NAT DISC	10
11	REC	20	1	EX	EX	EX	0.96		1 4 1	2.16	1.20	EX	EX	EX	1	20	TRACKLTS	12
13	REC	20	1	EX	EX	EX	0.96	1.52			0.56	EX	EX	EX	1	20	REC	14
15	BATHRMREC	20	1	EX	EX	EX	0.72		1.28		0.56	EX	EX	EX	1	20	REC	16
17	FLR REC	20	1	EX	EX	EX	1.20			2.40	1.20	3/4"	#12	#12	1	20N	REC	18
19	FLR REC	20	1	EX	EX	EX	1.20	1.20							1	15	SPARE	20
21	REC	20	1	#12	#12	3/4"	0.80		1.52		0.72	EX	EX	EX	1	20	REC	22
23	WH#5	30	2	EX	EX	EX	1.20			2.40	1.20	EX	EX	EX	2	30	WH#4	24
25	VVII#3	30	2	EX	EX	EX	1.20	2.40	5 _ 5		1.20	EX	EX	EX	2			26
27	WH#2	30	2	EX	EX	EX	1.20		2.40		1.20	EX	EX	EX	2	30	WH#3	28
29	VVII#2	30	4	EX	EX	EX	1.20		1.34	2.40	1.20	EX	EX	EX	2			30
31	WH#3	30	1	#10	#10	3/4"	2.30	3.50	1 - 0		1.20	EX	EX	EX	1	20	TRACKLTS	32
33	KITCHEN REC	20N	1	#12	#12	3/4"C	1.20		1.92		0.72	EX	EX	EX	1	20	REF. REC	34
35	TRACKLTS	20	1	EX	EX	EX	2.00	-	1 = 0	2.50	0.50	EX	EX	EX	1	20	EXIT LTS	36
37	KIT GFI	20	1	EX	EX	EX	0.56	1.56	1		1.00	EX	EX	EX	1	20	CEILING FAN	38
39	TRACKLTS	20	1	EX	EX	EX	2.00		2.56		0.56	EX	EX	EX	1	20	REC	40
41	MP LTS	20	1	EX	EX	EX	1.20		100	2.40	1.20	3/4"	#12	#12	1	20L	FACP	42
			•			Ť	OTALS:	12.34	12.48	16.26								
								CONNECTED LOAD (KVA)		DF	DEM LOAD		NOTES L-PROV	/IDE WIT	H LOCK	OUT CL	IP	
		LIGHTI	NG					15.	.78	125%	19.	19.73 G-GFCI PROTECTED						
		FIRST	10K RE	CEPTS				10.	.72	100%	10.	72	A/G-CO	MBINATI	ON AFCI	/GFCI		
		REMA	INDER	RECEPT						50%	0.0	00	S- SHU	NT TRIP				
											_		1					

