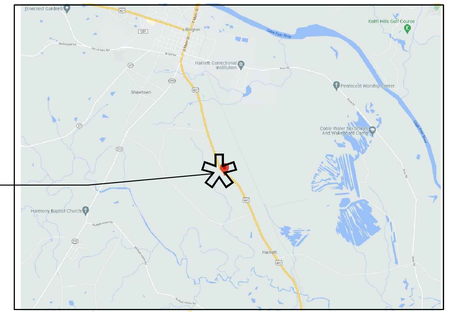
Proposed "Concrete Batch Plant"
Dispatch Office Building for

Crete Solutions LLC

2544 US 401 N
Lillington, North Carolina

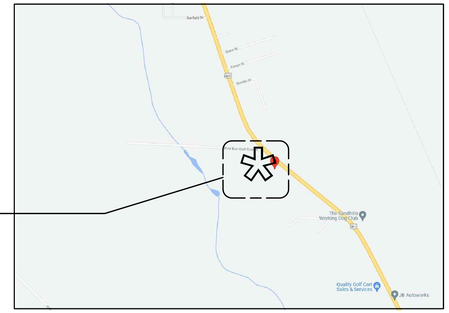
CONTRACT DOCUMENTS: SUBMITTAL 12/06/21 (Issued for Code Enforcement Permit Review Approval)
Occupancy Group Use: " Business (B) "

APPROXIMATE VICINITY OF PROPOSED PROJECT SEE LOCATION MAP



VICINITY MAP
NTS

APPROXIMATE AREA OF EXISTING BUILDING FACILITY NEW CONSTRUCTION



LOCATION MAP
NTS

1
A100

SITE NORTH

PLAN NORTH

KEY PLAN — NOT TO SCALE

SHEET TITLES

Contract Documents – issued for Construction

CRETE SOLUTIONS, LLC; CONCRETE BATCH PLANT OFFICE 2021

ARCHITECTURAL FIRM OF RECORD:

DESIGN ELEMENT, INC. REGISTERED ARCHITECTURAL CORPORATION CERT.NO 51371 WRIGHTSVILLE BEACH, NC NORTH CAROLINA

Design Elements
Michael L. Saieed, Jr., AIA, LEED-AP
Architect

ENGINEERING FIRM
(MECHANICAL, ELECTRICAL, PLUMBING) OF RECORD:

TOPSAIL ENGINEERING, INC
PLUMBING | MECHANICAL | ELECTRICAL

TOPSAIL ENGINEERING INC
(NC License: C-2546)
Post Office Box 367
Hampstead, NC 28443
(Tel) 910.270.3747
Email: office@topsailengineering.com

ENGINEERING FIRM STRUCTURAL OF RECORD:

DT
DAVID TERKELTOUB AND ASSOCIATES
CONSULTING ENGINEERS
902 PINE GROVE DRIVE
WILMINGTON, NC 28409
PHONE: (910) 794–3070 FAX: (910) 794–3090

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS - NC 2018 BUILDING CODE
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

Name of Project: Crete Solution, LLC "Concrete Batching Plant Office/Storage Building"

Address: 2544 US 401 N, Harnett Co., Lillington, North Carolina Zip Code 27546

Owner/Authorized Agent: Tyler Shaw , Owner Associate (Crete Investments, LLC) Phone # (910) 762-1691
E-Mail trns@cretellc.com

Designer Contact: MICHAEL SAIEED (Designer of Record / Agent) Phone # (910) 509-3131
E-Mail msaieed@designele.com

Owned By: ☐ City ☐ County ☐ State ☒ Private

Code Enforcement Jurisdiction: ☒ City Lillington, NC ☒ County Harnett ☐ State

PROJECT SUMMARY:

Building Description: NEW (PROPOSED) CONSTRUCTION OF A 1 STORY WOOD FRAME STRUCTURE

Scope of Work: DESIGN AND CONSTRUCT A PROPOSED SINGLE-STORY STRUCTURE FOR A CONCRETE BATCH PLANT OFFICE WITH ACCESSORY STORAGE

Code Compliance Summary: SINGLE STORY GROUP TYPE "B" OCCUPANCY (PRIMARY USE) FACILITY WITH ACCESSORY STORAGE (S-2 LOW HAZARD)

Alternative Means of Compliance Request: NONE

LEAD DESIGN PROFESSIONAL: .

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	Design Elements	Mitchell Saleed AIA	NC-8773	(910) 509-3131	msaleed@designele.com
Civil	tbd	tbd	NC-xx	–	xxx
Electrical	McDowell Consulting	Gregory McDowell	NC-18518	(910) 270-3747	gregmcdowell@bellsouth.net
Fire Alarm	McDowell Consulting	Gregory McDowell	NC-18518	(910) 270-3747	gregmcdowell@bellsouth.net
Plumbing	McDowell Consulting	Steven H. Everhart	NC-23933	(910) 270-3747	mcesteve@bellsouth.net
Mechanical	McDowell Consulting	Steven H. Everhart	NC-23933	(910) 270-3747	mcesteve@bellsouth.net
Sprinkler–Standpipe					
Structural	Terkeltoub & Associates	David Terkeltoub	NC-42466	(910) 794-3070	dterkeltoub@davidterkeltoubandassociates.com
Retaining Walls >5' High					
Precast					
Trusses					
Other					

"Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc

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

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

CONSTRUCTED (date) N/A CURRENT OCCUPANCY(S) (Ch. 3): N/A
RENOVATED: (date) - PROPOSED OCCUPANCY(S) (Ch. 3): BUSINESS GROUP [B]

OCCUPANCY CATGORY (Table 1604.5): CURRENT: ☒ N/A ☐ I ☐ II ☐ III ☐ IV
PROPOSED: ☐ N/A ☐ I ☒ II ☐ III ☐ IV

BASIC BUILDING DATA
Construction Type: (check all that apply) ☐ I-A ☐ I-B ☐ II-A ☐ II-B ☐ III-A ☐ III-B ☐ IV ☐ V-A ☒ V-B
Mixed construction: ☐ No ☐ Yes Types: _ , _

Sprinklers: ☐ N/A ☐ Yes ☒ No ☐ Partial ☐ N/A ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D

Standpipes: ☐ N/A ☒ No Class ☐ I ☐ II ☐ III ☐ Wet - Automatic ☐ Dry

Primary Fire District: ☐ Yes ☒ No Flood Hazard Area: ☐ Yes ☒ No

Special Inspections: ☐ Yes (Contact the local inspection jurisdiction for additional procedures and requirements.) ☒ No

Gross Building Area Table:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
4th Floor			
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor		1528	1528
Total		1528	1528

TOTAL GROSS SQUARE FOOT AREA (FOOTAGE / CONDITION AND NON-CONDITION SPACES, AS DEFINED NCBC-2018 SECTION 202); ESTIMATED (DENOTED sqft), ARE FOR CODE SUMMARY REVIEW ONLY; NOT FOR GENERAL CONTRACTOR'S REFERENCE USE OF ACTUAL AREA "BUILD TO SUIT " CONSTRUCTION COST

ALLOWABLE AREA:

Primary Occupancy Classification(s):
Assembly ☐ A-1 ☐ A-2 ☐ A-3 (Ground floor only) ☐ A-4 ☐ A-5
☒ Business ☐ Educational Factory ☐ F-1 Moderate ☐ F-2 Low
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ I-1 ☐ I-2 ☐ I-3 I-1 Condition ☐ 1 ☐ 2; I-2 Condition ☐ 1 ☐ 2; I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ Mercantile Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High Piled ☐ Parking Garage (Open) ☐ Parking Garage (Enclosed) ☐ Repair Garage
☐ Utility and Miscellaneous

Accessory Occupancy Classification(s): STORAGE S–2 LOW HAZARD

Incidental Uses (Table 509): .

Special Uses (Chapter 4 - List code Sections): .

Special Provisions (Chapter 5 - List code Sections): 508.2.4

Mixed Occupancy: ☒ No ☐ Yes Separation 0 Hr. Exception: 508.2.4

Separated Use ☒ No ☐ Yes
☒ Non-Separated Use (508.3)
☐ 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.

MOST RESTRICTIVE

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

$$\frac{\quad}{\quad} + \frac{\quad}{\quad} + \frac{\quad}{\quad} + \dots\dots\dots = \quad \leq 1.00$$

STORY NO.	(A) DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2[4] AREA	(C) AREA FOR FRONTAGE INCREASE[1,5]	(E) ALLOWABLE AREA PER STORY OR UNLIMITED[2,3]
1	B	1528 sqft	9000 sqft	N/A	9000 sqft
	S–2	1528 sqft	13,500 sqft	N/A	13,500 sqft

Percent of frontage increase I = 100 [F/P - 0.25] x W/30 (N/A Not Applicable to the project means)

1 Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = ___ (F)
b. Total Building Perimeter = ___ (P)
c. Ratio (F/P) = ___ (F/P)
d. W = Minimum width of public way = ___ (W)
2 Unlimited area applicable under conditions of Section 507.
3 Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2) (maximum 4 stories - 506.2.4 exception)
4 The maximum area of open parking garages must comply with 406.5.4. The maximum area of air traffic control towers must comply with 412.3.1.
5 Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT:

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	40'–0"	16'–8"	.
Building Height in Stories (Table 504.4)	2	1	.

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

FIRE PROTECTION REQUIREMENTS:

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/ REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural frame, including columns, girders, trusses		0	0				
Bearing Walls							
Exterior		0	0				
North		.					
East		.					
West		.					
South		.					
Interior		0	0				
Non-bearing walls and partitions Exterior	x ≥ 30'						
North							
East							
West							
South							
Interior Walls and partitions		0	0				
Floor construction including supporting beams and joists		0	0				
Floor Ceiling Assembly		N/A					
Columns supporting Floors		N/A					
Roof construction including supporting beams and joists		0	0				
Roof Ceiling Assembly		0					
Columns supporting Roof		N/A					
Shaft Enclosures - Exit		N/A					
Shaft Enclosures - Elevator		N/A					
Shaft Enclosures - Other		N/A					
Corridor Separation		N/A					
Occupancy/Fire Barrier Separation		N/A					
Party/Fire Wall Separation		N/A					
Smoke Barrier Separation		N/A					
Smoke Partition		N/A					
Tenant/Dwelling Unit Sleeping Unit Separation		N/A					
Incidental Use Separation		N/A					

*Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
NORTH WALL: >30'	Unprotected, Non–Sprinklered	No Limit	N/A
EAST WALL: >30'	Unprotected, Non–Sprinklered	No Limit	N/A
SOUTH WALL: >30'	Unprotected, Non–Sprinklered	No Limit	N/A
WEST WALL: >30'	Unprotected, Non–Sprinklered	No Limit	N/A

WALL LEGENDS: This section required for all projects
Check if the following are present and indicated by a wall legend on _____

☐ Fire Walls 706 ☐ Fire Barriers 707 ☐ Shaft Enclosure 713 ☐ Fire Partitions 708 ☐ Smoke Barriers 709 ☐ Smoke Partitions 710

LIFE SAFETY SYSTEM REQUIREMENTS:

Emergency Lighting:	☐ No	☒ Yes
Exit Signs:	☐ No	☒ Yes
Fire Alarm:	☒ No	☐ Yes
Smoke Detection Systems:	☒ No	☐ Yes ☐ Partial
Panic Hardware:	☒ No	☐ Yes

LIFE SAFETY SYSTEM REQUIREMENTS:
Life Safety Plan Sheet #: _____

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

EXIT REQUIREMENTS
NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM* NUMBER OF EXITS REQ'D	MINIMUM* NUMBER OF EXITS SHOWN ON PLANS	TRAVEL DISTANCE ALLOWABLE TRAVEL DISTANCE (TABLE 1017.2)	TRAVEL DISTANCE ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	ARRANGEMENT MEANS OF EGRESS[1,3] (SECTION 1007.1) REQUIRED DISTANCE BETWEEN EXIT DOORS	ARRANGEMENT MEANS OF EGRESS[1,3] (SECTION 1007.1) ACTUAL DISTANCE SHOWN ON PLANS
BUSINESS	1	1	200'	53'	N/A	27.5'
STORAGE	1	1	200'	53'	N/A	.

1 Corridor dead ends (Section 1020.4)
2 Single exits (Table 1006.3.2), Spaces with one means of egress (Table 1006.2.1)
3 Common Path of Travel (Section 1006.2.1)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA[1] SQ. FT.	(b) AREA[1] PER OCCUPANT (TABLE 1004.1.2)	(c) CALCULATED OCCUPANT LOAD (a x b)	(d) EGRESS WIDTH PER OCCUPANT (1005.3) STAIR	(d) EGRESS WIDTH PER OCCUPANT (1005.3) LEVEL	EXIT WIDTH (in)[2, 3, 4, 5, 6] REQUIRED WIDTH (SECTION 1005.3) (c x d) STAIR	EXIT WIDTH (in)[2, 3, 4, 5, 6] REQUIRED WIDTH (SECTION 1005.3) (c x d) LEVEL	EXIT WIDTH (in)[2, 3, 4, 5, 6] ACTUAL WIDTH SHOWN ON PLANS STAIR	EXIT WIDTH (in)[2, 3, 4, 5, 6] ACTUAL WIDTH SHOWN ON PLANS LEVEL
1st Floor (B)	969	100	8	–	.2	–	1.6"		68"
1st Floor (S–2)	559	500	2	–	.2	–	1.4"		68"

1 See Table 1004.1.2 to determine whether net or gross area is applicable. See definition "Floor Area, Gross" and "Floor Area, Net" (Section 202)
2 Minimum stairway width (Section 1011.2); min. corridor width (Section 1020.2); min. door width (Section 1010.1.1)
3 Minimum width of exit passageway (Section 1024.2)
4 See Section 1005.6 for converging exits.
5 The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required width (Section 1005.5)
6 Assembly occupancies (Section 1029)

PLUMBING FIXTURE REQUIREMENTS:
(TABLE 2902.1)

☐ NO CHANGE TO BUILDING PLUMBING FIXTURES

	USE		WATER CLOSETS		URINALS	LAVATORIES		SHOWERS/ TUBS	DRINKING FOUNTAINS	
	Grp Type	Occupancy Load	MALE	FEMALE		MALE	FEMALE		REGULAR	ACCESSIBLE
REQUIRED	B & S–2	5 M/ 5 F	1	1		1	1		N/A per 2902.6	
	TOTAL PROVIDED		1	1	0	1	1	0	N/A per 2902.6	

ACCESSIBLE PARKING: (SECTION 1106)
REFERENCE CIVIL/SITE DRAWINGS FOR RELATED INFORMATION

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES REQUIRED	TOTAL # OF PARKING SPACES PROVIDED	# OF ACCESSIBLE SPACES PROVIDED REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	TOTAL # ACCESSIBLE PROVIDED
TOTAL						

SPECIAL APPROVALS
Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)
PROVIDE BUILDING PREMISES IDENTIFICATION REFERENCE KEYNOTE [01]

DESIGN LOADS SUMMARY
(SEE STRUCTURAL DRAWINGS FOR CONTINUATION OF "BUILDING CODE SUMMARY")
ENERGY SUMMARY
(SEE MECHANICAL DRAWINGS FOR CONTINUATION OF "BUILDING CODE SUMMARY")
ELECTRICAL SYSTEM AND EQUIPMENT
(SEE ELECTRICAL/MECHANICAL DRAWINGS FOR CONTINUATION OF "BUILDING CODE SUMMARY")
MECHANICAL SUMMARY
(SEE MECHANICAL DRAWINGS FOR CONTINUATION OF "BUILDING CODE SUMMARY")

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 proposed design.
Existing building envelope complies with code: ☐ Yes (The remainder of this section is not applicable) ☐ No
Exempt Building : ☒ Yes Provide code or statutory reference: _____ ☐ No
Climate Zone: ☐ N/A ☐ 3A ☒ 4A ☐ 5A
Method of Compliance: ☐ Energy Code – Performance ☐ Energy Code – Prescriptive ☐ ASHRAE 90.1 – Performance ☐ ASHRAE 90.1 – Prescriptive ☐ Other – Performance (If "Other" specify source here) _____

COMcheck Software Version 4.1.5.1

Envelope Compliance Certificate

Project Information

Energy Code:	90.1 (2013) Standard
Project Title:	Crete Batch Plant Office Building
Location:	Lillington, North Carolina
Climate Zone:	4a
Project Type:	New Construction
Vertical Glazing / Wall Area:	15%
Permit No.	To Be Determined
Performance Sim. Specs:	EnergyPlus 8.1.0.009 (EPW: USA_NC_Raleigh-Durham.Intl.AP.723060_TMY3.epw)

Construction Site: 2544 US 401 N Lillington, NC 27546

Owner/Agent: Tyler Shaw Crete Investments, LLC 2005 Eastwood Road Wilmington, NC 28403 910-762-1691 tms@cretellc.com

Designer/Contractor: Michael Saieed, RA, AIA, LEED-AP Design Elements, RA (Architectural Firm) Wilmington, NC 28401 (910) 509-3131 msaieed@designele.com

Building Area	Floor Area
1-Building area: slab on grade (Office) : Nonresidential	1600

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor[a]
Roof - Asphalt Shingle, R42 batts attic insulation: Attic Roof with Wood Joists, [Bldg. Use 1 - Building area: slab on grade] : Comment: Floor 1: Slab-On-Grade Unheated, Vertical 1 ft., [Bldg. Use 1 - Building area: slab on grade] : Comment: Slab on grade (c)	1600	0.0	38.0	0.025	0.021
	160	---	7.5	0.600	0.520
NORTH					
North Wall: vinyl siding, 6" stud w/ R-19 fiberglass Insulation Intill: Wood-Framed, 16" o.c., [Bldg. Use 1 - Building area: slab on grade] : Comment: Vinyl siding, AWB membrane, cavity, R-19 fiberglass	400	19.0	0.0	0.067	0.064
Insulated Storefront 4517 type B: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID SOLARBAN 60 Clear/+Clear, SHGC 0.31, VT 0.54, [Bldg. Use 1 - Building area: slab on grade] : Comment: (b)	32	---	---	0.500	0.420
Insulated Storefront SHGC 5007 type A2: Glass (> 50% glazing) Metal Frame, Entrance Door, Perf. Specs.: Product ID SOLARBAN 60 Clear/+Clear, SHGC 0.25, VT 0.54, [Bldg. Use 1 - Building area: slab on grade] (b)	21	---	---	0.350	0.770
EAST					
East Wall: vinyl siding, 6" stud w/ R-19 fiberglass Insulation Intill: Wood-Framed, 16" o.c., [Bldg. Use 1 - Building area: slab on grade] : Comment: Vinyl siding, AWB membrane, cavity, R-19 fiberglass	400	19.0	0.0	0.067	0.064
Insulated Storefront 4517 type B: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID SOLARBAN 60 Clear/+Clear, SHGC 0.31, VT 0.54, [Bldg. Use 1 - Building area: slab on grade] (b)	16	---	---	0.500	0.420
Insulated Storefront 4517 type B: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID SOLARBAN 60 Clear/+Clear, SHGC 0.31, VT 0.54, [Bldg. Use 1 - Building area: slab on grade] (b)	16	---	---	0.500	0.420
SOUTH					
South Wall: vinyl siding, 6" stud w/ R-19 fiberglass Insulation Intill: Wood-Framed, 16" o.c., [Bldg. Use 1 - Building area: slab on grade] : Comment: Vinyl siding, AWB membrane, cavity, R-19 fiberglass	400	19.0	0.0	0.067	0.064
Insulated Storefront 4517 type B: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID SOLARBAN 60 Clear/+Clear, SHGC 0.31, VT 0.54, [Bldg. Use 1 - Building area: slab on grade] : Comment: (b)	16	---	---	0.500	0.420
Insulated Storefront 4517 type B: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID SOLARBAN 60 Clear/+Clear, SHGC 0.31, VT 0.54, [Bldg. Use 1 - Building area: slab on grade] (b)	16	---	---	0.500	0.420
Insulated Storefront 4517 type B: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID SOLARBAN 60 Clear/+Clear, SHGC 0.31, VT 0.54, [Bldg. Use 1 - Building area: slab on grade] (b)	16	---	---	0.500	0.420
Insulated Storefront Trifab 5007 type A2: Glass (> 50% glazing) Metal Frame, Entrance Door, Perf. Specs.: Product ID SOLARBAN 60 Clear/+Clear, SHGC 0.25, VT 0.54, [Bldg. Use 1 - Building area: slab on grade] (b)	21	---	---	0.350	0.770
WEST					
West Wall: vinyl siding, 6" stud w/ R-19 fiberglass Insulation Intill: Wood-Framed, 16" o.c., [Bldg. Use 1 - Building area: slab on grade] : Comment: Vinyl siding, AWB membrane, cavity, R-19 fiberglass	400	19.0	0.0	0.067	0.064
Insulated Storefront 4517 type B: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID SOLARBAN 60 Clear/+Clear, SHGC 0.31, VT 0.54, [Bldg. Use 1 - Building area: slab on grade] (b)	16	---	---	0.500	0.420
Insulated Storefront 4517 type B: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID SOLARBAN 60 Clear/+Clear, SHGC 0.31, VT 0.54, [Bldg. Use 1 - Building area: slab on grade] (b)	32	---	---	0.500	0.420
Insulated Storefront Trifab 5007 type A2: Glass (> 50% glazing) Metal Frame, Entrance Door, Perf. Specs.: Product ID SOLARBAN 60 Clear/+Clear, SHGC 0.25, VT 0.54, [Bldg. Use 1 - Building area: slab on grade] (b)	21	---	---	0.350	0.770

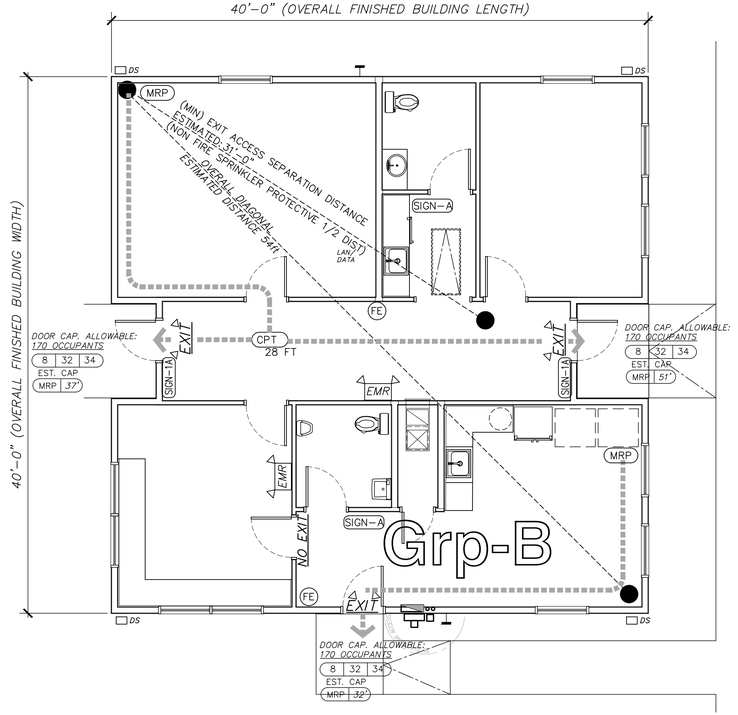
(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.
(c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Envelope PASSES: Design 1% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 90.1 (2013) Standard requirements in COMcheck Version 4.1.3.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title Signature Date



GENERAL ARRANGEMENT LIFE SAFETY PLANS

SCALE: 3/16" = 1'–0"

SITE NORTH · PLAN NORTH · A G101

"LIFE SAFETY" REFERENCE PLAN

WIDTH PROVIDED / EXIT (IN.)
WIDTH REQUIRED / EXIT (IN.)
TOTAL NO. PERSONS / EXITING

MRP — CPT — TRAVEL DISTANCE (FT)
COMMON PATH TRAVEL MOST REMOTE POINT
POINT OF ORIGIN
X — NUMBER OF PERSONS EXITING

10 TOTAL NUMBER OF PERSONS EXITING BUILDING (OR) OCCUPIED SPACE (HIGHEST CAPACITY FLOOR LEVEL) (BY DESIGN/PROGRAMMING)

LEGEND (LIFE SAFETY PLAN)

FE — PORTABLE FIRE EXTINGUISHER SURFACE WALL MOUNT UNIT; TOP/LEVER HEIGHT @ 42" AFF (MULTI–PURPOSE CARBON DIOXIDE (MIN.15lb) CLASS TYPE ABC)

SIGN–1 — WALL MOUNTED EXIT IDENTIFICATION SIGNAGE (SEE SIGNAGE DETAIL B/N100)

EXIT — DEDICATED BUILDING ACCESSIBLE MEANS OF EGRESS W/ OVERHEAD EXIT LIGHT AND EMERGENCY BACKUP. AT NON–DIRECT EXITS, PROVIDE DIRECTIONAL ARROW TO EXIT. (OPTIONAL: COMBINATION UNIT W/ EMERGENCY DIRECTIONAL (ACCESSIBLE PATHWAY) ADJUSTABLE (TWO) HEADS LED LIGHTING (REFERENCE MOST CURRENT NCBC–2018 RECOGNIZED NEC ELECTRICAL CODE AND ELECTRICAL DRAWINGS FOR ADDITIONAL DETAILED INFORMATION)

NO EXIT — EXTERIOR SERVICE ACCESS DOOR; NOT DECLARED AN ACCESSIBLE (HC/ADAG) MEANS OF EGRESS. (PROVIDE "NO EXIT" PLACARD, MIN. 2" RED LETTERS; MOUNTED 48" A.F.F. CENTERED TO DOOR PANEL)

EMR — MEANS OF EGRESS EMERGENCY DIRECTIONAL LIGHTING; BATTERY BACKUP; SURFACE WALL OR CEILING MOUNTED (REFERENCE NEC 2015 ELECTRICAL CODE AND ELECTRICAL DRAWINGS FOR APPROXIMATE REQUIRED QUANTITIES FOR ALLOWABLE DISTANCE LOCATIONS) (OPTIONAL: COMBINATION UNIT W/ EXIT SIGNAGE)

ASSUMED PATH OF TRAVEL (LESS THAN 200ft) FROM THE "MOST REMOTE POINT" TO DEDICATED MULTIPLE EXITS: ACCESSIBLE MEANS OF EGRESS

KNOX BOX — LOCATION OF KNOX BOX AND FECP (REFERENCE ARCH A101 [KEYNOTE 13]) SHALL BE APPROVED BY AUTHORITY HAVING JURISDICTION AND LOCAL FIRE MARSHALL
THE REQUIREMENTS OF A LOCK BOX SHALL BE AS FOLLOWS:
1. ONLY APPROVED BOXES SHALL BE USED. ORDER FROM WWW.KNOXBOX.COM
2. MINIMUM SIZE SHALL BE NECESSARY TO SECURE ALL THE KEYS FOR THE BUILDING. REFERENCE UNIT SHALL BE THE 3200 SERIES WITH A HINGED LID.
3. LOCK BOXES SHALL BE MOUNTED TO THE WALL WITHIN 5 FEET OF THE DOOR ADJACENT TO THE FACP OR REMOTE ANNUNCIATOR, FIVE (5) FEET ABOVE FINISHED FLOOR (AFF) MEASURED TO THE CENTERLINE.
4. THE RED KNOX BOX STICKER SHALL BE PLACED IN THE TOP LEFT CORNER OF THE DOOR THAT KEYS ARE PROVIDED TO OPEN.

ITEMS THAT SHALL BE INCLUDED IN THE LOCK BOX, IF APPLICABLE TO BUILDING:
1. MASTER ENTRY KEY FOR BUILDING OR BUSINESS
2. EQUIPMENT ROOM KEY
3. ANY OTHER KEY(S) THAT MAY BE HELPFUL IN FIRE DEPARTMENT OPERATIONS

GENERAL KEYNOTES

01 BUILDING PREMISES IDENTIFICATION
PROVIDE AN APPROVAL (ASSIGNED BY LOCAL AUTHORITY HAVING JURISDICTION) STREET ADDRESS NUMBER; WALL MOUNTED TO EXTERIOR BUILDING FACADE AND POSITION TO BE PLAINLY LEGIBLE AND VISIBLE FORM THE STREET (OR) ROAD FRONTING THE PROPERTY LINE (PUBLIC ACCESS WAY) BUILDING ADDRESS NUMBERS SHALL BE CONTRASTING WITH THE FINISHED BUILDING FACADE (BACKGROUND SIDING). BUILDING ADDRESS CHARACTERS SHALL BE "ARABIC (OR) ALPHABETICAL LETTERS" AT (MIN) 6" HEIGHT WITH A (MIN) STROKE WIDTH 3/4"; SECURE ADDRESS CHARACTERS WITH APPROPRIATE NON–CORROSIVE FASTENERS,

WHERE PROPOSED STRUCTURE ACCESS IS BY MEANS OF A PRIVATE ROAD AND THE BUILDING ADDRESS NUMBER CANNOT BE VIEWED FROM PUBLIC ACCESS WAY, A MONUMENT, POLE OR OTHER SIGN OR MEANS SHALL BE USED TO IDENTIFY THE STRUCTURE. (REFERENCE ICC/IBC/NCFC–2018 SECTION 505)

no.	date	revision
0	12/06/21	ISSUE FOR CODE ENFORCEMENT REVIEW & APPROVAL

THIS SHEET SHOWS BASIC DRAFTING STANDARDS

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06/2021

MICHAEL LEE SAIEED JR. 34 NORTH CAROLINA REGISTERED ARCHITECT 8773 SEAL

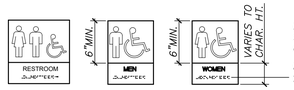
12/

Proposed Dispatch Office Building for
Crete Solutions, LLC
2544 US 401 N
Lillington, North Carolina 27546

BUILDING CODE & LIFE SAFETY PLAN

Contract Documents - Issued for Construction
job status

date	12/01/21
job no.	CRETE/LIL
drawn by	MSAIEED
checked by	MSAIEED
drawing no.	G100
revision no.	0



[SIGN–A] [SIGN–B] [SIGN–C]

RAISED GRAPHIC SYMBOLS AND CHARACTERS

BRAILLE 1/4" HT

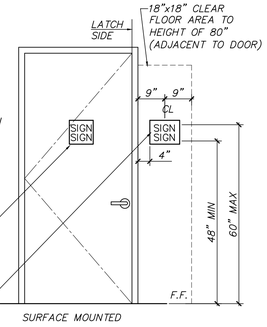
IDENTIFICATION SIGNAGE; PANEL MATERIAL TO BE 1/4" ACRYLIC, NON–GLARE FINISH; CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR PANEL BACKGROUND (DARK–ON–LIGHT OR LIGHT–ON–DARK)

IDENTIFICATION SIGNAGE AT 60" A.F.F., ARE TO BE DISTINCTLY DIFFERENT FROM THE DOOR OR WALL IN COLOR AND CONTRAST.

LETTERS & NUMBERS ON SIGNS SHALL BE RAISED 1/32" MIN., SHALL BE A MIN. OF 5/8" HIGH & SHALL BE SANS–SERIF UPPERCASE CHARACTERS ACCOMPANIED BY GRADE 2 BRAILLE.

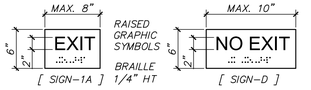
ONLY IF ADJACENT WALL SPACE CANNOT ACCOMMODATE, THEN SIGN(S) SHALL BE CENTERED PLACE ON THE DOOR

IF NO WALL SPACE AVAILABLE ADJACENT TO THE STRIKE JAMB/ LATCH SIDE OF DOOR, THEN THE SIGN(S) SHALL BE PLACED ON THE NEAREST ADJACENT WALL



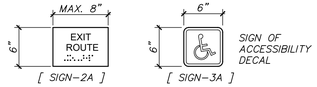
SURFACE MOUNTED

SIZE OF SIGNAGE BORDER/BACKER PLATE VARIES PER PROVIDER; DIMENSIONS DENOTED FOR REFERENCES ONLY

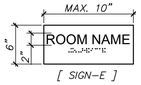


[SIGN–1A] [SIGN–D]

EXIT SIGNAGE:
LETTER SIZE 2" W/ GRADE TWO BRAILLE.
SURFACE MOUNTED DARK BACKGROUND & LIGHT LETTERS/ SYMBOL, MATTE FIN. REQUIRED AT DOOR(S): NOTED (EXIT HC)



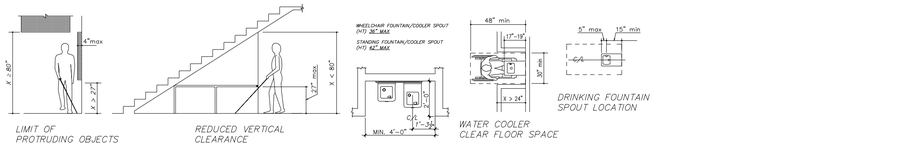
[SIGN–2A] [SIGN–3A]

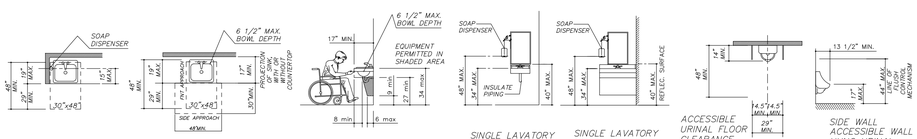


[SIGN–E]

B / N100 TACTILE SIGN DETAILS

NOT TO SCALE:





ACCESSIBLE SINK FLOOR CLEARANCE

ACCESSIBLE SINK FLOOR CLEARANCE

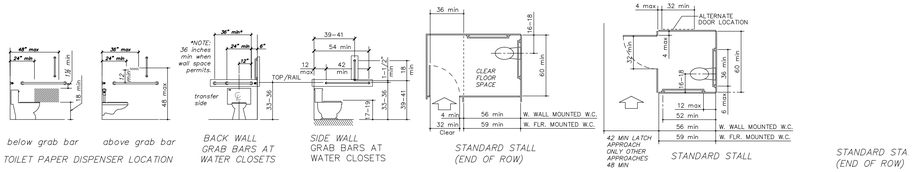
ACCESSIBLE SINK COUNTER HEIGHT AND KNEE CLEARANCE

SINGLE LAVATORY WALLHUNG W/MIRROR

SINGLE LAVATORY COUNTER W/MIRROR

ACCESSIBLE URINAL FLOOR CLEARANCE
(WHEN PRIVACY SCREENS DO NOT PROJECT BEYOND FIXTURE FRONT EDGE)

SIDE WALL ACCESSIBLE WALL HUNG URINAL



below grab bar above grab bar

TOILET PAPER DISPENSER LOCATION

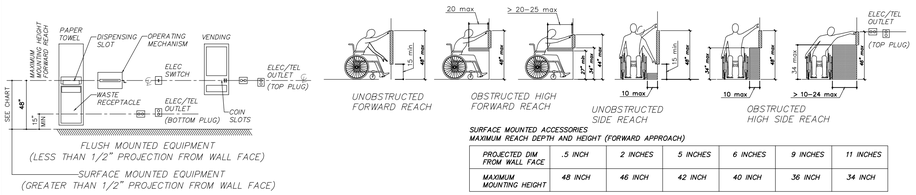
BACK WALL GRAB BARS AT WATER CLOSETS

SIDE WALL GRAB BARS AT WATER CLOSETS

STANDARD STALL (END OF ROW)

STANDARD STALL

STANDARD STA (END OF ROW)



FLUSH MOUNTED EQUIPMENT (LESS THAN 1/2" PROJECTION FROM WALL FACE)

SURFACE MOUNTED EQUIPMENT (GREATER THAN 1/2" PROJECTION FROM WALL FACE)

UNOBSTRUCTED FORWARD REACH

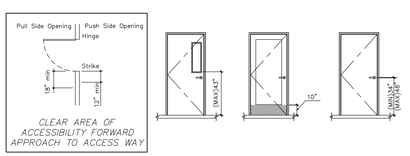
OBSTRUCTED HIGH FORWARD REACH

UNOBSTRUCTED SIDE REACH

OBSTRUCTED HIGH SIDE REACH

SURFACE MOUNTED ACCESSORIES
MAXIMUM REACH DEPTH AND HEIGHT (FORWARD APPROACH)

PROJECTED DIM FROM WALL FACE	.5 INCH	2 INCHES	5 INCHES	6 INCHES	9 INCHES	11 INCHES
MAXIMUM MOUNTING HEIGHT	48 INCH	46 INCH	42 INCH	40 INCH	36 INCH	34 INCH



DENOTED REFERENCE SKETCHES INDICATES AREA REQUIREMENTS FOR NEEDED SOLID BLOCKING (OR) SHEET METAL CROSS FRAMING FOR WALL MOUNTED ACCESSORY ITEMS ACCESSIBLE FOR PERSONS WITH DISABILITIES. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ADEQUATE STABLE BLOCKING TO RESIST 250 POUNDS VERTICALLY AND LATERALLY.

A / N100 TYPICAL REFERENCES for (ANSI/ADAAG (HC) ACCESSIBILITY CLEARANCES

NOT TO SCALE

GENERAL NOTES (SEE ADDITIONAL REFERENCES FOR REQUIRED "IN–WALL" BLOCKING)

TYPICAL BATHROOMS (PRIMARY AND SECONDARY USES) ARE DESIGNED IN REFERENCE TO ICC–IBC/NCBC 2012 CHAPTER 11 & ICC/ANSI A117.1 FOR AMERICANS WITH DISABILITIES. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE AND PRE–FRAME WITH BLOCKING FOR SUPPORTING WALL MOUNTED HARDWARE ACCESSORIES NEEDED FOR PERSONS WITH DISABILITIES.

ALL GRAB BARS ACCESSORIES, AND THEIR FASTENERS SHALL BE CAPABLE OF SUPPORTING A 250 POUND LOAD APPLIED IN ANY DIRECTION, ANYWHERE ALONG ITS LENGTH.

PROVIDE HORIZONTAL GALV. SHEET METAL STRIPPING (MIN 54mils 16ga) CROSS WIDTH TO WALL STUD FLANGES FOR SECURING INDICATED WALL MOUNT ACCESSORIES; CONTRACTOR TO REFERENCE MILLWORK SHOP DRAWINGS AND TOILET ACCESSORIES LOCATIONS FOR RECOMMENDED MOUNTING HEIGHTS

FLOOR PLAN LEGEND

- SIGN– WALL MOUNTED (DOOR MOUNTED IF NOT APPLICABLE) IDENTIFICATION SIGNAGE (SEE SIGNAGE DETAIL SHEET B/N100)
- 1 DESIGNATES WALL TYPE CONSTRUCTION; (SEE SHEET 1/N102 FOR TYPICAL WALL TYPES)
- FE FIRE EXTINGUISHER WALL MOUNT UNIT W/ LEVER HT. @ 42" AFF (MULTI–PURPOSE CARBON DIOXIDE (MIN.10lb) CLASS TYPE ABC)
- FEC FIRE EXTINGUISHER & SEMI–RECESS METAL CABINET; IN–WALL MOUNTED 42" AFF FROM TOP LEVER/HANDLE (MIN.10lb) CLASS TYPE ABC); FACE FINISHED CABINET SHALL NOT EXTEND > 4" INTO ANY PATH OF CIRCULATION; PROVIDE RATED CABINET WHERE INSTALLED IN RATED WALL.
- (#) INDICATES DOOR IDENTIFICATION NUMBER; SEE ARCH SHT XXX FOR INFORMATION ON NOM. DOOR/FRAME SIZES, DESIGNATION TYPES & HARDWARE (REFERENCE ARCH AXXX FOR DETAILED INFOR'N)
- (A) INDICATES WINDOW IDENTIFICATION NUMBER; REF. SEE SHEET D/A201 FOR DETAILED INFORMATION FOR WINDOW FRAME DIMENSIONS AND NOTES
- SWC/HM (WIDTH) x (HEIGHT) DESIGNATES SIZES AND DOOR – SOLID WOOD CORE (SCW) AND FRAME – METAL FRAME (HM) HOLLOW METAL OR METAL KNOCK DOWN FRAME
- M.T. DESIGNATES EXTRUDED (SOLID) ALUMINUM FLOOR FINISH FLUSH TRANSITION THRESHOLD; ADAAG/HC "BARRIER FREE" ACCESSIBLE CROSS–OVER (MAX. 1/2" THK'N,)
- E.J. EXPANSION CONSTRUCTION JOINT EXTERIOR (NOM. 1/2"); TRAFFIC GRADE BITUMINOUS MATERIAL; PERIMETER CONCRETE SLAB TO WALL
- M.T.S. ALUM. EXTRUDED THRESHOLD TRANSITION STRIP; APPROPRIATE FINISH STRIP, JOINT SYSTEM AT FINISHED FLOORING CHANGES FROM ONE MATERIAL TO ANOTHER; TYPICAL FINISHED CARPET TO TAPERED TO FINISHED CONCRETE SLAB; DISABILITY ACCESSIBLE (ANSI/ADAAG)
- C.T.J. CONCRETE FLAT SLAB CONTROL JOINT; PER–FORMED "T–SHAPE" PLASTIC CRACK CONTROL STRIP (OPTIONAL: SAW CUT CONTROL JOINT; SAW CUT TOP SURFACE)
- C.J. CONSTRUCTION JOINT; SEPARATE FLOOR SLAB POUR W/ FORMED CONT. (SHEAR) KEYWAY AT ABUTTING PERIMETER SLAB EDGES
- C.S. CONCRETE SLAB CONTROL JOINT; TOOLED JOINT
- ARCHITECTURAL VERTICAL CONTROL; SURFACE FINISHED ELEVATION POINT
- FD FLOOR DRAIN, APPROXIMATE LOCATION CAST–IN–SLAB RECESS AND SLOPE FOR DRAINAGE (MIN 16" SQ. FLOOR SLAB TAPERED TO DROPPED INLET WASTE DRAIN) REFERENCE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION
- DESIGNATES PROPOSED (NEW WORK) WOOD STUD WALL FRAMING LOCATIONS (REFERENCE A/XXX FOR TYPICAL WALL TYPE CONSTRUCTION ASSEMBLY)
- (HC) DESIGNATED AS HANDICAPPED ACCESSIBILITY "ARCHITECTURAL BARRIER FREE" (CLEAR FLOOR AREA: 60" DIAMETER TURNING AND 60"x60" SQUARE SPACE DENOTED ADA/ANSI) (OR) 30"x48" FORWARD AND SIDE APPROACHES)

GENERAL ACCESSIBILITY REQUIREMENTS

THE BUILDING OWNER AND GENERAL CONTRACTOR SHALL INSURE THAT THIS FACILITY SHALL BE "BARRIER FREE" ACCESSIBLE TO AND USABLE BY PERSON(S) WITH DISABILITIES. ACCORDING TO THE LATEST EDITION TO THE ICC–IBC/NCBC 2012 CHAPTER 11 & ICC/ANSI A117.1 ACCESSIBILITY CODES REQUIREMENTS OF THE APPLICABLE STANDARDS. THE FOLLOWING IS A PARTIAL LIST (BUT NOT LIMITED TO) OF REQUIREMENTS. (REFERENCE 1/N103 FOR ADDITIONAL DETAILS AND GENERAL NOTES)

1. OPERABLE DOOR HARDWARE SHALL BE MOUNTED BETWEEN 30"(MIN.) AND 42"(MAX.) ABOVE FLOOR OR GROUND LEVEL AND BE LEVER TYPE, DESIGNATED FOR (HC) ACCESSIBLE..

2. TOILETS ROOMS & ACCESSORIES:

A. LAVATORY TO HAVE LEVER HANDLES, SPRING FAUCETS OR SELF METERING FAUCETS.

B: A COAT HOOK 48" ABOVE THE FLOOR SHALL BE MOUNTED ON THE BACK SIDE OF THE HANDICAPPED STALL DOOR (or) BACK OF ENTRY DOOR.