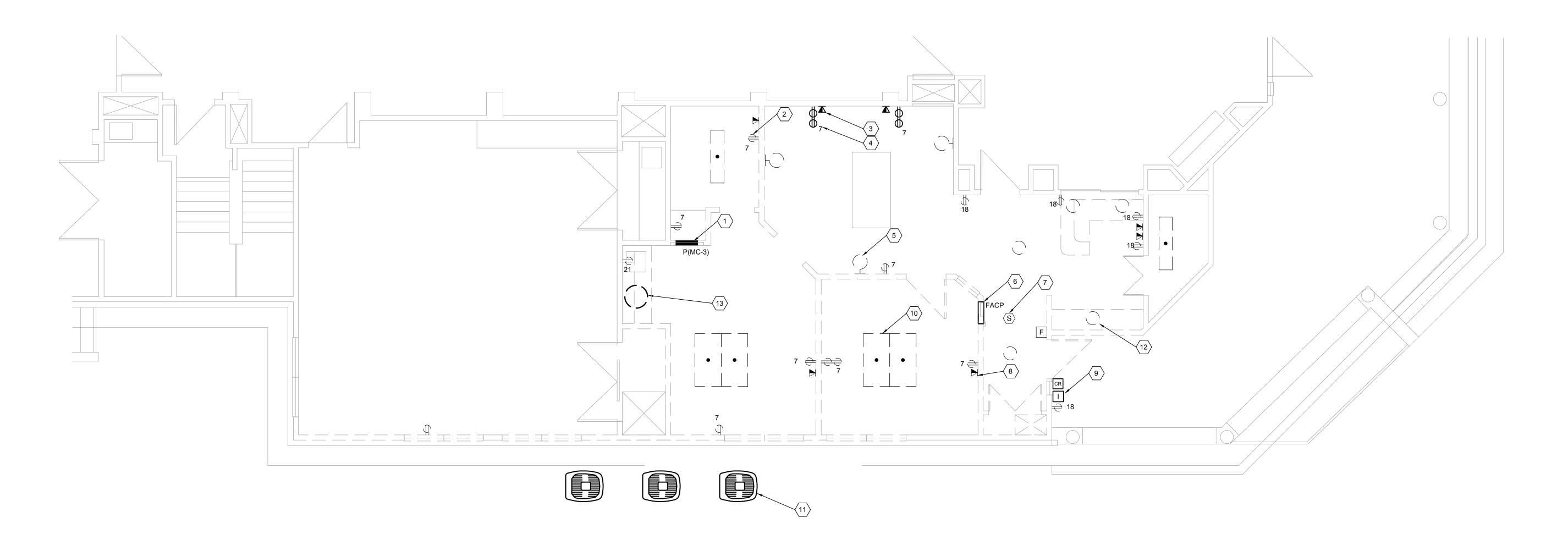
TOTALS:	12.34	12.48	16.26		
	CONNE		DF	DEMAND LOAD (KVA)	NOTES L-PROVIDE WITH LOCK OUT CLIF
LIGHTING	15.		125%	19.73	G-GFCI PROTECTED
FIRST 10K RECEPTS	10.	72	100%	10.72	A/G-COMBINATION AFCI/GFCI
REMAINDER RECEPT			50%	0.00	S- SHUNT TRIP
LARGEST MOTOR			125%	0.00	*-PHASE/NEUTRAL
MOTOR			100%	0.00	N-NEW BREAKER
MISC	14.	10	100%	14.10	
TOTAL (KVA)	40.	60		44.55	1
TOTAL AMPS	11	3		124	1

CONTRACTOR SHALL PROVIDE LABELLING SHOWING THE MAXIMUM AVAILABLE FAULT CURRENT/DATE CALCULATED. DESIGNER TO PROVIDE INFORMATION.





In situ studio



01 ELECTRICAL DEMOLITION PLAN
E2.00 SCALE: 1/4" = 1'-0"

.AN

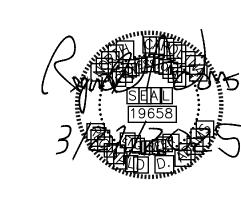
GENERAL NOTES:

- REFER TO SHEET E0.01 & E0.02 FOR GENERAL NOTES AND LEGEND.
- 2. ALL WIRING TO BE REMOVED SHALL BE REMOVED TO PANEL P(MC-3) CIRCUIT 6 UON.