C. LOCATE THE WATER CLOSET (MIN.)16.6" TO (MAX)17.5" FROM THE CENTER LINE OF THE FIXTURE TO THE FINISHED WALL SURFACE. THE SEAT WILL BE 17" TO 19" ABOVE THE FLOOR TO THE TOP OF SEAT. TANK TYPE FLUSH LEVER SHALL BE POSITION TOWARD (SIDE APPROACH) ACCESSIBLE CLEAR FLOOR AREA FOR SIDE REACH

D. PROVIDE ONE 42" AND ONE 36" LONG x 1 1/2" OUTSIDE DIAMETER PEENED GRAB BARS, 1 1/2" FROM THE WALL, WITH (36) BEHIND TOILET AT 6" FROM THE WALL, AND (42) ADJACENT TO AT 12" FROM THE WALL AND CENTERLINE MEASURED 33"–36" PARALLEL TO AND ABOVE THE FLOOR. PROVIDE ADDITIONAL SIMILAR 18" VERTICAL PULL BAR 1–1/2" ABOVE HORIZONTAL SIDE BAR CENTERLINE MEASURED AVE. 39"–41" FROM REAR WALL.

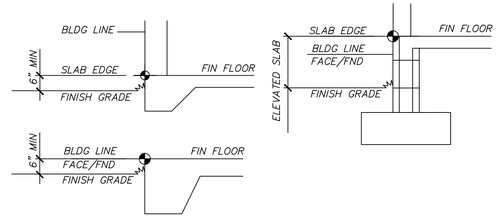
E. LAVATORY TO BE MOUNTED 34"(MAX.) ABOVE THE FINISHED FLOOR TO RIM WITH CLEAR FLOOR KNEE SPACE OF 30" IN WIDTH AND 27" IN CLEAR HEIGHT, (29" CLEAR UNDER FRONT EDGE), EXPOSED WATER/WASTE PLUMBING SHALL BE CLEAR OF ACCESSIBLE FLOOR AREA AND PROTECTED WITH PROPRIETARY VENDOR SUPPLIED "VINYL INSULATED PROTECTION COVERS" SHALL BE PROVIDED TO EACH SERVICE LINE (SIM. MFG. "TRUEBRO")

F. INSTALL MIRROR 40"(MAX.) ABOVE THE FINISHED FLOOR (BOTTOM FIN. EDGE) AND (72" TOP FIN. EDGE).

SYMBOL KEY

- 20 WINDOW TYPE
- A DOOR NUMBER
- 01 PLAN/SECTIONAL KEYNOTES
- 1 WALL TYPE CONSTRUCTION
- D / SHEET ELEVATION KEY
- 3 / SHEET ASSIGNED IDENTIFIER (LETTER OR NUMBER); SHEET NUMBER FOR REFERENCE DRAWING
- 100 ROOM NUMBER
- 5 / SHEET BUILDING SECTION KEY
- A301 SECTION KEY
- 5 / SHEET DETAIL KEY ENLARGED PLAN
- ELEVATION TARGET POINT

BUILDING LINE DEFINITION



VERTICAL CONTROL EQUIVALENTS:

FF – ARCHITECTURAL (DENOTED FOR SIMPLISTIC DESIGNS)
FINISHED FIRST FLOOR ELEVATION (EL) = 0'–00" (0.00' A.F.F.))

FG – ARCHITECTURAL FINISHED GRADE
ELEVATION (EL) = (–)3.000' A.F.F.
(EST. 5'–0" FROM DESIGNATED BUILDING LINE)

EL. FF – CIVIL SITE PLAN = FINISHED SLAB ELEVATION (MHSL)

FG – FINISH GRADE (BUILDING GRADE PERIMETER) = EL. (T.B.D.') MSL
(EST. 12'–0" FROM DESIGNATED BUILDING LINE)
(SEE CIVIL SITE DWG'S FOR ACTUAL FINISH GRADE (DECIMAL (FT) DESIGNATION)

CONVERSION CHART

US STANDARD STEEL GAUGE
EQUIVATENTS IN NOMINAL DIMENSIONS

MINIMUM DELIVERED THICKNESS (mils)	REFERENCE GAUGE STEEL SHEET (ga)	REFERENCE THICKNESS ALUMINUM 3003 (inch)
18	25	0.018"–0.021"
27	22	0.027"–0.031"
33	20	0.035"–0.040"
43	18	0.042"–0.045"
54	16	0.050"–0.055"
68	14	0.064"–0.071"
97	12	0.080"–0.102"

GENERAL ABBREVIATIONS

ADA AMERICAN/DISABILITY ACT
ADAAG ADA ACCESSIBLE GUIDELINES
AFF ABOVE FINISHED FLOOR*
AFG ABOVE FINISHED GRADE*
AGGR AGGREGATE
AHR ANCHOR
AHU AIR HANDLING UNIT*
ALUM ALUMINUM
ALT ALTERNATE*
ANOD ANODIZED
ASSY ASSEMBLY
ATTACH ATTACHMENT
AVG AVERAGE
AHJ AUTHORITY HAVING JURISDICTION

BRD BOARD
BITUM BITUMINOUS
BL BUILDING LINE
BLDG BUILDING
BLK BLOCK
BM BEAM
BOT BOTTOM
BRG BEARING

C/C CENTER TO CENTER*
CABT CABINET
CPT CARPET
CAV CAVITY
CG CORNER GUARD*
CEMT CEMENT
CER CERAMIC
CHAN CHANNEL
CHFR CHAMFER*
CJ CONSTRUCTION JOINT
CL CENTER LINE
CLG CEILING
CJ CONTROL JOINT
CLR CLEAR
CMU CONCRETE MASONRY UNIT*
CO CASED OPENING*
COL COLUMN
CONC CONCRETE
CONN CONNECTION
CONST CONSTRUCTION
CONT CONTINUOUS (ACTION)

DBL DOUBLE
DEMO DEMOLITION*
DET DETAIL
DF DRINKING FOUNTAIN
DIM DIMENSION
DIST DISTANCE
DN DOWN
DS DOWNSPOUT
DWG DRAWING

EL ELEVATION
EMER EMERGENCY
EQ EQUALLY SPACED
EQUIP EQUIPMENT*
EST ESTIMATE
EW EACH WAY
EWC ELECTRICAL WATER COOLER
EWH ELECTRICAL WATER HEATER*

EXHT EXHAUST FAN*
EXP EXPANSION
EJ EXPANSION JOINT
EXST EXISTING
EXT EXTERIOR

FACP FIRE ALARM CONTROL PANEL*
FD FLOOR DRAIN
FDN FOUNDATION
FEC FIRE EXTINGUISHER CABINET*
FRP FIBERGLASS*
FIN FINISH*
FIN FL FINISH FLOOR*
FIN GR FINISH GRADE*
FLR FLOOR(ING)*
FTG FOOTING

GA GAGE
GALV GALVANIZED
GND GROUND
GYP BD GYPSUM BOARD*

H PLAM HIGH PRESSURE LAMINATE*
HC HOLLOW CORE*
HDWR HARDWARE*
HGT HEIGHT
HORIZ HORIZONTAL
HPT HIGH POINT
HVAC HEATING, VENTILATION, AIR CONDITIONING*
HWH HOT WATER HEATER

INSUL INSULATION
INTR INTERIOR

JST JOIST*
JNT JOINT

LAM LAMINATION
LAV LAVATORY
LONG LONGITUDINAL
LPT LOW POINT*
LT WT LIGHTWEIGHT*
LTG FNL LIGHTING PANEL*
LVL LAMINATED VENEER LUMBER

MASO MASONRY*
MATL MATERIAL
MAX MAXIMUM
MECH MECHANICAL
MET METAL
MFG MANUFACTURING
MIN MINIMUM
MISC MISCELLANEOUS
MO MASONRY OPENING
MR MOISTURE RESISTANT
MTD MOUNTED

NA NOT APPLICABLE
NIC NOT IN CONTRACT
NOM NOMINAL
NTS NOT TO SCALE

O/C ON CENTER
OD OUTSIDE DIAMETER
OPP OPPOSITE
OVHD OVERHEAD

PEMB PRE–ENGINEERED METAL (MFR) BUILDING
PERP PERPENDICULAR
PLYWD PLYWOOD
PNL PANEL
PR PAIR
PREFAB PREFABRICATED
PREFIN PREFINISHED*
PRELIM PRELIMINARY
PSF POUNDS PER SQUARE FOOT
PSI POUNDS PER SQUARE INCH
PT PRESSURE TREATED
PTD PAINTED

REF REFERENCE
REINF REINFORCE(D)(ING)(MENT)
REQ REQUIRED
RO ROUGH OPENING

SCHED SCHEDULE
SHT SHEET(ING)*
SIM SIMILAR
SPCL SPECIAL
SPEC SPECIFICATION
SF (SQ.FT.) SQUARE FOOT
SS STAINLESS STEEL
STC SOUND TRANSMISSION CLASS*
STD STANDARD
STL STEEL
STOR STORAGE
STRUCT STRUCTURAL*

T&B TOP AND BOTTOM
T&G TONGUE AND GROOVE
T/ TOP OF (CONSTRUCTED ELEMENT)
THK THICKNESS*
THRU THROUGH
TEMP TEMPERED GLASS*
TOL TOTAL
TV TELEVISION
TYP TYPICAL
TELE TELEPHONE CABINET*
TYP TYPICAL
TBD TO BE DETERMINE

UNO UNLESS OTHERWISE NOTED*

VCT VINYL COMPOSITION TILE*
VERT VERTICAL

W/ WITH
W/O WITHOUT
W/W WALL TO WALL*
WC WATER CLOSET
WCO WALL CLEANOUT*
WD WOOD
WWF WELDED WIRE FABRIC*

XFMR TRANSFORMER

no.	date	revision
0	12/06/21	ISSUE FOR CODE ENFORCEMENT REVIEW & APPROVAL

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12/06/2021

LEE SAEED JR. MICHAEL NORTH CAROLINA REGISTERED ARCHITECT 13773 SEAL

Proposed Dispatch Office Building for
Crete Solutions, LLC
2544 US 401 N
Lillington, North Carolina 27546

Contract Documents - Issued for Construction

job status

ACCESSIBILITY DETAILS, SYMBOLS AND LEGENDS

date	12/01/21
job no.	CRETE/LIL
drawn by	MSAIEED
checked by	MSAIEED
drawing no.	N100
revision no.	0

GENERAL CONDITIONS

1. THE USE OF THESE DOCUMENTS ARE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED. REUSE OR REPRODUCTION OF THE DOCUMENTS (IN WHOLE OR IN PART) FOR ANY OTHER PURPOSE IS PROHIBITED

2. GENERAL CONTRACTOR AND ASSOICATED TRADES (SUB–CONTRACTORS) SHALL TO BE FAMILIAR WITH ALL LOCAL ZONING CRITERIA, SPECIAL WORKING CONDITIONS PERTAINING TO ALL BARRICADES, NOISE, DUST, TRASH REMOVAL, ETC. COORDINATE WITH LOCAL AUTHORITIES HAVING JURISDICTION. ANY WORK THAT IS REQUIRED TO TAKE PLACE AT NIGHT OR DURING OFF HOURS SHALL BE VERIFIED WITH GENERAL CONTRACTOR'S PROJECT MANAGER AND ITS COST TO BE INCLUDED IN THE BID.

3. THE GENERAL CONTRACTOR SHALL TO PROTECT NEWLY INSTALLED MATERIALS, MILLWORK, BUILT–INS AND FINISHES. PROTECT PUBLIC AREAS NOT UNDERGOING WORK, ADJOINING AREAS FROM ANY DAMAGE WHICH MAY ARISE FROM THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING FOR ANY DAMAGE ARISING FROM HIS WORK.

4. THE GENERAL CONTRACTOR SHALL FURNISH ALL TEMPORARY UTILITIES REQUIRED TO PERFORM THEIR WORK INCLUDING BUT NOT LIMITED TO ELECTRICITY, WATER, HEAT, AND TELEPHONE (OR SITE SUPERINTENDENT W/ CELLULAR PHONE). THE CONTRACTOR SHALL MAINTAIN AT THEIR COST A JOB PHONE, AND ON SITE OFFICE AREA PROPERLY SECURED.

5. THE GENERAL CONTRACTOR SHALL MAINTAIN AT THE SITE A WORKING DOCUMENT PRINT SET (IF NOT PRESENTED OTHERWISE WITHIN CONTRACT DOCUMENT SET) AND SPECIFICATIONS THAT SHALL BE UPDATED AS WORK PROGRESSES, INDICATING ANY CHANGES, DEVIATIONS, OR ALTERATIONS; AND SHALL PROVIDE A REVISED SET DENOTED AS "RECORD DOCUMENTS" DRAWINGS TO BE TURNED OVER TO THE BUILDING OWNER/DEVELOPER AND LEASE TENANT/OWNER AT THE COMPLETION OF WORK.

6. THE GENERAL CONTRACTOR SHALL DILIGENTLY PERFORM THE WORK TO COMPLETION AND SHALL AT ALL TIMES GIVE THE PERSONAL SUPERVISION AND ATTENTION THERETO AND MAINTAIN A COMPETENT SUPERINTENDENT AND NECESSARY FOREMAN TO ACT FOR THE CONTRACTOR'S FIRM. PROVIDE SUFFICIENT AND SATISFACTORY ON–SITE WORKERS REQUIRED TO ENSURE THE PERFORMANCE OF THE WORK TO COMPLETION AND TO MEET AGREED UPON TURNOVER DATE.

7. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR LAYOUT AND FOR THAT OF THEIR TRADE SUB–CONTRACTORS. ALL DIMENSIONS INDICATED AS HOLD DIMENSIONS SHALL BE MAINTAINED. DENOTED (REF) SHALL BE DIMENSION "TO" AS (COMPARISON) PRE–EXISITNG CONDITIONS TO CROSS–REFERENCE. ANY VARIANCES FROM THESE WILL BE AT THE RISK OF THAT TRADE OR CONTRACTOR. VERIFY ANY EQUIPMENT CLEARANCES PRIOR TO LAYOUT, THE TRADES SHALL BE HELD FOR ANY DAMAGE TO OR ADDITIONAL COST FOR FAILURE TO DO SUCH LAYOUT. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION THE CONTRACTOR SHALL VERIFY ALL OVERALL DIMENSIONS, COLUMN LOCATIONS AND REPORT THESE TO THE ARCHITECT. THE GENERAL CONTRACTOR SHALL COORDINATE THE WORK OF THEIR ON–SITE WORKERS WITH TRADE SUB CONTRACTORS, AND OWNER. ANY FAILURE TO PROPERLY COORDINATE WHICH RESULTS IN ADDITIONAL COST INCLUDING ANY DEMOLITION OF CONSTRUCTION IN PLACE SHALL BE BOURNE BY THE GENERAL CONTRACTOR.

8. THE GENERAL CONTRACTOR SHALL OBTAIN, MAINTAIN DURING THE COURSE OF WORK WORKMAN'S COMPENSATION, COMPREHENSIVE LIABILITY INSURANCE INCLUDING COVERAGE FOR BODILY INJURY, PROPERTY DAMAGE, IN ACCORDANCE WITH THE OWNER(S), AND LOCAL REQUIREMENTS. LAWS OF THE STATE AND AS DIRECTED BY THE OWNER(S), PROVIDE EVIDENCE INDICATING INDEMNIFICATION OF THE OWNER(S) AND ARCHITECT. THE GENERAL CONTRACTOR SHALL BEAR THE RISK OF LOSS AND RESPONSIBILITY OF ALL INJURIES OR DAMAGES TO PERSONS OR PROPERTY THAT MAY ARISE FROM THE WORK. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THEFT OF TOOLS, MATERIALS AND EQUIPMENT STORED ON OR OFF THE SITE. ANY ADDITIONAL SINGLE PROJECT SPECIFIC INSURANCE REQUIREMENTS OR INDEMNIFICATION COSTS, SHALL BE BORNE BY THE GENERAL CONTRACTOR.

9. GENERAL CONTRACTOR SHALL GUARANTEE ALL WORK INCLUDING WORK PERFORMED BY TRADE SUB–CONTRACTOR'S FOR A PERIOD OF ONE (1) YEAR COMMENCING WITH THE DATE OF TOTAL COMPLETION (PUNCH LIST) OF THE WORK. FURNISH ALL WRITTEN WARRANTIES TO OWNERS REPRESENTATIVES PRIOR TO SUBMISSION OF FINAL PAYMENT.

10. GENERAL CONTRACTOR AND TRADES SHALL PERFORM HIGH QUALITY PROFESSIONAL WORK, JOIN MATERIALS TO UNIFORM, ACCURATE FITS SO THEY MEET WITH NEAT, STRAIGHT LINES, FREE OF SMEARS OF OVERLAPS. INSTALL EXPOSED MATERIALS APPROPRIATELY LEVEL, PLUMB AND AT ACCURATE RIGHT ANGLES, OR FLUSH WITH ADJOINING MATERIALS. WORK OF EACH TRADE SHALL MEET ALL NATIONAL STANDARDS PUBLISHED BY THAT TRADE, EXCEPT IN THE CASE WHERE THE CONTRACT DOCUMENTS ARE MORE STRINGENT

11. THE GENERAL CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL MILLWORK ITEMS FOR THE DEVELOPER'S REVIEW. DRAWINGS SHALL SHOW FIELD VERIFIED DIMENSIONS, METHODS OF SUPPORT AND ATTACHMENT, AND SAMPLES OF FINISH TO BE APPLIED.

12. WARRANTIES AND GUARANTEES: IN ADDITION TO OTHER GUARANTEES HEREIN REQUIRED, GENERAL CONTRACTOR HEREBY GUARANTEES THAT AT DELIVERY TO THE OWNER(S) FOR ACCEPTANCE THE WORK TO BE PERFORMED UNDER THIS AGREEMENT, THE SAME SHALL BE IN PROPER FUNCTIONAL ORDER WITHOUT FAILURE, AND THERE SHALL BE NO OMISSION OF OR DEFECT IN MATERIAL OR WORKMANSHIP OF ANY WORK, MACHINERY, EQUIPMENT, PARTS, ASSEMBLIES (EXCEPT THOSE FURNISHED BY OWNER AND OWNER'S PROPRIETARY EQUIPMENT SPECIALIST) AND THAT ALL LABOR, THE AFOREMENTIONED MATERIALS AND ALL OTHER PERFORMED SHALL COMPLY WITH THE AGREEMENT. IF ANY DEFECTIVE OR FAULTY WORKMANSHIP OR MATERIAL IS DISCOVERED WITHIN ONE (1) YEAR COMMENCING FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK, THE SAME SHALL BE PROMPTLY REMEDIED, REPLACED AND RESTORED TO THE OWNER'S SATISFACTION BY THE GENERAL CONTRACTOR AT THE GENERAL CONTRACTOR'S EXPENSE.

13. ANY ADDITIONAL WORK, CHANGES, ADDITIONAL SERVICES OR FEES SHALL NOT OCCUR OR BE PROVIDED WITHOUT WRITTEN CONFIRMATION OF THE LEASE TENANT/OWNER PRIOR TO EXECUTION. FAILURE TO DO SO SHALL RESULT IN NO PAYMENT BY THE LEASE TENANT/OWNER OR THEIR REPRESENTATIVES FOR SUCH ITEMS.

14. THE ENTIRE AREA OF WORK IS TO BE MAINTAINED IN A NEAT AND ORDERLY MANNER AT ALL TIMES AND POLICED AT INTERVALS TO PREVENT ACCUMULATION OF TRASH AND RUBBISH. ALL MATERIALS SHALL BE STACKED NEATLY IN CENTRAL LOCATIONS AND COORDINATE IT'S DISPOSAL LOCATION WITH THE GENERAL CONTRACTOR'S SUPERINTENDENT. GENERAL CONTRACTOR AND TRADE SUB–CONTRACTORS MUST LEAVE THEIR WORK IN A NEAT AND CLEAN CONDITION READY FOR WORK TO BE PERFORMED BY OTHERS. PROVIDE DUMPSTER AS REQUIRED.

15. CLEAN UP AND JOB COMPLETION.
    - A. ALL PUNCH LIST ITEMS SHALL BE COMPLETED WITH THE SATISFACTION OF [LEASE TENANT AND BUILDING OWNER(S)] REPRESENTATIVE BEFORE FINAL PROJECT RELEASE WITH A WRITTEN ACCEPTANCE BETWEEN CONTRACTOR AND OWNER(S)
    - B. PREMISES TO BE TURNED OVER CLEAR OF ALL DEBRIS, PACKING BOXES, WRAPPINGS, AND EXCESS MATERIALS.
    - C. ALL GLASS TO BE CLEANED OF PROTECTIVE PADS, MASTIC AND MARKINGS.
    - D. ALL ELECTRICAL PANELS AND BREAKERS TO BE PROPERLY MARKED AND A TYPED SCHEDULE TO BE PROVIDED.
    - E. A COMPLETE LIST OF ALL SUB NAMES, ADDRESSES, AND TELEPHONE NUMBERS, TO BE SUBMITTED TO [LEASE TENANT AND BUILDING OWNER(S)]

16. FINAL PAYMENT
    1. ALL FINAL WAIVER MUST BE SUBMITTED WITH FINAL PAYMENT REQUEST.
    2. ALL PUNCH LIST ITEMS MUST BE COMPLETED PRIOR TO RELEASE OF FINAL PAYMENT.

GEN. ARCHITECTURAL CONSTRUCTION & PLAN NOTES

THESE WORKING DOCUMENTS HAVE BEEN PREPARED FOR THE BUILDING OWNER(S) AND BY THE BUILDING OWNER(S)' DIRECTIONS WITH SELECTED GENERAL CONTRACTOR AS A DESIGN/BUILD SERVICES FOR THE PURPOSE OF DEPICTING OVERALL BUILDING GEOMETRY, AND THE ASSEMBLY OF ARCHITECTURAL ELEMENTS AND THEIR COMPLIANCE WITH LOCAL BUILDING CODE REQUIREMENTS FOR BUILDING TYPE, MATERIAL FINISHES, ACCESS TO EXITS, AND EXIT SYSTEMS ONLY. FOR COMPLETE CONSTRUCTION INFORMATION, THESE DRAWINGS MUST BE USED IN CONJUNCTION WITH PLUMBING, MECHANICAL, ELECTRICAL, AND MANUFACTURER ENGINEERED BUILDING WOOD TRUSSES PROPRIETARY VENDOR'S SHOP DRAWINGS; AND (IF APPLICABLE) SPECIAL CONSTRUCTION STEEL FABRICATOR'S SHOP DRAWINGS; PROVIDED BY OTHERS.

THESE WORKING DRAWINGS SHOULD PROVIDE THE BUILDING OWNER(S)/GENERAL CONTRACTOR A BASIC SET OF CONTRACT DOCUMENTS (AS A DESIGN/BUILD MECHANISM) FOR PRICE BIDDING AND PERMITTING. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THESE CONTRACT DOCUMENTS, FOR CROSS–REFERENCING RESPECTIVE DESIGN/BUILD CONSTRUCTION TRADES, DIMENSIONS AND SITE VERIFYING OF EXISTING CONDITIONS (ABOVE AND BELOW GRADE) FOR ALL THEIR ACCURACY'S, AND CONFIRMING THAT THE WORK IS BUILD–ABLE AS SHOWN BEFORE PROCEEDING WITH CONSTRUCTION. IF THERE ARE ANY QUESTIONS REGARDING THESE OR OTHER COORDINATION ISSUES, THE BUILDING OWNER(S)/GEN. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ARCHITECT OR PROJECT DESIGN DISCIPLINES BEFORE PROCEEDING WITH CONSTRUCTION IN QUESTION. THE CONTRACTOR SHALL BE ABLE TO MAKE ANY MODIFICATIONS DEEMED NECESSARY FOR GOOD CONSTRUCTION PRACTICE UNDER THE LATEST EDITION "ICC/IBC–NCBC 2012 ed. GENERAL CONSTRUCTION" INCLUDING AND ANY OTHER ADDITIONAL LOCAL AREA ZONING ORDINANCE

THE BUILDING OWNER'S ASSIGNED AGENT (AND/OR) GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THESE CONTRACTS DOCUMENT REVIEWED FOR ALL NECESSARY APPROVALS AND OBTAINING ALL REQUIRED PERMITS, AND APPLICATIONS IN ACCORDANCE WITH ALL APPLICABLE STATE AND COUNTY BUILDING CODES, AND LOCAL AREA ZONING ORDINANCE, FROM LOCAL AUTHORITIES HAVING JURISDICTION.

THE BUILDING OWNER'S GENERAL CONTRACTOR SHALL INSURE THAT THIS FACILITY WILL BE ACCESSIBLE TO AND USABLE BY PERSON(S) WITH DISABILITIES. ACCORDING TO THE LATEST EDITION/REVISION TO THE "AMERICAN NATIONAL STANDARDS" ICC/ANSI A117.1 2009; ACCESSIBILITY CODE REQUIREMENTS OF THE APPLICABLE STANDARDS.

BUILDING OWNER'S SHALL SPECIFY COMMERCIAL TYPE OF APPLIANCES (KITCHEN EQUIPMENT) AND CABINETRY MILLWORKS (KITCHEN & BAR) DESIGN LAYOUTS WITH MATERIAL SELECTIONS FROM VENDOR'S DESIGN ARRANGEMENT INSTALLATION SHOP DRAWINGS AND PLUMBING FIXTURES FOR SUB–CONTRACTORS TO INSTALL. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE WITH BUILDING OWNER'S APPROVAL ALL OTHER APPLIANCES AND FIXTURES, (MECHANICAL, ELECTRICAL AND PLUMBING (MEPs)) THAT BUILDING OWNER(S) HAS NOT PREVIOUSLY SPECIFIED (OR) WITHIN REFERENCED ENGINEEER(S) MEP DRAWINGS.

GENERAL CONTRACTOR SHALL COORDINATE W/ BUILDING OWNER(S)' SPECIALITY EQUIPMENT VENDOR'S PRODUCT "CUT SHEETS" FOR REQUIRED SERVICE UTILITY CONNECTIONS AND LOCATIONS OF ALL WALL OR CEILING MOUNTED EQUIPMENT AND THEIR ADEQUATE REQUIRED REINFORCEMENT OF WALL STUDS AND MOUNTING BRACKET CONSTRUCTION DURING ROUGH–IN FRAMING INSPECTIONS,

BUILDING OWNER(S) TO COORDINATE WITH GENERAL CONTRACTOR'S MILLWORK CONTRACTOR FOR CUSTOM DESIGNS AND SELECTED FINISHES FOR CABINETRY BUILT–IN'S & CLOSET STORAGE UNITS. (MILLWORK SUB–CONTRACTOR TO PROVIDE SHOP DRAWINGS PRIOR TO CONSTRUCTION FOR ANY REQUIRED WALL FRAMED BLOCKING AND ELECTRICAL/DATA/PHONE OUTLETS NEEDED FOR MILLWORK INSTALLATION) DRAWINGS SHALL SHOW FIELD VERIFIED DIMENSIONS, METHODS OF SUPPORT AND ATTACHMENT, AND SAMPLES OF FINISH TO BE APPLIED.

BUILDING OWNER SHALL REVIEW RESTROOM ACCESSORIES FOR FINAL APPROVAL; GENERAL CONTRACTOR TO PROVIDE SELECTED FINISHING MATERIALS AND COLOR SAMPLES FOR ALL INTERIOR SURFACE FINISHES NOT DESIGNATED BY BUILDING OWNER(S) OR THE OWNER(S)' REPRESENTATIVE

THE GENERAL CONTRACTOR SHALL SUBMIT ALL PROPOSED SUBSTITUTIONS TO THE DESIGNER(S) OF RECORD IN WRITING WITH SUFFICIENT INFORMATION, SAMPLES AND DIFFERENCE IN COST FOR EVALUATION. SUBSTITUTIONS MUST BE APPROVED IN WRITING BEFORE THEY MAY BE USED. IF THE CONTRACTOR, BUILDING OWNER(S) OR THE OWNER(S)' REPRESENTATIVE SUBSTITUTE A MATERIAL, REVISE A CONSTRUCTION DETAIL, METHOD OF ATTACHMENT OR IN ANY WAY ALTER THE WORK SO THAT IT DOES NOT CONFORM WITH THESE DOCUMENTS WITHOUT THE ARCHITECT'S WRITTEN APPROVAL, SUCH ACTION WILL RELIEVE THE ARCHITECT OF ANY RESPONSIBILITY OR LIABILITY AS TO THE AESTHETIC EFFECT, SUBSEQUENT FAILURE, PROPERTY DAMAGE OR PERSONAL LIABILITY.

THE USE OF THE WORD 'TYPICAL' MEANS FOR ALL SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.

DETAILS ARE USUALLY KEYED ONLY ONCE ON THE PLANS (ON ELEVATIONS WHEN THEY FIRST OCCUR) AND ARE TYPICAL FOR SIMILAR CONDITIONS THROUGHOUT CONSTRUCTION DOCUMENT SET UNLESS OTHERWISE NOTED.

REFER TO "WALL TYPE LEGEND" DETAILS FOR DESIGNATED WALL TYPES KEYED ON FLOOR PLAN.

SEE FLOOR PLAN SHEETS FOR ALL BUILDING DIMENSIONS AND FINISHED FLOOR ELEVATIONS

DO NOT SCALE DRAWINGS. GOVERN DIMENSIONS: LARGE SCALE DETAILS GOVERN OVER SMALL SCALE DETAILS. THE WORK SHALL BE LAID OUT FROM DIMENSIONS SHOWN ON THE DRAWINGS ONLY. CONTRACTORS SHALL WORK FROM MOST RECENT DRAWINGS SUPPLIED BY OWNER(S) OR ARCHITECT.

TYPICAL FLOOR PLAN DIMENSIONS OF INTERIOR WALLS ARE MEASURED FROM "FACE TO FACE" OF WALL STUDS (FACE END (2x WOOD) EDGE FRAMING, UNLESS NOTED OTHERWISE

THE GENERAL CONTRACTOR SHALL LAYOUT WALL LOCATIONS AND CENTER LINE PLUMBING FIXTURE LOCATIONS AND REVIEW THIS LAYOUT WITH THE ARCHITECT AS NECESSARY.

HINGE SIDE OF DOOR TO BE MIN. 5" OFF INSIDE FACE OF PERPENDICULAR STUD WALL (UNLESS NOTED OTHERWISE); PROVIDE WALL MOUNTED BUMPER @ DOOR LEVER–SET HEIGHT.

DIMENSIONAL LUMBER TO BE USED AS BLOCKING WITHIN WALLS (FOR DENOTED "WALL MOUNTED" ACCESSORIES) ALTERNATE BLOCKING: GALV SHEET METAL (ASTM G40 16 GAUGE (54mils) FASTEN TO AND CONTINUOUS CROSS MULTIPLE WALL STUD FACE EDGES

THE GENERAL CONTRACTOR SHALL PERFORM HIGH QUALITY PROFESSIONAL WORK, JOIN MATERIALS TO UNIFORM, ACCURATE FITS SO THEY MEET WITH NEAT, STRAIGHT LINES, FREE OF SMEARS OF OVERLAPS. INSTALL EXPOSED MATERIALS APPROPRIATELY LEVEL, PLUMB AND AT ACCURATE RIGHT ANGLES, OR FLUSH WITH ADJOINING MATERIALS. WORK OF EACH TRADE SHALL MEET ALL NATIONAL STANDARDS PUBLISHED BY THAT TRADE, EXCEPT IN THE CASE WHERE THE CONTRACT DOCUMENTS ARE MORE STRINGENT

ALL MATERIAL SPECIFIED IS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS. GENERAL CONTRACTOR IS TO CONSTRUCT PROJECT IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S RECOMMENDATIONS.

ABSOLUTELY NO THRU ROOF PENETRATION ALLOWED WITHOUT BUILDING OWNER'S WRITTEN ACCEPTANCE AND GENERAL CONTRACTOR'S WRITTEN ASSURANCE TO MAINTAIN ROOF WARRANTY PER FINISHED ROOF PROPRIETARY MANUFACTURER RECOMMENDATIONS

"SPECIFIC" GENERAL CONDITIONS: THE PRESENCE OF THE ARCHITECT'S REPRESENTATIVE (OR VISITING ARCHITECT) ON THE JOB SITE DOES NOT IMPLY CONCURRENCE OR APPROVAL OF THE WORK COMPLETED OR BEING PERFORMED DURING SITE VISITS. THE GENERAL CONTRACTOR SHALL CALL SPECIFIC ITEMS TO THE ATTENTION OF THE ARCHITECT'S REPRESENTATIVE IF CONTRACTOR WISHES TO OBTAIN THE ARCHITECT'S APPROVAL. CONSTRUCTION OBSERVATION IS NOT PART OF THIS DESIGN/BUILD CONTRACT BETWEEN DESIGN ELEMENT, INC., WITH BUILDING OWNER(S) AND/OR GENERAL CONTRACTOR

JOB SITE SAFETY: DESIGN/BUILD ARCHITECTURAL FIRM (DESIGN ELEMENT, INC) DOES NOT HAVE CONTRACTUAL RESPONSIBILITY FOR "JOB SITE" SAFETY (AND) PROVIDING SERVICES INVOLVED IN CONSTRUCTION ACTIVITY. GENERAL CONTRACTOR SHALL BE RESPONSIBLE IN HAVING CONTROL OF "JOB–SITE" CONSTRUCTION MEANS, METHODS AND SAFETY PROCEDURES TO ALL EMPLOYED PERSONNEL, CONTRACTED SUB–CONTRACTORS AND BUILDING OWNER'S PROPERTY DURING CONSTRUCTION.

SEVERE COASTAL ENVIRONMENT: DESIGN/BUILD ARCHITECTURAL FIRM (DESIGN ELEMENT, INC) DOES NOT HAVE CONTRACTUAL WARRANTIES FOR OWNER(S)' CONTRACTOR'S PRODUCT MATERIALS, METHODS OF CONSTRUCTION OR INSTALLATION AND MAINTENANCE PROCEDURES FOR THIS PROPOSED PROJECT. "ADVISORY NOTICE:" DUE TO THE VICINITY (WITHIN THREE MILES OF COASTAL SALT WATERS) OF PROPOSED DESIGN/BUILD PROJECT; LOCATED AND SUBJECTED TO SEVERE/ADVERSE ENVIRONMENTAL SURROUNDING CONDITIONS (SALT LATENT AIR AND OCEAN FRONT EXCESSIVE WINDS), THE PROJECT OWNER(S)' MUST BE AWARE TO MAINTAIN A REGULAR SCHEDULE OF AGGRESSIVE BUILDING MAINTENANCE AND AN OPERATIONAL PLAN WITH RECORDS, TO INSURE A REASONABLE PRODUCT MATERIAL LONGEVITY OF THE BUILDING'S FINISHES AND EXTERIOR COMPONENTS. THE "ARCHITECT OF RECORD" HAS PREPARED ONLY, ARCHITECTURAL DETAILED CONSTRUCTION DOCUMENTS AS TO THE BEST PROFESSIONAL DESIGNED OPINIONS, TO REDUCE ABNORMAL WEARING EFFECTS OF AREAS SUBJECTED TO SEVERE COASTAL ENVIRONMENT CONDITIONS.

FINISH NOTES

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ADVISING THE BUILDING OWNER(S) AND OWNER(S)' REPRESENTATIVE OF ANY QUESTIONS REGARDING THE FINISH SELECTIONS, FINISH SYSTEMS, METHOD OF APPLICATION, OR SCOPE OF WORK PRIOR TO PROCEEDING WITH THE WORK IN QUESTION.

ALL FLAME SPREAD RATINGS FOR INTERIOR FINISHES TO BE IN ACCORDANCE WITH IBC/NCBC–2012 CODE TABLE 803.9 AS FOLLOWS:
EXIT ACCESS CORRIDOR & OTHER EXITWAYS: MINIMUM CLASS "B"
ROOMS AND ENCLOSED SPACES: MINIMUM CLASS "C" OR BETTER.

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD INSPECTION OF THE SURFACES TO RECEIVE DECORATIVE COLORED STAIN CONCRETE FINISH, PAINT OR WALL COVERING AND ASSURING THAT SUCH SURFACES ARE ACCEPTABLE FOR APPLICATION PRIOR TO INITIATING ACTUAL FINISH WORK. NO STAIN, PAINT OR FINISH SHALL BE APPLIED ON ANY SURFACE WHICH IS UNFINISHED, OR IMPROPERLY PREPARED OR OTHERWISE NOT FULLY ACCEPTABLE FOR THE FINISH APPLICATION. ALL ROUGHNESS OR OTHER IRREGULARITIES THAT MAY APPEAR AFTER PRIMING SHALL BE THOROUGHLY SANDED OUT OR OTHERWISE CORRECTED TO PROVIDE A SMOOTH, EVEN SURFACE FOR PAINTING AND FINISHING. FINISHED APPLICATION AND WALL APPEARANCE SHALL BE FREE OF SURFACE AND COLOR IRREGULARITIES. BY FINISHING THESE SURFACES, THE FINISH/PAINTING CONTRACTOR ACCEPTS THE RESPONSIBILITY FOR FINAL PRODUCT.

ALL GYPSUM BOARD AT DENOTED RATED PARTITIONS WALLS SHALL BE 5/8" FIRE CODE TYPE "X" (UL LISTED) GYPSUM BOARD CLOSED TO UNDERSIDE OF ROOF/FLOOR DECKS ABOVE IN COMPLIANCE WITH APPLICABLE CODES. GENERAL CONTRACTOR TO VERIFY WALLS ARE CLOSED TO ROOF/FLOOR DECKS AND IN COMPLIANCE WITH CODE, INCLUDE ANY WORK REQUIRED IN BASE BID. [ALL HORIZONTAL GYPSUM BOARD SHEATHING AT THE CEILINGS SHALL BE 5/8" FIRE CODE TYPE "C" (UL LISTED)]

MOISTURE RESISTANT GYPSUM WALL BOARD FINISH (ALL WET AREAS AND ENTRY ALCOVES

ALL FINISHED TRIM TO BE PAINT GRADE POPLAR SMOOTH SANDED FINISHED WITH SCARFED JOINTS AND MITERED CORNER JOINTS GLUED AND NAILED–NO BUTT JOINTS.

PLASTIC LAMINATE COLORS NOT SHOWN ON THE DRAWINGS WILL BE SELECTED AT THE TIME OF SHOP DRAWING SUBMITTAL BY GEN CONTRACTOR W/ OWNER'S APPROVAL..

SOLID SURFACE COMPOSITE, CULTURE (AND/OR) GRANITE COUNTERTOPS TEXTURES AND COLORS NOT SHOWN ON THE DRAWINGS SHALL BE SELECTED AT THE TIME OF SHOP DRAWING SUBMITTAL BY GEN CONTRACTOR W/ OWNER'S APPROVAL.

INTERIOR PAINTING IF APPLICABLE

THE GENERAL CONTRACTOR SHALL SUBMIT FOR THE OWNER'S REPRESENTATIVE 12"x12" SAMPLES, IN DUPLICATES, OF ALL SPECIFIED FINISHES. UPON ACCEPTANCE, ON SAMPLES OF EACH FINISH, SIGNED DUPLICATES FROM THE OWNER'S REPRESENTATIVE SHALL HAVE ONE RETAINED BY OWNER(S) AND THE GENERAL CONTRACTOR. ADDITIONAL DUPLICATES SHALL BE FORWARD TO THE PROPRIETARY MATERIAL VENDOR AND PAINTING SUB–CONTRACTOR FOR THEIR ACKNOWLEDGMENT OF SAMPLE FINISHES TO THE GENERAL CONTRACTOR. COLORS AND MATERIAL FINISHES SHALL BE AS SPECIFIED ON OWNER'S REPRESENTATIVE'S SELECTED COLOR SCHEDULES. ALL FINISHES SHALL MATCH EXACTLY THE SAMPLES AND SPECIFIED COLORS.

BEFORE PAINTING BEGINS, PAINTING CONTRACTOR SHALL VERIFY ALL INTERIOR GYPSUM WALL BOARD SURFACES HAVE RECEIVED A MIN. (GA–214) LEVEL FIVE (5) FINISH. GENERAL CONTRACTOR TO CONFIRM SUITABILITY OF ALL SURFACES TO RECEIVE PAINT AS PER MANUFACTURER'S SPECIFICATIONS. PAINTING CONTRACTOR SHALL NOTIFY TO GENERAL CONTRACTOR IF ANY SURFACES ARE NOT ACCEPTABLE TO RECEIVE FINISH AS SPECIFIED. POOR APPLICATION OVER UNSUITABLE SURFACE IS PAINTING CONTRACTORS RESPONSIBILITY.

APPLICATION FOR ALL PAINTED SURFACES SHALL RECEIVE NOT LESS ONE (1) COAT HIGH BUILD (MIN. 35% SOLID) SURFACE PAINT PRIMER AND TWO (2) FINISHED COATS OF ACRYLIC LATEX PAINT SYSTEM, UNLESS OTHERWISE NOTED, USING THE COMPLETE PAINT SYSTEM (SEALER, PRIMER, FINISH COAT, ETC.) AS RECOMMENDED BY THE PAINT MANUFACTURER AND ALL APPLICABLE MINIMUM TRADE STANDARDS.

UNLESS OTHERWISE SPECIFIED, PAINTED FINISH "SHEEN" SHALL BE AS FOLLOWS:

CEILINGS:	LATEX BASE – FLAT "MATTE" FINISH (ONLY IF GYPSUM BOARD)
WALLS:	LATEX BASE – EGG SHELL FINISH (ONLY IF GYPSUM BOARD)
	LATEX BASE – SEMI–GLOSS FINISH (AT ALL PAINTED WALL SURFACES WITHIN BATHROOMS AND HIGH TRAFFIC AREAS: CORRIDORS)
TRIM:	BASE, CROWN MOLDING, DOOR AND WINDOWS (EXCEPT SELECTED AREAS TO BE STAINED))
	LATEX BASE – HIGH–GLOSS FINISH (ONLY IF WOOD OR MDF SELECTED)

ALL MATERIAL WORKMANSHIP OF PAINTED SURFACE SHALL PRODUCE A UNIFORM FINISH OF SMOOTH ROLLED OR BRUSHED WITH NO SKIPS, LAPS, OR STREAKS.

THE GENERAL CONTRACTOR SHALL, UPON COMPLETION, REMOVE ALL PAINT FROM WHERE IT HAS SPILLED, SPLASHED OR SPLATTERED ON SURFACES, INCLUDING LIGHT FIXTURES, DIFFUSERS, REGISTERS, FITTINGS, ETC. THE GENERAL CONTRACTOR SHALL RECEIVE ALL ELECTRICAL SWITCH AND OUTLET PLATES, SURFACE HARDWARE, ETC. BEFORE PAINTING. THE GENERAL CONTRACTOR SHALL PROTECT AND REPLACE THE SAME WHEN PAINTING IS COMPLETE.

PAINTING CONTRACTOR TO FILL AND TOUCH UP ALL NAIL HOLES IN WOOD TRIM.

PAINTING CONTRACTOR SHALL PROVIDE CAULKING AROUND ALL INTERIOR AND EXTERIOR FINISHED WINDOW FRAMES, BUILT–INS, JOINTS AND INTERSECTIONS OF DISSIMILAR MATERIALS IN COORDINATION WITH THE GENERAL CONTRACTOR. FINISHED CAULKING SHALL BY POLYURETHANE ADHESIVES / SEALANT COLOR MATCH TO WINDOW AND DOOR FRAMES; (SIM MFR. SONNEBORNE NP–1) ABSOLUTELY NO SILICONE SEALANT ALLOWED

PAINTING CONTRACTOR TO LEAVE ON SITE ONE (1) QUART OF EACH PAINT TYPE AND COLOR USED FOR THIS JOB, IN CLEARLY MARKED CONTAINERS.

ALL WALLS SCHEDULED TO RECEIVE WALL COVERING SHALL BE PRIMED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

ALL STAINED WOODWORK TO BE MINIMUM TWO (2) COATS STAIN WITH MINIMUM TWO (2) COATS SATIN FINISH POLYURETHANE.

EXTERIOR CONCRETE: SURFACE SEALER FINISH
ALL EXPOSED CONCRETE SHALL BE FINISHED W/ (2) COATS CONCRETE WATERPROOFING SEALER W/ UV BLOCKERS (SIM. MFG. BENJAMIN MOORE & CO. "SEALER 075"; COLOR: CLEAR)

WALLCOVER IF APPLICABLE

WALLCOVERING IF SELECTED BY OWNER(S) SHALL BE SUPPLIED BY INTERIOR DESIGNER AND INSTALLED BY GENERAL CONTRACTOR. "ABSOLUTELY NO" VINYL WALLCOVERING SHALL BE ALLOWED ON ANY INTERIOR SURFACE FINISHES OF EXTERIOR WALLS (THAT ARE EXPOSED TO OUTSIDE ENVIRONMENT).