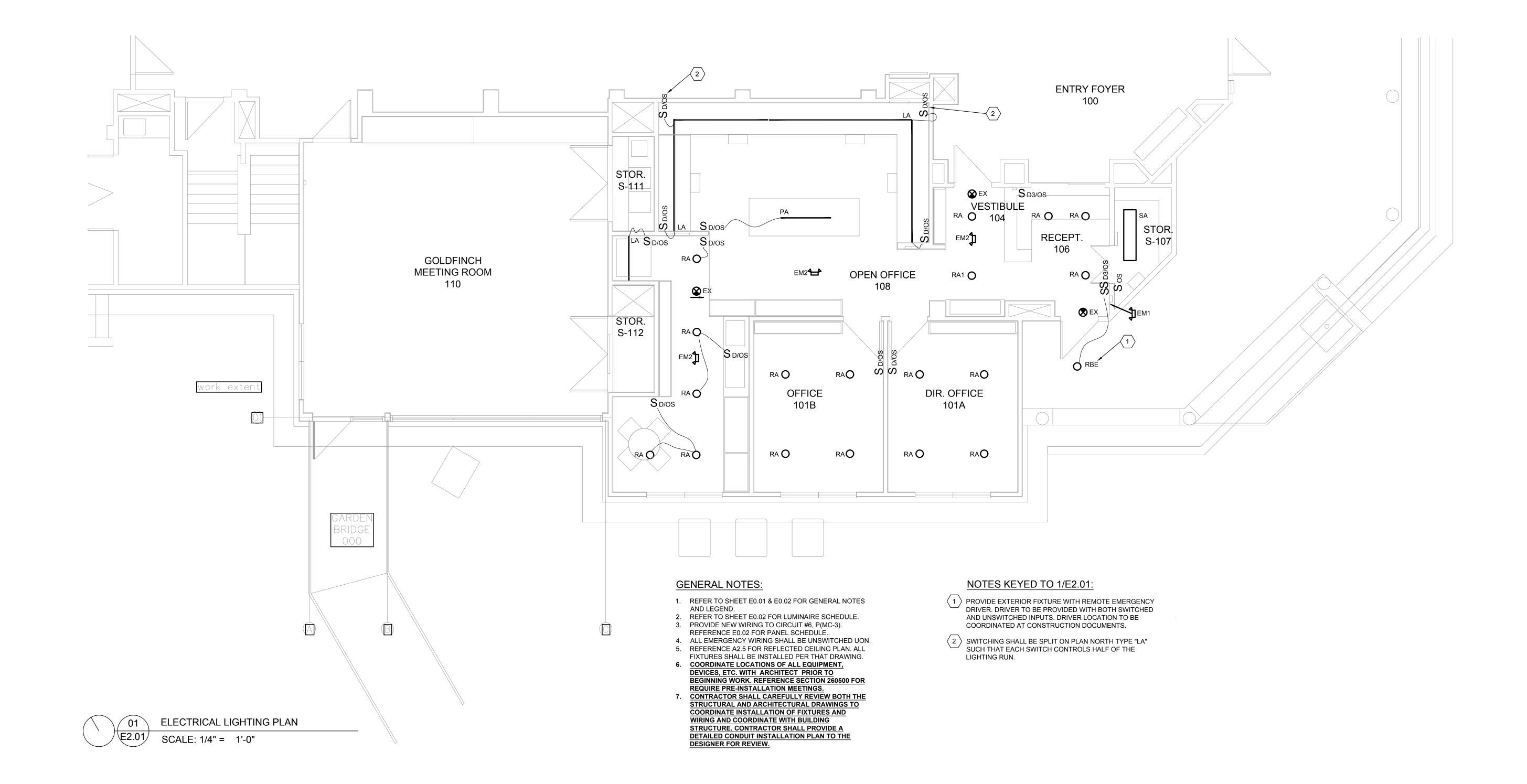
NOTES KEYED TO 1/E2.00:

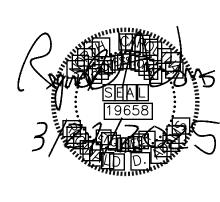
- $\langle 1 \rangle$ EXISTING PANEL TO REMAIN.
- TYPICAL EXISTING RECEPTACLE TO BE REMOVED. REMOVE ALL CONDUIT AND WIRING TO P(MC3).
- (3) EXISTING DATA OUTLET TO REMAIN. TYPICAL.
- 4 EXISTING RECEPTACLE TO REMAIN. TYPICAL.
- 5 EXISTING WALL MOUNTED FIXTURE TO BE REMOVED. TYPICAL.
- 6 EXISTING FACP TO BE REMOVED AND STORED. FACP WILL BE RELOCATED PER E2.01.
- T EXISTING SMOKE DETECTOR AND PULLSTATION TO BE REMOVED, STORED AND REINSTALLED PER E2.01.
- 8 EXISTING DATA OUTLET TO BE REMOVED. ALL WIRING AND CONDUIT TO BE REMOVED TO SOURCE.
- 9 EXISTING INTERCOM AND CARD READER TO BE REMOVED, STORED AND REINSTALLED PER E2.02.

- EXISTING TROFFER TO BE REMOVED. ALL WIRING TO BE REMOVED TO SOURCE. TYPICAL.
- DISCONNECT EXISTING WIRING AND LEAVE SAFE FOR EXTENSION. REFER TO SHEET E2.01 FOR ADDITIONAL INFORMATION. TYPICAL OF THREE (3) CONDENSING UNITS.
- REMOVE ALL CEILING MOUNTED LIGHTING AND WIRING. TYPICAL.
- PREPARE EXISTING WIRING TO BE REMOVED TO POINT ABOVE CEILING AND THEN EXTENDED TO NEW WATER HEATER. CIRCUIT P(MC-3) 31.REFERENCE E2.02 FOR NEW

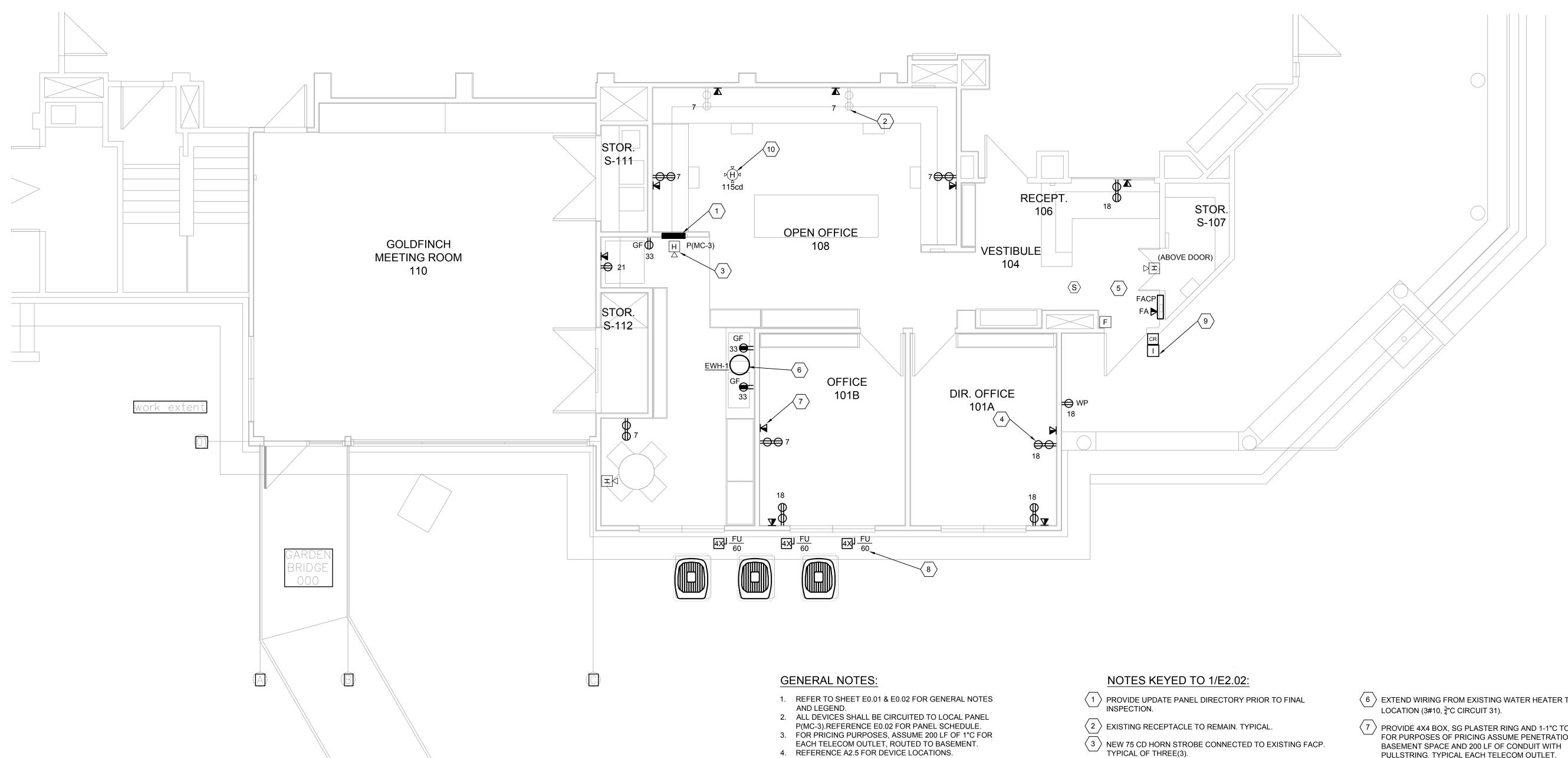












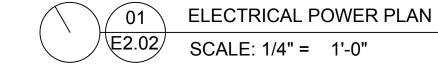
REFERENCE NOTE BELOW FOR COORDINATION WITH

BEGINNING WORK. REFERENCE SECTION 260500 FOR REQUIRE PRE-INSTALLATION MEETINGS.