ALL WALLS (IF SCHEDULED OR DESIRED BY OWNER'S INTENT) TO RECEIVE WALL FINISH COVERING SHALL BE GYPSUM WALL BOARD PAINTED PRIMED BEFORE FINISHING PRIMER IS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

WALLCOVERING TO BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS INCLUDING RECOMMENDED ADHESIVE. ALL WALLS TO BE PROPERLY SIZED PRIOR TO INSTALLATION.

WALLCOVERING SURFACES TO BE CLEANED OF ALL ADHESIVE RESIDUE. ALL EXCESS ADHESIVE TO BE REMOVED WITH COMMERCIAL CLEANER COMPATIBLE WITH ALLOVER.

ALL EXTRA WALLCOVERING ROLLS TO REMAIN AT JOB SITE.

CLEAN MATERIAL OF EXCESS PASTE, DIRT, DEBRIS, OR LABELS.

CONCRETE WORK

(REFERENCE STRUCTURAL CONTRACT DOCUMENTS (IF PROVIDED) FOR COMPREHENSIVE ENGINEERING NOTES AND SPECIFICATIONS; NOTE: THE MOST STRINGENT DETAIL INFORMATION AND GENERAL NOTES (ARCH (OR) STRUC) SHALL TAKE PRECEDENCE!

GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW AND REFERENCE PROFESSIONAL SOIL ENGINEER'S SUBSURFACE ECO–TECHNICAL SOIL REPORT (PROVIDED BY BUILDING OWNER(S)) FOR RECOMMENDATIONS TO STRUCTURALLY SITE PREP AND CONDITION EXISTING GRADES TO ACHIEVE PROPER SOIL BEARING CAPACITIES.

WITHIN BUILDING PAD (FOOT PRINT) AND 5'–0" BEYOND BUILDING LINE; REMOVE TOPSOIL CONTAINING, ORGANICS, SOFT CLAY AND OTHER UNSUITABLE MATERIALS UNDER PROPOSED FOUNDATION FOOTINGS AND INTERIOR CONCRETE FLOOR (SLAB–ON–GRADE) AND TERMITE TREAT SOIL BEFORE (FOOTING & SLAB) BUILDING CONSTRUCTION BEGINS. CONCRETE FLOOR SLAB SHALL BEAR ON SELECT (MIN. 6") DRAIN–ABLE CLEAN COMPACTED SUB–GRADE FILL CAPABLE OF SUPPORTING A DESIGN BEARING PRESSURE OR 2000 PSF; WHERE DRAIN–ABLE SUB–GRADE DOES NOT EXTEND TO SUITABLE UNDISTURBED SUBSOIL, ALL UNSUITABLE MATERIAL SHALL BE REMOVED AND THE INTERIOR BUILDING FOOTPRINT PAD SHALL BE FILLED WITH CLEAN MATERIAL SELECT AND COMPACTED TO 95% DENSITY (COMPACTION PROCEDURE PER ASTM RECOMMENDATIONS) FILL FOR INTERIOR BUILDING PAD AND AREA OF PROPOSED TRENCHING FOR INTERIOR UNDER FLOOR SLAB UTILITIES (ELECTRICAL). CONCRETE FLOOR SLAB AND "BACK–FILL) SUB–GRADE FROM UTILITIES TRENCHING SHALL NOT BE ACCEPTABLE UNTIL SOIL COMPACT TESTS HAVE BEEN PASSED (OR) GENERAL CONTRACTOR ACCEPTS SURETIES AND RESPONSIBILITIES FOR EXISTING AND BACK–FILL SOIL CONDITIONS TO RESIST BUILDING SETTLEMENT ISSUES.

CONCRETE WORK (CONTINUED)

ALL FOUNDATIONS (FOOTINGS) SHALL BEAR ON UNDISTURBED (WITHOUT ORGANIC) SOIL (OR) SELECT FILL CAPABLE OF SUPPORTING A DESIGN BEARING PRESSURE (AS DENOTED IN STRUCTURAL CONTRACT DOCUMENTS AND SOIL ENGINEER'S REPORT); WHERE THE BOTTOM OF FOOTER ELEVATION DOES NOT EXTEND TO SUITABLE UNDISTURBED SUBSOIL, ALL UNSUITABLE MATERIAL SHALL BE REMOVED AND FILLED WITH CLEAN MATERIAL SELECT AND COMPACTED TO 95% DENSITY (COMPACTION PROCEDURE PER ASTM RECOMMENDATIONS) FILL SHALL BE TESTED FOR COMPACTION BY A CERTIFIED GEO–TECHNICAL SOIL ENGINEERING TESTING FIRM. TEST SHALL BE CONDUCTED IN AN AREA OF PROPOSED TRENCHED FOOTING, ONE TEST PER 50 LINEAR FEET OF FOOTING. FOOTING SUB GRADE WILL NOT BE ACCEPTABLE UNIT TESTS HAVE BEEN PASSED (OR) GENERAL CONTRACTOR ACCEPTS SURETIES AND RESPONSIBILITIES FOR EXISTING SOIL CONDITIONS TO RESIST BUILDING SETTLEMENT ISSUES.

GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW AND REFERENCE PROFESSIONAL SOIL ENGINEER'S SUBSURFACE ECO–TECHNICAL SOIL REPORT (PROVIDED BY BUILDING OWNER(S)) FOR RECOMMENDATIONS TO STRUCTURALLY SITE PREP AND CONDITION EXISTING GRADES TO ACHIEVE PROPER SOIL BEARING CAPACITIES.

CONCRETE FLOOR SLAB–ON–GRADE SHALL OBTAIN A COMPRESSIVE STRENGTH OF (MIN.) 4000psi (LOW SLUMP POUR) AT AN AGE OF 28 DAYS; CONCRETE TEST RESULTS AND SUPPLYING PRODUCT VENDOR'S CONCRETE MIXTURE RATIO REPORT SHALL BE AVAILABLE AT THE JOB SITE FOR REVIEW BY INSPECTOR
ALL REINFORCING STEEL BARS SHALL BE IN ACCORDANCE WITH ASTM A–615, GRADE 60 ksi; WELD WIRE FABRIC (WWF) WITH ASTM A185;

PLACEMENT AND PROTECTION (AND CLEAN FROM SURFACE RUST) OF STEEL REINFORCING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF A.C.I. 318 (LATEST EDITION); MINIMUM CLEAR CONCRETE COVER CAST AGAINST AND PERMANENTLY EXPOSED TO GRADE: (3") EXPOSED TO WEATHER ABOVE GRADE: (2")

WHERE CONTINUOUS REINFORCING BARS ARE REQUIRED THERE SHALL BE A MIN. 36 (X) BAR DIAMETER AT END LAPPED SPLICES

ALL CONCRETE MASONRY UNITS SHALL BE IN ACCORDANCE OF WITH ASTM C–90 TYPE I GRADE N–1 (FM 1350psi); GROUT FOR MASONRY WALL SHALL COMPLY WITH ASTM C–476, AND SHALL BE PROPORTIONED TO OBTAIN A 28 DAY COMPRESSIVE STRENGTH OF 2500psi; ALL MORTAR SHALL BE ASTM C–270. TYPE M OR S.

CONVENTIONAL 2x WOOD FRAMING

LUMBER ABOVE GROUND AND EXPOSED TO WEATHER SHALL BE PRESSURE TREATED PER USE CATEGORY UC1–3 IN ACCORDANCE WITH AWPA C2/C9. LUMBER IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PER USE CATEGORY UC1–3

JOISTS, STUDS, RAFTERS AND GIRDERS SHALL BE GRADE NO. 2 SOUTHERN YELLOW PINE (SYP); OR NO. 1 STRUCTURAL GRADE; SPRUCE PINE FIR (SPF)

PROVIDE SOLID BLOCKING LOCATED AT ⅓' POINTS FOR EXTERIOR LOAD BEARING WALLS. FOR ALL OTHER WALLS, PROVIDE BLOCKING AT MID HEIGHT.

SHEAR WALLS SHALL BE NOM. 5/8" (APA) C–D EXTERIOR GRADE PANELS. FASTEN WITH 8d RING SHANK NAILS AT 6" O.C. AT ALL PANEL EDGES AND 12" O.C. AT ALL "IN–FILL" INTERMEDIATE SUPPORTS. PROVIDE DOUBLE WALL STUDS @ EDGES OF SHEAR WALLS.

ROOF SHEATHING SHALL BE NOM. 3/4" (APA) C–D EXTERIOR GRADE PLYWOOD PANELS OR APPROVED EQUAL. PLACE WITH LONG DIMENSION PERPENDICULAR TO FRAMING. STAGGER END JOINTS. FASTEN WITH 8d HOT–DIPPED GALVANIZED BOX NAILS AT 6" O.C. AT ALL SUPPORTED EDGES, EXCEPT WITHIN THE FIRST 4'–0" FROM ROOF EDGES. FASTENERS WITHIN THE FIRST 4'–0" SHALL BE AT 4" O.C.

WALL SHEATHING SHALL BE NOM. 5/8" (APA) C–D EXTERIOR GRADE PLYWOOD PANELS OR APPROVED EQUAL. PLACE WITH LONG DIMENSION PERPENDICULAR TO FRAMING. STAGGER END JOINTS. FASTEN WITH 8d HOT–DIPPED GALVANIZED RING SHANK NAILS AT 6" O.C. AT ALL SUPPORTED EDGES, (4" O.C. AT EDGES WITHIN 48" OF ALL BUILDING CORNER SUBJECTED TO HIGH WINDS) AND "IN–FILL" INTERMEDIATE FRAMING FASTENERS SHALL BE AT 12" O.C.

MANUFACTURED ENGINEERED ROOF FRAMED TRUSSES

CONTRACT DOCUMENTS (WORKING DRAWINGS) SHOW BASIC BUILDING ARRANGEMENTS, WORK POINTS, TIMBER TRUSSES, FRAMING DETAILS AND BUILDING CROSS SECTIONS ARE FOR PRESENTATION PURPOSES ONLY AS A SCHEMATIC LAYOUT FOR A PROPRIETARY ROOF TRUSS SUPPLYING VENDOR. SEE STRUCTURAL ENGINEER'S WORKING DRAWINGS AND PRE–FAB/ENGINEERED TRUSS MANUFACTURER'S DESIGNED SHOP DRAWINGS FOR ACTUAL QUANTITIES, LOCATIONS AND INSTALLATION OF ROOF TRUSSES, AND TRUSS SUPPORTING (LAMINATED VENEER LUMBER) BEAMS. GENERAL CONTRACTOR SHALL COORDINATE TYPICAL ROOF TRUSS END BEARING AND UPLIFT REACTIONS WITH "STRUCTURAL ENGINEER OF RECORD" FOR VERIFYING ADEQUATE TRUSS HANGERS, AND HOLD–DOWN "HIGH WIND UPLIFT" CLIPS SIZES

GENERAL STRUCTURAL NOTES (SEE FRAMING DRAWINGS "BUILDING ANALYSIS SUMMARY FOR ADDITIONAL DETAILED INFORMATION)

1. DESIGN LIVE LOADS
   ROOF : DL 10 PSF LL 20.0 PSF
   COLLATERAL LOAD: 5.0 PSF

   (COLLATERAL LOADS SHALL NOT BE USED IN WIND UPLIFT LOAD CASES)

2. WIND LOADS
   BASIC WIND VELOCITY: (MIN) 118 MPH
   EXPOSURE CLASS: B

GENERAL CONTRACTOR (GC) TO HAVE WALL SECTIONS AND FRAMING SCHEMATIC PLANS REVIEWED BY PRE–FAB/ENGINEERED FLOOR, ROOF & BEAM MANUFACTURER BEFORE COST ESTIMATING AND CONSTRUCTION BEGINS. (MANUFACTURED/ENGINEERED TRUSSES & LAMINATED VENEER LUMBER BEAM FABRICATOR TO PROVIDE G.C. WITH CERTIFIED (NC ENGINEERED SEALED) WORKING DOCUMENTS & INSTALLATION DETAILS, THAT SHOWS THEIR TRUSS SYSTEM IS DESIGNED IN COMPLIANCE TO LATEST EDITION OF ICC/IBC–NCBC 2018 GENERAL CONSTRUCTION & ASCE 7–10 (NC RECOGNIZED LATEST EDITION) CODES.
(G.C.) TO SUBMIT THESE SEALED WORKING DOCUMENTS TO ENGINEER OF RECORD FOR VERIFICATION OF MANUFACTURER'S COMPLIANCE TO CODE CRITERIA DESIGNED LOADS.

IF REQUESTED BY AUTHORITIES HAVING JURISDICTION, GENERAL CONTRACTOR SHALL HAVE TRUSS MANUFACTURER SUBMIT FOR APPROVAL: SEALED SHOP DRAWINGS WITH DESIGN CALCULATIONS BY AN ENGINEER REGISTERED IN N.C..

THE GENERAL CONTRACTOR DURING CONSTRUCTION AND ERECTION SHALL ADEQUATELY BRACE AND SUPPORT ALL FRAMING UNTIL ALL CONNECTIONS, PERMANENT BRACING, AND ROOF DECK ARE IN PLACE

BEFORE FINAL PLACEMENT AND CONSTRUCTION OF ROOF TRUSSES, GENERAL CONTRACTOR & RESPECTED SUB–CONTRACTOR(S) OF TRADES ARE TO COORDINATE ALL PROPOSED VERTICAL AND HORIZONTAL INSTALLATION OF THEIR COMPONENT (PLUMBING WASTE STACKS AND TRAPS, ELECTRICAL AND (IF APPLICABLE) FIRE SPRINKLER PIPING) DESIGNS RUNNING BETWEEN AND THRU ROOF TRUSSES. COORDINATION FOR FIELD ADJUSTMENTS SHALL BE REVIEWED WITH STRUCTURAL ENGINEER AND "TRUSS MANUFACTURER" SHOP DRAWINGS FOR THEIR ALLOWABLE CLEAR VERT./HORZ. DIMENSIONS. SPACE TRUSS FRAMING LOCATIONS AWAY FROM WASTE WATER PLUMBING SYSTEMS; "ABSOLUTELY NO MODIFICATION (CUTTING (OR) NOTCHING) OF PRE–MANUFACTURED (TRUSS VENDOR) TRUSSES SHALL BE ALLOWED" GENERAL CONTRACTOR AND/OR SUB–CONTRACTOR(S) SHALL BE HELD RESPONSIBLE FOR RELOCATING (OR) RECEIVE FROM PROPRIETARY TRUSS MFG "FIELD ALTERATION" DETAILING INFORMATION ENABLING "FIELD MODIFY" TO EXISTING CONFLICTING TRUSSES TO THEIR RESPECTED WORK OF TRADE.

MECHANICAL ELECTRICAL, PLUMBING DESIGNERS–CONTRACTORS (IF REQUIRED FIRE SPRINKLER) AND RESPECTED TRADE SUB–CONTRACTOR(S) TO COORDINATE WITH (GENERAL CONTRACTOR) ANY PROPOSED DUCTWORK AND PIPING DESIGNS RUNNING THRU MANUFACTURED TRUSSES. COORDINATION OF THE MECHANICAL/PIPNG DESIGNS SHALL BE REVIEWED WITH PROPRIETARY "ENGINEER OF RECORD" FOR THEIR ALLOWABLE SUSPENDED WEIGHT, CLEAR ROUGH OPENING SIZES AND HORIZ. LOCATIONS THRU TRUSS WEB FRAMING

NOTICE: GENERAL CONTRACTOR SHALL PROVIDE TEMPORARY BRACING TO ENGINEERED–MANUFACTURED ROOF WOOD TRUSS ASSEMBLY SYSTEMS DURING CONSTRUCTION (SEE MANUFACTURER'S RECOMMENDATIONS). NOTE: IT SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE INSTALLATION AND DIMENSIONAL ALIGNMENT OF TRUSSES AS NOT TO INTERFERE WITH CONSTRUCTION OF THRU FLOOR PLUMBING PLACEMENT OF TOILET OR ANY OTHER (UNDER FLOOR FIXTURE) DIRECT WASTE LINES

MANUFACTURED EXTERIOR VINYL SIDING AND SOFFIT

THE GENERAL CONTRACTOR SHALL REFERENCE PROPRIETARY MANUFACTURER'S COMMERCIAL PROJECT INSTALLATION INSTRUCTIONS AND ICC–ES PRODUCT EVALUATION REPORT ESR–1066 (REISSUED MAY 2016) FOR DETAILED INFORMATION

no.	date	revision			
0	12/06/21	ISSUE FOR CODE ENFORCEMENT REVIEW & APPROVAL	–	–	–
			–	–	–

Design Elements
M. L. Saieed (Michael), AIA, LEED-AP
Architect / President
1213 Culbreth Drive, Suite 142
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12/06/2021

MITCHELL LEE SAIEED JR.
8773

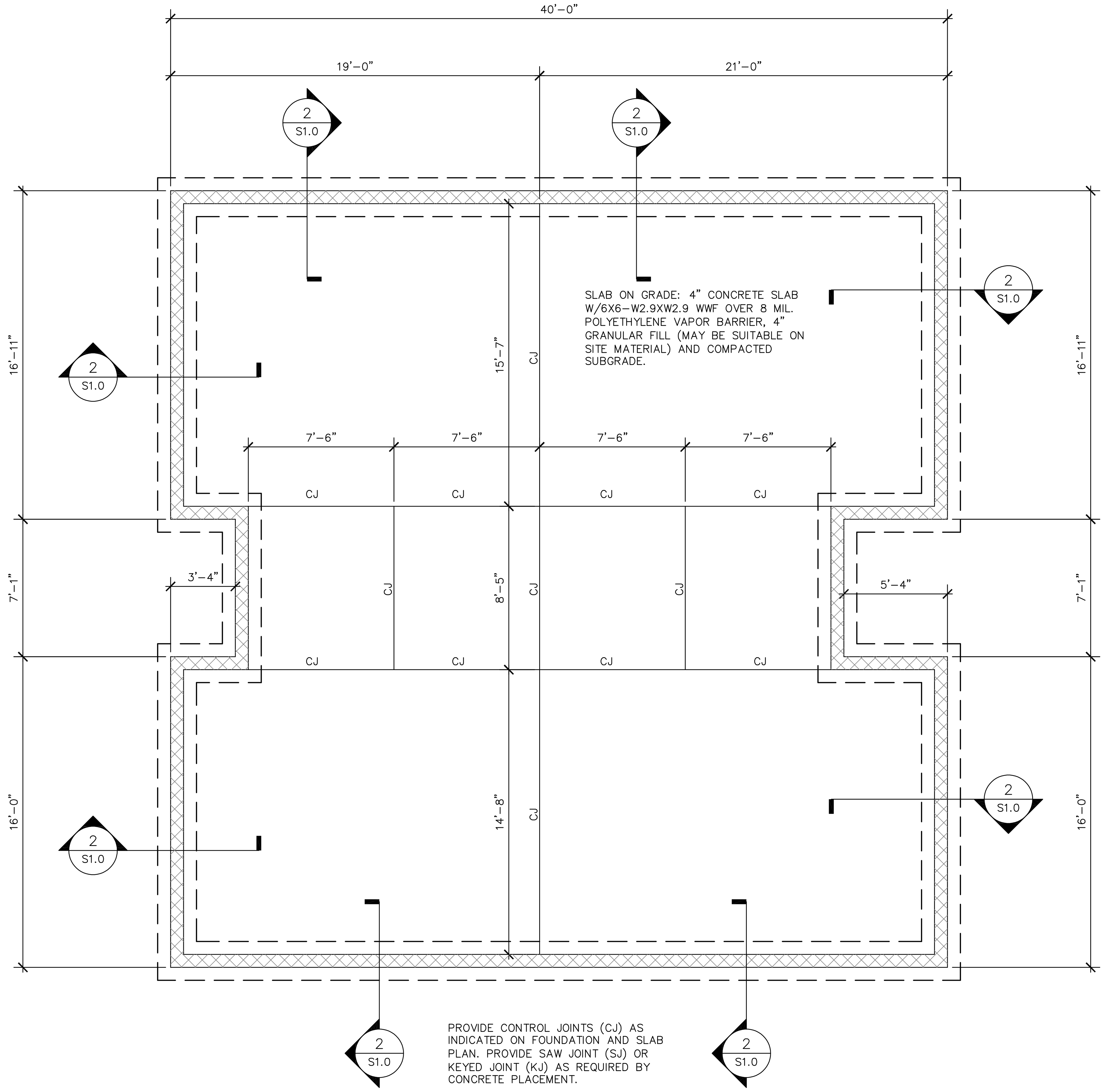
Proposed Dispatch Office Building for
Crete Solutions, LLC
2544 US 401 N
Lillington, North Carolina 27546

GENERAL CONSTRUCTION NOTES

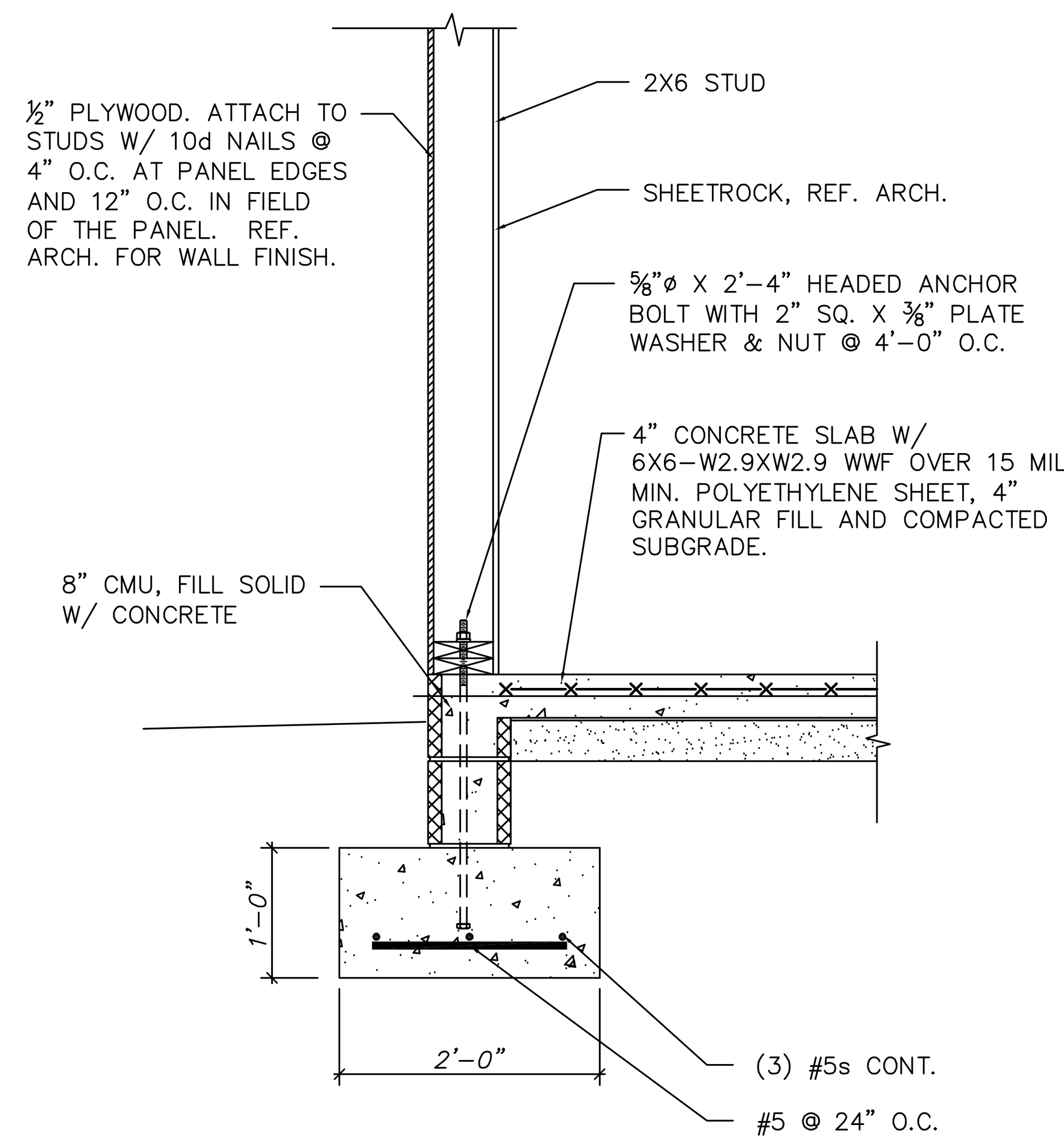
job status **Contract Documents - Issued for Construction**

date	12/01/21
job no.	CRETE/LIL
drawn by	MSAIEED
checked by	MSAIEED
drawing no.	N101
revision no.	0

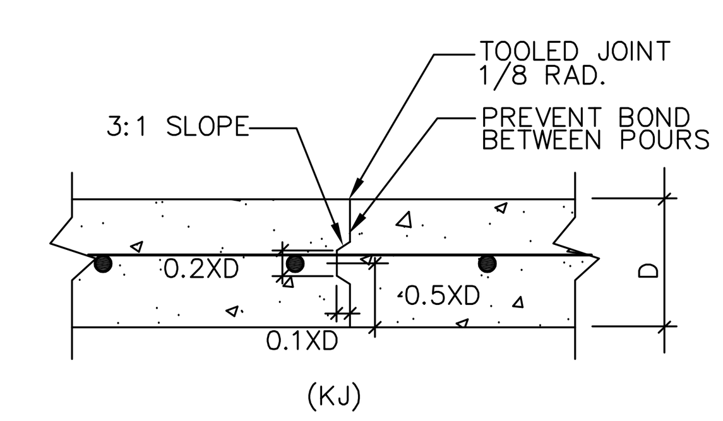
no.	date	revision			
0	12/06/21	ISSUE FOR CODE ENFORCEMENT REVIEW & APPROVAL	–	–	–
			–	–	–



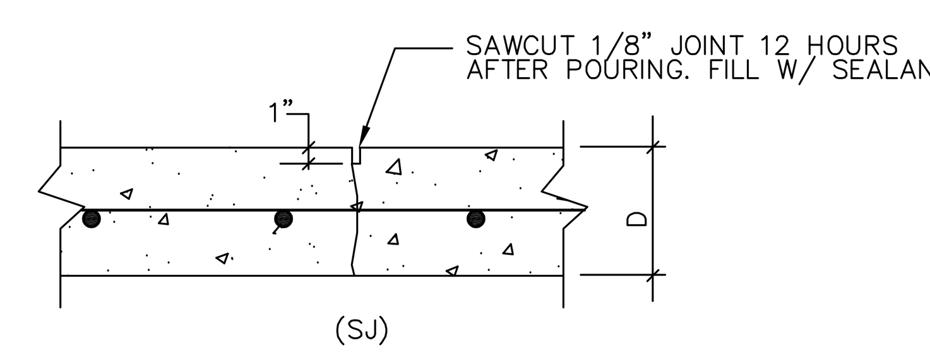
1 FOUNDATION AND SLAB PLAN
S1.0 SCALE: 1/4" = 1'–0"



2 SECTION
S1.0 SCALE: 3/4" = 1'–0"



3 KEYED CONST. JT.
S1.0 SCALE: 1" = 1'-0"



4 SAWED CONST. JT.
S1.0 SCALE: 1" = 1'-0"

STRUCTURAL NOTES

GENERAL

1. DESIGN LOADS:
   - ROOF: LIVE LOAD 20 PSF
   - FLOOR: LIVE LOAD 150 PSF

BASIC WIND DESIGN VELOCITY: 118 MPH (N.C. STATE BUILDING CODE LATEST EDITION). DESIGN PRESSURES PER ASCE 7–10 EXPOSURE B

IMPORTANCE FACTORS: Wind (I_W) 1.0; Snow (I_S) 1.0; Seismic (I_E) 1.0

COLLATERAL LOAD: 5.0 psf

GROUND SNOW LOAD: 15.0 psf

WIND LOAD: Basic Wind Speed 118 MPH (ASCE–7–10); Exposure Category B

Wind Base Shears (for MWFRS) Vx = 56.0K Vy = 48.0K

SEISMIC DESIGN CATEGORY A
Compliance with Section 1616.4 only ?☐Yes ☐No

SEISMIC DESIGN CATEGORY ☐B ☒C ☐D

Provide the following Seismic Design Parameters:

Seismic Use Group I

Spectral Response Acceleration S_S = 29.24 %g S_1 = 9.7 %g

Site Classification E ☐ Field Test ☒ Presumptive ☐ Historical Data

Basic Structural System (check one)
- X Bearing Wall
- ___ Building Frame
- ___ Moment Frame
- ___ Dual w/Special Moment Frame
- ___ Dual w/Intermediate R/C or Special Steel
- ___ Inverted Pendulum

Seismic base shear Vx = 31.6 Vy = 31.6

Analysis Procedure ___ Simplified X Equivalent Lateral Force ___ Modal

Architectural, Mechanical, Components anchored? ___

LATERAL DESIGN CONTROL: Earthquake ___ Wind X

SOIL BEARING CAPACITIES:
- Field Test (provide copy of test report) ___ psf
- Presumptive Bearing Capacity 2000 psf
- Pile size, type, and capacity ___

LAYOUT

1. THE CONTRACTOR SHALL PROVIDE ALL LAYOUT REQUIRED TO CONSTRUCT HIS WORK.
2. STRUCTURE SHALL BE BRACED UNTIL CONSTRUCTION IS COMPLETE.

FOUNDATION

1. FOOTING DESIGN IS BASED ON AN ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF.
2. REMOVE TOPSOIL, ORGANICS, SOFT CLAY AND OTHER UNSUITABLE MATERIALS UNDER ALL FLOOR SLABS, FOOTINGS, AND 5'–0" BEYOND BUILDING WALLS. BACKFILL AS REQUIRED WITH CLEAN SELECT FILL COMPACTED IN 8–INCH LAYERS TO A MINIMUM OF 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT IN ALL LAYERS UP TO THE UPPER ONE FOOT. FILL TO BE PLACED WITHIN 12–INCHES OF THE DESIGN SUBGRADE ELEVATION SHALL BE COMPACTED TO 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT.

CAST–IN–PLACE CONCRETE

1. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS: 4000 PSI
2. WATER/CEMENT RATIO 0.45
3. MAXIMUM SLUMP 4.0 INCHES
4. REINFORCING STEEL: ASTM A615, GRADE 60
5. WELDED WIRE MESH: ASTM A185
6. MINIMUM CLEAR COVER ON REINFORCING: PER ACI 318 (LATEST EDITION)
7. DOWELS AND CONTINUOUS REINFORCING SHALL HAVE A MINIMUM LAP OF 30 BAR DIAMETERS, BUT SHALL NOT BE LESS THAN 24 INCHES.
8. PROVIDE AIR ENTRAINMENT OF 4 TO 6 PERCENT IN EXTERIOR CONCRETE.

STRUCTURAL TIMBER

1. LUMBER SHALL BE SOUTHERN YELLOW PINE OR SPF GRADE 2 MINIMUM.
2. ALL WORK SHALL COMPLY WITH THE N.C. STATE BUILDING CODE (LATEST EDITION). WOOD CONNECTIONS AND DETAILS NOT SHOWN ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH THE "WOOD CONSTRUCTION" CHAPTER AND THE FASTENING SCHEDULES OF THE N.C. STATE BUILDING CODE.
3. LUMBER IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED WITH CA–C TO 0.25 PCF RETENTION.
4. LUMBER ABOVE GROUND AND EXPOSED TO WEATHER SHALL BE PRESSURE TREATED WITH CA–C TO 0.25 PCF RETENTION.

WOOD TRUSS GENERAL NOTES

1. TRUSS AND DETAILS ON THESE DRAWINGS ARE FOR ESTIMATING PURPOSES ONLY AND SUBJECT TO MODIFICATION DEPENDING ON THE PARTICULAR TRUSS USED.
2. TRUSS MANUFACTURER SHALL SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ENGINEER OF RECORD FOR APPROVAL BASED ON THE INFORMATION PROVIDED.
3. THE DRAWINGS AND CALCULATIONS SHALL BE SEALED BY AN ENGINEER LICENSED IN THE STATE OF NORTH CAROLINA.
4. DURING CONSTRUCTION AND ERECTION, THE CONTRACTOR SHALL ADEQUATELY BRACE AND SUPPORT ALL TRUSSES UNTIL ALL CONNECTIONS, PERMANENT BRACING, AND ROOF DECK ARE IN PLACE.
5. TRUSS LOADING:
   ROOF TRUSSES
   - TOP CHORD DL = 10 PSF, LL = 20 PSF, WIND = 118 MPH
   - BOTTOM CHORD DL = 10 PSF, LL = 10 PSF (NON–STORAGE)

Proposed Dispatch Office Building for
Crete Solutions, LLC
2544 US 401 N
Lillington, North Carolina 27546

job status **Contract Documents - Issued for Construction**

Design Elements
M. L. Saieed (Michael), AIA, LEED-AP
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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DAVID TERKELTOUB
12-6-2021

DAVID TERKELTOUB AND ASSOCIATES, P.C.
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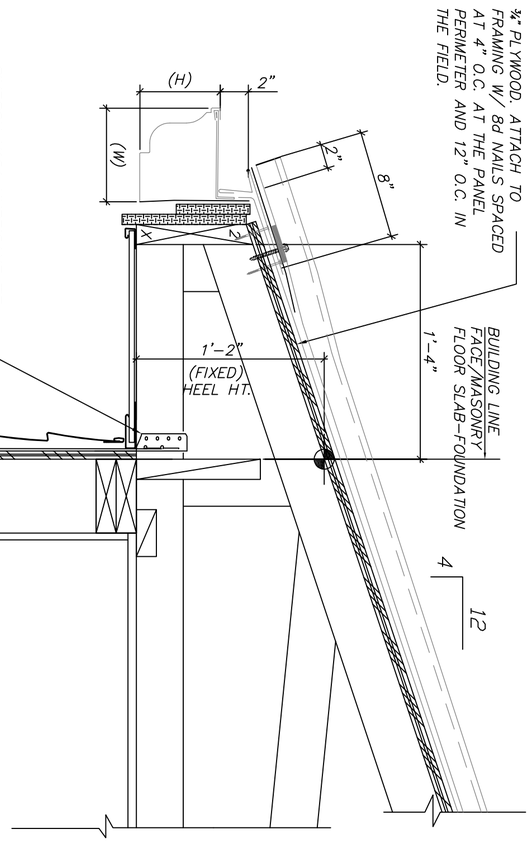
DT PROJECT NO. 21038
FIRM LICENSE NO.: C–2874

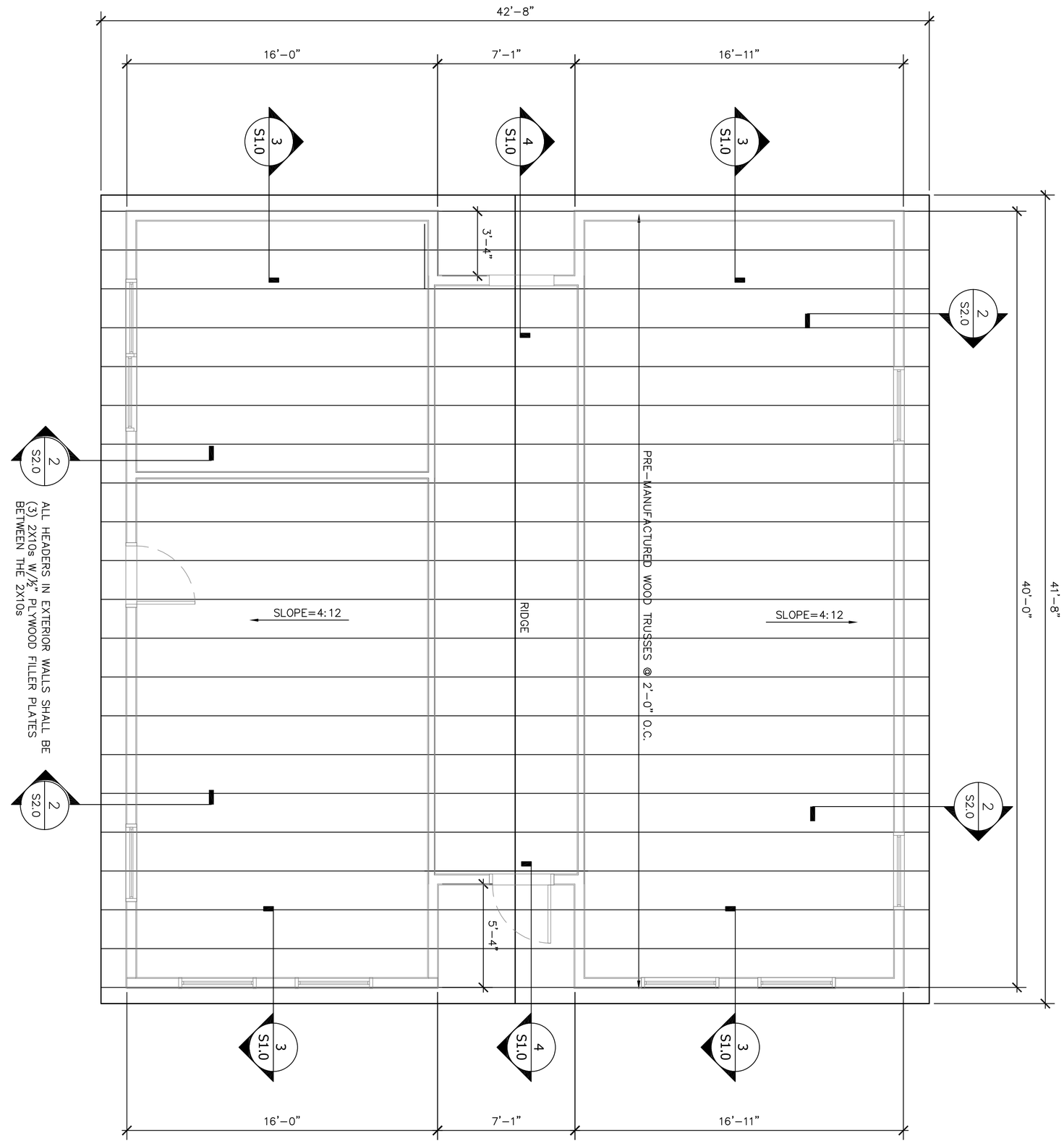
date	12/01/21
job no.	CRETE/LIL
drawn by	DTERKELTOUB
checked by	DTERKELTOUB
drawing no.	S1.0
revision no.	0

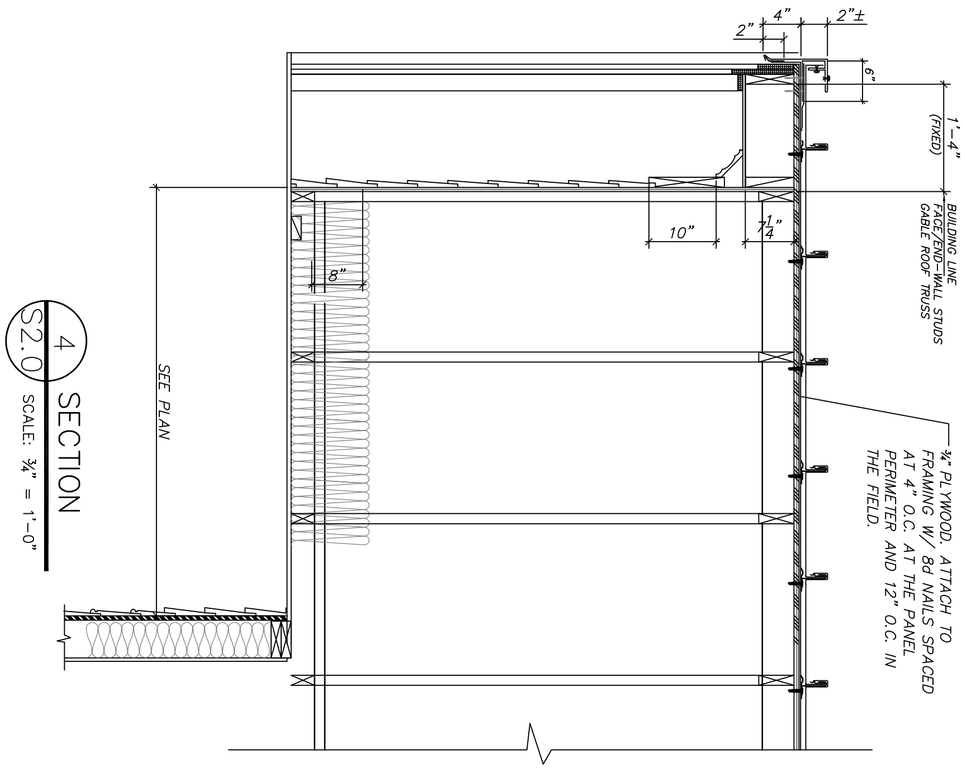
no.	date	revision			
0	12/06/21	ISSUE FOR CODE ENFORCEMENT REVIEW & APPROVAL	–	–	–
			–	–	–



2 SECTION S2.0
SCALE: 1 ½" = 1'-0"

1 ROOF FRAMING PLAN S2.0
SCALE: 1/4" = 1'-0"





4 SECTION S2.0
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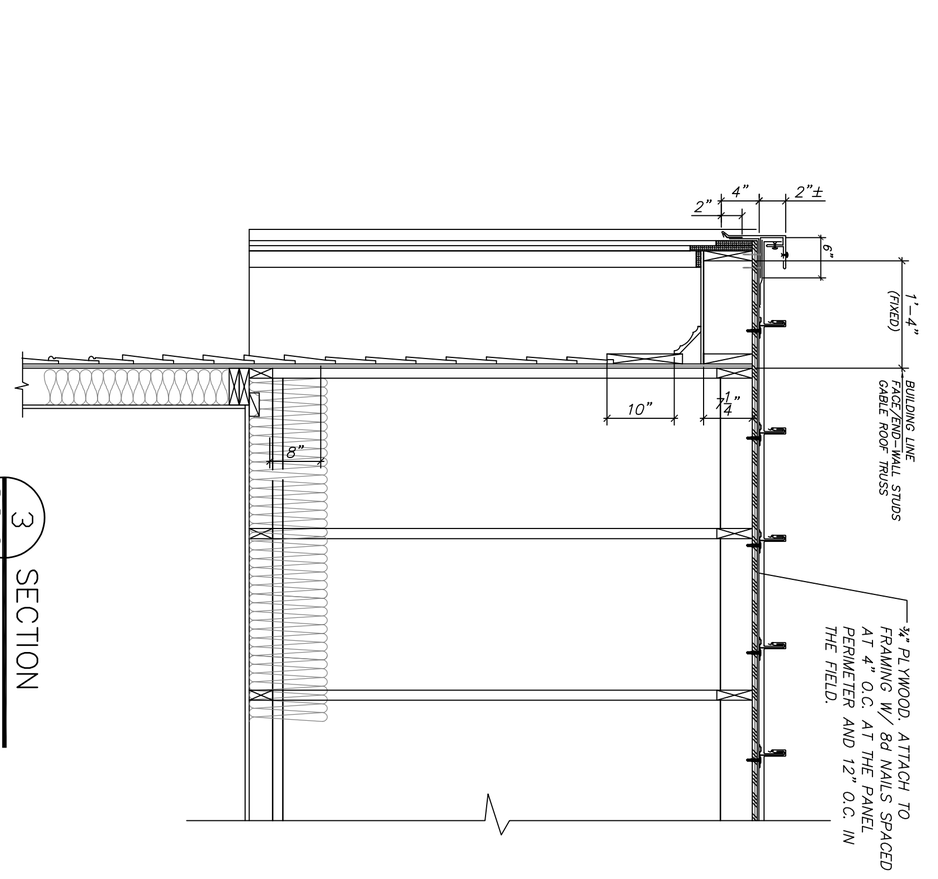

3 SECTION S2.0
SCALE: ¾" = 1'-0"

THIS SHEET SHOWS BASIC DRAFTING STANDARDS

revision no. 0
drawing no. S2.0
checked by DTERKELTOUB
drawn by DTERKELTOUB
job no. CRETE/LIL
date 12/01/21