5. COORDINATE LOCATIONS OF ALL EQUIPMENT,

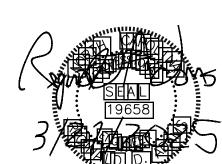
DEVICES, ETC. WITH ARCHITECT PRIOR TO

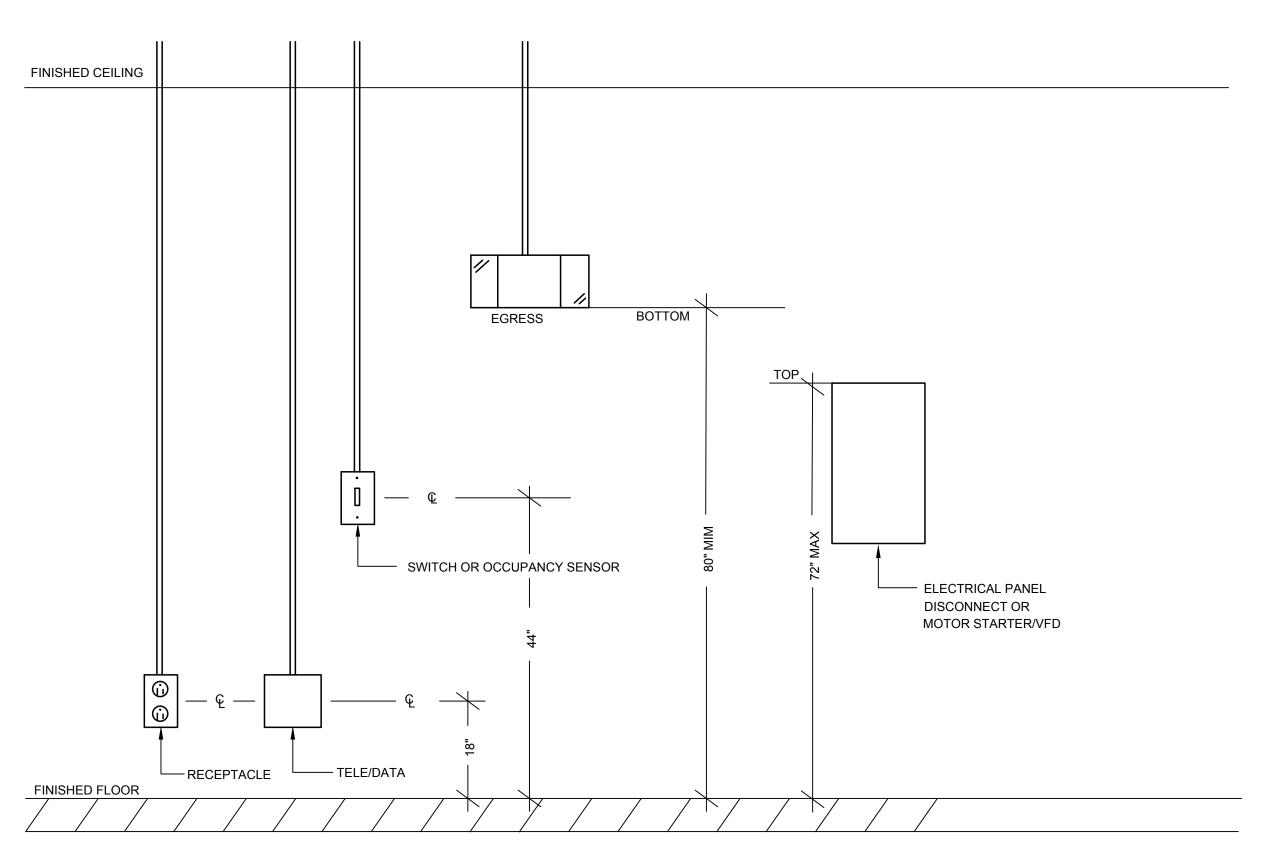
DESIGNER AND ARCHITECT.



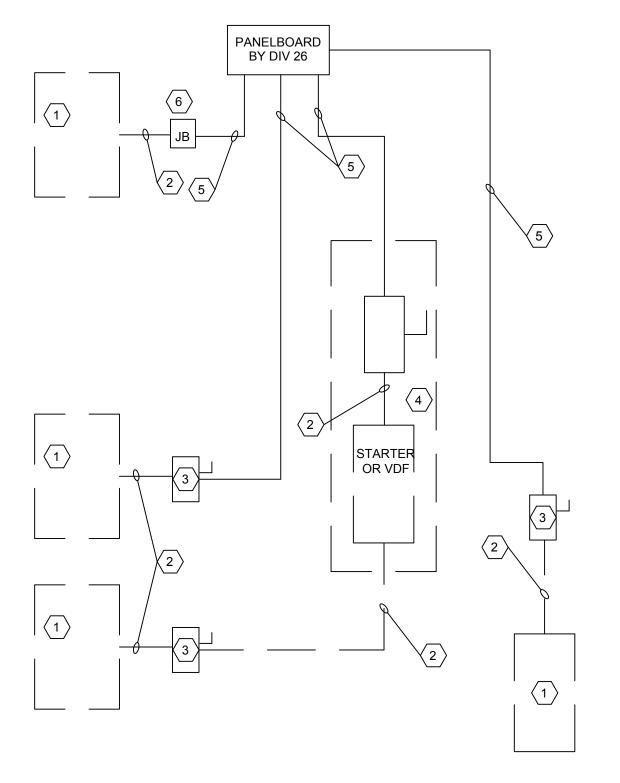
- TYPICAL OF THREE(3).
- 4 NEW QUAD RECEPTACLE CONNECTED TO PANEL P(MC3). TYPICAL.
- 5 RELOCATED FIRE ALARM PANEL. RE-WORK EXISTING CONDUIT/PROVIDE NEW AS NECESSARY AND PROVIDE NEW WIRING FROM EXISTING "FIRST DEVICE" REMAINING IN PLACE. REINSTALL SMOKE DETECTOR AND PULLSTATION. ALL CONDUIT TO BE $\frac{3}{4}$ " MINIMUM EXCEPT PROVIDE 1" WHERE NECESSARY. RECONNECT POWER TO PANEL P(MC-3). PROVIDE NEW TELECOM. WIRING IN 1"C TO MDF ROOM.
- $\langle 6 \rangle$ EXTEND WIRING FROM EXISTING WATER HEATER TO NEW
- $\overline{7}$ PROVIDE 4X4 BOX, SG PLASTER RING AND 1-1"C TO MDF. FOR PURPOSES OF PRICING ASSUME PENETRATION TO BASEMENT SPACE AND 200 LF OF CONDUIT WITH PULLSTRING. TYPICAL <u>EACH</u> TELECOM OUTLET.
- 8 EXTEND EXISTING WIRING FOR EACH EXISTING CONDENSING UNIT TO NEW LOCATION (3#8 1"C). PROVIDE NEW DISCONNECTS AS SHOWN. TYPICAL OF THREE (3) CONDENSING UNITS. UNITS ARE FED FROM PANEL P(MC-2) LOCATED IN BASEMENT.
- \langle 9 \rangle PROVIDE NEW ROUGH-IN FOR INTERCOM AND CARD READER. FROM EACH BOX, PROVIDE ONE (1) 1"C AND INTERCEPT EXISTING CONDUIT SYSTEM. CARD READER AND INTERCOM WILL BE RE-INSTALLED BY OWNER'S SECURITY VENDOR.
- NEW 115 CD CEILING MOUNTED HORN/STROBE. PROVIDE NEW WIRING AND CONNECT TO EXISTING FACP.







NOTE:
NOT ALL DEVICES MAY BE USED IN CONSTRUCTION.