Proposed Dispatch Office Building for

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Architect / President
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NORTH CAROLINA PROFESSIONAL SEAL 16897 ENGINEER DAVID TERKELTOUB
12-6-2021

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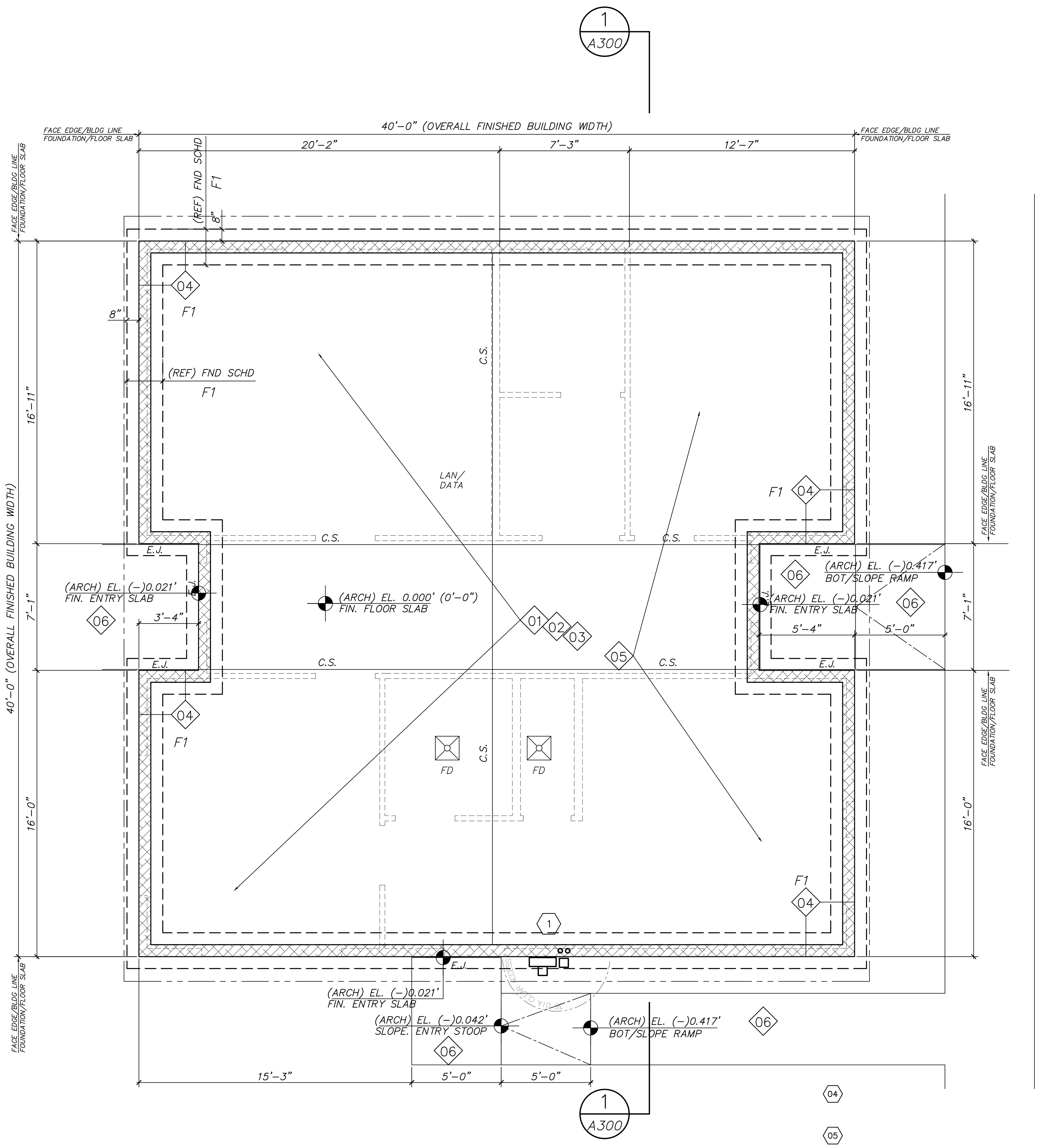
DT PROJECT NO. 21038
FIRM LICENSE NO.: C-2874



1
A100

FOUNDATION PLAN

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

(REF) SITE NORTH PLAN NORTH

GRAPHIC BAR SCALE (FOOT UNITS) 0 2 4 8

GENERAL FOUNDATION PLAN NOTES

REFERENCE ARCHITECTURAL (TYP) WALL SECTIONS (AND IF PROVIDED AS SUPPLYMENT: STRUCTURAL DRAWINGS TAKES PRECEDENCE OVER ARCHITECTURAL

PRE-CONSTUCTION SITE PREP REMOVE REQUIRED LAYERS OF EXISTING TOPSOIL (ORGANIC SOIL) GRADES OF SOFT CLAY AND OTHER UNSUITABLE MATERIALS UNDER ALL FLOOR SLABS, RIBBON SLABS, FOOTINGS, AND 5'-0" BEYOND BUILDING FOOTPRINT EXTERIOR WALLS. REFERENCE GEO-TECHNICAL SOIL ENGINEERING REPORT OF SUBSURFACE INVESTIGATION FOR PROPER SOIL BEARING CONDITIONS FOR RECOMMENDATIONS TO STRUCTURALLY SITE PREP AND CONDITION TO IMPROVE EXISTING GRADES AT DEPTHS (DENSIFY THE SOIL) TO ACHIEVE PROPER SOIL BEARING CAPACITIES AND (IF REQUIRED) SEISMIC RESISTANCE. PREPARED SOILS SHALL BE CLEANED OF ALL VEGETATION AND ORGANIC MATERIAL. TERMITE TREAT BEFORE CONSTRUCTING BUILDING PAD, PERIMETER SLABS AND FOUNDATIONS; GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO REFERENCE STRUCTURAL DRAWINGS AND BUILDING OWNER PROVIDED PROFESSIONAL SOIL ENGINEER'S SUBSURFACE GEO-TECHNICAL SOIL REPORT (OPTIONAL: REMOVED ORGANIC SOILS TO BE STORED AND REUSED FOR LANDSCAPING)

ALL FOUNDATIONS (FOOTINGS) SHALL BEAR ON UNDISTURBED (WITHOUT ORGANIC) SOIL (OR) SELECT FILL CAPABLE OF SUPPORTING A DESIGN BEARING PRESSURE OR 1500 PSF; WHERE THE BOTTOM OF FOUNDATION ELEVATION DOES NOT EXTEND TO SUITABLE UNDISTURBED SUBSOIL, ALL UNSUITABLE MATERIAL SHALL BE REMOVED AND THE BUILDING FOOTPRINT PAD SHALL BE FILLED WITH CLEAN MATERIAL SELECT AND COMPACTED TO 95% DENSITY (COMPACTION PROCEDURE PER ASTM D698 RECOMMENDATIONS) FILL FOR BUILDING PAD SHALL BE TESTED FOR COMPACTION BY A CERTIFIED GEO-TECHNICAL SOIL ENGINEERING TESTING FIRM. TEST SHALL BE CONDUCTED IN AN AREA OF PROPOSED TRENCHED FOOTING, ONE TEST PER 25 LINEAR FEET OF FOOTING. FOOTING SUB GRADE WILL NOT BE ACCEPTABLE UNIT TESTS HAVE BEEN PASSED (OR) GENERAL CONTRACTOR ACCEPTS SURETIES AND RESPONSIBILITIES FOR EXISTING SOIL CONDITIONS TO RESIST BUILDING SETTLEMENT ISSUES.

GENERAL CONDITIONS AND NOTES

PLAN DIMENSIONS OF INTERIOR WALLS ARE MEASURED FROM FACE TO FACE OF WALL STUD END FACE EDGE AND FACE OF MASONRY, FACE OF FLOOR SLAB/MASONRY FOUNDATION WALL, UNLESS NOTED OTHERWISE; REFERENCE ARCHITECTURAL SHEET A100 FOR DIMENSIONAL LOCATIONS OF WALLS AND PLUMBING FIXTURES LOCATIONS; GENERAL CONTRACTOR SHALL PROVIDE (AND CHECK REFERENCE WITH PROPRIETARY VENDOR SPECIFICATIONS AND SPECIALITY EQUIPMENT DRAWINGS) ALL LAYOUTS (AND UNDER SLAB (COMMON AND SPECIALITY) SERVICES) REQUIRED BEFORE CONSTRUCTION BEGINS

ALL CONCRETE FLOOR SLABS OVER EXCAVATION TRENCHING FOR BUILDING UNDER SLAB OPERATIONAL SERVICES SHALL BEAR ON UNDISTURBED (WITHOUT ORGANIC) SOIL (OR) SELECT FILL CAPABLE OF SUPPORTING A DESIGN BEARING PRESSURE OR 1500 PSF IF GEO-TECHI WHERE BACKFILLING (SUB-GRADE) SOIL IS REQUIRED WITHIN EXCAVATED TRENCHED AREAS THE SUB-GRADE SOIL MATERIAL SHALL BE CLEAN SELECTED AND COMPACTED IN 8-INCH LAYERS TO A (MINIMUM) 95% STANDARD PROTECTOR DRY DENSITY (COMPACTION PROCEDURES SHALL FOLLOW ASTM D698 RECOMMENDATIONS); TEST SHALL BE CONDUCTED IN AN AREA OF PROPOSED TRENCHING, ONE TEST PER 25 LINEAR FEET OF FOOTING. FOOTING SUB GRADE WILL NOT BE ACCEPTABLE UNIT TESTS HAVE BEEN PASSED (OR) GENERAL CONTRACTOR ACCEPTS SURETIES AND RESPONSIBILITIES FOR EXISTING SOIL CONDITIONS TO RESIST BUILDING SETTLEMENT ISSUES.
FINAL SUB-GRADE BACKFILL SHALL BE FINISHED FLUSH AND LEVEL TO EXISTING BASE SOIL (UNDER SLAB) SUB-GRADE AS NOT TO CAUSE ANY UN-INFORMED THICKNESS OF CONCRETE FLOOR SLAB CONSTRUCTION. GENERAL CONTRACTOR ACCEPTS SURETIES AND RESPONSIBILITIES FOR EXISTING SOIL CONDITIONS AND SUB-GRADE SOIL BACKFILL TO RESIST FLOOR SLAB SETTLEMENT ISSUES. (ONLY IF PROVIDED AS A SUPPLEMENT: REFERENCE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION TO TAKE PRECEDENCE)

ALL CONCRETE FOOTINGS, INCLUDING FLOOR (IF PROVIDED CUSTOM COLORED) SLAB-ON-GRADE SHALL OBTAIN A COMPRESSIVE STRENGTH OF (MIN) 3,500 psi AT AN AGE OF 28 DAYS AND A MAXIMUM SLUMP OF 5 INCHES, UNLESS NOTED OTHERWISE. (DO NOT AIR ENTRAIN CONCRETE) (ONLY IF PROVIDED AS A SUPPLEMENT: REFERENCE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION TO TAKE PRECEDENCE)

ALL REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A615, GRADE 60 ksi; PLACEMENT AND PROTECTION (AND CLEAN FROM SURFACE RUST) OF STEEL REINFORCING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF A.C.I. 318; WHERE CONTINUOUS REINFORCING BARS ARE REQUIRED THERE SHALL BE A MIN. 36 (X) BAR DIAMETER AT END LAPPED SPLICES

MINIMUM CLEAR COVER ON REINFORCING: PER ACI 318 (LATEST EDITION) CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO SOILS: 3" CONCRETE OVER EXPOSED TO SOIL; WELD WIRE FIBER (W.W.F.) MID-POINT (CENTER) PLACEMENT WITHIN CONCRETE FLOOR SLAB

ALL CONCRETE MASONRY UNITS (CMU) SHALL BE IN ACCORDANCE OF WITH ASTM C-90 TYPE I GRADE N-1 (FM 1350psi); GROUT FOR MASONRY WALL SHALL COMPLY WITH ASTM C-476, AND SHALL BE PROPORTIONED TO OBTAIN A 28 DAY COMPRESSIVE STRENGTH OF 2500psi; ALL MORTAR SHALL BE ASTM C-270. TYPE M OR S.

LEGEND

THIS SHEET ONLY

FD — FLOOR DRAIN, APPROXIMATE LOCATION CAST-IN-SLAB RECESS AND SLOPE FOR DRAINAGE (MIN 18" SQ. FLOOR SLAB TAPERED TO DROPPED INLET WASTE DRAIN) REFERENCE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION

C.S. — CONCRETE FLAT SLAB CONTROL JOINT (APPROXIMATE LOCATION) WHERE APPLICABLE PLACE UNDER PARTITION WALLS; PRE-FORMED "T-SHAPE" PLASTIC CRACK CONTROL STRIP (OPTIONAL: SAW CUT CONTROL JOINT; SAW CUT TOP SURFACE)

E.J. — EXPANSION CONSTRUCTION JOINT, (NOM. 1/2" WIDTH) EXTERIOR TRAFFIC GRADE BITUMINOUS MATERIAL; PERIMETER FOUNDATION TO SLAB EDGE; WEATHER TIGHT JOINT SEAL W/ POUR-ABLE SELF LEVELING SEALANT (SIMILAR MFR: SIKAFLEX)

UNDERGROUND PVC CONDUIT STUB UP FOR MULTIPLE CIRCUITED ELECTRICAL JUNCTION BOX(S) (ELECTRICAL OUTLET(S) COMBINATION; REFERENCE ELECTRICAL DRAWINGS; VERIFY LOCATION WITH GENERAL ARRANGEMENT FLOOR PLAN, CAP ALL CONDUITS/PIPING DURING CONSTRUCTION. PVC CONDUIT ONLY AT UNDERGROUND LOCATIONS. (SCHEDULE 20 PVC, UTILIZE 45° BENDS ONLY); COORDINATE FINIAL LOCATIONS WITH BUILDING OWNER.

NOM. 8" CONCRETE MASONRY UNIT FOUNDATION WALL (REFERENCE ARCHITECTURAL WALL SECTION FOR ADDITION INFORMATION) SEE STRUCTURAL WORKING DRAWINGS FOR CONSTRUCTION DETAILS AND SPECIFICATION NOTES

(TYPICAL; UNLESS NOTED OTHERWISE) CONCRETE MASONRY UNITS SHALL BE IN ACCORDANCE OF WITH ASTM C-90 TYPE I GRADE N-1 (FM 1350psi); GROUT FOR MASONRY WALL SHALL COMPLY WITH ASTM C-476, AND SHALL BE PROPORTIONED TO OBTAIN A 28 DAY COMPRESSIVE STRENGTH OF 2500psi; ALL MORTAR SHALL BE ASTM C-270. TYPE M OR S.

PLAN KEYNOTES

01 REMOVE REQUIRED LAYERS OF EXISTING (ORGANIC SOIL) FINISHED TOPSOIL GRADE TO VIRGIN GRADE SOIL LEVEL; (IF PROVIDED AS NECESSARY, REMOVE TOPSOIL AT DEPTHS DENOTED IN GEO-TECHNICAL SOIL ENGINEERING REPORT). PREPARED BUILDING FOOTPRINT BEARING SOIL SHALL BE CLEANED OF ALL VEGETATION AND ORGANIC MATERIAL (OPTIONAL: REMOVED ORGANIC SOILS TO BE STORED AND REUSED FOR LANDSCAPING)

02 BACK-FILL SUB-GRADE FOR ELEVATED FLOOR SLAB AND SPREAD FOOTING BEARING; PROVIDE CLEAN SANDY/CLAY SOIL (IF REQUIRED BY GEO-TEC SOIL ENGINEER'S REPORT: #57 AGGREGATE) IN COMPACTED "LIFT GRADE" 8 INCH LAYERS (MIN. 95% COMPACTION (MECHANICAL ACTION) OF EACH LAYER) IF PROVIDED AS NECESSARY GENERAL CONTRACTOR TO REVIEW BUILDING OWNER'S PROVIDED "SOIL ENGINEER'S" REPORT OF SUBSURFACE INVESTIGATION FOR PROPER SOIL BEARING CONDITIONS

03 "VAPOR BARRIER (VB)" UNDER CONDITIONED SPACES ONLY (MIN. 15mils) UNDER CONCRETE FLOOR SLAB (OVER CLEAN COMPACTED/ELEVATED GRADE LIFT SUB-BASE SOIL) MOISTURE PROTECTION-PUNCTURE RESISTANT PLASTIC SHEETING (METALLOCENE POLYOLEFIN); PROVIDE MIN. 6" SEAL LAPPED JOINTS WITH TAPED SEAMS INSTALLATION; THRU BARRIER/SLAB PIPE PENETRATIONS (ei. PLUMBING AND ELECTRICAL SERVICES) SHALL BE TAPED (OR) MASTIC (MFR. "STEGO INDUSTRIES-15MIL," ASTM E1745 CLASS A; WITH 0.01 PERMANENCE)

04 CONTINUOUS 8" CONCRETE MASONRY UNIT FOUNDATION WALL; REINFORCED W/ #5 HOOKED VERT. DOWELS TO FOOTING, TYPICAL 2'-0" O/C. AND MAX. 16" FROM INSIDE/OUTSIDE BUILDING CORNERS; STAGGER PLACEMENT 24" FROM TRAVERSE BARS; PROVIDE HORZ MASONRY "TRUSS TYPE" REINF. @ 8" VERT. O.C.; CONCRETE GROUT (PEA GRAVEL (MAX. 3/8" DIA) AGGREGATE) FILL ALL CMU CELLS SOLID.

05 MIN. 4" THK CONCRETE SLAB ON GRADE; REINFORCED W/ 6x6 W2.1-W2.1 (FLAT SHEETS) W.W.F. ON VAPOR BARRIER OVER CLEAN COMPACTED DRAINAGE SUB-BASE AGGREGATE (CONC Fy 3500 psi; STL. TROWEL SURFACE FINISH)

06 EXTERIOR CONCRETE SLAB ON ELEVATE GRADE; NOM. 4" THK'N REINFORCED W/ 6x6 1.4-1.4 W.W.F. OVER CLEAN COMPACTED GRANULAR SUBFILL (CONC 2800 psi; LIGHT BROOM SURFACE FINISH) SITE-VERFIY AND MODIFY TO MATCH EXISTING GRADE CONDITIONS. HORIZONTAL RUNS SHALL NOT EXCEED VERTICAL GRADIENT FOR: WALKWAY 1:20; SLOPE ACCESSIBLE RAMPS: 1:12; MAX. (FIXED) CROSS SLOPE (FROM CENTER) SIDE DRAINAGE 1/4" PER FOOT

1 PROPOSED ELECTRICAL POWER AND LIGHTING PANELS; PROVIDE (2) ADDITIONAL UNDER SLAB 2" DIA. PVC SPARE CONDUITS "STUB-UP" (MIN. 6" AFF) AND CAP UNDER ELEC PANEL (SEE ELECTRICAL DRAWINGS FOR ADDITIONAL DETAILED SERVICES & "MD" PNL LOCATIONS)

PIER AND FOOTING SIZE SCHEDULE

MARK	PIER SIZE Lenght(L) x Width(W)	FOOTING SIZE Length(L) x Width(W) x Depth (D)	BOTTOM FOOT'G REINFORCEMENT Each Way (EW) Short Way (SW) Long Way (LW)	TOP FOOT'G REINFORCEMENT Each Way (EW) Short Way (SW) Long Way (LW)	REMAKS
F1	CONTINUOUS SPREAD FOOTING	CONT x 2'-0"x 10"	(3) No. 4's CONT (OR) (2) No. 5's CONT	N/A	PROVIDE No.3 TRANSVERSE BARS (CROSS REINF TIES) AT 36" O/C
F2	CMU FOUNDATION WALL	N/A	(X) No. N/A (SW) (X) No. N/A (LW)	N/A	REFERENCE DETAIL 1/A700
F3	N/A	N/A	(3) No. 4's CONT (OR) (2) No. 5's CONT	N/A	PROVIDE No.3 TRANSVERSE BARS (CROSS REINF TIES) AT 36" O/C

no.	date	revision
0	12/06/21	ISSUE FOR CODE ENFORCEMENT REVIEW & APPROVAL

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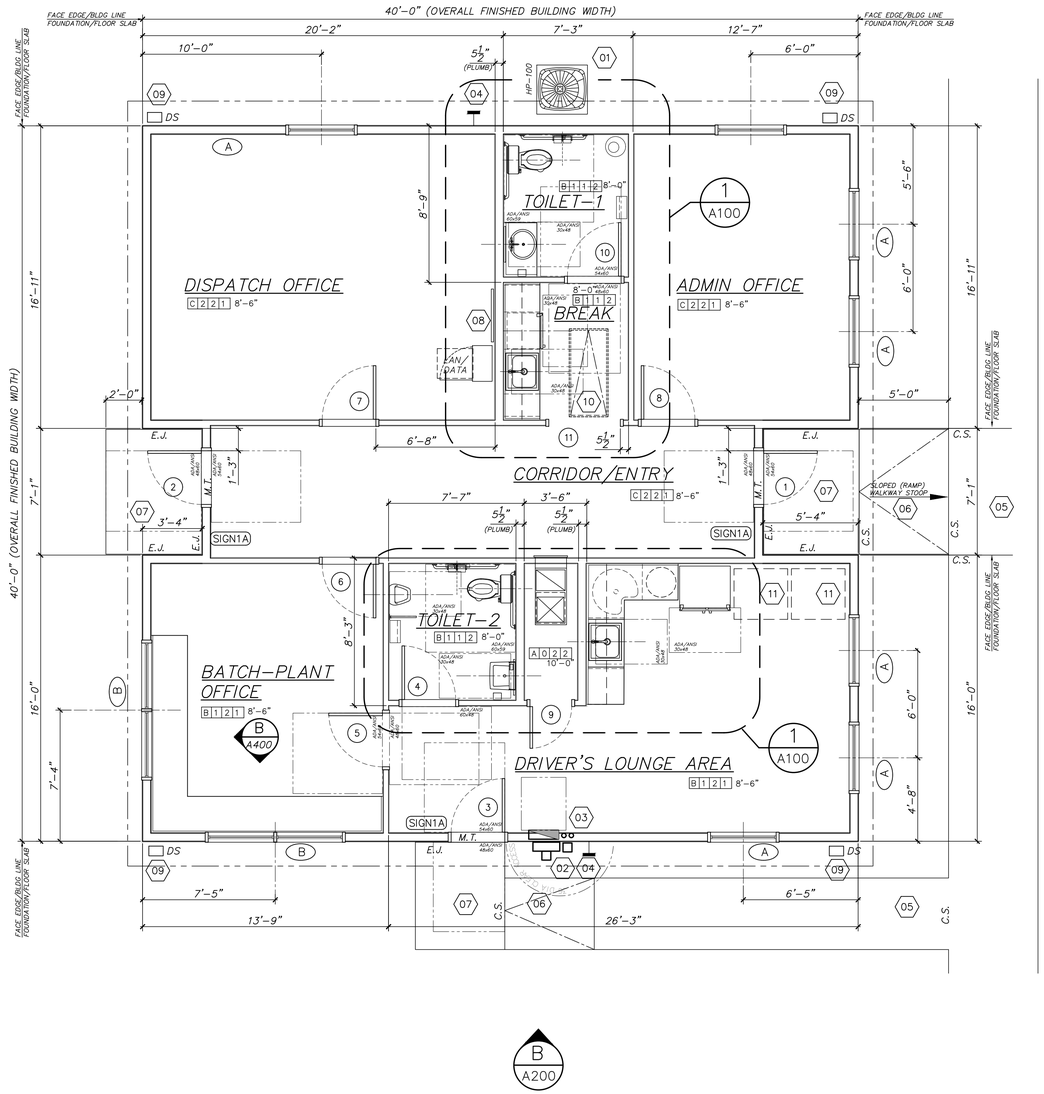
12/06/2021

Proposed Dispatch Office Building for
Crete Solutions, LLC
2544 US 401 N
Lillington, North Carolina 27546

FOUNDATION PLAN

job status **Contract Documents - Issued for Construction**

date	12/01/21
job no.	CRETE/LIL
drawn by	MSAIEED
checked by	MSAIEED
drawing no.	AS100
revision no.	0



PROPOSED FLOOR PLAN

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

GRAPHIC BAR SCALE (FOOT UNITS)
0 2 4 8

GENERAL KEYNOTES

FOR THIS SHEET ONLY!

(01) HEATING/AIR CONDITIONING (HVAC) EXTERIOR COMPRESSOR UNIT W/ ON-GRADE CONCRETE MAINTENANCE PAD (EPOXY ADHESIVE ANCHORED BOLT UNIT IN-PLACE); (MIN. 4" THK CONC PAD); HVAC UNIT ZONED PER SINGLE FLOOR LEVEL (OCCUPIED SPACES); MECHANICAL UNIT ELECTRICAL DISCONNECT SWITCH EXTERIOR SURFACE WALL MOUNTED ABOVE GRADE (MIN. 36"); MIN. HORIZONTAL DISTANCE 36" AWAY FROM ANY UNIT; (REFERENCE MECHANICAL DRAWINGS FOR DETAILS)

(02) ELECTRICAL MAIN DISTRIBUTION (CENTER) PANEL AND METER BASE; APPROXIMATE LOCATION (REFERENCE ELECTRICAL DRAWINGS)

(03) PROPOSED RECESSED INTERIOR WALL MOUNTED ELECTRICAL (POWER AND LIGHTING) PANEL (APPROXIMATE CENTERLINE LOCATION); PROVIDED THRU WALL ABOVE (OR CENTERED) ELECTRICAL PANEL PVC CONDUIT; NOTE PROVIDE: (2) ADDITIONAL UNDER SLAB 2" DIA. PVC SPARE CONDUITS AND (1) 1" PVC SPARE CONDUIT "STUB-UPS" (MIN. 6" A.F.F. AND CAP) UNDER ELECTRICAL PANEL (ELECTRICAL PANEL AMPERAGE AND ITS DESIGNATED SERVICE ASSIGNED SPACES, SHALL BE COORDINATED WITH BUILDING OWNER AND BATCH-PLANT SPECIALIZE ELECTRICAL EQUIPMENT AND VERIFIED WITH ELECTRICAL CONTRACTOR) REFERENCE ELECTRICAL ENGINEER DRAWINGS FOR ADDITIONAL DETAIL INFORMATION)

(04) EXTERIOR HOSE BIB; THRU WALL WALL SECUREMENT; PROVIDE FREEZE PROTECTION

(05) (TYPICAL) ACCESSIBLE CONCRETE (FRONT EGRESS/ENTRY) WALKWAY/PARKING CURB STEP DOWN; (MIN. 5'-0" WIDTH U.N.O.) MIN. 4" THICKNESS EXTERIOR CONCRETE "SLAB/CURB ON GRADE" W/ TURN-DOWN PERIMETER THICKEN EDGES; REINFORCED SLAB/CURB W/ 6x6 1.4-1.4 W.W.F. (MESH SHEETS) OVER CLEAN COMPACTED GRANULAR SUBFILL (CONC 3000 psi), PROVIDE TOP/BOTTOM No.4 NOSING BARS AT TURN-DN EDGES;

FINISHED WALKWAY/CURBING: HIGH POINT (HP) ELEVATION (-) 0.25" DROP FROM FINISHED CONCRETE FLOOR SLAB; LOW POINT (LP) MAX. 6" ELEVATED WALKWAY/CURBING ABOVE FINISH PAVEMENT; SLOPE WALKWAY/CURBING CROSS-SECTION FOR DRAINAGE (MAX. 1/4" IN 12"); LT. BROOM SURFACE TEXTURE FINISH PROVIDED W/ ADEQUATE CONTROL JOINT ON-CENTER MIN. NOMINAL SPACING EQUAL TO WIDTH OF WALKWAY/CURBING; OVERALL WALKWAY "RUN" SHALL NOT EXCEED 5% SLOPE; OFFSET EGRESS/ENTRY STOOP TO PROVIDE MIN. 18" WIDE (FLAT SURFACE) "ARCHITECTURAL BARRIER FREE" FORWARD APPROACH TO DOOR STRIKE SIDE

SEE CIVIL/SITE PLANS FOR "ARCHITECTURAL BARRIER FREE" ACCESSIBLE ACCESS POINTS "CURB CUTS," LOCATIONS AND CONSTRUCTION DETAILS

(06) (TYP) ACCESSIBLE SLOPED CONCRETE SIDEWALK AND APRON; SLOPE TO FINISHED WALKWAY (OR) FOR DRAINAGE (MAX. NOT TO EXCEED 6'-0" RUN LENGTH @ 1"IN 12" SLOPE; FLUSH TO FINISHED GRADE: MAX. 1/2" ELEVATION GRADE DIFFERENCE) SLOPE CROSS-SXN FOR DRAINAGE (MAX. 1/4" IN 12"); SITE VERIFY/ADJUST FOR WIDTH; REINF. W/ 1.4x1.4-6x6 W.W.F.; LIGHT BROOM TEXTURE FINISH;

(07) (TYP) ACCESSIBLE CONCRETE STOOP ENTRY/EXIT ACCESS POINT; STOOP (NOMINAL FLAT) FLUSH TO FINISHED BUILDING FLOOR SLAB AT ACCESS POINT; SLOPE TO FINISHED WALKWAY (OR) ACCESSIBLE RAMP AT CROSS-SXN FOR DRAINAGE (MAX. 1/4" IN 12"); (REFERENCE KEYNOTE [05] FOR CONSTRUCTION)

(08) PROPOSED TELEPHONE BACKBOARD (APPROXIMATE LOCATIONS; SEE PLAN) FOR EQUIPMENT SERVICE; MIN. 24"(W)x48"(H)-3/4"; SURFACE WALL MOUNTED (BOTTOM 30" A.F.F.) RATED PLYWOOD (FRTW) BACKER (BLUE) BOARD (UL-LISTED); PROVIDE DOUBLE GANG ELECTRICAL OUTLET (IF NOT DENOTE ON ELECTRICAL DRAWINGS)

(09) NOM. 12"(W) x 30"(L) PRE-CAST CONCRETE SPLASH (GUARD) BLOCKS; PLACED DIRECTLY UNDER DOWNSPOUT DISCHARGE; LOCATIONS AS DENOTED; (OPTIONAL: DOWNSPOUTS SHALL CONNECT DIRECTLY TO UNDERGROUND STORM DRAINAGE)

(10) ATTIC ACCESS "CEILING RECESS FOLDING PULL-DOWN" LADDER, ALUM EXTRUDED COMMERCIAL GRADE FRAMING; (MIN. 300lb CAP.) VERIFY R.O. DIMENSION W/PROPRITARY ACCESS STAIR MFR. AND COORDINATE W/ TRUSS VENDOR/SUPPLIER) PROVIDE MIN. 36"X36" CLEAR FLOOR AREA AT PULL-DOWN (RECESS FOLDING NOM. SIZE 22"x54" SITE VERIFY ACCESSIBILITY BEFORE ROUGH OPENING CONSTRUCTION.

(11) (FUTURE) PROPOSED LOCATION FOR COIN/CURRACY OPERATED VENDING MACHINE (COLD SOFT DRINKS/BOTTLE WATER AND SNACK/CANDY) PROVIDED BY BUILDING OWNER. GENERAL CONTRACTOR SHALL PROVIDE ELECTRICAL SERVICES TO FUTURE INSTALLATION.

FLOOR PLAN LEGEND

FOR THIS SHEET ONLY!

(#) INDICATES DOOR IDENTIFICATION NUMBER; SEE ARCH SHT A6XX FOR INFORMATION ON NOM. DOOR/FRAME SIZES, DESIGNATION TYPES & HARDWARE

(X) INDICATES WINDOW IDENTIFICATION LETTER; REFERENCE SEE SHEET A6XX FOR DETAILED INFORMATION FOR WINDOW FRAME DIMENSIONS AND NOTES

E.J. EXPANSION CONSTRUCTION JOINT, (NOM. 1/2" WIDTH) EXTERIOR TRAFFIC GRADE BITUMINOUS MATERIAL; PERIMETER FOUNDATION TO SLAB EDGE; WEATHER TIGHT JOINT SEAL W/ POUR-ABLE SELF LEVELING SEALANT (SIMILAR MFR: SIKAFLEX)

T DESIGNATES FREEZE-PROOF ENCLOSED COMMERCIAL WALL "HOSE BIB" WITH VACUUM BREAKER & "TEE" KEY

DS PRE-FINISHED NOM. 4x2 DOWN SPOUT (DS) (MIN. 26Ga) FROM CONTINUOUS GEE GUTTER, (MIN. 26Ga); PROVIDE (DS) CONNECTION WALL STRAPS AT EACH 1/3 POINT VERTICAL WALL HEIGHT; PROVIDE EACH W/ PRE-CAST CONCRETE SLASH BLOCK; SURFACE SHEET STORM-WATER DRAINAGE MANAGEMENT SYSTEM, REFERENCE CIVIL SITE DWG'S

C.S. CONCRETE SLAB CONTROL JOINT; TOOLED JOINT

MTS APPROPRIATE ALUMINUM SOLID EXTRUDED TRANSITION STRIPS, JOINT SYSTEM AT FINISHED FLOORING CHANGES FROM ONE MATERIAL TO ANOTHER

M.T. DESIGNATES EXTRUDED ALUMINUM FLOOR FINISH FLUSH TRANSITION THRESHOLD; ADAAG/HC "BARRIER FREE" ACCESSIBLE CROSS-OVER (MAX. 1/2" THK'N.)

(SIGN-) WALL MOUNTED IDENTIFICATION SIGNAGE (SEE SIGNAGE DETAIL A/N100)

ROOM FINISH LEGEND

FOR BUILDING OWNER REVIEWS AND FINAL APPROVALS, GENERAL CONTRACTOR SHALL PROVIDE SELECTED FINISHING (FLOOR, WALL & CEILING AND RESTROOM ACCESSORIES) MATERIALS AND COLOR SAMPLES FOR ALL INTERIOR SURFACE FINISHES. ADDITIONAL SUBMITTALS FOR BUILDING OWNER APPROVALS SHALL INCLUDE ELECTRICAL LIGHTING AND PLUMBING FIXTURES AND MECHANICAL APPLIANCES FROM PROPRIETARY VENDORS.

NAME — ROOM IDENTIFICATION NAME
A 1 1 1 — CEILING HEIGHT ABOVE FIN FLOOR

CEILING
1 = 2x2 SUSPENDED CEIL'G ACOUSTICAL LAY-IN SYSTEM; COLOR: WHITE TILE/CEILING GRID; (USG: "MARS" (HIGH-NRC/HIGH-CAC); TEGULAR TILES 7/8"(D) (SLT) EDGES: ACOUSTICAL SUSPENSION SYSTEM: DONN DX/DXL 15/16" GRID)
2 = PAINTED GYPSUM SOFFIT/CEILING BOARD (GA214-LEVEL 5 SURFACE TEXTURE FINISH) (OPTIONAL: USG: "TUFF-HIDE") SMOOTH SURFACE FINISHED

WALLS
1 = PAINTED GYPSUM BOARD PARTITION; (GA214-LEVEL 4 SURFACE FINISH) (WASHABLE, AND MILDEW/MOISTURE RESISTANCE PAINT REQUIRED); (PRE-PRIMED PAINTED) SEMI-GLOSS ACRYLIC LATEX; COLOR: T.B.D.
2 = PAINTED GYPSUM BOARD PARTITION; (GA214-LEVEL 4 SURFACE FINISH); (PRE-PRIMED PAINTED) EGG-SHELL SHEEN FINISH, ACRYLIC LATEX PAINT; COLOR: T.B.D.

BASE
0 = NONE
1 = RUBBER/VINYL BASE (NOM 4" HEIGHT); COLOR: T.B.D.
2 = 5.5" WOOD BASE W/ BEVEL COVE (PAINT GRADE) (OWNER SPECIFIED)

FLOOR
A = SEALED CONCRETE FINISH; MULI-APPLIED "PENETRATING" CONCRETE MOISTURE BARRIER SEALER (PROPRIETARY MFR.: "AQUAFIN INC."
B = 12"x12" VINYL COMPOSITE TILE (OWNER SPECIFIED)
C = 24"x24" (OR) 12"x36" COMPOSITE CARPET TILE; DIRECT GLUED-DOWN (FLEECE BACKER (OR) NEOPRENE FOAM BACKER)

no.	date	revision			
0	12/06/21	ISSUE FOR CODE ENFORCEMENT REVIEW & APPROVAL	-	-	-

THIS SHEET SHOWS BASIC DRAFTING STANDARDS

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12/06/2021

Proposed Dispatch Office Building for
Crete Solutions, LLC
2544 US 401 N
Lillington, North Carolina 27546

FLOOR PLAN

job status **Contract Documents - Issued for Construction**

date	12/01/21
job no.	CRETE/LIL
drawn by	MSAIEED
checked by	MSAIEED
drawing no.	A100
revision no.	0

REFLECTED SUSPENDED CEILING NOTES

REFERENCE ELECTRICAL AND MECHANICAL DRAWINGS FOR 2x2 FINISHED CEILING GRID LAYOUTS WITH SPECIFIED LIGHTING FIXTURE TYPES AND ACTUAL MECHANICAL (SUPPLY AND RETURN) DIFFUSERS CONFIGURATIONS.

GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO SITE VERIFY ALL OVERHEAD EXISTING CONDITIONS (STRUCTURAL WOOD FRAMING, AND MECHANICAL DUCTWORK SYSTEM, BUT NOT LIMITED TO), FOR ALL THEIR LOCATIONS OF VERTICAL HEIGHTS ABOVE FINISHED FLOOR, AND CONFIRMING THAT THE PROPOSED FINISHED CEILING ASSEMBLIES ARE BUILD-ABLE AS SHOWN BEFORE PROCEEDING WITH CONSTRUCTION. IF THERE ARE ANY QUESTIONS REGARDING THESE OR OTHER COORDINATION ISSUES, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE LEASE TENANT OWNER (OR) DESIGNER BEFORE PROCEEDING WITH CONSTRUCTION IN QUESTION.

POSITION 2x2 LAY-IN GRID ASSEMBLY TO PROVIDE THE OPTIMUM USAGE OF FULL TILES WITH MINIMUM REQUIRED FIELD CUTTING TO FIT. "ABSOLUTELY NO CEILING TILE SLIVERS ALLOWED" WHERE PERIMETER 2x2 GRID LAYOUT MEETS HEAD WALLS, THE MIN. ALLOWED FINISHED TILE WIDTH SHALL NOT BE LESS THAN 6". CONTRACTOR SHALL MODIFY ONLY ADJACENT PERIMETER 2x2 GRIDS INTO 2x4 GRIDS TO ELIMINATE TILE SLIVERS. (CONTRACTOR SHALL ORDER AN EXTRA BOX (10 PERCENT) MATCHING CEILING TILES AS NECESSARY FOR DAMAGE REPLACEMENTS)

(BUILDING OWNER) SHALL SPECIFY SELECTED LIGHTING FIXTURE ARCHITECTURAL STYLE/TYPES (ELECTRICAL DRAWING DENOTING ONLY RECOMMENDED FIXTURE STYLE/TYPE); GENERAL CONTRACTOR SHALL PROVIDE (UNLESS NOTED OTHERWISE); REFERENCE ELECTRICAL DRAWINGS FOR ALLOWABLE WATTAGE PER FIXTURE AS DENOTED AND REQUIRED TO MEET NCBC/ECC-2012

GENERAL CONTRACTOR SHALL REFERENCE PROPRIETARY VENDOR'S SUSPENDED CEILING FRAMING ASSEMBLY SYSTEM FOR APPROPRIATE STANDARD SUSPENSION REQUIRED OF HANGERS AND "SEISMIC" DIAGONAL SPLAY WIRES (GAUGE & O/C SPACING) AT FRAMING GRID INTERSECTIONS AND LIGHTING FIXTURE CORNERS (AND IF APPLICABLE) ADDITION ALTERNATING SPLAYS AT SUSPENDED FRAMING SYSTEM (CROSS MEMBERS AND RUNNERS) WHERE LOCATED ABOVE PARTITION WALLS CONTACTING CEILING GRID.