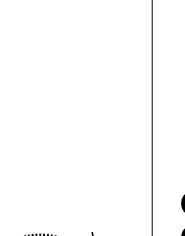


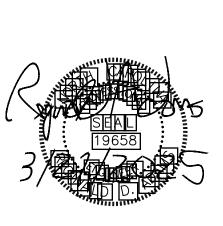
- (1) EQUIPMENT BY THE DIVISION 22 (PLUMBING) AND DIVISION 23 (HVAC) CONTRACTOR.
- CONDUIT & WIRING BY THE DIVISION 26 (ELECTRICAL) CONTRACTOR COORDINATED WITH THE DIVISION 22 (PLUMBING) AND DIVISION 23 (HVAC) CONTRACTOR.
- 3 IF AN ADDITIONAL DISCONNECT IS REQUIRED BY THE NATIONAL ELECTRICAL CODE, IT SHALL BE FURNISHED BY THE DIVISION 22 (PLUMBING) AND DIVISION 23 (HVAC) CONTRACTOR AND INSTALLED BY THE DIVISION 26 (ELECTRICAL) CONTRACTOR.
- A COMBINATION STARTER OR VFD MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER, LOCATED ADJACENT TO EQUIPMENT. STARTERS AND VFD FURNISHED BY THE DIVISION 22 (PLUMBING) AND DIVISION 23 (HVAC) CONTRACTOR AND INSTALLED BY THE DIVISION 26 (ELECTRICAL) CONTRACTOR.
- 5 FEEDER CIRCUIT WIRING AND CONDUIT FURNISHED AND INSTALLED BY THE DIVISION 26 (ELECTRICAL) CONTRACTOR. SEE PANELBOARD SCHEDULES FOR WIRE AND BREAKER SIZES.
- JUNCTION BOX MAY BE SHOWN ON ELECTRICAL PLANS FOR SOME EQUIPMENT. IF NO STARTER OR DISCONNECT IS SUPPLIED, A JUNCTION BOX SHALL BE INSTALLED ADJACENT TO EQUIPMENT. THE DIVISION 26 (ELECTRICAL) CONTRACTOR SHALL FURNISH AND INSTALL LINE SIDE WIRING TO THE JUNCTION BOX. LOAD SIDE WIRING WILL BE FURNISH AND INSTALL BY THE DIVISION 26 (ELECTRICAL) CONTRACTOR COORDINATED WITH THE DIVISION 22 (PLUMBING) AND DIVISION 23 (HVAC) CONTRACTOR.

NOTES:

THE DIVISION 22 (PLUMBING) AND DIVISION 23 (HVAC) CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER DIRECTION OF ROTATION FOR ALL THREE PHASE MOTORS AND EQUIPMENT.

IN ALL CASES THE DIVISION 22 (PLUMBING) AND DIVISION 23 (HVAC) CONTRACTOR SHALL BE CONTRACTUALLY OBLIGATED TO INSURE ALL FINAL CONNECTIONS, START UP, AND TESTING OF EQUIPMENT IS PROVIDED PER THE MANUFACTURERS' STRICT INSTRUCTIONS; HOWEVER ALL FINAL CONNECTIONS SHALL FURNISHED AND INSTALLED BY THE DIVISION 26 (ELECTRICAL) CONTRACTOR





704 N Person St
Raleigh NC 27604
www.insitustudio.us

Engineered Solution, PC Falls of Neuse Rd, Suite 101 Raleigh NC 40 9300 www.sirmaes.com Tic: C-2490

PROVIDE WHITE SELF-ADHESIVE LABEL.

LABEL TO SHOW DEVICE BEING

LETTERING TO BE 1/2" IN HEIGHT. COLOR

OF LABELING TO BE FIELD VERIFIED. TOP

CONTROLLED OR MONITORED. BOTTOM

LABEL TO SHOW LOOP AND DEVICE

NUMBER. TYPICAL ADDRESSABLE

MODULES OR TEST SWITCHES.