CEILING LEGEND

NOM. 2x4 LAY-IN SUSPENDED (OR) SURFACE MOUNTED CEILING "LED" LIGHTING FIXTURE; FLAT PANEL GASKET DIFFUSING LENS (REFERENCE: ELECTRICAL DWGS FOR ADD'N DETAILED INFOR'N)

RECESS DOWNLIGHT "LAY-IN" SUSPENDED CEILING GIRD FIXTURE; (REFERENCE: ELECTRICAL DWGS FOR ADD'N DETAILED INFORMATION)

PENDANT LIGHTING FIXTURE (BUILDING OWNER) SHALL SPECIFY AND COORDINATE FINAL LOCATIONS WITH GENERAL CONTRACTOR (REFERENCE: ELECTRICAL DWGS FOR ADD'N DETAILED INFORMATION)

PENDANT LIGHTING FIXTURE (BUILDING OWNER) SHALL SPECIFY AND COORDINATE FINAL LOCATIONS WITH GENERAL CONTRACTOR (REFERENCE: ELECTRICAL DWGS FOR ADD'N DETAILED INFORMATION)

WALL MOUNTED LIGHT FIXTURE: COORDINATE LOCATION CENTERED ABOVE MIRROR

REFLECTED CEILING GRID SYSTEM (RCG), (AND) SOFFIT/BULKHEAD FINISHED HEIGHT ABOVE FINISHED FLOOR (A.F.F)

2X2 SUPPLY AIR DIFFUSER (REFERENCE MECHANICAL DRAWINGS FOR SIZE AND LOCATIONS)

2X2 RETURN AIR DIFFUSER (REFERENCE MECHANICAL DRAWINGS FOR SIZE AND LOCATIONS)

(TYP) 2x2 ACOUSTICAL SUSPENDED REFLECTED CEILING GRID SYSTEM ASSEMBLY PLAN (RCP); FINISHED HEIGHT A.F.F. SEE PLAN (UNLESS NOTED OTHERWISE)

(TYP) CENTER RECESSED LIGHT (OR PENDANT JUNCTION BOX) FIXTURE WITHIN CEILING TILE (OR) WIRE GRILLE/WOOD SLATS SUSPENDED CEILING

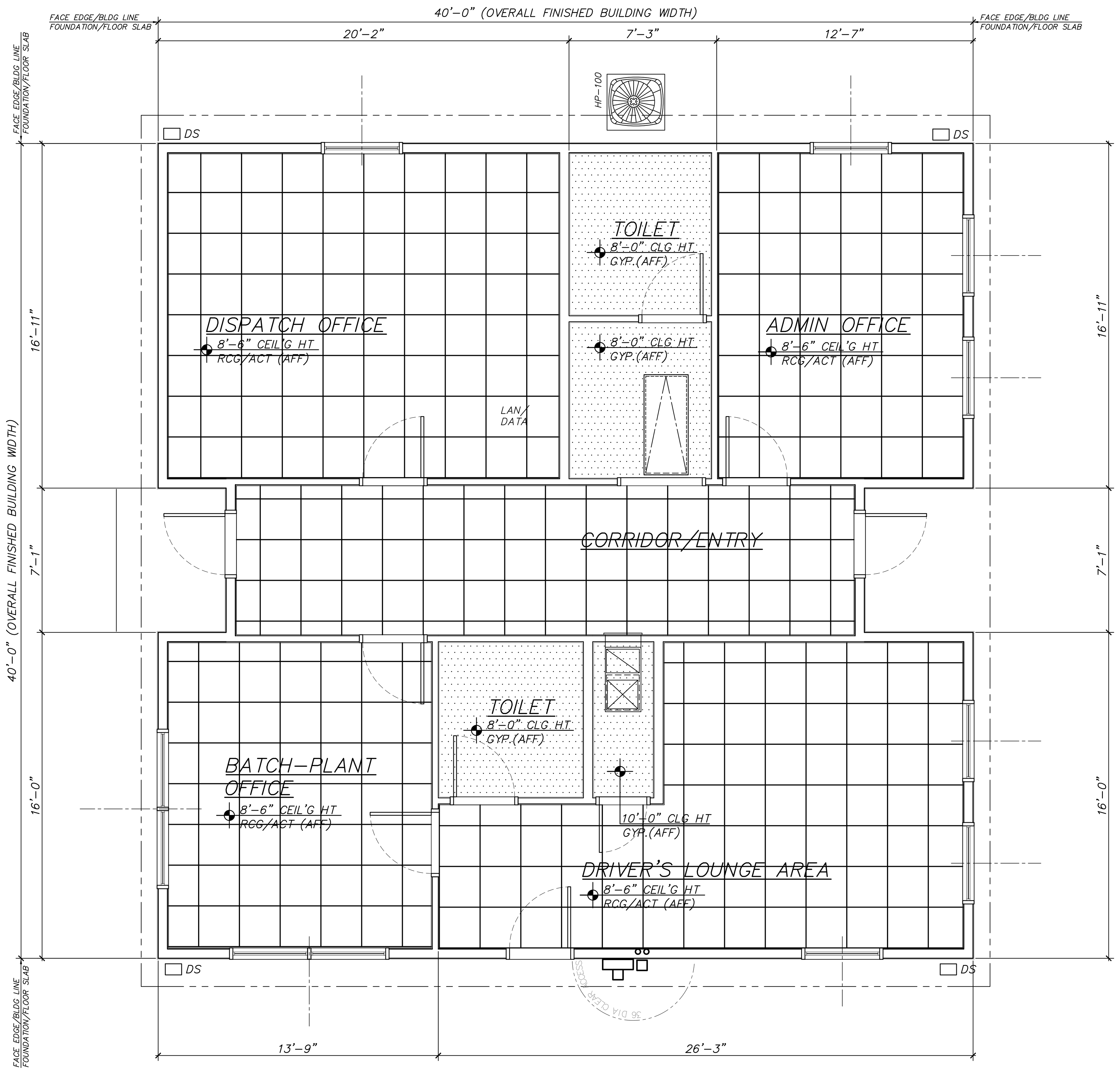
(TYP) LAY-IN LIGHT FIXTURE WITHIN CEILING GIRD FRAMING; OVERHEAD WIRE SUSPENSION ALL FOUR CORNERS

FINISH-X — CEILING FINISH

1 = 2x2 SUSPENDED CEIL'G ACOUSTICAL LAY-IN SYSTEM; COLOR: WHITE TILE/CEILING GRID; (USG: "MARS" (HIGH-NRC/HIGH-CAC); TEGULAR TILES 7/8"(D) (SLT) EDGES; ACOUSTICAL SUSPENSION SYSTEM: DONN DX/DXL 15/16" GRID)
2 = PAINTED GYPSUM SOFFIT/CEILING BOARD (GA214-LEVEL 5 SURFACE TEXTURE FINISH) (OPTIONAL: USG: "TUFF-HIDE") SMOOTH SURFACE FINISHED

HATCH PATTERN AREAS DESIGNATES SUSPENDED GYPSUM BOARD PANEL (HARD) TEXTURE FINISH CEILING OR BUILT-DOWN SOFFIT/BULKHEAD; FINISHED HEIGHT A.F.F. SEE PLAN (UNLESS NOTED OTHERWISE) ASSEMBLY SYSTEM REFERENCE AS FOLLOWS: (SEE SCHEMATIC DETAILS FOR SIMILAR CONSTRUCTION GUIDANCE)

1. 1/2" GYPSUM CEILING PANEL SHEATHING (GA-214: LEVEL 4) SURFACE FINISH ALL EXPOSED AREAS
2. SUSPENDED METAL CEILING GRID SYSTEM; HEAVY DUTY TEE/RUNNER (24" O/C EACH-WAY) SUPPORTED W/VERTICAL HANGER GALV WIRES (12 GA.) AT 48" O/C EACH WAY

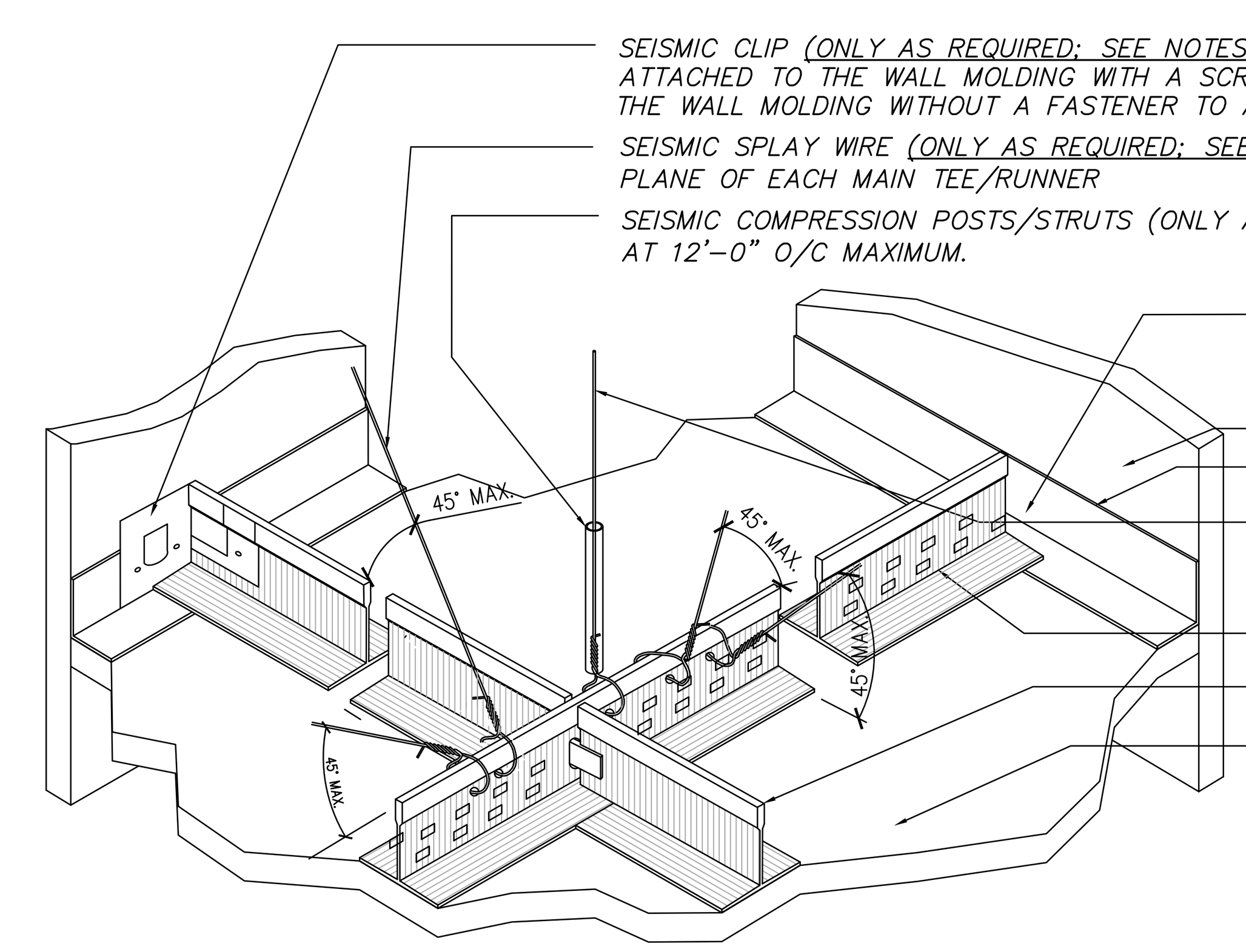


(REF) SITE NORTH — PLAN NORTH

1/A101 PROPOSED REFLECTED CEILING PLAN

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

GRAPHIC BAR SCALE (FOOT UNITS) 0 2 4 8



SEISMIC CLIP (ONLY AS REQUIRED; SEE NOTES); ONE END OF CEILING GRID SHALL BE ATTACHED TO THE WALL MOLDING WITH A SCREW AND THE OTHER END SHALL BE ATTACHED TO THE WALL MOLDING WITHOUT A FASTENER TO ALLOW BACK AND FORTH MOVEMENT

SEISMIC SPLAY WIRE (ONLY AS REQUIRED; SEE NOTES); 12 GA. AT MAX. 12'-0" O/C IN EACH PLANE OF EACH MAIN TEE/RUNNER

SEISMIC COMPRESSION POSTS/STRUTS (ONLY AS REQUIRED; SEE NOTES); FULL HEIGHT; TYPICAL AT 12'-0" O/C MAXIMUM.

3/4" CLEAR MOVEMENT GAP (OPPOSITE FROM SEISMIC CLIP CONNECTION, ONLY AS REQUIRED FOR HIGH SEISMIC ZONE AREAS)

(TYP) FINISHED DRYWALL CONSTRUCTION

(TYP) WALL MOLDING

(TYP) VERTICAL GALV. HANGER WIRES 12 GA. AT 48" O.C. EACH WAY AND AT EACH 2x LAY-IN LIGHTING FIXTURE CORNER

(TYP) MAIN TEE/RUNNER AT 48" O/C

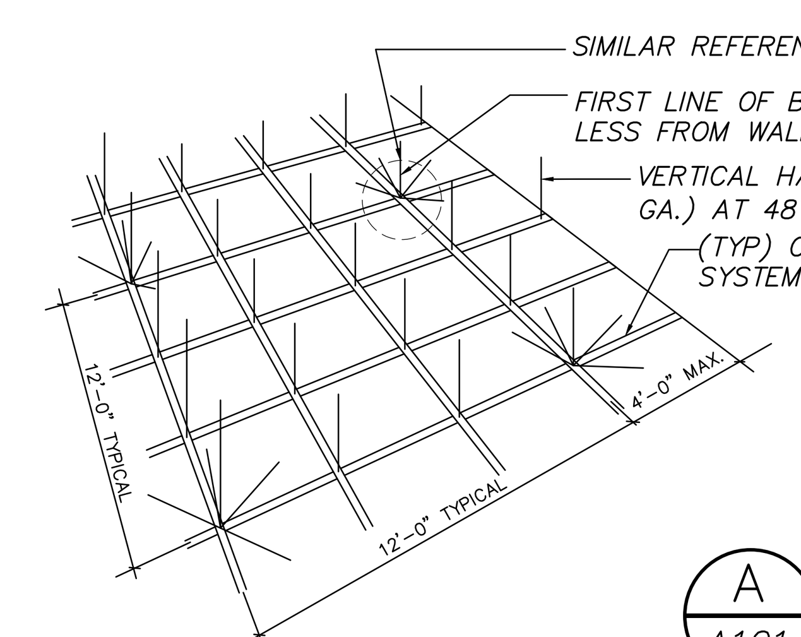
(TYP) CROSS TEE/RUNNER AT 16" O/C

(TYP) DRYWALL "HARD" CEILING; 5/8" GYPSUM CEILING PANEL SHEATHING (GA-214: LEVEL 4) SURFACE FINISH ALL EXPOSED AREAS; UNLESS NOTED OTHERWISE (GA-214: LEVEL 3) SURFACE FINISH IN MECH/ELEC UTILITY ROOMS AND ABOVE LAY-IN SUSPENDED ACOUSTICAL CEILINGS)

GENERAL SUSPENDED CEILING NOTE:

1. SEISMIC SPLAY WIRE BRACING AND COMPRESSION POSTS/STRUTS ARE ONLY REQUIRED IN HIGH SEISMIC ZONE AREAS DESIGNED FOR: CATEGORIES D, E, F.
2. AREAS SMALLER THAN 1000 SQ. FT. AND WITH WALLS ON FOUR SIDES EXTENDING TO THE STRUCTURE NEED NOT HAVE SEISMIC SPLAY WIRE REINFORCING. BOUNDARY WALLS MUST BE BRACED TOP AND BOTTOM INDEPENDENT OF CEILING TO QUALIFY.
3. SEISMIC CLIPS ARE REQUIRED IN SEISMIC DESIGN CATEGORIES D, E AND F.
4. NOMINAL 2" HORIZONTAL LEG ON WALL MOLDING IS REQUIRED ONLY IN SEISMIC DESIGN CATEGORIES D, E AND F. WITH CC-ES EVALUATION REPORT, A 7/8" LEG WOULD BE ACCEPTABLE WITH PROPER SEISMIC CLIPS.

TYPICAL FINISHED ACOUSTICAL METAL LAY-IN SUSPENSION SYSTEM ASSEMBLIES SHALL BE SIMILAR AS METAL SUSPENSION SYSTEM WITH GYPSUM PANEL SHEATHING (HARD CEILINGS)



SIMILAR REFERENCE ENLARGE DETAIL

FIRST LINE OF BRACING 4'-0" OR LESS FROM WALL BOUNDARY

VERTICAL HANGER GALV WIRES (12 GA.) AT 48" O/C EACH WAY

(TYP) CEILING SUSPENSION SYSTEM ASSEMBLY

A/A101 (TYP) SCHEMATIC SUSPENDED CEILING GRID SYSTEM

NOT TO SCALE

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0	12/06/21	ISSUE FOR CODE ENFORCEMENT REVIEW & APPROVAL
-	-	-
-	-	-
-	-	-

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12/06/2021

Proposed Dispatch Office Building for

Crete Solutions, LLC

2544 US 401 N
Lillington, North Carolina 27546

REFLECTED CEILING PLAN

job status **Contract Documents - Issued for Construction**

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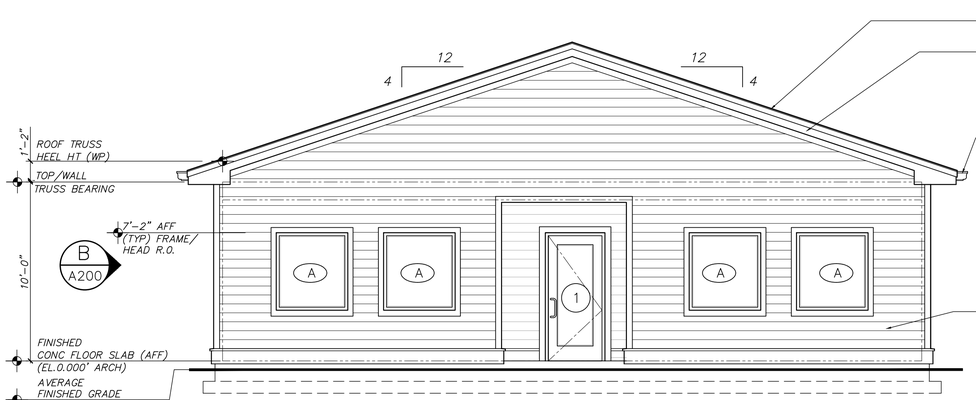
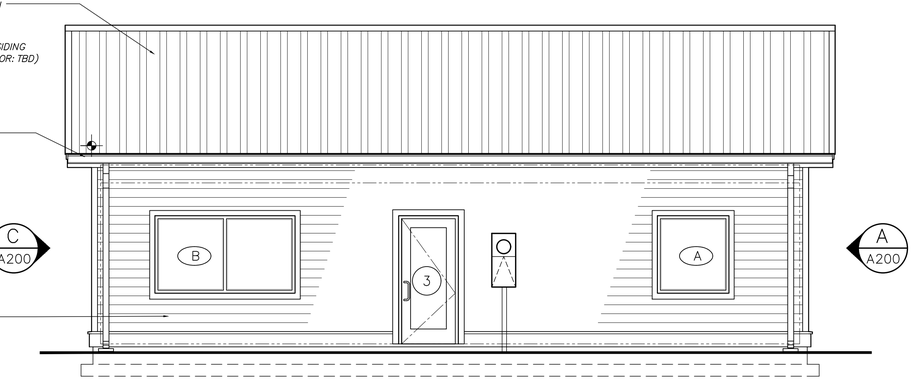
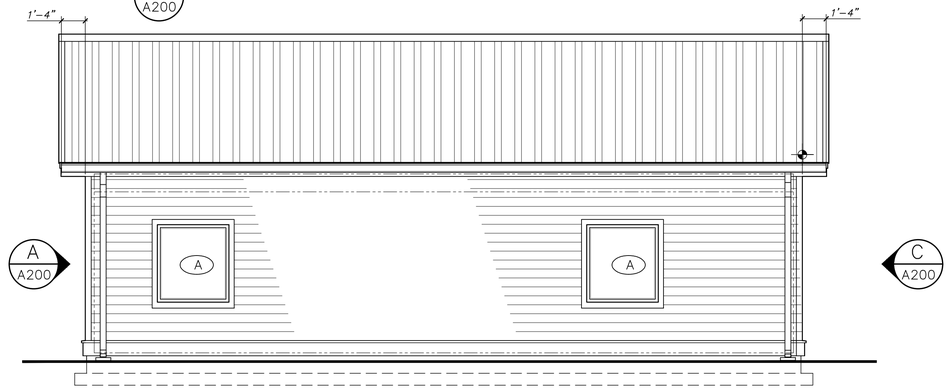


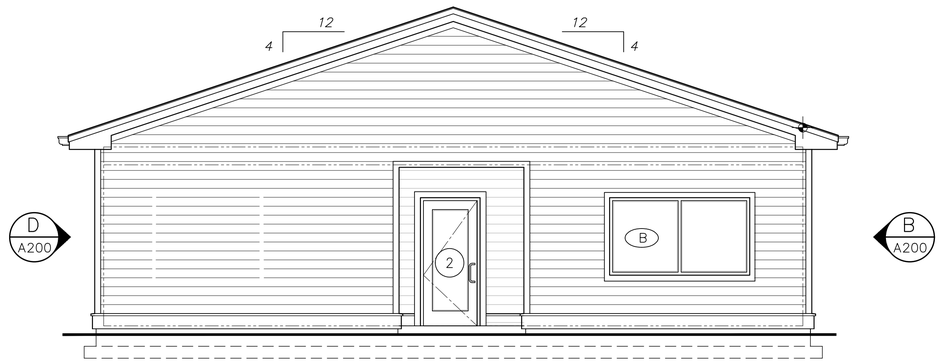
A200 FRONT (SOUTH) ELEVATION — SCALE: 1/4" = 1'-0"



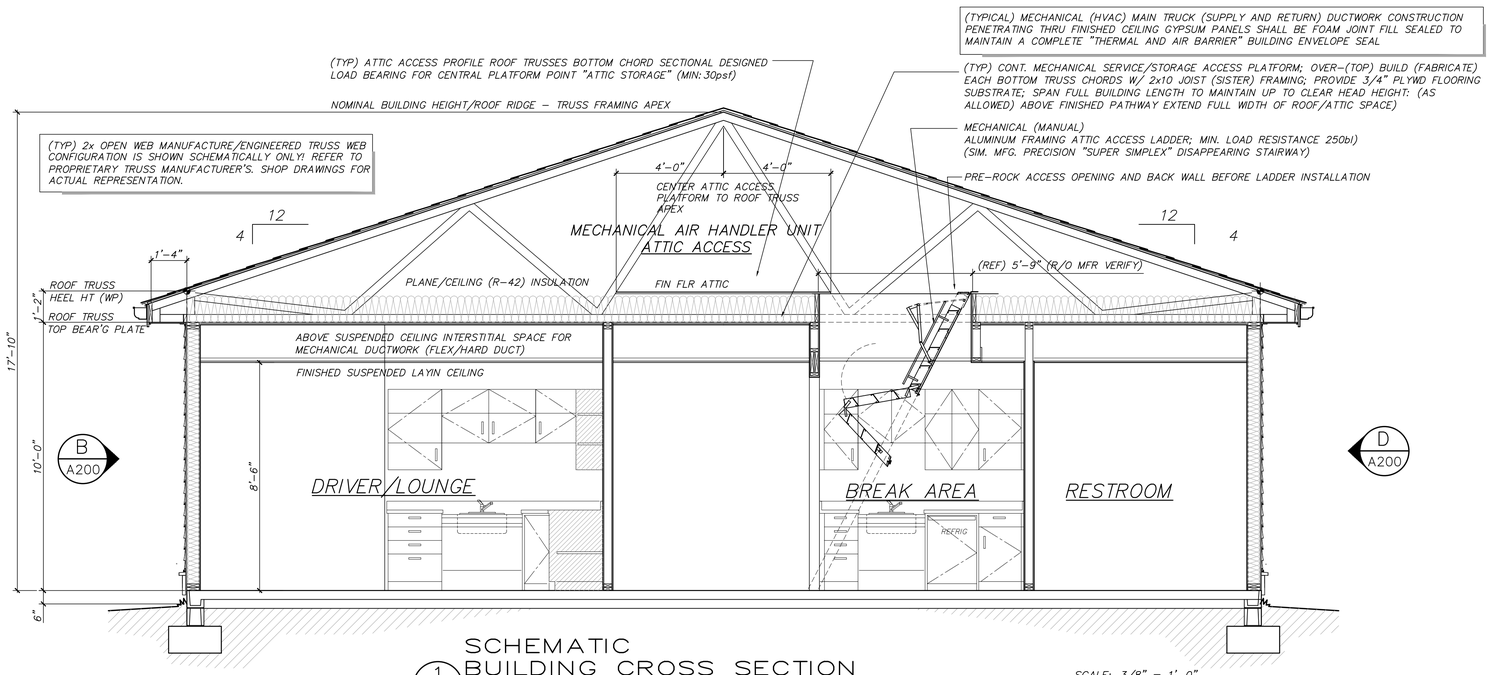
B A200 SIDE (WEST) ELEVATION — SCALE: 1/4" = 1'-0"



D A200 SIDE (EAST) ELEVATION — SCALE: 1/4" = 1'-0"



C A200 REAR (NORTH) ELEVATION — SCALE: 1/4" = 1'-0"



1 A200 SCHEMATIC BUILDING CROSS SECTION — SCALE: 3/8" = 1'-0"

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THIS SHEET SHOWS BASIC DRAFTING STANDARDS

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12/06/2021

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Proposed Dispatch Office Building for
Crete Solutions, LLC
2544 US 401 N
Lillington, North Carolina 27546
job status **Contract Documents - Issued for Construction**

EXTERIOR BUILDING ELEVATIONS

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job no.	CRETE/LIL
drawn by	MSAIEED
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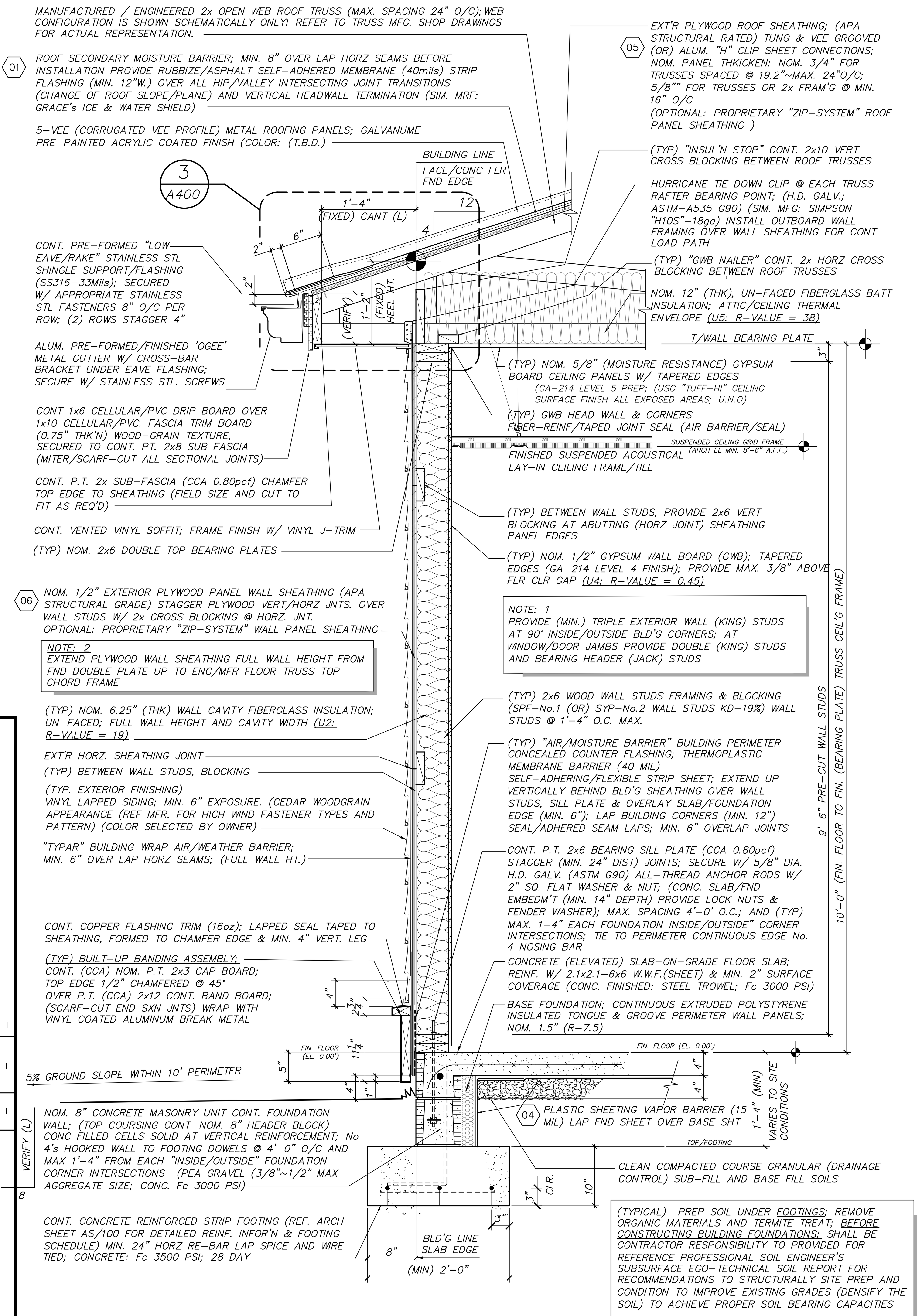
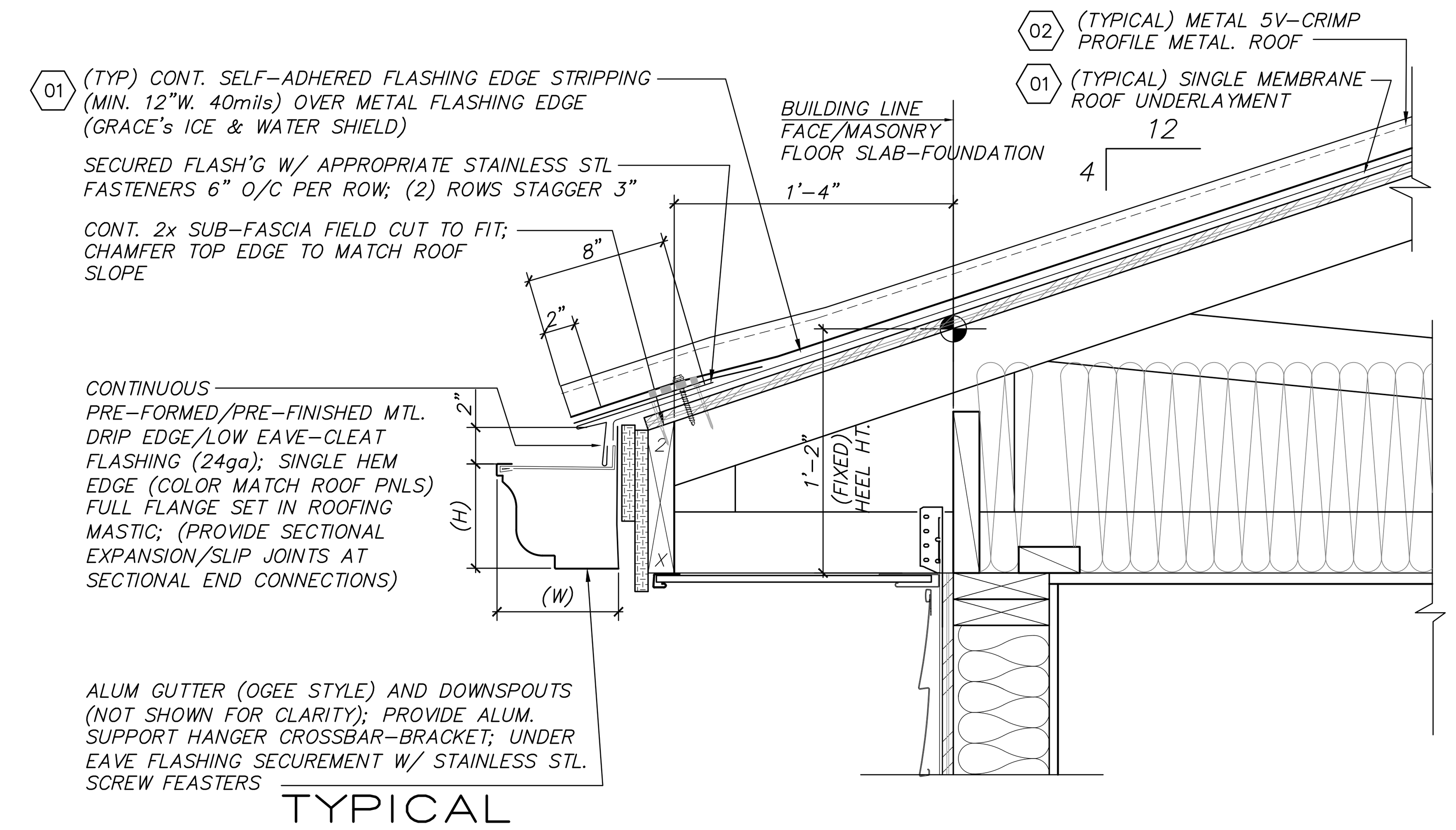
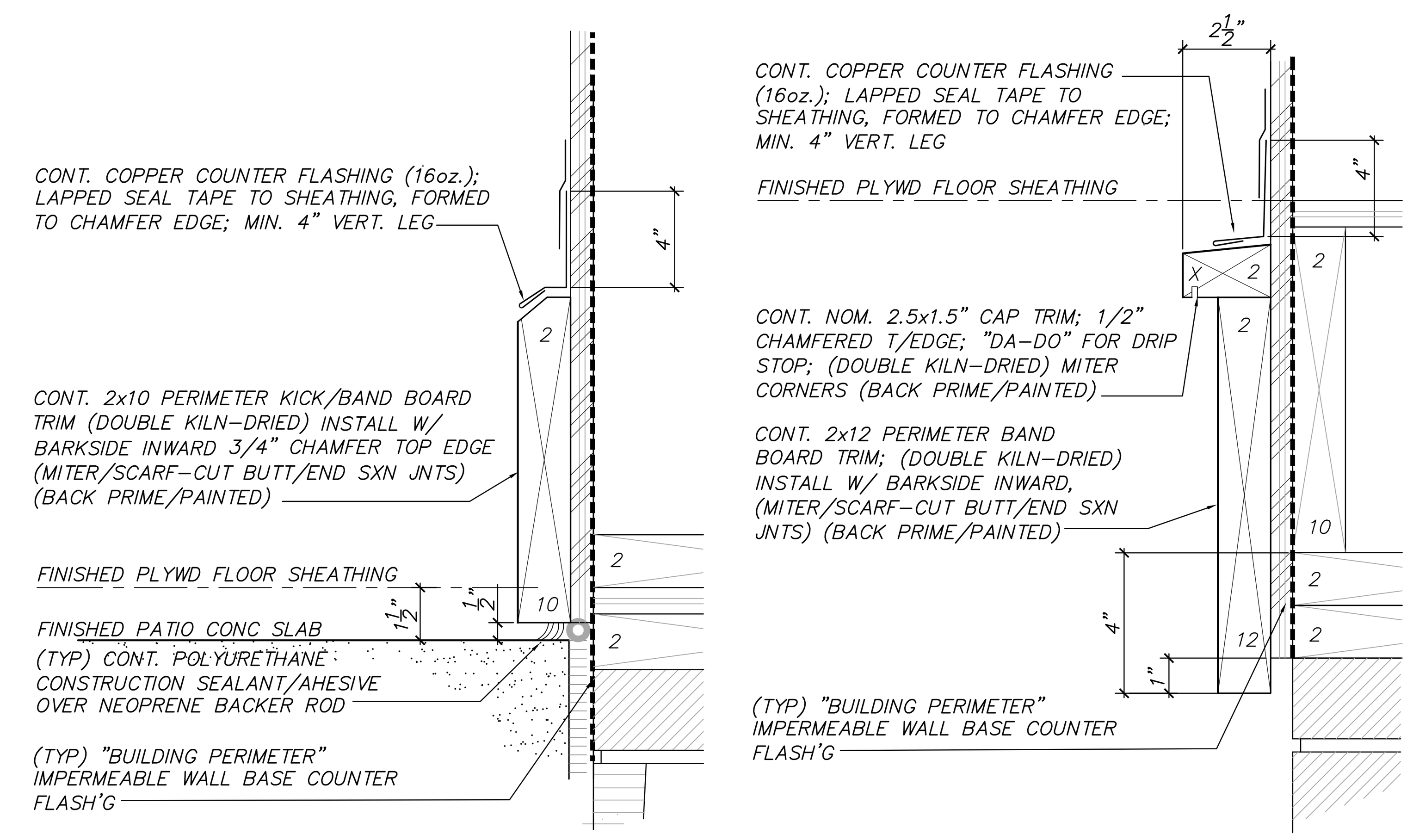


1 TYPICAL WALL SECTION (A300) SCALE: 1" = 1'-0"



3 TYPICAL LOW EAVE ROOF SECTION (A400) SCALE: 1-1/2" = 1'-0"



B TYPICAL BANDBOARD PERIMETER TRIM (A300) SCALE: 3" = 1'-0"

GENERAL KEYNOTES

FOR SHEETS A400 AND A401

01 ROOF MEMBRANE UNDERLAYMENT, "ROOF SECONDARY WATER-BARRIER" (MIN. (+)40mil); SINGLE PLY MYLAR SURFACE FINISHED SELF-ADHERED, RUBBERIZED ASPHALT, FLEXIBLE SHEETING; LAP EDGES MIN. 6"; PROVIDE ADDITIONAL SINGLE STRIPPING AS COUNTER FLASHING AT ALL HEADWALL INTERSECTIONS AND CHANGE OF SLOPE INTERSECTIONS AT HIPS & VALLEYS; EXTEND MIN. 6" VERT/HORZ OVERLAPS (SIMILAR MFG.: WR GRACE "ICE & WATER SHIELD" W/ OPTIONAL "RIPCORD"

02 ARCHITECTURAL METAL ROOF; PRE-FINISHED 5V-CRIMP (RIB NOM. 1/2" HT) PANELS MIN.26 GAUGE; (MAX PANEL: 24" WIDE; 45'-0 RECOMMENDED LENGTHS); ACRYLIC COATED GALVALUME; SECURE W/ APPROPRIATE SIZE AND SPACING EXPOSED STAINLESS STL CAP (METAL TO WOOD) FASTENERS W/ NEOPRENE SEAL WASHERS (SIZE PROPERLY (DIAMETER/LENGTH) TO RESIST PANEL EXPANSION/CONTRACTION (AND) FASTENER "BACK-OUT." REFERENCE PROPRIETARY MFG. RECOMMENDATIONS FOR COMPLETE ASSEMBLY DETAILS FOR FULL SYSTEM INSTALLATION W/ (20 YR.) WARRANTIES: INSTALLATION, MATERIAL FINISH AND HIGH WIND UP-LIFT RESISTANCE FOR 130mph WIND SPEED; PROVIDE W/ MFR'S AND CONTRACTOR'S "QUALITY OF ASSURANCE"); RECOMMENDED PANEL FASTENER SPACING: (MAX. 6" O/C LINEAR ROOF PERIMETER "END" PANEL EDGES, MAX. 12" O/C EACH WAY WITHIN 48" SQUARE "IN-FILL" AREAS OF ROOF EDGE CORNERS; MAX. 16" O/C ROOF "IN-FILL" PANEL AREAS.) (UL LISTED "CLASS A" ROOF MATERIAL) FINISH: COLORFAST GALVALUME.

03 BUILDING WRAP; "VAPOR PERMEABILITY/MOISTURE BARRIER" SHALL BE INSTALLED EXTERIOR SHEATHING PANELS AND "BACKWRAP" (FLEXI-TAPED FLASHING) THRU ROUGH DOOR AND WINDOW OPENINGS. OVERALL MEMBRANE MATERIAL SHALL NOT HAVE UNSEALED: SEAMS, CUTS, CRACKS PENETRATIONS OR ANY VOIDS IN THE PROPRIETARY PRODUCT; AND VERTICAL AND HORIZONTAL SEAMS SHALL BE OVERLAPPED (MIN. 6") AND CONTINUOUS SEAL TAPED. ALL MECHANICALLY FASTENER SHALL BE SEALED; CONTRACTOR SHALL BE RESPONSIBLE FOR SEAL TAPING ALL JOINT SEAMS W/ PROPRIETARY MEMBRANE TAPE. PROPRIETARY BARRIER MEMBRANE PERFORMANCE: FLEXIBLE AND TEAR RESISTANCE, HIGH BREATHABILITY (VAPOR TRANSMISSION); HIGH AIR PENETRATION PROTECTION; HIGH MOISTURE RESISTANCE (HYDROSTATIC HEAD); (SPECIFIED MFR: "TYPAR" COMMERCIAL BUILDING WRAP)

04 "VAPOR BARRIER (VB)" UNDER CONDITIONED SPACES ONLY (MIN. 15mils) UNDER CONCRETE FLOOR SLAB MOISTURE PROTECTION-PUNCTURE RESISTANT PLASTIC SHEETING (METALLOCENE POLYOLEFIN); PROVIDE MIN. 6" SEAL LAPPED JOINTS WITH TAPED SEAMS INSTALLATION; THRU BARRIER/SLAB PIPE PENETRATIONS (ei. PLUMBING AND ELECTRICAL SERVICES) SHALL BE TAPED (OR) MASTIC (MFR. "STEGO INDUSTRIES-15MIL," ASTM E1745 CLASS A; WITH 0.01 PERMANENCE)

05 NOM. 5/8" EXTERIOR PLYWOOD PANEL ROOF SHEATHING; (APA STRUCTURAL RATED) OPTIONAL: PROPRIETARY ROOF PANEL SHEATHING W/ BUILT-IN ENERGY EFFICIENT MOISTURE/VAPOR BARRIER SURFACE FINISH; ALL PANEL JOINTS SHALL BE PRESSURED SEAM-SEALED TAPED (ENGINEERED PRODUCT SIM. HUBER ENG'R WOODS:-"ZIP SYSTEM") PANEL FASTENER TYPES AND SPACING SHALL BE GOVERN BY NCRC-12 FOR COASTAL HAZARD HIGH WIND ZONE (AREAS PRONE TO HURRICANE FORCED MIN. 130 mph)

06 NOM. 1/2" EXTERIOR PLYWOOD PANEL WALL SHEATHING (APA STRUCTURAL GRADE) STAGGER PLYWOOD VERT/HORZ JNTS. OVER WALL STUDS W/ BLK'G @ HORZ. JNT. OPTIONAL: PROPRIETARY WALL PANEL SHEATHING W/ BUILT-IN ENERGY EFFICIENT MOISTURE/VAPOR BARRIER SURFACE FINISH; ALL PANEL JOINTS SHALL BE PRESSURED SEAM-SEALED TAPED (ENGINEERED PRODUCT SIM. HUBER ENG'R WOODS:-"ZIP SYSTEM") (U1: R-VALUE = 0.63)

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12/06/2021

MITCHELL LEE SAIEED JR. NC ARCHITECT 8773 WRIGHTSVILLE BEACH

Proposed Dispatch Office Building for
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2544 US 401 N
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TYPICAL WALL SECTION AND DETAILS

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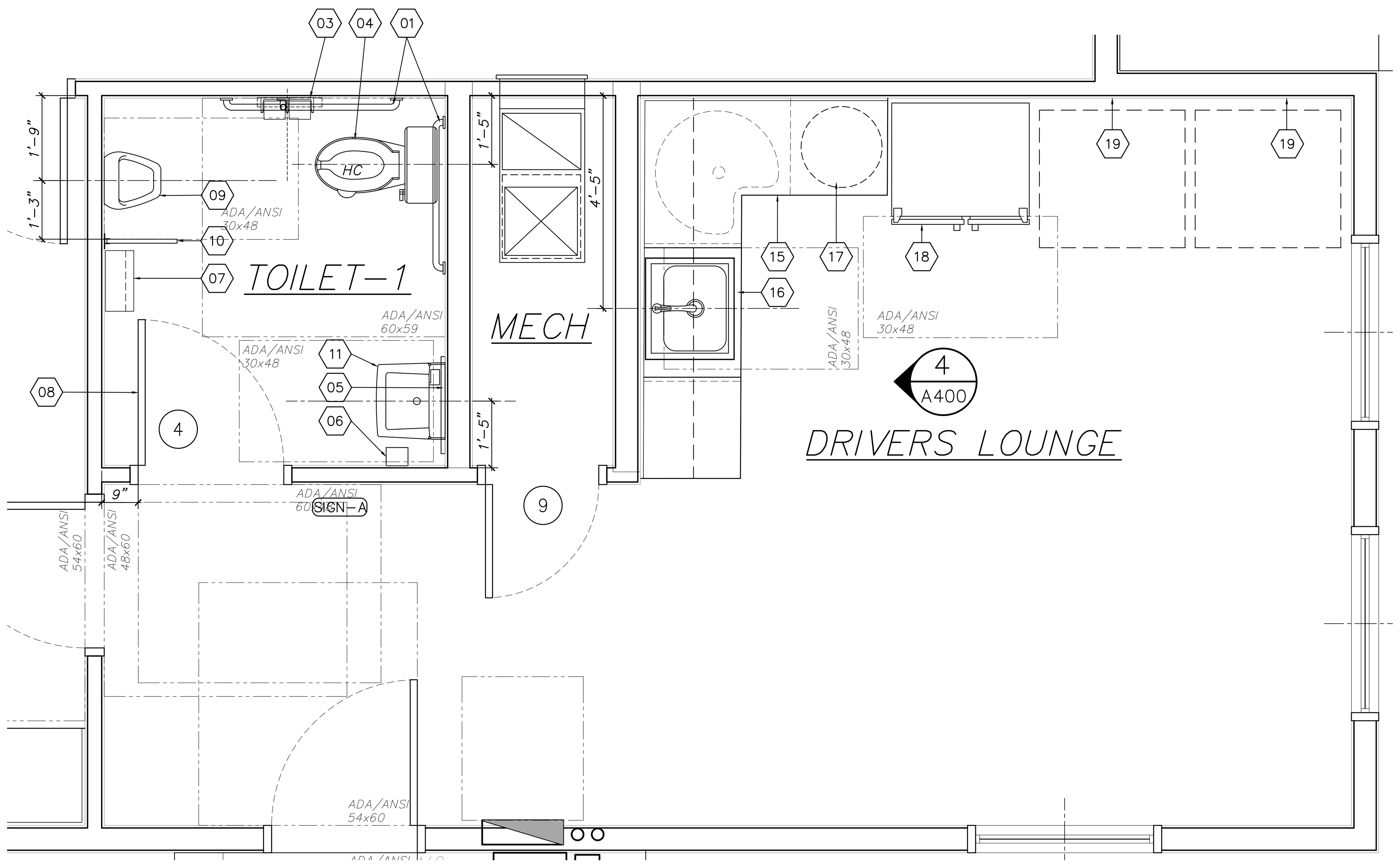
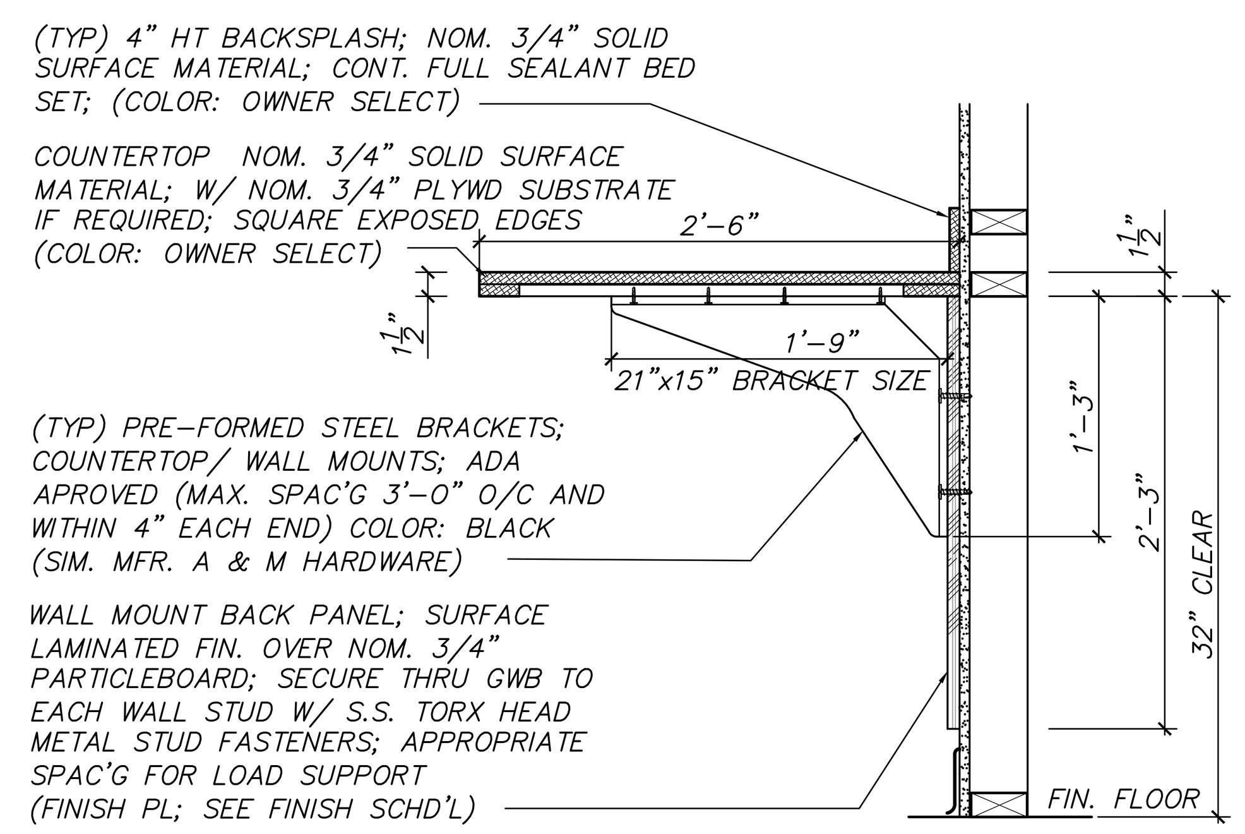


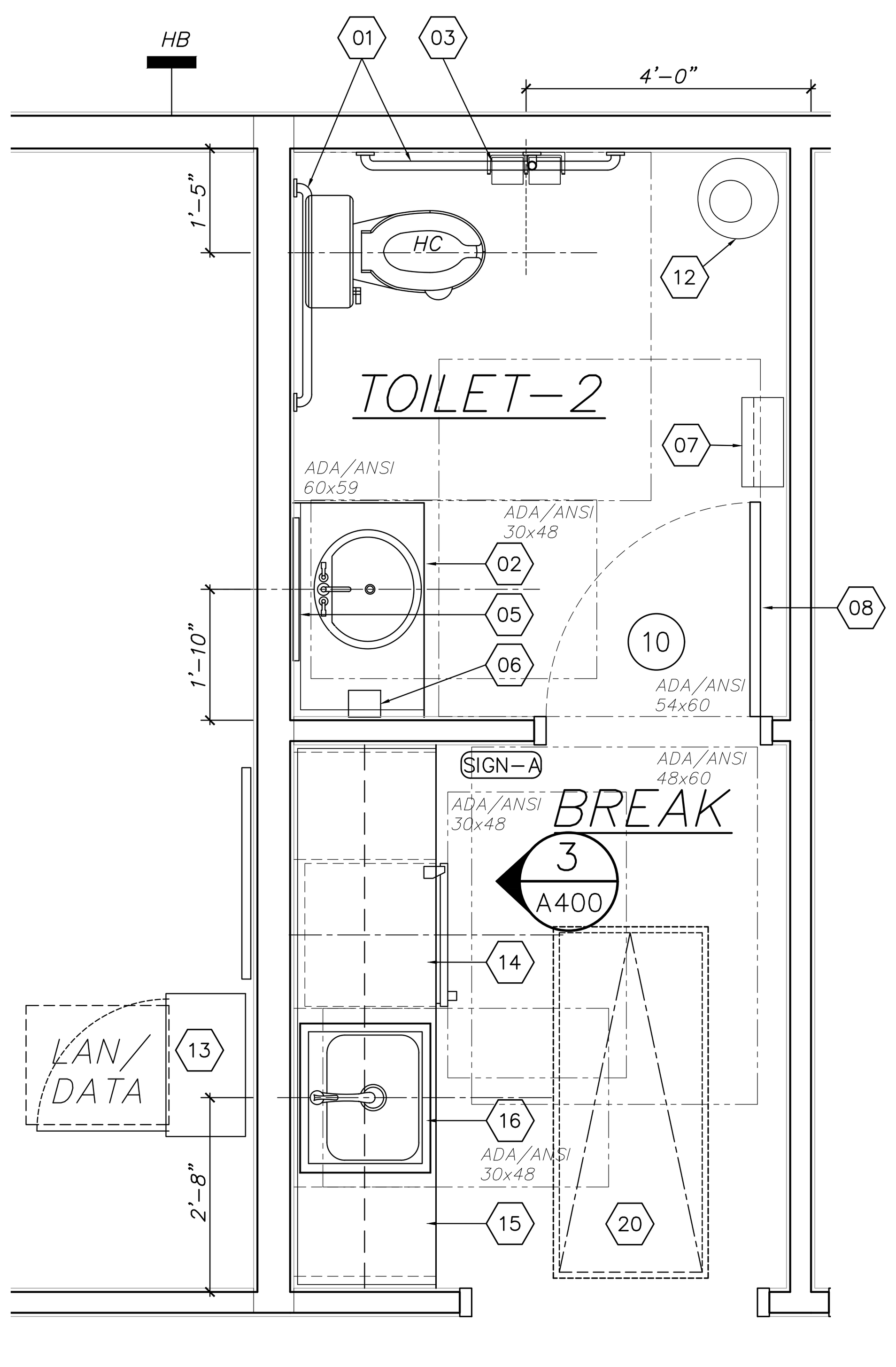
1 A400 ENLARGED RESTROOM AND DRIVERS LOUNGE PLAN

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



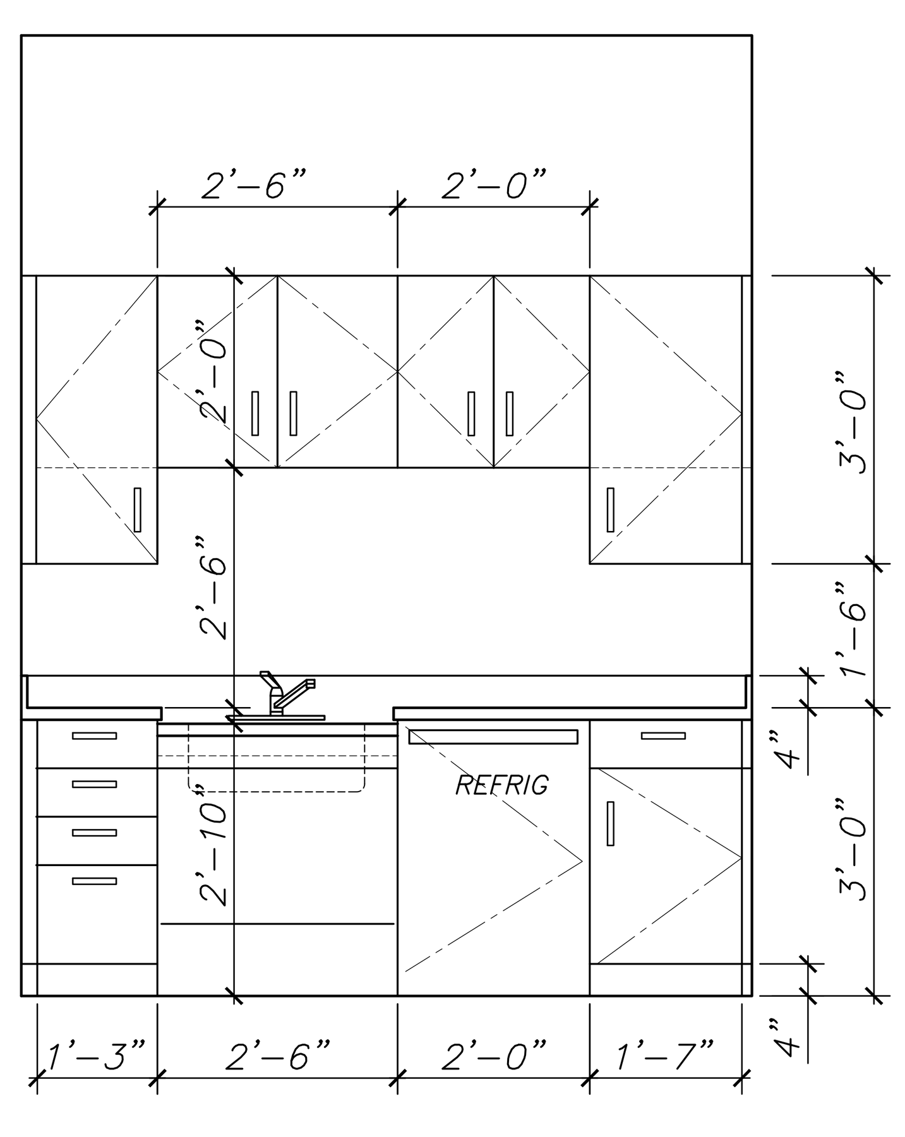
B A400 COUNTER DETAIL

SCALE: 1" = 1'-0"



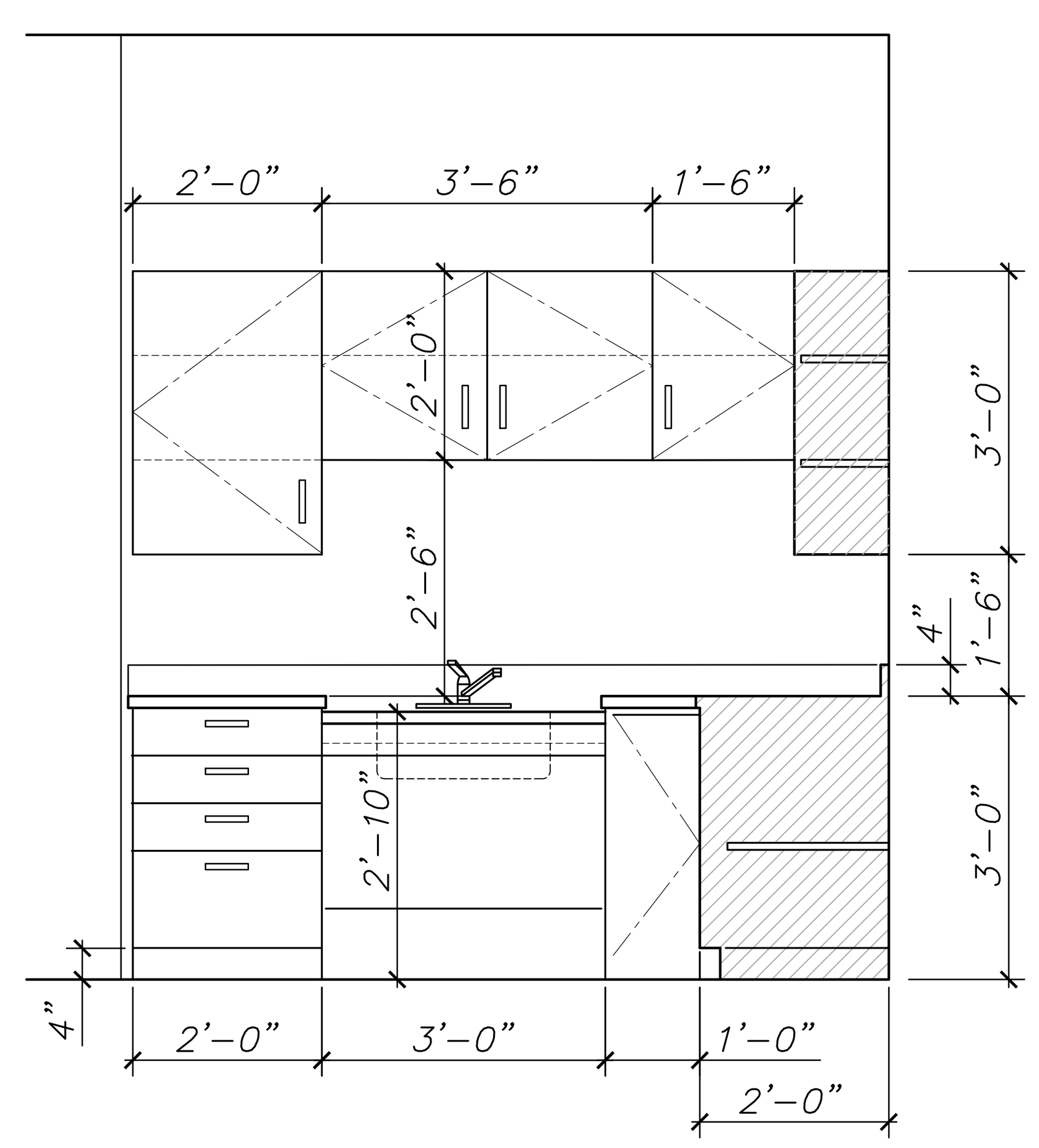
2 A400 ENLARGED RESTROOM AND BREAK PLAN

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



3 A400 ENLARGED BREAK ELEVATION

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



4 A400 ENLARGED LOUNGE ELEVATION

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

PLAN KEYNOTES THIS SHEET ONLY

- 01 1 1/2"ø – STAINLESS STEEL HANDRAIL BACK WALL & SIDE WALL MOUNTED "HORIZONTAL GRAB BARS" WITH "VERTICAL SIDE WALL PULL BAR" (SEE STANDARD HC ACCESSIBILITY DETAILS) SIMILAR MFG: GAMCO PRODUCTS "GRAB BAR"; FINISH: BRUSHED SATIN/TEXTURE GRIP "T"). (REFERENCE STANDARD HC ACCESSIBILITY DETAILS 1/N104)
- 02 CUSTOM VANITY UNIT (MIN. 22"(D)); PLASTIC LAMINATE COUNTERTOP AND BACKSPLASH W/ "DROP-IN" LAVATORY; FAUCET FIXTURE SETBACK FROM FRONT RIM (MAX. DIST. 19") PROVIDE ADA COMPLIANT ELECTRONIC SENSOR ACTIVATED FAUCET CONTROLS. (MAX. RIM HT. 34" A.F.F.) SEE GENERAL ACCESSIBILITY REQUIREMENTS (SEE STANDARD HC ACCESSIBILITY DETAILS 1/N100) AND SECTION A/A400 (REF PLUMBING DWG'S FOR ADDITIONAL INFOR'N)
- 03 TOILET TISSUE (MULTI-ROLL) STAINLESS STL. DISPENSERS; TWO UNITS, SURFACE MOUNT (SIM. MFG: BOBRICK: B-4288)
- 04 FLOOR MOUNTED TOILET; TANK TYPE W/ ELONGATED BOWEL AND OPEN-FRONT SEAT WITH INTEGRATED HANDLE; ADA/ANSI ACCESSIBLE; PROVIDE FLUSH VALUE LEVER ON ACCESSIBLE SIDE CLEAR FLOOR AREA (REFERENCE: PLUMBING DWGS)
- 05 WALL MOUNTED VANITY MIRROR – (1/4" TEMP/SAFETY) W/ METAL EDGE CENTERED TO SINK (UNLESS NOTED OTHERWISE FULL LENGTH OF VANITY: VERIFY W/ OWNER): (MIN. 24"(W) x 36"(H)). MOUNT BOTTOM EDGE 40" MAX A.F.F.
- 06 SOAP SANITIZER AND LOTION DISPENSER; SURFACE MOUNTED (SIM. MFG: GEORGIA- PACIFIC; "53253"; COLOR: TRANS-SMOKE)
- 07 COMBINATION; STAINLESS STL. SURFACE-MOUNT FOLDING PAPER TOWEL DISPENSER (ABOVE) AND WALL WASTE RECEPTACLE (BELOW) (SIM. MFG: BOBRICK B-3944-BARRIER FREE)
- 08 (TYP) "BARRIER FREE" ACCESSIBILITY COAT HOOK, MOUNTED (HT. 48" A.F.F.) (SIM. MFG: BOBRICK BRUSHED-NICKEL FINISH)
- 09 WALL MOUNTED URINAL; PROVIDE THRU-WALL VERTICAL CARRIAGE (THIN WALL), ADA/HC ACCESSIBLE WHERE NOTED (HC); (REF PLUMBING DWGS)
- 10 WALL MOUNTED URINAL/PRIVACY (24" WIDTH x 48" HEIGHT; MOUNT BOTTOM EDGE 12" AFF) PARTITIONS (DESIGN WEIGHT SUPPORT 250 lbs); PROVIDE STAINLESS STEEL PANELS; WALL MOUNTED INSTALLATION WITH CONTINUOUS STAINLESS STEEL WALL MOUNTING BRACKETS (FULL PANEL LENGTH)
- 11 WALL-HUNG LAVATORY 19"x 17", VITREOUS CHINA, WITH MATCHING PIPE SHROUD, WHITE; PROVIDE WITH STEEL BRACKET WALL HANGER, INSTALL ADA COMPLIANT ELECTRONIC SENSOR ACTIVATED FAUCET CONTROLS.; FAUCET FIXTURE SETBACK FROM FRONT RIM (MAX. DIST. 19") "UNLESS NOTED OTHERWISE;) REFERENCE ACCESSIBILITY DETAILS
- 12 WASTE RECEPTACLE STAINLESS STL. W/ DOME-LIP; FLOOR FREE-STANDING; (SIM. MFG: BOBRICK: B-2300)
- 13 OWNER'S ROUTER/DATA STATION; 19" METAL RACK
- 14 NOM. 24" UNDERCOUNTER REFRIGERATOR (PROVIDED BY OWNER; INSTALLED BY CONTRACTOR)
- 15 NOM. 24"(D)x 36"(H) (UNLESS NOTED OTHERWISE) STANDARD BUILT-IN BASE CABINETS W/ (HP) PLASTIC LAMINATED FINISHES: COUNTER TOP W/ 4"H. BACKSPLASH, FRONT FACE CABINETS W/ DOOR PANELS AND DRAWER; NOM. 12" DEEP WALL CABINETS W/ ADJUSTABLE SHELVING
- 16 STAINLESS STEEL (HEAVY GAUGE 304 TYPE; 33mil) SHALLOW BASIN "DROP-IN" KITCHEN SINK, FULL SEALANT BED SET; PROVIDE LEVER TYPE HOT/COLD WATER SUPPLY HANDLES W/ GOOSE NECK FAUCET; (FAUCET MAX. FRONT RIM DIST. 19") PROVIDE CLEAR FRONT OPEN'G FOR ACCESSIBLE TO PERSONS W/ DISABILITIES SEE DETAILS; (REF. PLUMBING FOR ADD'N INFOR'N)
- 17 PROPOSED LOCATION: (28 GAL CAPACITY; UNLESS DIRECTED OTHERWISE BY OWNER) ELECTRIC "LOWBOY" WATER HEATER (UNDERCOUNTER); PROVIDE DRAINAGE PAN PLUMBING AND PRESSURE RELEASE VALUE "BLOW-OUT". (PLUMBING CONTRACTOR SHALL PROVIDE, ELECTRICAL CONTRACTOR SHALL WIRE FOR FULL POWER SERVICE)
- 18 RESIDENTIAL STYLE FREE-STANDING (SUPPLIED BY OWNER) REFRIGERATOR/FREEZER W/ ICE MAKER; [MAX. CLR FLOOR SPACE 36"(W)] (CONTRACTOR INSTALL), CONTRACTOR SHALL INSTALL ICE/WATER LINES AND LOCAL WATER SHUT-OFF VALVE.
- 19 PROVIDE DEDICATED POWER FOR PROPOSED VENDING MACHINE(S) (PROVIDED BY OWNER) (REFERENCE ARCH SHEET 1/A100)
- 20 ATTIC ACCESS "CEILING RECESS FOLDING PULL-DOWN" LADDER, (REFERENCE ARCH SHEET 1/A100)

GENERAL ACCESSIBILITY REQUIREMENTS

THE BUILDING OWNER AND GENERAL CONTRACTOR SHALL INSURE THAT THIS FACILITY SHALL BE "BARRIER FREE" ACCESSIBLE TO AND USABLE BY PERSON(S) WITH DISABILITIES. ACCORDING TO THE LATEST EDITION TO THE ICC-IBC/NCBC 2012 CHAPTER 11 & ICC/ANSI A117.1 ACCESSIBILITY CODES REQUIREMENTS OF THE APPLICABLE STANDARDS. THE FOLLOWING IS A PARTIAL LIST (BUT NOT LIMITED TO) OF REQUIREMENTS. (REFERENCE 1/N103 FOR ADDITIONAL DETAILS AND GENERAL NOTES)

1. OPERABLE DOOR HARDWARE SHALL BE MOUNTED BETWEEN 30"(MIN.) AND 42"(MAX.) ABOVE FLOOR OR GROUND LEVEL AND BE LEVER TYPE, DESIGNATED FOR (HC) ACCESSIBLE..

2. TOILETS ROOMS & ACCESSORIES:

A. LAVATORY TO HAVE LEVER HANDLES, SPRING FAUCETS OR SELF METERING FAUCETS.

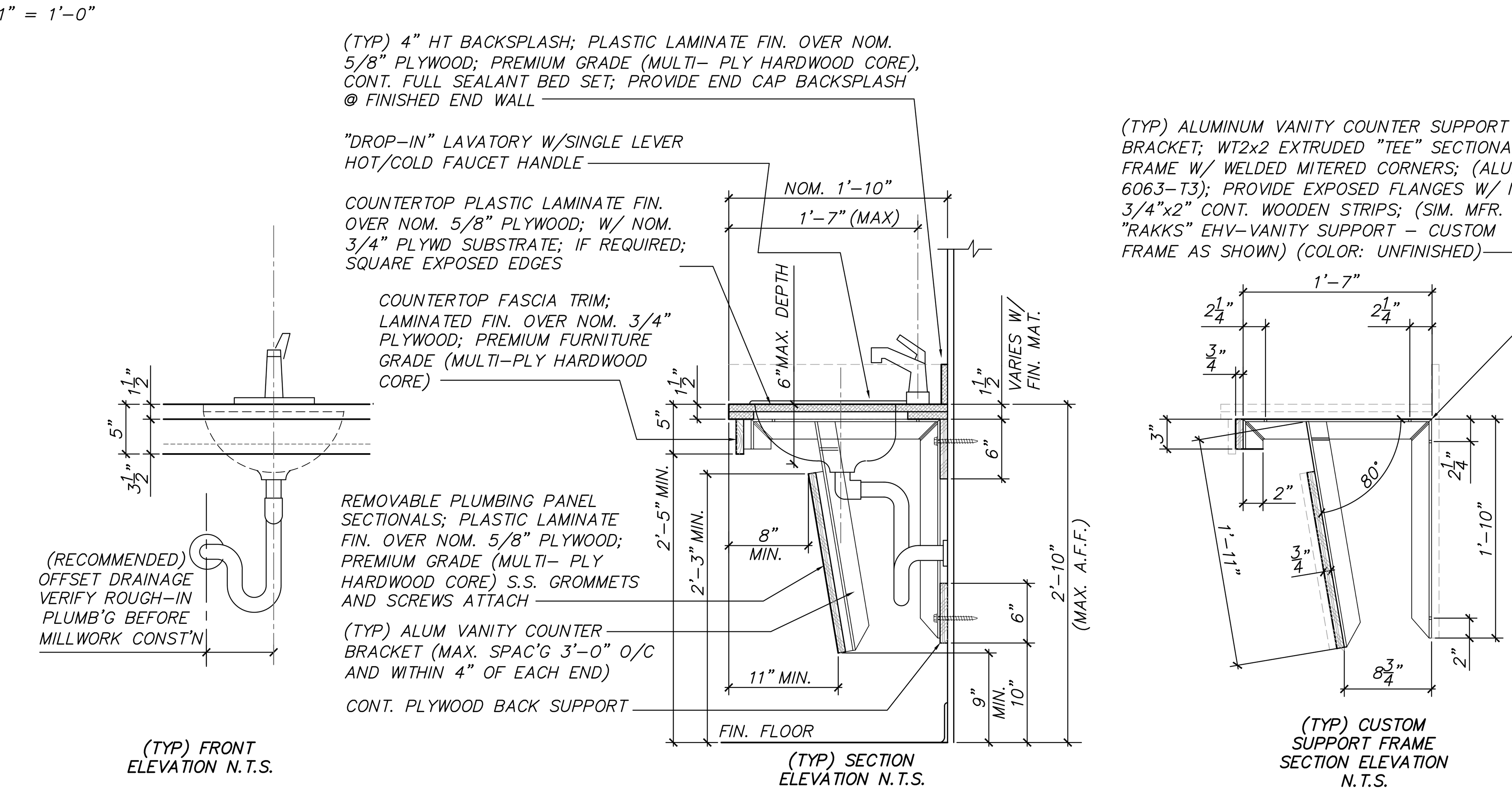
B: A COAT HOOK 48" ABOVE THE FLOOR SHALL BE MOUNTED ON THE BACK SIDE OF THE HANDICAPPED STALL DOOR (or) BACK OF ENTRY DOOR.

C. LOCATE THE WATER CLOSET (MIN.)16.6" TO (MAX)17.5" FROM THE CENTER LINE OF THE FIXTURE TO THE FINISHED WALL SURFACE. THE SEAT WILL BE 17" TO 19" ABOVE THE FLOOR TO THE TOP OF SEAT. TANK TYPE FLUSH LEVER SHALL BE POSITION TOWARD (SIDE APPROACH) ACCESSIBLE CLEAR FLOOR AREA FOR SIDE REACH

D. PROVIDE ONE 42" AND ONE 36" LONG x 1 1/2" OUTSIDE DIAMETER PEENED GRAB BARS, 1 1/2" FROM THE WALL, WITH (36) BEHIND TOILET AT 6" FROM THE WALL, AND (42) ADJACENT TO AT 12" FROM THE WALL AND CENTERLINE MEASURED 33"-36" PARALLEL TO AND ABOVE THE FLOOR. PROVIDE ADDITIONAL SIMILAR 18" VERTICAL PULL BAR 1-1/2" ABOVE HORIZONTAL SIDE BAR CENTERLINE MEASURED AVE. 39"-41" FROM REAR WALL.

E. LAVATORY TO BE MOUNTED 34"(MAX.) ABOVE THE FINISHED FLOOR TO RIM WITH CLEAR FLOOR KNEE SPACE OF 30" IN WIDTH AND 27" IN CLEAR HEIGHT. (29" CLEAR UNDER FRONT EDGE). EXPOSED WATER/WASTE PLUMBING SHALL BE CLEAR OF ACCESSIBLE FLOOR AREA AND PROTECTED WITH PROPRIETARY VENDOR SUPPLIED "VINYL INSULATED PROTECTION COVERS" SHALL BE PROVIDED TO EACH SERVICE LINE (SIM. MFG. "TRUEBRO")

F. INSTALL MIRROR 40"(MAX.) ABOVE THE FINISHED FLOOR (BOTTOM FIN. EDGE) AND (72" TOP FIN. EDGE).



A A400 ACCESSIBLE VANITY SECTION

SCALE: 1" = 1'-0"

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MITCHELL LEE SAIEED JR. REGISTERED ARCHITECT 8377 WRIGHTSVILLE BEACH, N.C. — 12/06/2021

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Crete Solutions, LLC
2544 US 401 N
Lillington, North Carolina 27546

ENLARGED RESTROOM PLAN & DETAILS

job status **Contract Documents - Issued for Construction**

date	12/01/21
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checked by	MSAIEED
drawing no.	A400
revision no.	0

DOOR AND FRAME SCHEDULE

DOOR NO.	SPACE	DOOR OPENING WIDTH	DOOR OPENING HGT.	DOOR OPENING THK.	DOOR MAT'L.	DOOR TYPE	DOOR GLAZING	FRAME MAT'L.	FRAME DETAILS HEAD	FRAME DETAILS JAMB	FRAME DETAILS SILL	HDW SET	REMARKS NOTE 1 & 2	DOOR NO.
EXTERIOR DOORS – ALL UNITS														
	HOLLOW METAL													
1	ENTRY	3'–0"	7'–0"	1–3/4"	I–HM	A	FULL	CLAD	1/A601 (ACCESSIBLE SILL)			–	Exterior Outswing Door	1
2	ENTRY	3'–0"	7'–0"	1–3/4"	I–HM	A	FULL	CLAD	1/A601 (ACCESSIBLE SILL)			–	Exterior Outswing Door	2
3	DRIVER LOUNGE	3'–0"	7'–0"	1–3/4"	I–HM	A	FULL	CLAD	1/A601 (ACCESSIBLE SILL)			–	Exterior Outswing Door	3
INTERIOR DOORS – ALL UNITS														
4	TOILET	3'–0"	7'–0"	1–3/4"	MDF	B		HM	––					4
5	BATCH OFFICE	3'–0"	7'–0"	1–3/4"	MDF	B		HM	––					5
6	BATCH OFFICE	3'–0"	7'–0"	1–3/4"	MDF	B		HM	––					6
7	DISPATCH OFFICE	3'–0"	7'–0"	1–3/4"	MDF	B		HM	––					7
8	ADMIN OFFICE	3'–0"	7'–0"	1–3/4"	MDF	B		HM	––					8
9	UTILITY	2'–4"	7'–0"	1–3/4"	MDF	B		HM	––					9
10	TOILET	3'–0"	7'–0"	1–3/4"	MDF	B		HM	––					10
11	BREAK	4'–0"	7'–0"	–––	MDF	–––		HM	––				Cased Opening	11

MATERIAL LEGEND:
ALUM – ALUMINUM STOREFRONT
SCW – SOLID CORE WOOD
HM – HOLLOW METAL
I–HM – INSULATED HOLLOW METAL
WD – WOOD
PLAS – POLYVINYL REINF HOLLOW CORE
FRC – FIBERGLASS COMPOSITE OSB CORE
MDF – MEDIUM DENSITY FIBERGLASS

GLAZING MATERIAL
FULL TEMPERED SINGLE PANE (FULL LITE)
HALF TEMPERED SINGLE PANE (HALF LITE)
NVP TEMERED GLASS NARROW VIEW PANEL
DV DOOR VIEWER (180° FIELD OF VIEW MIN)

GHM – GALVANIZED HOLLOW METAL
GIHM – GALV INSULATED HOLLOW METAL
GMS – GALVANIZED METAL SLATS
STL – STEEL RAIL ASSEMBLY
GLV – GALVANIZED METAL RAIL ASSEMBLY
GIPNL – GALV. INSULATED SECTIONAL PANEL

NOTE 1 SUPPLY WALL MOUNTED DOOR STOPS ON ALL DOORS MOUNTED W/ THE HINGE SIDE 5" OR LESS FROM A PERPENDICULAR WALL

NOTE 2 PAINT ALL FRAMES

NOTE 3 ALL DOOR HARDWARE TO BE SATIN NICKEL FINISH

ABBREVIATED DOOR HARDWARE NOTES & SCHEDULE

OPERABLE DOOR HARDWARE SHALL BE MOUNTED BETWEEN 30"(MIN.) AND 42"(MAX.) ABOVE FLOOR OR GROUND LEVEL AND "ALL" SHALL LEVER STYLE WITH TURN–BACK END RETURN, DESIGNATED FOR ARCHITECTURAL BARRIER FREE ACCESSIBLE. CONTRACTOR SHALL COORDINATE LATCH/LOCKSETS KEYING SCHEDULE WITH BUILDING OWNER BY PROVIDING MASTER AND GRAND MASTER KEYING SYSTEM

DOOR HARDWARE MATERIAL FINISH TYPES SHALL BE STAIN NICKEL PLATED (US26D) OR STAIN STAINLESS STEEL (US32D) AND INSTALLED BY CONTRACTOR. IF NOT DIRECTLY SPECIFIED BY OWNER, CONTRACTOR SHALL PROVIDE. ALL EXTERIOR HARDWARE AND MOVING PARTS SHALL HAVE SALT AIR RESISTANCE (STAINLESS STEEL OR BRASS) MECHANISMS SHALL BE HEAVY DUTY GRADE.

GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR DOOR ASSEMBLY AND HARDWARE IDENTIFICATIONS AND QUANTITIES AS SHOWN ON PLANS. PRIOR TO ORDERING ANY HARDWARE, CONTRACTOR TO SUPPLY OWNER AND DESIGNER WITH SPECS AND CUT SHEETS FOR APPROVAL AND TO COORDINATE WITH DOOR HARDWARE SPECIALIST AN ASSIGNED MASTER KEYING SYSTEM.

GENERAL FRAME & GLAZING NOTES

EXTERIOR METAL STOREFRONT WINDOW / DOOR AND FRAME SYSTEM ASSEMBLIES, U.N.O.
(TYP) NOM. 4.5" WIDE ALUM. EXTRUDED FIXED "THERMALLY BROKEN" EXTERIOR STOREFRONT WINDOW FRAME SYSTEMS W/ 1" INSULATED GLAZING (FRAME COLOR: "KYNAR" (CONFIRM WITH OWNER) (70% KYNAR PREMIUM PERFORMANCE COATING) FINISHED FRAMES (AAMA 2605; CLASS 1 611–CURRENT EDITION); GLAZING: PPG/SOLARBAN 60 CLEAR+CLEAR; TINTED, LOW–E GLASS; SHGC MIN. 0.38);

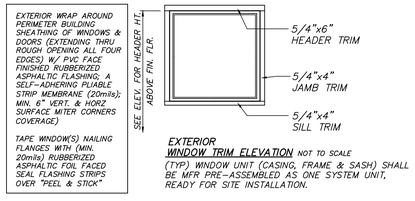
WINDOW/DOOR SYSTEM (FRAM'G–GLAZ'G) SHALL BE DESIGN PRESSURE (DP) WIND RATED FOR ITS GEOGRAPHICAL LOCATION; WINDOW INSTALLER SHALL BE RESPONSIBLE FOR ADEQUATELY USING APPROPRIATE FASTENER TYPES, SPACING AND VERTICAL FRAME STEEL STRUTS TO RESIST WIND SPEED (130 MPH) DP RATING. BASIS OF DESIGN:

SAFETY (S) – DESIGNATES IMPACT GLAZING:

ALL SAFETY GLAZING PRODUCTS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS UNDER CPSC 16 CFR PART 1201 CATEGORY II FOR TEMPERED/SAFETY–IMPACT GLAZING WHEN SUCH PRODUCTS ARE INSTALLED IN CONDITIONS CONSIDERED HAZARDOUS FOR HUMAN IMPACT AND AS REQUIRED UNDER CHAPTER 24 AND RELATED SECTIONS OF THE INTERNATIONAL BUILDING CODE: ICC/NCBC–2012; CHAPTER 24; SECTION 2406

WINDOW/DOOR SUPPLIER SHALL PROVIDE ROUGH–OPENING SIZES, BEFORE FRAMING CONSTRUCTION BEGINS!
WINDOW INSTALLER SHALL BE RESPONSIBLE FOR ADEQUATELY USING APPROPRIATE MOULDING TRIM STOPS, FASTENER TYPES AND SPACING AND FOR LATERAL STABILITY. PROPRIETARY COMMERCIAL WINDOW MFR SPECIFIED: KAWNEER

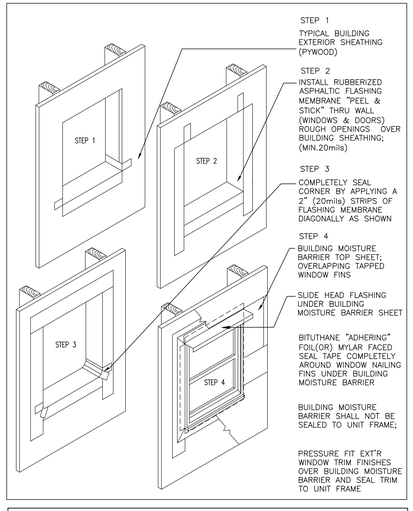
(X) SYMBOL INDICATES WINDOW/FRAME STYLE AND SIZE; REFERENCE FLOOR PLAN A101 FOR WINDOW/FRAME TYPE SYMBOL LOCATIONS; NOMINAL WINDOW SIZES SHOWN; VERIFY ROUGH OPENING SIZE.



EXTERIOR
WINDOW TRIM ELEVATION NOT TO SCALE

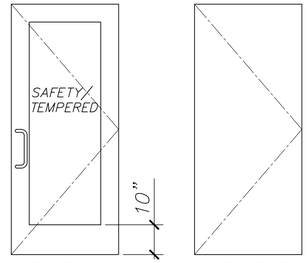
(TYP) WINDOW UNIT (CASING, FRAME & SASH) SHALL BE MFR PRE–ASSEMBLED AS ONE SYSTEM UNIT, READY FOR SITE INSTALLATION.

C A500 EXTERIOR TRIM DETAIL N.T.S.

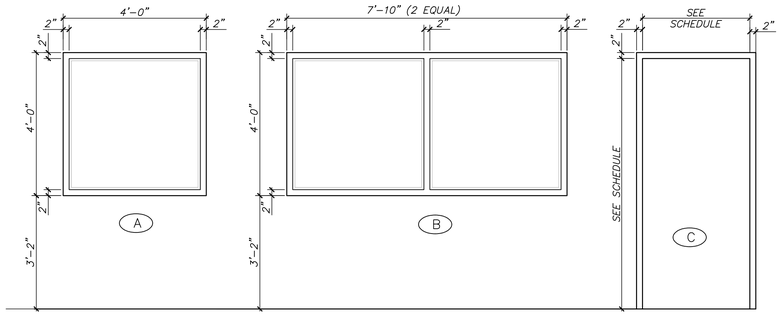


EXTERIOR WRAP AROUND PERIMETER BUILDING SHEATHING OF WINDOWS & DOORS (EXTENDING THRU ROUGH OPENING ALL FOUR EDGES) W/ MYLAR FACE FINISHED RUBBERIZED ASPHALTIC FLASHING; A SELF–ADHERING PLIABLE STRIP MEMBRANE (MIN. 20mils); MIN. 6" VERT. & HORZ SURFACE MITER CORNERS COVERAGE) (SIMILAR PRODUCT FLASHING MFG: W.R.GRACE "ICE AND WATER SHIELD)

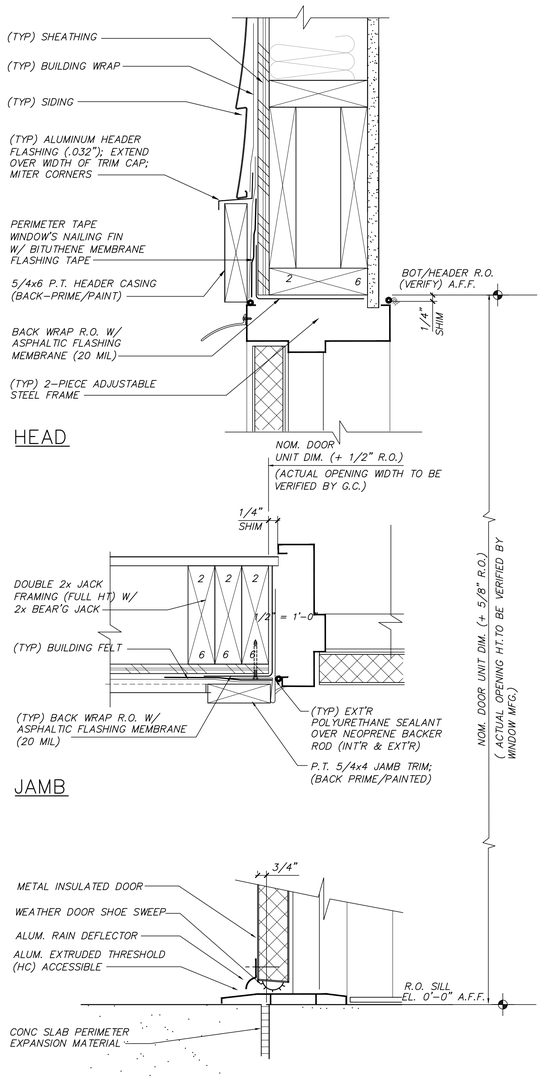
D A500 SCHEMATIC FLASHING DETAIL NTS



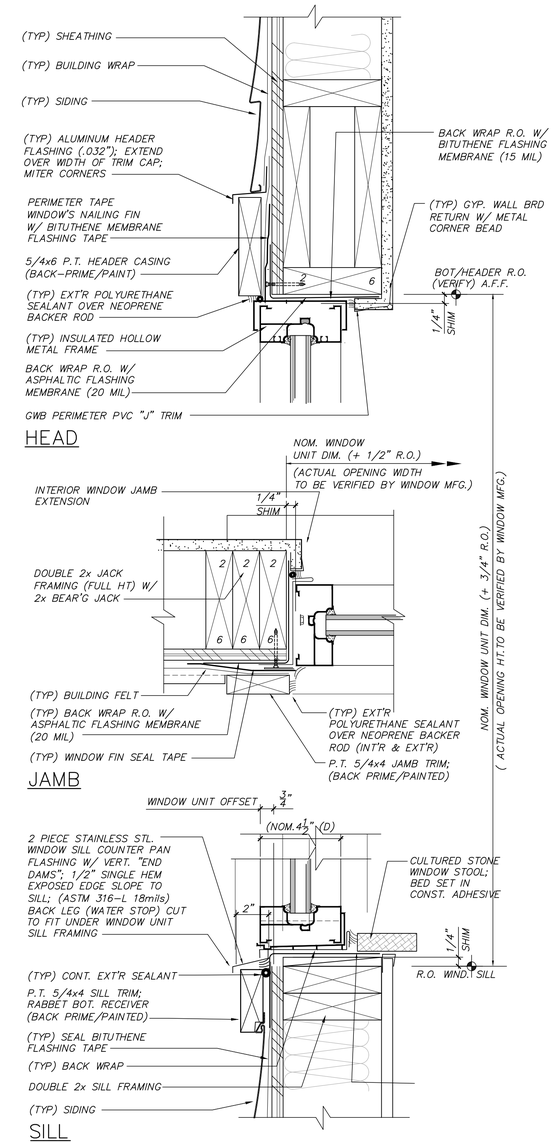
A A500 SCHEMATIC DOOR ELEVATIONS 1/2" = 1'–0"



B A500 SCHEMATIC FRAME ELEVATIONS 1/2" = 1'–0"



1 A500 (TYP) EXTERIOR ENTRANCE DOOR DETAIL 3" = 1'–0"



2 A500 (TYP) WINDOW DETAIL 3" = 1'–0"

no.	date	revision
0	12/06/21	ISSUE FOR CODE ENFORCEMENT REVIEW & APPROVAL

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06/2021

MICHAEL LEE SAEED JR. 34773 REGISTERED ARCHITECT WILMINGTON, NORTH CAROLINA 12/

Proposed Dispatch Office Building for
Crete Solutions, LLC
2544 US 401 N
Lillington, North Carolina 27546
job status **Contract Documents - Issued for Construction**

WINDOW AND DOOR SCHEDULES & DETAILS

date	12/01/21
job no.	CRETE/LIL
drawn by	MSAIEED
checked by	MSAIEED
drawing no.	A500
revision no.	0

PLUMBING FIXTURE SCHEDULE

P-#	FIXTURES	SPECIFICATIONS	PIPING REQUIRED		
			WASTE	CW	HW
P-1	WATER CLOSET/ADA FLOOR MOUNTED TANK TYPE – 1.6 GPF	AMERICAN STANDARD "CADET RIGHT HEIGHT" MODEL 2298.012 VITREOUS CHINA TOILET WITH ELONGATED BOWL AND TANK WITH SIDE TRIP LEVER, 16 ½" RIM HEIGHT, 1.6 GPF, 12" ROUGH–IN, BOLT CAPS, COMPLIES WITH ANSI A112.19.2 & A117.1 SEAT : BEMIS/CHURCH DURAGUARD 2100 NSSC ANTI–MICROBIAL HEAVY DUTY WHITE ELONGATED OPEN FRONT SEAT WITH COVER. VALVE: McGUIRE NO. 2166 ⅜"X12" FLEX CLOSET SUPPLY WITH STOP.	3"	1/2"	--
P-2	URINAL – HANDICAP ¾" TOP SPUD – 1.0 GPF MANUAL FLUSH VALVE	AMERICAN STANDARD "ALLBROOK" MODEL 6541.132 1.0 GPF ¾" TOP SPUD, WHITE VITREOUS CHINA, 2" IPS OUTLET, WALL HANGER. MOUNT RIM 17"AFF TO COMPLY WITH ADA. VALVE: SLOAN REGAL MODEL 1–186–1–ADA, 1GPF, CHROME FLUSH WITH ADA COMPLIANT HANDLE.	2"	1/2"	--
P-3	LAVATORY – WALL MTD. SINGLE LEVER FAUCET ADA	AMERICAN STANDARD "LUCERNE" 0355.012 WALL MTD. WHITE VITREOUS CHINA 20"X18" LAVATORY WITH 4" FAUCET CENTERS. FAUCET: AMERICAN STANDARD "RELIANT +" MODEL NO. 7385 SINGLE LEVER LAVATORY FAUCET WITH CERAMIC DISC CARTRIDGE, INDEXED METAL LEVER, VANDAL RESISTANT 0.5 GPM AERATOR, ⅜"O.D. COPPER INLETS, ADJUSTABLE HOT LIMIT SAFETY STOP. SUPPLIES: McGUIRE NO. 165 ⅜"X12" FLEX ANGLE SUPPLY WITH STOP STRAINER: McGUIRE NO. 155–A GRID STRAINER WITH 1 ¼" TAILPIECE. TRAP AND SUPPLY INSULATION: McGUIRE PREWRAPED PROWRAP INSULATION KIT MODEL NO.2150	1–1/2"	1/2"	1/2"
P-4	LAVATORY – CABINET MTD. SINGLE LEVER FAUCET ADA	AMERICAN STANDARD "AQUALYN" 0476.028 CABINET MTD. WHITE VITREOUS CHINA 20"X17" SELF RIMMING LAVATORY WITH 4" FAUCET CENTERS. FAUCET: AMERICAN STANDARD "RELIANT +" MODEL NO. 7385 SINGLE LEVER LAVATORY FAUCET WITH CERAMIC DISC CARTRIDGE, INDEXED METAL LEVER, VANDAL RESISTANT 0.5 GPM AERATOR, ⅜"O.D. COPPER INLETS, ADJUSTABLE HOT LIMIT SAFETY STOP. TRAP AND SUPPLIES: McGUIRE NO. 155WC OFFSET WHEELCHAIR LAVATORY GRID STRAINER WITH 1 ¼"OUTLET. McGUIRE NO. 8902 17 GA 1 ¼"X1 ½" P–TRAP & NIPPLE. McGUIRE NO 2165 ½" IPS X ⅜" FLEX ANGLE SUPPLY WITH STOP.	1–1/2"	1/2"	1/2"
P-5	SINGLE BOWL SINK ADA	JUST MODEL NO. SL–1613–A–GR SINGLE COMPARTMENT SINK. 16"X13", 304 STAINLESS STEEL, 18 GAUGE, 3 ½" FAUCET LEDGE WITH 4 HOLES @ 4" CENTERS. TRAP AND SUPPLIES: McGUIRE NO 151 CHROME PLATED FORGED BRASS STRAINER WITH 1–½" TAILPIECE, McGUIRE NO. 8912 1 ½" P–TRAP AND NIPPLE. McGUIRE NO. 2165 ANGLE SUPPLIES WITH STOPS. FAUCET: JUST MODEL J1174KS TWO–HANDLE KITCHEN FAUCET. CHROME PLATED BRASS CONSTRUCTION, 6" WRIST BLADE HANDLES, COMPLIES WITH LATEST ADA REQUIREMENTS.	1–1/2"	1/2"	1/2"
P-6	ICE/COFFEE MAKER CONNECTION	PROVIDE RECESSED WALL BOX WITH SHUT–OFF VALVE, ROUTE ⅜" SOFT "K" COPPER TO MACHINE CONNECTION.	--	1/2"	--

GENERAL PLUMBING SPECIFICATIONS

GENERAL: THE ENTIRE PLUMBING SYSTEM SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA BUILDING PLUMBIING CODE. SUBMIT THREE (3) COPIES OF PLUMBING INSPECTION CERTIFICATES TO OWNER. PLUMBING CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS REQUIRED BY GOVERNING AUTHORITIES FOR WORK DONE UNDER THIS CONTRACT. PROVIDE AND INSTALL ALL SUPPORTS, BRACKETS, MATERIALS AND LABOR AS REQUIRED FOR A COMPLETE AND ACCEPTABLE PLUMBING SYSTEM. PLUMBING CONTRACTOR SHALL CLEAN ALL PLUMBING FIXTURES AFTER ALL CONSTRUCTION IS COMPLETE.