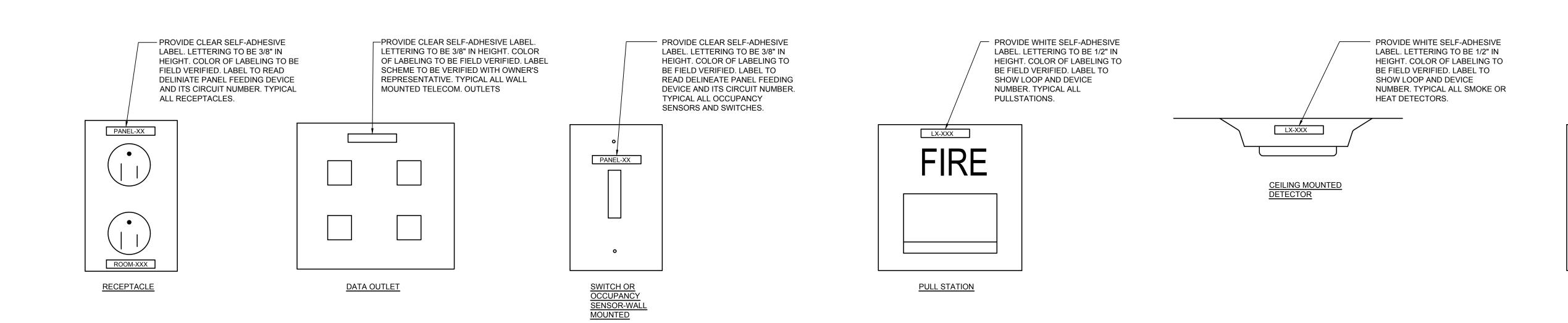
AHU-XX

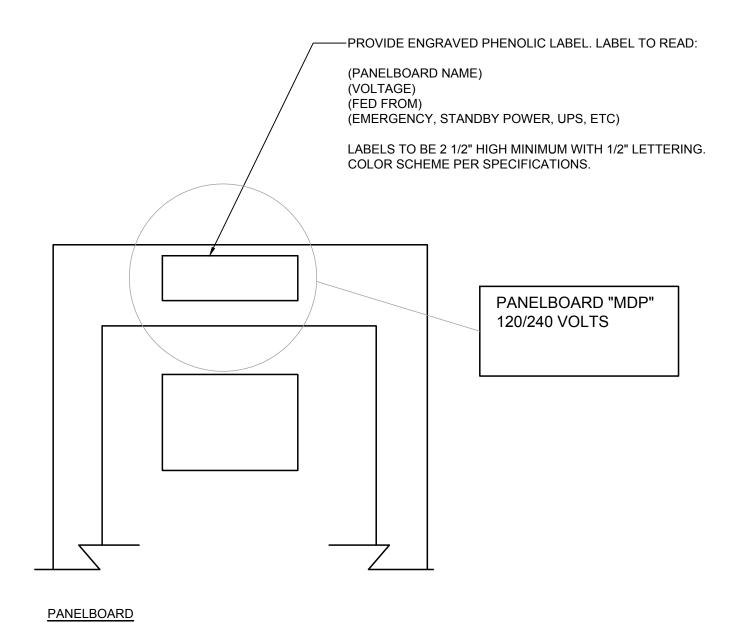
 \bigcirc

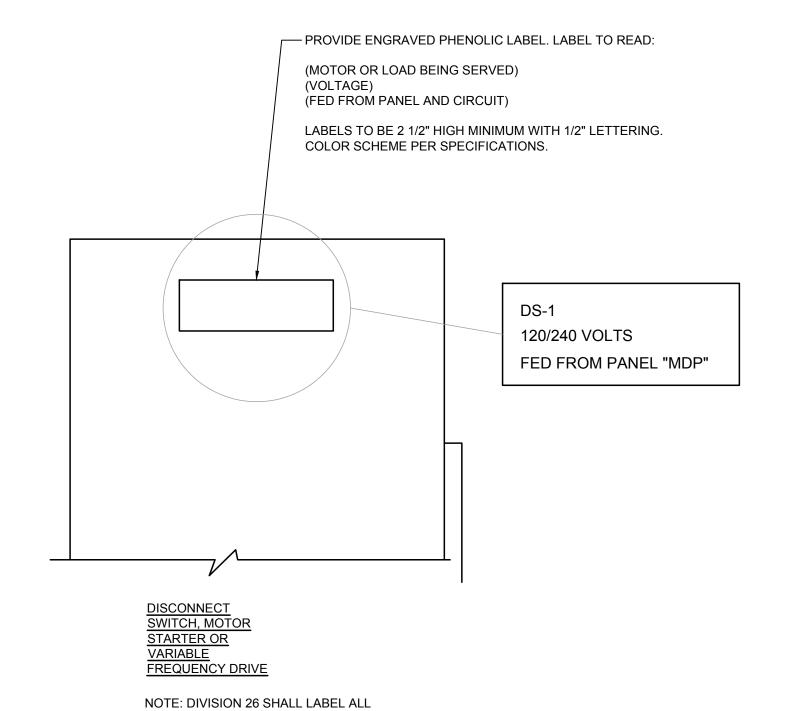
LX-XXX

FIRE ALARM MODULE OR TEST SWITCH









DISCONNECTS INCLUDING THOSE PROVIDED BY DIVISIONS 22 AND 23.

SEAL 19658