SOIL, WASTE AND VENT PIPING: WASTE PIPING AND VENT PIPING SHALL BE P.V.C. – D.W.C. SCHEDULE 40 PIPE. HOWEVER, COEXTRUDED PVC "FOAM CORE", ASTM F891, WILL NOT BE ALLOWED.

ALL PENETRATIONS THROUGH NON–COMBUSTIBLE CONSTRUCTION SHALL BE PACKED WITH NON–COMBUSTIBLE FIRE STOPPING MATERIAL.

GRADE WASTE AND VENT PIPING 1/4 INCH PER FOOT WHERE POSSIBLE BUT NOT LESS THAN 1/8 INCH PER FOOT, UNLESS SPECIFICALLY DIRECTED. MAINTAIN INVERTS WHERE INDICATED.

WATER HEATER. ALL FITTINGS SHALL BE SWEAT TYPE WROUGHT COPPER WITH WALL THICKNESS EQUAL TO PIPE WALL THICKNESS. ALL JOINTS SHALL BE MADE WITH 95–5 SOLDER OR SILVABRITE 100. NO SOLDER W/LEAD SHALL BE PERMITTED.

ALL ROUGHING–IN PIPING SHALL BE RUN CONCEALED. ALL EXPOSED WATER LINES, STOPS, TRAP AND WASTE PIPE AT THE FIXTURES SHALL BE CHROME PLATED BRASS, WHICH FOR THE MOST PART WILL BE FURNISHED WITH THE FIXTURES. CHROME PLATED ESCUTCHEON RINGS SHALL BE USED AT EACH POINT OF ENTRANCE OF CHROME PIPING INTO WALLS, FLOORS, OR CEILINGS. EXPOSED WORK SHALL BE UNIFORM IN HEIGHT AND LOCATION FOR EACH TYPE FIXTURE.

WATER PIPING UNDER GROUND OUTSIDE OF BUILDING SHALL BE AT LEAST 24 INCHES BELOW THE FINISHED GRADE SURFACE.

THERMAL INSULATION: ALL HOT AND COLD WATER PIPING INSIDE BUILDING AND IN CRAWL SPACE, ALL HOT WATER PIPING BELOW GRADE, AND COLD WATER PIPING BELOW GRADE WITHIN 3'–0" OF OUTSIDE SHALL BE INSULATED WITH 1" THICK "ARMAFLEX" OR IMCOA WITH SEALED JOINTS OR PREMOLDED FIBERGLASS WITH VAPOR BARRIER JACKET. IN LIEU OF INSULATING WATER PIPING IN HEATED WALLS PIPING MAY BE ENCASED IN BATT INSULATION WITHIN THE WALL OR FLOOR/CEILING.

WATER HEATERS: WATER HEATERS SHALL BE UL LISTED AND COMPLETE WITH ALL STANDARD FEATURES, FIVE (5) YEAR TANK WARRANTY, GLASS–LINED TANK, FOAM INSULATION ON THE TANK, ANODE ROD, AUTOMATIC TEMPERATURE CONTROL, AND AUTOMATIC HIGH–LIMIT SAFETY CUTOFF.

EACH WATER HEATER SHALL BE PROVIDED WITH AN ASME APPROVED PRESSURE AND TEMPERATURE RELIEF VALVE. UNITS NOT INSTALLED WITH VACUUM BREAKER ON COLD WATER SUPPLY LINE SHALL BE PROVIDED WITH AGA CERTIFIED VACUUM RELIEF VALVE PER ANSI Z21.22. A GATE VALVE SHALL BE INSTALLED ON SAME FLOOR AS UNIT AND NO FURTHER THAN 3 FEET ON THE COLD WATER SUPPLY.

EACH WATER HEATER AND ITS INSTALLATION SHALL COMPLY WITH THE LATEST ISSUE AND ALL ADDENDA THERETO OF THE STATE BOILER INSPECTION LAWS AND REGULATIONS. ALL WIRING AND CONTROLS ASSOCIATED WITH THE HEATERS SHALL BE U.L. APPROVED AND IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.

EACH HEATER TANK SHALL BE FITTED WITH APPROVED "DIP" TUBE AND LABELED TO SHOW APPROVAL FOR INSTALLATION.

DISCHARGE RELIEF VALVE FROM EACH WATER HEATER SHALL BE PIPED FULL SIZE TO WITHIN SIX (6) INCHES OF THE FLOOR OVER A FLOOR DRAIN, DRIP PAN OR OTHER SAFE LOCATION. DISCHARGE PIPE SHALL BE SUPPORTED AND ANCHORED SO THAT IT WILL NOT PUT UNDUE STRAIN ON THE RELIEF VALVE BODY OR MOUNTING COUPLING.

SUBMITTAL: THE CONTRACTOR SHALL WITHIN (15) DAYS OF RECEIPT OF PROPERLY SIGNED CONTRACT SUBMIT TO THE ARCHITECT/ENGINEER FOR APPROVAL (5) COPIES OF A LIST OF SUPPLIES AND MANUFACTURER'S MATERIAL AND EQUIPMENT TO BE USED ON THIS PROJECT.

SUBSTITUTION OF MATERIALS AND/OR EQUIPMENT FOR THAT SPECIFIED WILL NOT BE ACCEPTED WITHOUT PRIOR WRITTEN APPROVAL BY THE ARCHITECT/ENGINEER PRIOR TO RECEIPT OF BIDS.

GUARANTEE: THE PLUMBING CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE BY OWNER STATING THE DAY THE GUARANTEE BEGINS AND ENDS.

WATER HEATER (EWH): STATE M/N PCE 20 10MSA, 20 GALLON ELECTRIC WATER HEATER WITH ONE (1) 1500 WATT ELEMENT, 120 VOLT, SINGLE PHASE, WITH 3 YEAR WARRANTY. FURNISH WITH A.S.M.E. APPROVED RELIEF VALVE, WATERGUARD EXPANSION TANK M/N ETC–2X, AND DRAIN PAN. CONNECTION SIZES: C=1 1/4", H=1 1/4"

NOTE: PLANS SHOULD NOT BE SCALED FOR DIMENSIONS. COORDINATE ALL ROUGH IN DIMENSIONS WITH EQUIPMENT TO BE INSTALLED AND DIMENSIONED DRAWINGS INCLUDING KITCHEN EQUIPMENT PLANS IF AVAILIBLE. CONTACT ENGINEER BEFORE CONSTRUCTION WITH ANY CONFLICTS.

PLUMBING GENERAL NOTES:

1. PROVIDE ALL MATERIALS AND LABOR NECESSARY FOR COMPLETE AND PROPERLY FUNCTIONING PLUMBING SYSTEMS. WARRANTY ALL WORK AND ALL MATERIALS, EQUIPMENT AND DEVICES FOR A PERIOD OF ONE YEAR AFTER OWNER'S ACCEPTANCE.

2. WORK SHALL CONFORM TO OR MEET THE REQUIREMENTS OF THE MOST CURRENT EDITION OF:
   A. NORTH CAROLINA PLUMBING CODE
   B. ASPE
   C. UL
   D. ANSI
   E. ALL FEDERAL, STATE AND LOCAL CODES AND ORDINANCES

3. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE NOT INTENDED TO BE SCALED FOR DIMENSIONS, UNLESS DIMENSIONED.

4. ALL MATERIALS, EQUIPMENT AND DEVICES SHALL, AS A MINIMUM, MEET THE REQUIREMENTS OF UL WHERE UL STANDARDS ARE ESTABLISHED FOR THOSE ITEMS. ALL ITEMS SHALL BE CLASSIFIED BY UL AS SUITABLE FOR THE PURPOSE USED.

5. ALL ITEMS SHALL BE NEW, UNLESS NOTED OTHERWISE.

6. ALL MATERIALS AND EQUIPMENT SHALL BE CURRENT PRODUCTS BY MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH PRODUCTS.

7. COORDINATE LOCATION OF PLUMBING WORK WITH OTHER TRADES TO AVOID CONFLICTS AND INTERFERENCES.

8. INSTALL ALL EQUIPMENT AND MATERIAL IN ACCORDANCE WITH MANUFACTURER'S WRITTEN PRINTED INSTRUCTIONS AND RECOMMENDATIONS.

9. COORDINATE WITH AND OBTAIN PERMITS AND INSPECTIONS FROM AUTHORITY HAVING JURISDICTION AND INCLUDE ALL FEES IN BID.

10. PROVIDE OWNER WITH CERTIFICATES OF FINAL INSPECTION AND ACCEPTANCE FROM AUTHORITY HAVING JURISDICTION.

11. ALL EQUIPMENT AND PIPE ABOVE CEILING SHALL BE SUPPORTED FROM BUILDING STRUCTURE ABOVE, UNO.

12. WHERE PIPES PENETRATE FIRE RATED BARRIERS (WALLS, FLOORS AND CEILINGS) SEAL OPENING AROUND PIPES AND DUCTWORK WITH U.L. LISTED FIRE STOPPING MATERIAL TO MAINTAIN THE FIRE RATING OF THE BARRIER. PER NC BUILDING CODE VOLUME 1, PENETRATIONS OF NONRATED WALLS, PARTITIONS AND FLOORS OF NONCOMBUSTIBLE CONSTRUCTION SHALL BE FIRE–STOPPED WITH NONCOMBUSTIBLE MATERIAL.

13. PROVIDE EXPANSION–DEFLECTION JOINTS WHERE PIPE CROSSES BUILDING EXPANSION OR SEISMIC JOINTS.

14. PRIOR TO BIDDING, THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL VISIT THE JOBSITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED AND SHALL INCLUDE IN HIS BID ALL LABOR, MATERIAL AND OPERATIONS REQUIRED FOR A COMPLETE JOB. (NOTIFY OWNER AND ENGINEER OF ANY DISCREPANCIES PRIOR TO BID.)

15. CLEANOUTS, LINE SIZE, UNO.

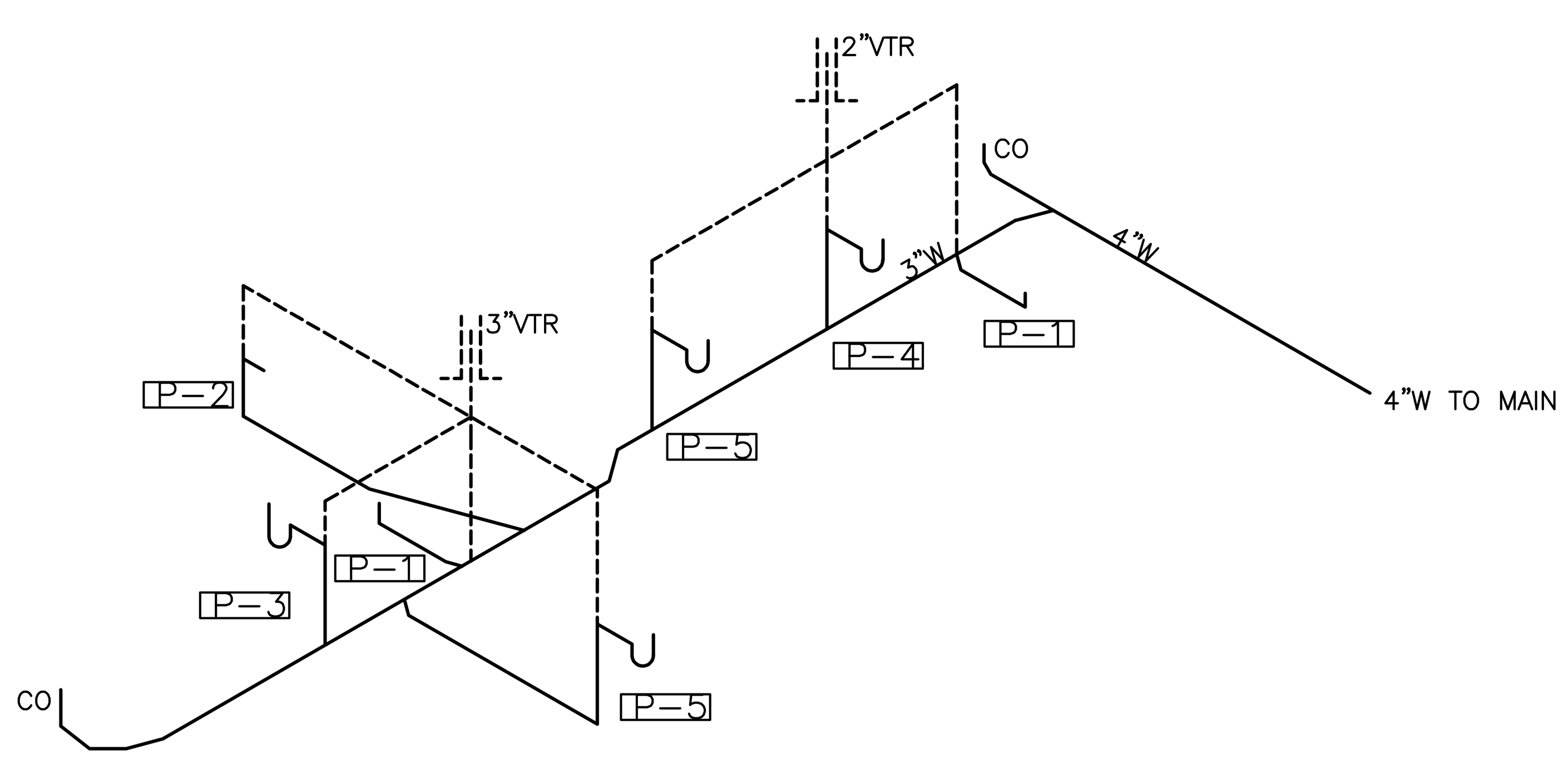
16. FLOOR DRAINS, LINE SIZE, UNO.

17. FLOOR DRAINS WITH SUBSCRIPT CO TO HAVE INTEGRAL CLEANOUT AND SHALL BE SIMILAR TO REGULAR FLOOR DRAIN SPECIFIED, UNO.

18. FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH TRAP PRIMERS OR ALTERNATE METHODS AS APPROVED BY AUTHORITY HAVING JURSIDICTION.

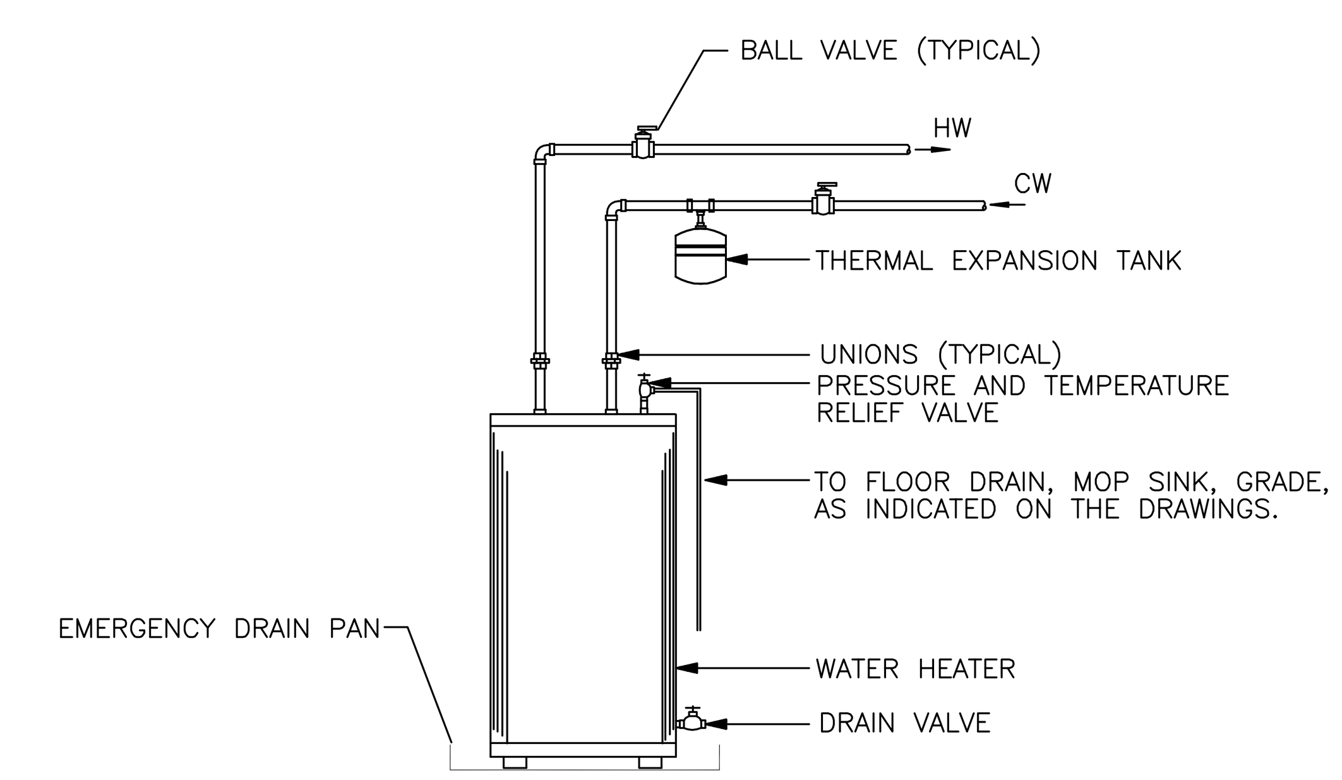
PLUMBING LEGEND

Symbol	Description
P-#	FIXTURE NUMBER, SEE SCHEDULE
VTR	VENT THRU ROOF
— · — · —	NEW COLD WATER PIPE
— · · — · · —	NEW HOT WATER PIPE
————	NEW WASTE PIPE
- - - - - -	NEW VENT PIPE



WASTE RISER

SCALE: NONE



(A) ELECTRIC WATER HEATER

SCALE: NONE

no.	date	revision

PROJECT NO. 14450

TOPSAIL ENGINEERING, INC

PLUMBING | MECHANICAL | ELECTRICAL

Design Elements

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Architect

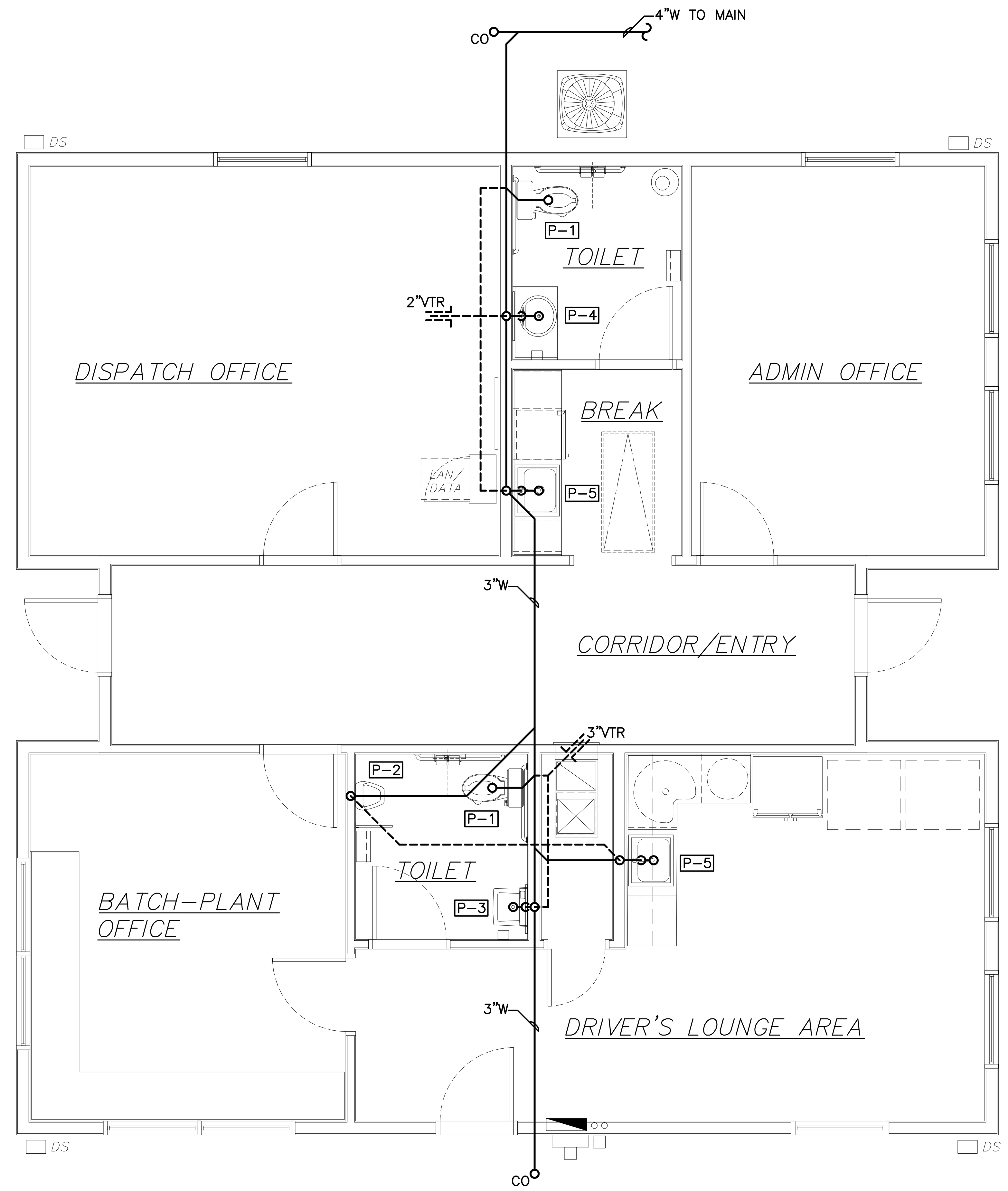
Proposed Concrete Batch Plant Office for Crete Solutions, LLC

2544 US 401 N.
LILLINGTON, NORTH CAROLINA 27546

PLUMBING SCHEDULES, NOTES & DETAILS

job status **Construction Document - Issued for Construction**

date	15 DEC, 2021
job no.	CRETE/BUS
drawn by	KSG
checked by	SE
drawing no.	P100
revision no.	



(REF) SITE NORTH — PLAN NORTH — 1 P101

PROPOSED FLOOR PLAN — PLUMBING — WASTE

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

GRAPHIC BAR SCALE (FOOT UNITS) 0 2 4 8

no.	date	revision

PROJECT NO. 14450

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PLUMBING | MECHANICAL | ELECTRICAL
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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 23933 12/15/21 STEVEN H. EVERHART, JR.

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FLOOR PLAN — PLUMBING — WASTE

job status **Construction Document - Issued for Construction**

date	15 DEC, 2021
job no.	CRETE/BUS
drawn by	KSG
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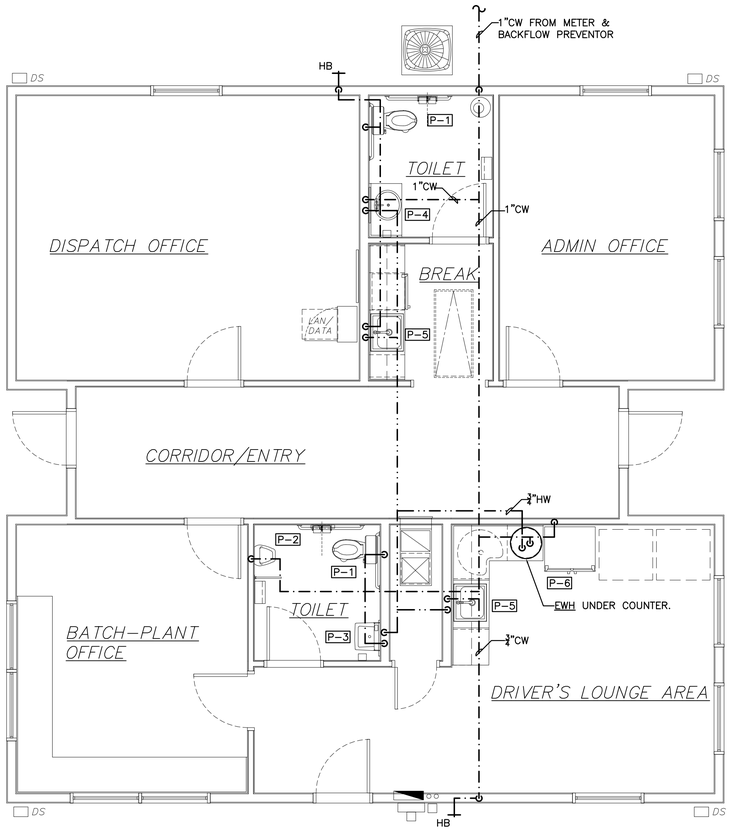

(REF) SITE NORTH

PLAN NORTH

1 / P102 PROPOSED FLOOR PLAN — PLUMBING — WATER

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

GRAPHIC BAR SCALE (FOOT UNITS)

0 2 4 8

no.	date	revision

THIS SHEET SHOWS BASIC DRAFTING STANDARDS

PROJECT NO. 14450

TOPSAIL ENGINEERING, INC
PLUMBING | MECHANICAL | ELECTRICAL

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Crete Solutions, LLC

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FLOOR PLAN — PLUMBING — WATER

job status **Construction Document - Issued for Construction**

date	15 DEC, 2021
job no.	CRETE/BUS
drawn by	KSG
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SPLIT SYSTEM HEAT PUMP SCHEDULE

	UNIT NUMBER	AHU-1	
	AREA SERVED		
	MANUFACTURER	TRANE	
	MODEL NUMBER	TEM6A0B30H21	
	UNIT WEIGHT (LBS)	111	
FAN	TOTAL AIR CFM	800	
FAN	OUTSIDE AIR CFM	80	
FAN	FAN H.P.	1/3	
FAN	EXT. S.P. (IN. H2O)	0.4	
FAN	POWER SUPPLY	208/230/60/1	
COOLING CAPACITY	TOTAL CAPACITY COOLING (BTUH)	29,000	
COOLING CAPACITY	SENSIBLE CAPACITY COOLING (BTUH)	22,500	
COOLING CAPACITY	ENTERING AIR TEMP.	80/67	
HEATING CAPACITY	ENTERING AIR TEMP.	70 °F	
HEATING CAPACITY	HIGH TEMPERATURE (BTUH) 47°F DB °	27,800	
HEATING CAPACITY	LOW TEMPERATURE (BTUH) 17°F DB °	18,400	
HEATING CAPACITY	AUXILARY COIL CAPACITY	3.6/4.8 KW @ 208/240	
HEATING CAPACITY	POWER SUPPLY	208/230/60/1	
HEATING CAPACITY	MINIMUM AMPACITY	27/30	
HEATING CAPACITY	MAX. OVERCURRENT PROTECTION	30/30	
AIR COOLED HEAT PUMP	UNIT NUMBER	HP-1	
AIR COOLED HEAT PUMP	MODEL NUMBER	4TWR6030	
AIR COOLED HEAT PUMP	UNIT WEIGHT	196	
AIR COOLED HEAT PUMP	ENTERING AIR TEMP.	95°F	
AIR COOLED HEAT PUMP	FAN TYPE	PROPELLER	
AIR COOLED HEAT PUMP	FAN H.P.	1/8	
AIR COOLED HEAT PUMP	COMPRESSOR	RECIP	
AIR COOLED HEAT PUMP	POWER SUPPLY	208/230/60/1	
AIR COOLED HEAT PUMP	MINIMUM AMPACITY	17	
AIR COOLED HEAT PUMP	MAX. OVERCURRENT PROTECTION	25	
	ACCESSORIES	(1), (2), (3)	

(1) PROVIDE WALL MOUNTED, PROGRAMMABLE ELECTRONIC THERMOSTAT WITH AUTO CHANGEOVER.

(2) SYSTEMS SELECTED MEET REQUIREMENTS UNDER SECTION 506 OF THE NORTH CAROLINA STATE BUILDING CODE: ENERGY CONSERVATION CODE.

(3) PROVIDE STRIP HEAT SHUTOFF PER 503.2.4.1.1

AIR DISTRIBUTION DEVICE SCHEDULE

TAG	SERVICE	NECK SIZE	OVERALL SIZE	MODEL NUMBER	DESCRIPTION & ACCESSORIES
A	SUPPLY	8"ø	24 X 24	ASCD	1, 2, 3, 7, 8
B	RETURN	14"ø	24 X 24	80	1, 2, 3, 5

(1) PRICE AIR DISTRIBUTION; OR APPROVED EQUAL.
(2) ALUMINUM CONSTRUCTION, STANDARD WHITE FINISH.
(3) T-BAR LAY-IN PANEL
(4) SURFACE MOUNT BORDER.
(5) CFM SHOWN IN GRILLE TAG IS MAXIMUM POSSIBLE WITH EXHAUST AND OUTSIDE AIR AT 0.
(6) DOUBLE DEFLECTION GRILLE.
(7) SQUARE FACE, ROUND NECK DIFFUSER
(8) BUTTERFLY STYLE VOLUME CONTROL DAMPER.

NOTE: FLEXIBLE DUCTWORK SHALL MATCH DIFFUSER NECK SIZE UNLESS OTHERWISE NOTED.

EXHAUST FAN SCHEDULE

TAG	CFM	RPM	S.P. IN. W.G.	WATTS/HP	SONES	ELECTRIC	CONTROL	MANUFACTURER MODEL NUMBER	DESCRIPTION & ACCESSORIES
EF-1	75	700	.25	50 WATTS	3.0	120-1-60	WIRED WITH LIGHT	GREENHECK SP-B90	1, 2, 3

(1) CABINET CEILING FAN, DIRECT DRIVE, CENTRIFUGAL, SPRING LOADED ALUMINUM BACKDRAFT DAMPER.
(2) ALUMINUM, WHITE ENAMEL CEILING GRILLE.
(3) ALUMINUM HOODED WALL CAP WITH BUILT-IN BIRDSCREEN AND DAMPER.

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT METHOD OF COMPLIANCE

Prescriptive ● Energy Cost Budget ____

Thermal Zone: 4A

Exterior design conditions
- winter dry bulb: 26° F
- summer dry bulb: 92° F DB/76° F WB

Interior design conditions
- winter dry bulb: 70° F
- summer dry bulb: 75° F
- relative humidity: 50%

Building heating load: 15 MBTU/H

Building cooling load: 1.7 TONS

Mechanical Spacing Conditioning System
- Unitary
  - description of unit: ____
  - heating efficiency: 80%
  - cooling efficiency: 14.0 SEER AVG.
  - heat output of unit: SEE SCHEDULES
  - cooling output of unit: SEE SCHEDULES
- boiler
  - total boiler output. If oversized, state reason. N/A
- chiller
  - total chiller capacity. If oversized, state reason. N/A

List equipment efficiencies: N/A

Equipment schedules with motors (mechanical systems)
- motor horsepower: SEE SCHEDULES
- number of phases: SEE SCHEDULES
- minimum efficiency: SEE SCHEDULES
- motor type: ODP
- # of poles: 4

Additional prescriptive compliance method : 506.2.1 More Eff. Mech Equip.

DESIGNER STATEMENT:

To the best of my knowledge and belief, the design of this building complies with the mechanical systems, service systems and equipments of the 2018 North Carolina State Energy Code.

SIGNED: ____
NAME: STEVEN H. EVERHART JR., P.E.
TITLE: PROFESSIONAL ENGINEER

GENERAL MECHANICAL SPECIFICATIONS

ALL WORK SHALL COMPLY WITH THE REQUIRMENTS OF THE LATEST EDITION OF THE NC MECHANICAL CODE.

BASIS OF DESIGN: UNLESS OTHERWISE NOTED THE PURPOSE OF THESE DRAWINGS IS TO PROVIDE DIRECTION AND BASIS OF DESIGN TO A COMPETENT CONTRACTOR FAMILIAR WITH THE TYPE OF SYSTEMS BEING INSTALLED SUFFICIENT TO INDICATE OWNERS REQUESTS AND CODE REQUIREMENTS. IT IS THE CONTRACTORS RESPONSIBILITY, WHEN OTHERWISE UNDIRECTED, TO FOLLOW STANDARD INDUSTRY PRACTICES AND BASIC CODE COMPLIANCE INCLUDING, BUT NOT LIMITED TO, PROVIDING MATCHING REQUIRED ACCESSORIES TO THE SYSTEMS INDICATED, COORDINATING EXACT ROUTINGS AND LOCATIONS WITH OTHER TRADES AND THE OWNER, SELECTING CODE APPROVED MATERIALS, AND MAKING MINOR OFFSETS/ADJUSTMENTS BASED ON FIELD COORDINATION AND OWNER'S FIELD REQUESTS. CHANGE OF MANUFACTURER TO EQUIVALENT SYSTEMS, WITH OWNER'S APPROVAL, IS ACCEPTABLE. CONTACT ENGINEER WITH ANY CONFLICTS NOT COVERED BY THE ABOVE INSTRUCTIONS.

SHEET METAL WORK: THIS CONTRACTOR SHALL FURNISH ALL DUCTWORK AND ASSOCIATED SHEET METAL WORK AS CALLED FOR ON THE DRAWINGS AND REQUIRED FOR A COMPLETE DUCTED AIR DISTRIBUTION SYSTEM.

DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH BEST PRACTICES OF SHEET METAL WORK AND SMACNA STANDARDS.

ALL DUCTWORK SHALL BE GALVANIZED SHEET IRON THROUGHOUT EXCEPT WHERE OTHERWISE SHOWN AND FABRICATED IN ACCORDANCE WITH THE FOLLOWING TABLE (ALL DUCT SIZES ON CONTRACT DRAWINGS ARE SHEET METAL FABRICATION SIZES):

MAXIMUM DIMENSION OF DUCT	GAUGE U.S. STD.	TRANSVERSE JOINT	BRACING
UP TO 12"	26	DRIVE SLIPS 7'-10" CENTERS	NONE
13" TO 30"	24	DRIVE SLIPS 7'-10" CENTERS	1"X1"X1/8" ANGLES 4 FEET FROM JOINT

DUCTS 25 INCHES OR SMALLER IN MAXIMUM DIMENSION SHALL BE SUPPORTED WITH 1 INCH FLAT BAND HANGERS; DUCTS 25 INCHES AND LARGER SHALL BE SUPPORTED BY 3/4 INCH X 1-1/2 INCH ANGLE IRON AND ROUND ROD. SUPPORTS SHALL BE NOT MORE THAN 8 FEET ON CENTERS, PROPERLY FASTENED AND PLACED TO BUILDING STRUCTURES AND SHALL EXTEND AND BE RIVETED TO THE BOTTOM OF DUCTS.

UNLESS OTHERWISE SPECIFIED, FURNISH AND INSTALL ALL NECESSARY LINTELS, PROPERLY SIZED, SHEET METAL SLEEVES AND ESCUTCHEON COLLARS WHERE DUCTWORK RISES THROUGH FLOORS OR PASSES THROUGH WALLS OR CEILINGS.

FURNISH AND INSTALL FLEXIBLE COLLARS IN THE DUCTWORK CONNECTIONS TO AIR HANDLING FANS TO PREVENT NOISE TRANSMISSION BETWEEN SECTIONS.

ALL CHANGES IN DUCT DIRECTION SHALL BE LONG RADIUS ELBOWS OR SHALL BE FITTED WITH TURNING VANES.

IT IS ACCEPTABLE TO CHANGE RECTANGULAR DUCTWORK TO THE EQUIVALENT SIZE IN ROUND PROVIDED THE CONTRACTOR COORDINATES ALL CLEARANCE ISSUES.

DUCT INSULATION:
ALL CONCEALED DUCTWORK SHALL BE INSULATED ON THE OUTSIDE WITH TWO INCH (2") THICK, 3/4 POUND DENSITY FIBERGLASS BLANKET INSULATION HAVING AN ALUMINUM FOIL-SCRIM VAPOR BARRIER JACKET.

EDGES OF INSULATION SHALL BE CUT STRAIGHT AND TRUE AND SHALL BE TIGHTLY BUTTED. THE VAPOR BARRIER JACKET SHALL OVERLAP THE BLANKET JOINT A MINIMUM OF THREE INCHES (3"). THE JACKET LAP SHALL BE FASTENED WITH MOISTURE RESISTANT ADHESIVE AND ALSO OUTWARD CLINCHING STAPLES SPACED TEN INCHES (10") C/C. THE VAPOR BARRIER EDGE AND STAPLES SHALL THEN BE COVERED WITH A THREE INCH (3") WIDE TAPE OF THE SAME MATERIAL AS THE JACKET AND SHALL BE FASTENED WITH MOISTURE RESISTANT ADHESIVE.

ALL CUTS, TEARS AND PENETRATIONS IN THE VAPOR BARRIER JACKET SHALL BE SEALED WITH JOINT TAPE. ALL EDGES OF INSULATING BLANKET SHALL BE SEALED FROM THE JACKET TO DUCT SURFACE WITH TAPE.

INSULATING BLANKET ON THE BOTTOM OF SURFACES IN EXCESS OF 24 INCHES WIDE SHALL BE SECURED AGAINST THE DUCT WITH ADHESIVE OVER THE ENTIRE AREA, MECHANICAL CLIPS ON 24 INCH CENTER OR BY WIRE TIES AROUND THE DUCT SPACED 24 INCHES C/C.

CONTRACTOR MAY USE FLEXIBLE DUCTWORK (MAXIMUM LENGTHS 15'-0") FOR FINAL CONNECTIONS TO DIFFUSERS/GRILLES. FLEXIBLE DUCTWORK SHALL BE CERTAFLEX 25 AS MANUFACTURED BY THE CERTAINTEED CORPORATION.

REGISTERS AND GRILLES: ALL REGISTERS AND GRILLES SHALL BE OF SIZE, STYLE AND CAPACITY CALLED FOR ON PLANS AND IN THE GRILLE SCHEDULE. PROVIDE RUBBER OR EXPANDED FOAM GASKETS COMPLETELY AROUND ALL REGISTER AND GRILLE FRAMES TO PREVENT AIR LEAKAGE BETWEEN GRILLE FRAME AND DUCT OR BETWEEN GRILLE FRAME AND SURROUNDING FINISHED SURFACE. ACCEPTABLE MGFS: PRICE, CARNES, METALAIR, KRUGER. REGISTERS AND GRILLES SHALL BE BALANCED TO CFM SHOWN AND RECORD MADE OF ACTUAL FLOW AND BALANCE METHOD.

EQUIPMENT: MECHANICAL AND ELECTRICAL CONTRACTORS SHALL COORDINATE PRIOR TO ORDERING EQUIPMENT TO VERIFY CONSISTANT VOLTAGES. PRIOR TO EQUIPMENT BEING ENERGIZED, VOLTAGE TO EQUIPMENT CIRCUITS SHALL BE VERIFIED AS INSTALLED TO MATCH EQUIPMENT NAMEPLATE.

OPERATING INSTRUCTIONS, CERTIFICATES AND WARRANTIES: THE ORIGINAL OF ALL INSPECTION CERTIFICATES SHALL BE DELIVERED TO THE OWNER AND ONE (1) COPY EACH TO THE ENGINEER PRIOR TO REQUEST FOR FINAL PAYMENT.

THREE (3) COPIES OF OPERATING AND MAINTENANCE INSTRUCTIONS AND MANUFACTURER'S WARRANTIES FOR ALL EQUIPMENT PROVIDED UNDER THIS CONTRACT SHALL BE PROVIDED TO THE OWNER PRIOR TO SUBMITTING REQUEST FOR FINAL PAYMENT.

PRIOR TO FINAL PAYMENT TO THE CONTRACT, THE CONTRACTOR SHALL BE RESPONSIBLE TO TRAIN THE AUTHORIZED PERSONNEL ON HOW TO SERVICE, START-UP AND SHUT-DOWN THE VARIOUS SECTIONS OF THE SYSTEM. UPON COMPLETION OF THIS PHASE OF THE CONTRACT, THE CONTRACTOR SHALL SECURE A LETTER OF ACCEPTANCE FROM THE OWNER THAT HE IS SATISFIED WITH THE CONDITIONS STIPULATED HEREIN. UPON ACCEPTANCE OF THIS LETTER AND AT THE DISCRETION OF THE ENGINEER, THE FINAL PAYMENT WILL BE MADE.

THE CONTRACTOR SHALL PROVIDE A WRITTEN GUARANTEE OF ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM DATE OF SYSTEM ACCEPTANCE.

THE WORK UNDER THIS CONTRACT WILL BE ACCEPTED ONLY AS AN ENTIRE SYSTEM UPON SATISFACTORY COMPLETION OF THE REQUIRED TESTS. NO PARTIAL ACCEPTANCE OF ANY PART OR PORTION OF APPARATUS WILL BE MADE.

INSTALL AND CONNECT ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND DO ALL WORK IN A NEAT AND WORKMANLIKE MANNER AND IN ACCORDANCE WITH ACCEPTED GOOD PRACTICE AS JUDGED BY THE ENGINEER.

ALL EQUIPMENT AND PIPING SHALL BE SO INSTALLED THAT NO OBJECTIONABLE NOISES FROM EQUIPMENT, PIPING OR AIR DISTRIBUTION ARE AUDIBLE IN THE FINISHED AREAS.

GUARANTEE: THIS CONTRACTOR SHALL GUARANTEE ALL MATERIALS, EQUIPMENT AND WORKMANSHIP FOR ONE (1) YEAR FOLLOWING FINAL INSPECTION AND ACCEPTANCE OF THE BUILDING BY THE ENGINEER AND OWNER. THIS APPLIES TO ALL MATERIALS AND EQUIPMENT INSTALLED UNDER THIS CONTRACT, REGARDLESS OF SOURCE.

THE ONE (1) YEAR GUARANTEE PERIOD WILL START ON THE DAY OF FINAL INSPECTION AND ACCEPTANCE BY THE OWNER. THE CONTRACTOR SHALL PROVIDE THE ENGINEER A LETTER WITH TWO (2) COPIES STATING THE BEGINNING AND ENDING DATES OF THE GUARANTEE BASED ON THE AFOREMENTIONED STARTING DATES.

EXTENDED GUARANTEE: PROVIDE AN ADDITIONAL FOUR (4) YEAR GUARANTEE ON ALL COMPRESSORS BEYOND THE ABOVE MENTIONED ONE (1) YEAR GUARANTEE PERIOD.

AIR BALANCE: ALL SYSTEMS SHALL BE BALANCED BY THE CONTRACTOR PER THE REQUIREMENTS OF SECTION 408.2.2.1 OF THE NORTH CAROLINA STATE BUILDING CODE: ENERGY CONSERVATION CODE.

ENERGY CODE COMPLIANCE: HVAC EQUIPMENT SELECTED MEETS PERFORMANCE REQUIREMENTS OF THE NORTH CAROLINA STATE BUILDING CODE: ENERGY CONSERVATION CODE SECTION 406.2 ANY SUBSTITUTIONS MUST MEET THIS STANDARD AS WELL. UPON FINAL INSPECTION THE CONTRACTOR SHALL PROVIDE TO OWNER MANUALS AND EVIDENCE OF AIR BALANCE. CONTRACTOR SHALL SCHEDULE DESIGN PROFESSIONAL AND ASSIST TO COMPLETE SYSTEM INSTALLATION STATEMENT IN ACCORDANCE WITH THE NORTH CAROLINA STATE BUILDING CODE: ENERGY CONSERVATION CODE SECTION 408.1.

no.	date	revision

THIS SHEET SHOWS BASIC DRAFTING STANDARDS

PROJECT NO. 14450

TOPSAIL ENGINEERING, INC
PLUMBING | MECHANICAL | ELECTRICAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 23933 12/15/21 STEVEN H. EVERHART JR.

Design Elements
Michael L. Saieed, Jr., AIA, AIBD
Architect
1213 Culbreth Drive, Suite 142
Wilmington, North Carolina 28405
910. 509. 3131

Proposed Concrete Batch Plant Office for
Crete Solutions, LLC
2544 US 401 N
LILLINGTON, NORTH CAROLINA 27546

MECHANICAL SCHEDULES, NOTES & DETAILS
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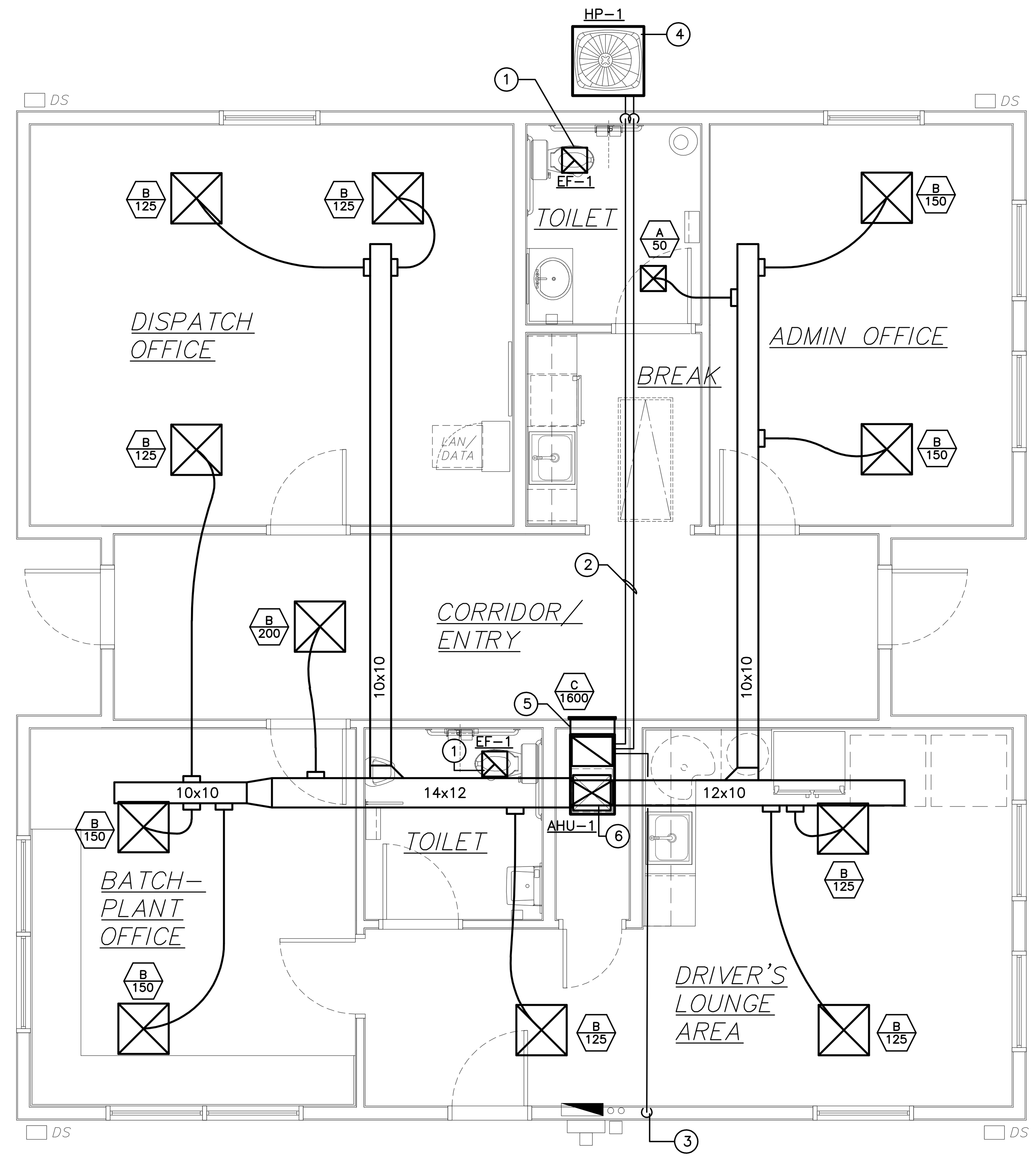

GENERAL NOTES:

1. ROUTE 6" EXHAUST TO WALL OR ROOF CAP AS CORRDINATED IN FIELD.
2. REFRIGERANT PIPING CONCEALED ABOVE CEILING AND IN BUILDING CONSTRUCTION, SIZE AS RECOMMENDED BY UNIT MANUFACTURER. (TYP.)
3. 1"CONDENSATE DRAIN PIPING WITH PROPER PITCH. TERMINATE OUTSIDE BUILDING, MIN. 8" ABOVE GRADE WITH ELBOW LOOKING UP. (TYP.)
4. MOUNT UNIT ON 4" CONCRETE PAD OR PAVED SURFACE.
5. ROUTE 8"O.A. TO INTAKE VENT VIA BACKDRAFT DAMPER AND BALANCE DEVICE. MINIUMUM 10' BETWEEN O.A. INTAKE AND EXHAUST FAN CAP.
6. 20 X 12 UP TO CEILING AREA.

(REF) SITE NORTH — PLAN NORTH

1 / M101 PROPOSED FLOOR PLAN — MECHANICAL

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

GRAPHIC BAR SCALE (FOOT UNITS) 0 2 4 8

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PLUMBING | MECHANICAL | ELECTRICAL

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Crete Solutions, LLC
2544 US 401 N.
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FLOOR PLAN — MECHANICAL

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DETAILED ELECTRICAL SPECIFICATIONS

SCOPE: FURNISH ALL MATERIALS, LABOR, TOOLS, EQUIPMENT AND SUPERVISION NECESSARY TO INSTALL COMPLETE ELECTRICAL POWER AND LIGHTING SYSTEM IN THE BUILDING AS FURTHER DESCRIBED ON THE ELECTRICAL CONTRACT DRAWINGS.

SUPPLY ALL MATERIALS, FITTINGS AND HARDWARE NECESSARY FOR COMPLETE OPERATING SYSTEMS WITHIN THE OBVIOUS INTENT OF THE DRAWINGS. NO ATTEMPT HAS BEEN MADE TO DETAIL OR LIST EACH AND EVERY ITEM OF MATERIAL. THE ELECTRICAL CONTRACTOR IS CAUTIONED TO READ THE ENTIRE PROJECT DRAWINGS AND SPECIFICATIONS TO ASSURE HIMSELF OF A THOROUGH KNOWLEDGE OF BUILDING CONSTRUCTION, STRUCTURAL RESTRICTIONS TO ELECTRICAL CONTRACT WORK AND TO ASSURE THAT NO REFERENCE ANYWHERE IN THE PROJECT DRAWINGS AND SPECIFICATIONS TO WORK BY THE ELECTRICAL CONTRACTOR IS OVERLOOKED.

CODES, PERMITS AND INSPECTIONS: THE LATEST EDITION OF THE STATE BUILDING CODE WHICH INCLUDES THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE IS HEREBY MADE A PART OF THIS SPECIFICATION. CODE REQUIREMENTS SHALL TAKE PRECEDENCE OVER THESE SPECIFICATIONS WHERE THE CODE REQUIREMENTS EXCEED THAT OF THE SPECIFICATIONS. HOWEVER, THE SPECIFICATIONS SHALL BE FOLLOWED WHERE THEY EXCEED CODE REQUIREMENTS. THE ELECTRICAL CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE OWNER, OBTAIN THE SERVICES OF THE LOCAL ELECTRICAL INSPECTOR TO MAKE ALL REQUIRED DURING CONSTRUCTION AND COMPLETED ELECTRICAL SYSTEM INSPECTIONS.

MATERIALS AND WORKMANSHIP: ALL MATERIAL BUILT INTO THIS PROJECT SHALL BE NEW OF EQUIVALENT OR BETTER QUALITY THAN THAT SPECIFIED. SPECIFIC NAMES AND CATALOG NUMBERS USED HEREIN ARE TO ESTABLISH THE ITEM FUNCTION, ARRANGEMENT AND QUALITY REQUIRED AND ARE NOT INTENDED TO RESTRICT COMPETITION. ALL MATERIALS SHALL BE UL LISTED AND LABELED FOR THE PARTICULAR APPLICATION AS USED ON THIS PROJECT.

CONDUCTORS: ALL CONDUCTORS SHALL BE COPPER (#10 AWG AND SMALLER SHALL BE SOLID, AND #8 AWG AND LARGER STRANDED) WITH THHN/THWN INSULATION, INSTALLED IN CONDUIT OR APPROVED CABLE ASSEMBLY. NM CABLE SHALL NOT BE USED. CONDUCTORS SHALL BE #12 AWG MINIMUM EXCEPT WITHIN LIGHT FIXTURES, LOW VOLTAGE CONTROLS OR COMMUNICATION/FIRE ALARM EQUIPMENT. CONDUCTOR COLOR CODE SHALL CONFORM TO THE NEC. CONDUCTORS SHALL BE CONTINUOUS FROM TERMINAL TO TERMINAL OR PULL BOX TO PULL BOX. JOINTS SHALL BE MADE WITH IDEAL "WIRENUTS."

RACEWAYS: RACEWAYS SHALL BE ELECTRICAL METALLIC TUBING (EMT) WITH THREADED STEEL HEXAGONAL COMPRESSION FITTINGS – NEITHER INDENTOR TYPE OR DIE METAL FITTING WILL BE ACCEPTED. CONDUIT UNDER THE FLOOR SLAB AND UNDER GROUND OUTSIDE THE BUILDING MAY BE PVC. FITTINGS IN EMT SHALL BE WEATHER TIGHT (THOMAS AND BETTS SERIES #5123 WITH NYLON INSULATED THROATS), BENDS SHALL BE FACTORY FABRICATED OR MADE "COLD" WITH BENDING TOOL, FREE OF KINKS OR RESTRICTIONS. NO SINGLE BEND SHALL BE IN EXCESS OF 90 DEGREES. THERE SHALL BE NO MORE THAN THE EQUIVALENT OF THREE (3) 90 DEGREE BENDS IN A GIVEN RACEWAY FROM PULL BOX TO PULL BOX. RIGID RACEWAY THREADS SHALL BE CUT STRAIGHT AND TRUE – PIPE ENDS SHALL BE REAMED AND SMOOTHED INSIDE AND OUT.

SUPPORT 1–1/2 INCH AND LARGER CONDUIT 10 FEET O/C OR LESS, AND 1 INCH AND SMALLER 6 FEET O/C MAXIMUM. RACEWAYS SHALL BE SUPPORTED DIRECTLY FROM BUILDING STRUCTURE WITH BOLTS, SCREWS, STRAPS, HANGER RODS AND BRACKETS. ALL METALLIC HARDWARE SHALL BE GALVANIZED OR CADMIUM PLATED. NAILS, WIRE AND/OR PERFORATED STRAPS WILL NOT BE ACCEPTED.

USE THREADED LOCKNUTS OUTSIDE AND THREADED LOCKNUT AND BUSHING INSIDE ALL RACEWAY CONNECTIONS TO BOXES, DEVICES, PANELS AND GUTTERS. USE NON–METALLIC BUSHINGS ON ALL 1–1/4 INCH AND LARGER CONDUIT. EXPOSED CONDUIT SHALL BE RUN STRAIGHT AND TRUE PARALLEL AND PERPENDICULAR TO PRIMARY BUILDING LINES.

BOXES AND DEVICES: ALL BOXES, PANELS AND EQUIPMENT SHALL BE SUPPORTED DIRECTLY FROM THE BUILDING STRUCTURE AND SHALL NOT DEPEND ON THE FEEDER RACEWAYS FOR SUPPORT. ALL ITEMS SHALL BE CAREFULLY ALIGNED SO THAT COVERS WILL FINISH FLUSH AND STRAIGHT. ALL UNUSED KNOCKOUTS SHALL BE CLOSED WITH BLANKING DEVICES. BOXES IN CONCRETE OR MASONRY SHALL BE 3–1/2 INCH DEEP (MINIMUM) SQUARE 16 GAUGE GALVANIZED STEEL – STEEL CITY SERIES GW. BOXES INSTALLED IN WOOD PARTITIONS SHALL BE STEEL CITY 3–1/2 INCH DEEP GANGABLE SQUARE CORNER TYPE. RECEPTACLES SHALL BE HUBBELL 5362 OR EQUAL. SWITCHES SHALL BE HUBBELL 1120 SERIES OR EQUAL. COVER PLATES SHALL BE IMPACT RESISTANT.

PULL BOXES SHALL BE 14 GAUGE GALVANIZED STEEL WITH BLANK COVER SIZED AS REQUIRED BY NATIONAL ELECTRICAL CODE.
LOCATE DEVICES AND EQUIPMENT ABOVE FINISHED FLOOR AS FOLLOWS UNLESS OTHERWISE SPECIFICALLY NOTED ON PLANS:
WALL SWITCHES – 4'–0" OR TO NEAREST MASONRY COURSE JOINT.
RECEPTACLES – 1'–6" OR TO NEAREST MASONRY COURSE JOINT.
LIGHT FIXTURES – AS NOTED ON FIXTURE SCHEDULE.

GROUNDING: THE ELECTRICAL SYSTEM AND ALL ELECTRICAL EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE. GREEN EQUIPMENT GROUND WIRE SHALL BE USED WITH ALL FEEDERS AND BRANCH CIRCUITS.

LIGHTING FIXTURES: LIGHTING FIXTURES AND LAMPS SHALL BE PROVIDED AND INSTALLED AS PER SCHEDULE. ALL FIXTURES SHALL BE CLEANED ON COMPLETION OF INSTALLATION.

TESTS: THE CONTRACTOR SHALL MEGGER ALL BUSWAYS, CABLES AND CONTROL CONNECTIONS TO PROVE INSULATION RESISTANCE IS OF ACCEPTABLE VALUE.

PANELBOARDS: PROVIDE PANELBOARDS RATED AND SIZED AS INDICATED IN THE SCHEDULE AND SHOWN ON THE PLANS EQUAL TO SQUARE D COMPANY MODEL QO LOAD CENTER.

ACCEPTABLE MANUFACTURERS: SQUARE D, GENERAL ELECTRIC, SIEMENS, CUTLER–HAMMER

SAFETY SWITCHES: SWITCHES SHALL BE EQUAL TO SQUARE D TYPE GD WITH RATINGS AND FUSING PROVISIONS AS INDICATED.

IDENTIFICATION AND NAMEPLATES: PROVIDE ENGRAVED, LAMINATED BAKELITE (WHITE LETTERS ON BLACK SURFACE) NAMEPLATES SCREWED TO EACH PIECE OF ELECTRICAL DISTRIBUTION EQUIPMENT AS FOLLOWS:

A. PANELBOARDS, SWITCHBOARDS – DESIGNATION L1, P1, ETC.,VOLTAGE, PHASE NUMBER OF WIRES, ETC.; WORDING EXAMPLE: PANEL L1–208V–3 PHASE, 4 WIRE.

B. MOTOR STARTERS, DISCONNECT SWITCHES – UNLESS MOUNTED DIRECTLY ON OR ADJACENT TO IDENTIFY EQUIPMENT; WORDING EXAMPLE: EXHAUST FAN 1, MAKE–UP AIR UNIT.

PROVIDE TYPED DIRECTORIES FOR PANELBOARD BRANCH CIRCUIT IDENTIFICATION. IDENTIFY EACH CIRCUIT BREAKER AS TO THE EXACT ROOM NUMBERS OR AREA SERVED AND THE TYPE OF CIRCUIT, I.E. "ROOMS 101–104 LIGHTS" OR "CAFETERIA EXHAUST FAN".

EQUIPMENT CONNECTIONS: THIS CONTRACTOR SHALL BRING ALL REQUIRED ELECTRICAL SERVICE TO ALL EQUIPMENT ITEMS FURNISHED UNDER OTHER SECTIONS OF THESE SPECIFICATIONS OR BY THE OWNER, MAKE FINAL CONNECTIONS, AND LEAVE EQUIPMENT READY FOR OPERATION. THIS CONTRACTOR SHALL COORDINATE WITH ANY AFFECTED TRADE TO ASSURE CORRECT OPERATION OF THE EQUIPMENT ITEM.

CONTROL AND INTERLOCK WIRING: EXCEPT AS OTHERWISE INDICATED ON THE DRAWINGS, ALL CONTROL AND INTERLOCK WIRING SHALL BE PERFORMED BY THE RESPECTIVE CONTRACTORS.

THE ELECTRICAL SUBCONTRACTOR SHALL INSTALL ALL STARTERS, PILOT SWITCHES, CONTROL DEVICES AND MISCELLANEOUS ITEMS OF ELECTRICAL EQUIPMENT FURNISHED UNDER OTHER SECTIONS OF THESE SPECIFICATIONS THAT ARE NOT INTEGRALLY MOUNTED WITH THEIR ASSOCIATED EQUIPMENT.

SERVICE: THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING SERVICE WITH THE UTILITY COMPANY. PROVIDE UTILITY REQUIRED METERING PROVISIONS. PROVIDE CT CAN OR CONCRETE PAD FOR TRANSFORMER AS REQUIRED. PROVIDE CONDUIT FOR UTILITY IF REQUIRED. EC SHALL WORK DIRECTLY WITH THE UTILITY AND SHALL COMPLETE AND SUBMIT ALL LOAD DATA SHEETS REQUIRED FOR SERVICE APPLICATION.

EQUIPMENT CONNECTION SCHEDULE

CALLOUT	SYMBOL	VOLTS	AMPS	KVA	CIRCUIT	WIRE CALLOUT	MCA	MOCP	DISCONNECT	DISCONNECT DESCRIPTION
AHU		240V 2P 2W	45	10.8	A–1,3	2 #6, #10 GND	55	60	FUSED	240/60/2
HP		240V 2P 2W	24.2	5.8	A–2,4	2 #8, #10 GND	30	50	FUSED	240/60/2/3R
WH	$	120V 1P 2W	12.5	1.5	A–5	2 #12, #12 GND	16	20	TOGGLE SWITCH	

A

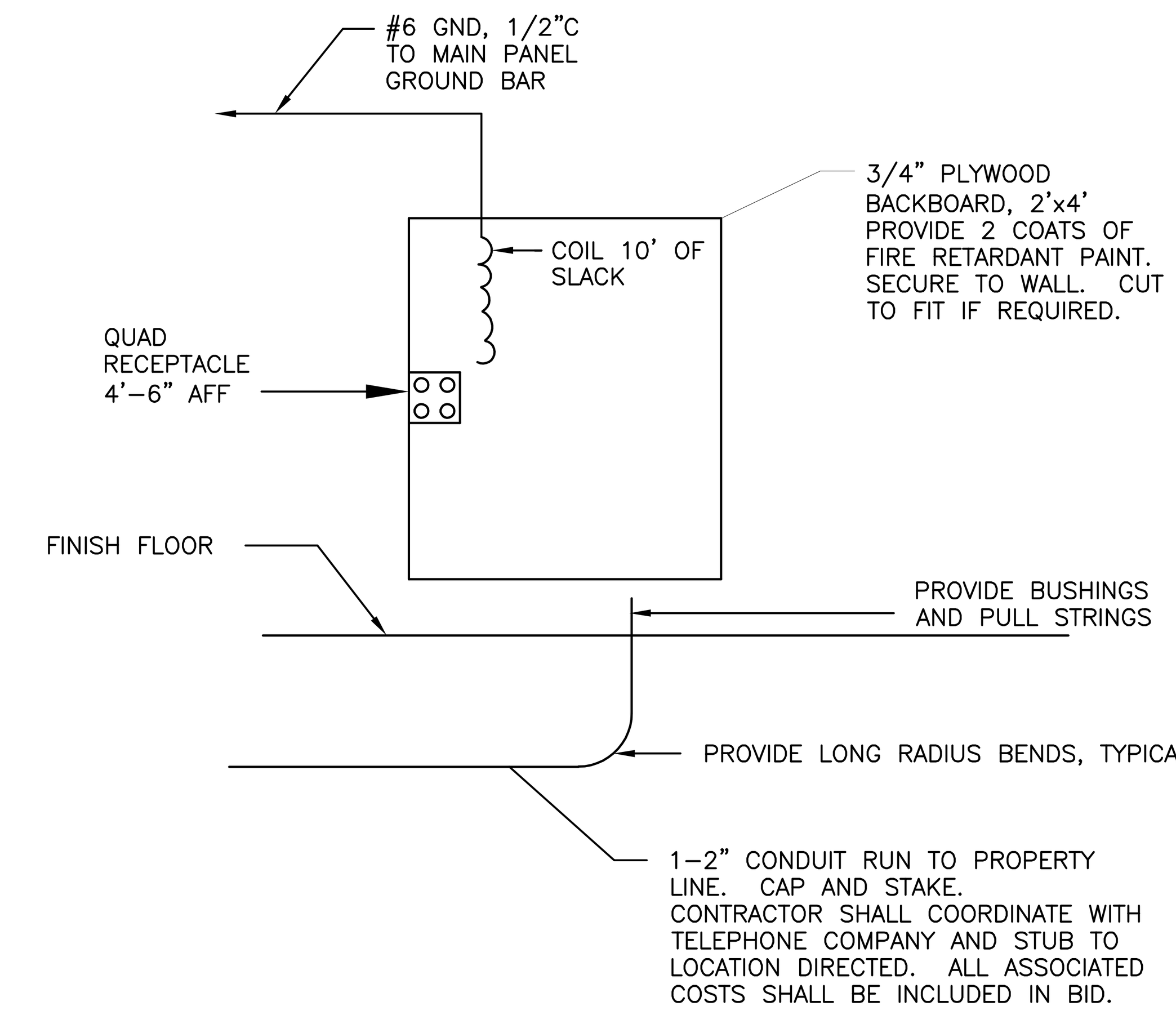
MOUNTING FLUSH	VOLTS 240/120V 2P 3W	AIC 22,000
FED FROM UTILITY	BUS AMPS 200	MAIN BRKR 200
NOTE	NEUTRAL 100%	LUGS STANDARD

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B
1	60/2	AHU	5.4		2	50/2	HP	2.9	
3	|			5.4	4	|			2.9
5	20/1	WATER HEATER	1.5		6	20/1	LIGHTING	0.621	
7	20/1	SPARE		0	8	20/1	LIGHTING		0.627
9	20/1	REFRIGERATOR	1.2		10	20/1	EXTERIOR LIGHTING	0.128	
11	20/1	VENDING		1.2	12	20/1	LAN		0.36
13	20/1	VENDING	1.2		14	20/1	TEL BOARD	0.36	
15	20/1	ADMIN RECEPTACLE		0.9	16	20/1	UC REFRIGERATOR		0.6
17	20/1	DISPATCH RECEPTACLE	0.54		18	20/1	BREAK RECEPTACLE	0.18	
19	20/1	DISPATCH RECEPTACLE		0.54	20	20/1	BREAK RECEPTACLE		0.18
21	20/1	TLTS, HALL, OUTSIDE RECEPTACLE	0.9		22	20/1	LOUNGE RECEPTACLE	0.18	
23	20/1	BATCH RECEPTACLE		0.54	24	20/1	LOUNGE RECEPTACLE		0.36
25	20/1	BATCH RECEPTACLE	0.54		26	20/1	SPARE	0	
27	20/1	LOUNGE RECEPTACLE		0.54	28	20/1	SPARE		0
29	20/1	SPARE	0		30	20/1	SPARE	0	
31	20/1	SPARE		0	32	20/1	SPARE		0
33	20/1	SPARE	0		34	20/1	SPARE	0	
35	–/1	SPACE		0	36	–/1	SPACE		0
37	–/1	SPACE	0		38	–/1	SPACE	0	
39	–/1	SPACE		0	40	–/1	SPACE		0
							TOTAL CONNECTED KVA BY PHASE	15.6	14.1

	CONN KVA	CALC KVA			CONN KVA	CALC KVA	
LIGHTING	1.38	1.72	(125%)	CONTINUOUS	1.5	1.88	(125%)
LARGEST MOTOR	5.8	1.45	(25%)	HEATING	10.8	10.8	(100%)
OTHER MOTORS	0	0	(100%)	COOLING	5.8	0	(0%)
RECEPTACLES	6.12	6.12	(50%>10)	NONCONTINUOUS	0	0	(100%)
KITCHEN EQUIP	4.2	3.36	(80%)	DIVERSE	0	0	(N/A)
				METERED DEMAND	0	0	(125%)
				TOTAL KVA	29.8	25.3	
				BALANCED AMPS		106	

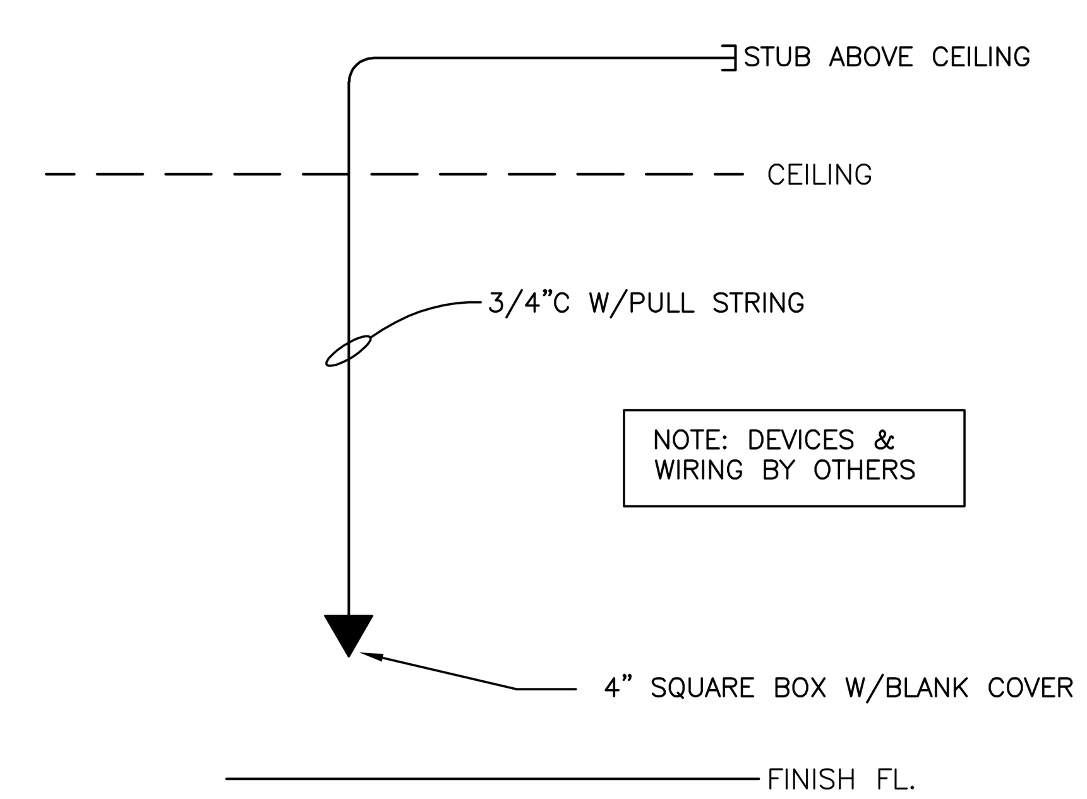
ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
———	CONDUIT
– – – – – –	CONDUIT UNDERFFLOOR OR UNDERGROUND
	ARROW INDICATES HOMERUN, TICKMARKS: NEUTRAL,PHASE,GND.
	POWER PANEL
▼	DATA/COMM OUTLET
(J)	JUNCTION BOX
	DISCONNECT SWITCH; FUSED; NONFUSED
FPN	FUSE PER NAMEPLATE
S_m	MOTOR TOGGLE SWITCH
	MOTOR
	EXISTING OR BY OTHERS
	LIGHT FIXTURE
S, S_3, S_4	SINGLE POLE SWITCH , 3 WAY, 4 WAY
S_D, S_{D3}	DIMMER SWITCH, 3–WAY DIMMER SWITCH
AFF	ABOVE FINISHED FLOOR
	DUPLEX RECEPT , ABOVE COUNTER
WP , GFI	WEATHERPROOF , GROUND FAULT
	QUAD–PLEX RECEPTACLE



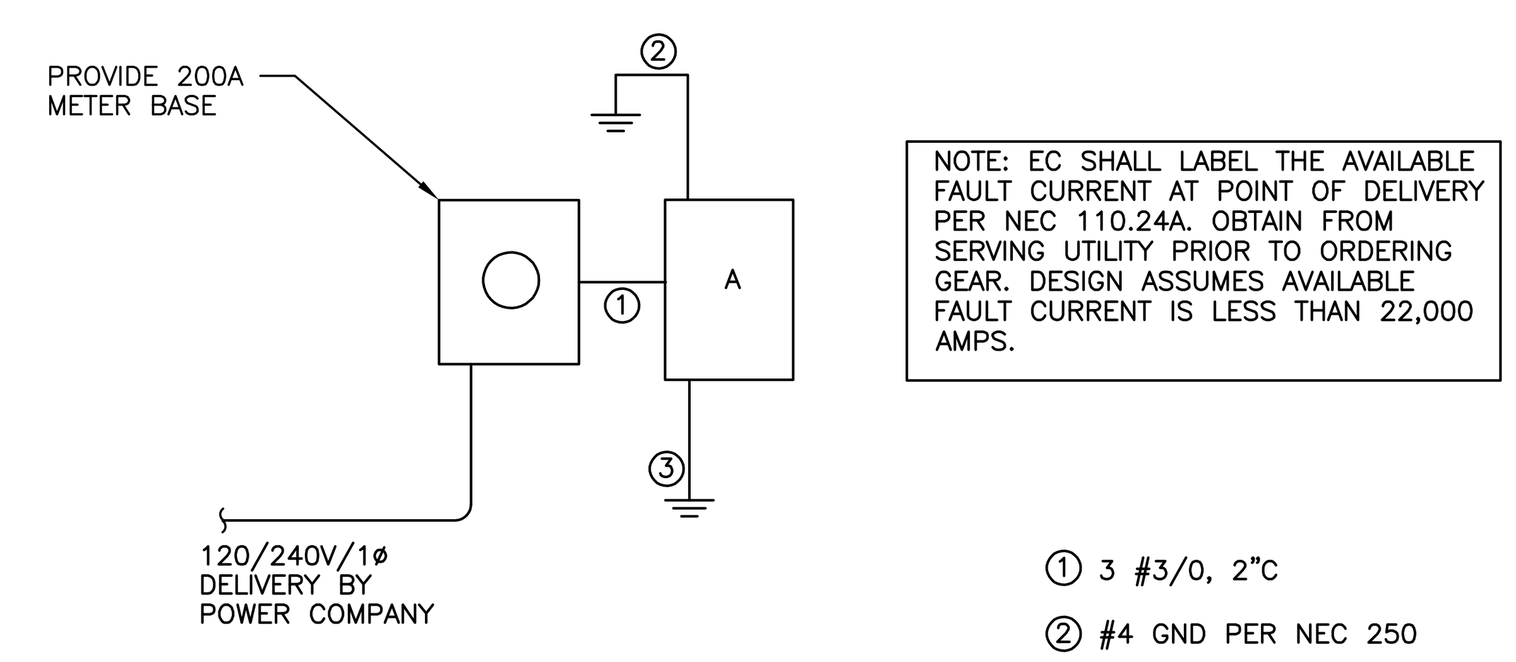
TELEPHONE SERVICE DETAIL

NTS



TYPICAL DATA/COMM OUTLET

NTS



NOTE: EC SHALL LABEL THE AVAILABLE FAULT CURRENT AT POINT OF DELIVERY PER NEC 110.24A. OBTAIN FROM SERVING UTILITY PRIOR TO ORDERING GEAR. DESIGN ASSUMES AVAILABLE FAULT CURRENT IS LESS THAN 22,000 AMPS.

(1) 3 #3/0, 2"C

(2) #4 GND PER NEC 250

(3) #6 SUPPLEMENTAL GROUND

POWER RISER

NTS

THIS SHEET SHOWS BASIC DRAFTING STANDARDS

PROJECT NO. 14450

TOPSAIL ENGINEERING, INC
PLUMBING | MECHANICAL | ELECTRICAL

Design Elements
Michael L. Saieed, Jr., AIA, AIBD
Architect
1213 Culbreth Drive, Suite 142
Wilmington, North Carolina 28405
910 509 3131

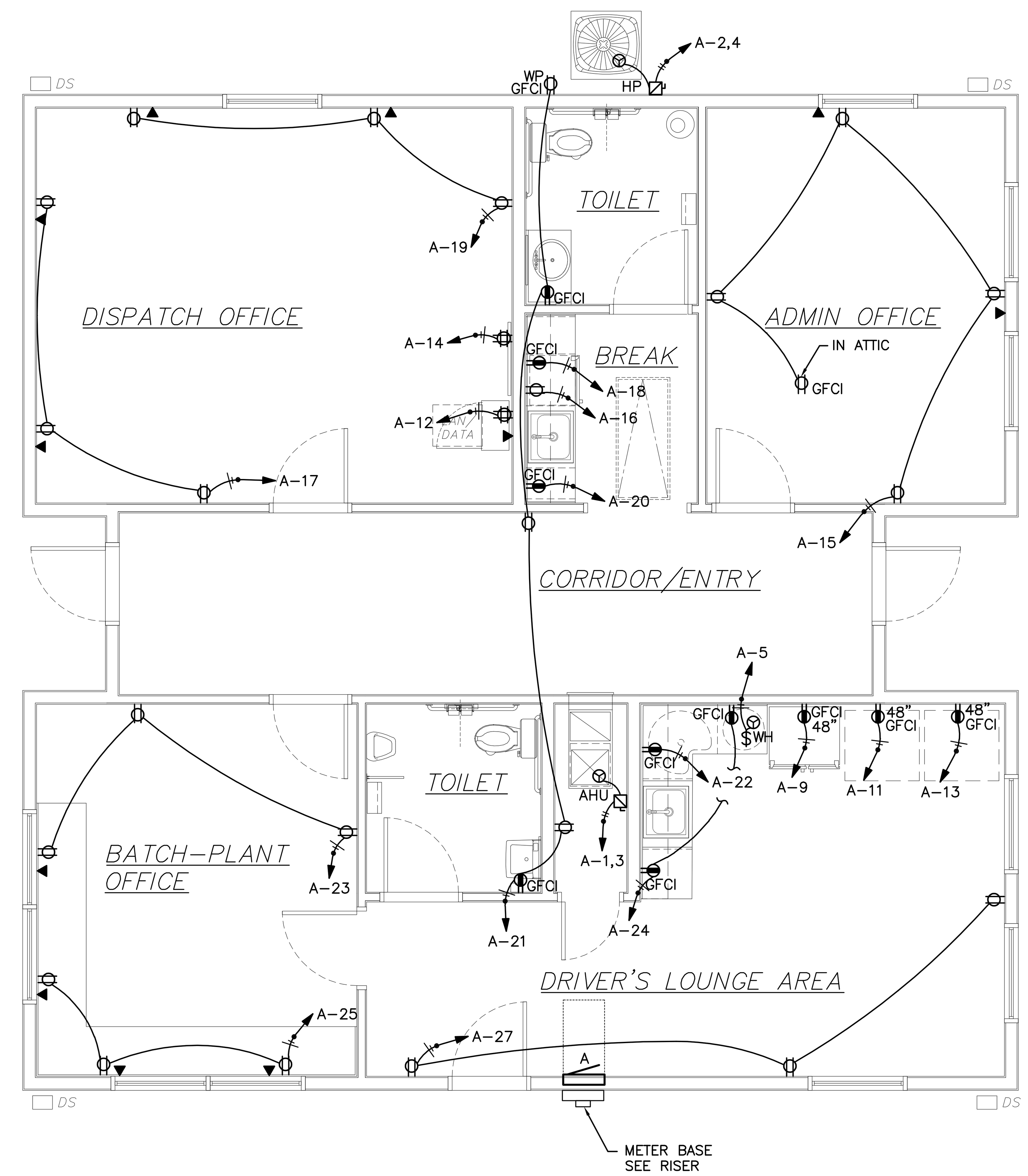
Proposed Concrete Batch Plant Office for Crete Solutions, LLC
2544 US 401 N.
LILLINGTON, NORTH CAROLINA 27546

ELECTRICAL SCHEDULES, NOTES & DETAILS

job status **Construction Document - Issued for Construction**

date	15 DEC, 2021
job no.	CRETE/BUS
drawn by	RSG
checked by	GLM
drawing no.	E100
revision no.	

no.	date	revision



(REF) SITE NORTH

PLAN NORTH

1 E101 PROPOSED FLOOR PLAN — POWER

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

GRAPHIC BAR SCALE (FOOT UNITS)
0 2 4 8

no.	date	revision

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PROJECT NO. 14450

TOPSAIL ENGINEERING, INC
PLUMBING | MECHANICAL | ELECTRICAL

SEAL 018518 12/15/21 GREGORY L. McDOWELL

Design Elements
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2544 US 401 N
LILLINGTON, NORTH CAROLINA 27546

FLOOR PLAN — ELECTRICAL — POWER

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LUMINAIRE SCHEDULE

CALLOUT	LAMP	DESCRIPTION	MOUNTING	MODEL	INPUT WATTS	NOTE 1	QUANTITY	VOLTS
A	LED	2x4 BASKET TROFFER	CEILING	DAY-BRITE 2EVG38L850UNVDIM	37		22	120
B	LED	WRAPAROUND	SURFACE	DAY-BRITE OWL440L835UNVDIM	37		1	120
C	LED	2' STRIP	WALL	DAY-BRITE FSS220L840UNVDIM	17		1	120
D	LED	DOWNLIGHT	RECESSED	LIGHTOLIER P6RD10NZ10UVB P6RD835VB P6RDCC	10		2	120
E	INCLUDED	EMERGENCY	WALL	CHLORIDE CFX6			3	120
ER	INCLUDED	REMOTE HEAD	WALL	CHLORIDE VLL2R			3	120
EX	LED (EXIT) INCLUDED (EM)	EXIT/EM COMBO	WALL/CEILING	CHLORIDE VCRW			3	120
F	AS REQUIRED	VANITY	WALL	SELECTED BY OWNER	100	100W MAX	2	120
G	LED	KEYLESS FIXTURE	SURFACE	SELECTED BY CONTRACTOR	60		1	120
OA	LED	EXTERIOR SCONCE	WALL	STONCO LPWZ-8BZ	14	UL DAMP LABEL	2	120
OB	LED	EXTERIOR SCONCE	WALL	LIGHTOLIER P6RD15NZ10UVB P6RD840VB P6RDCC	100	UL WET LABEL	1	120

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

METHOD OF COMPLIANCE:

Energy Code: ☒ Prescriptive ☐ Performance

ASHRAE 90.1: ☐ Prescriptive ☐ Performance

Lighting schedule
- lamp type required in fixture: See Fixture Schedule
- number of lamps in fixture: See Fixture Schedule
- ballast type used in the fixture: See Fixture Schedule
- number of ballasts in fixture: See Fixture Schedule
- total wattage per fixture: See Fixture Schedule

Building Area: ● Space by Space: ____

total interior wattage specified vs allowed: 1088/1312

total exterior wattage specified vs allowed: 48/780

Additional Prescriptive Compliance
- ☒ 506.2.1 More Efficient Mechanical Equipment
- ☐ 506.2.2 Reduced Lighting Power Density
- ☐ 506.2.3 Energy Recovery Ventilation Systems
- ☐ 506.2.4 Higher Efficiency Service Water Heating
- ☐ 506.2.5 On-Site Supply of Renewable Energy
- ☐ 506.2.6 Automatic Daylighting Control System
- ☐ N/A EXISTING/RENOVATION

DESIGNER STATEMENT:
To the best of my knowledge and belief, the design of this building complies with the requirements of Chapter 5 of the 2012 North Carolina State Energy Code.

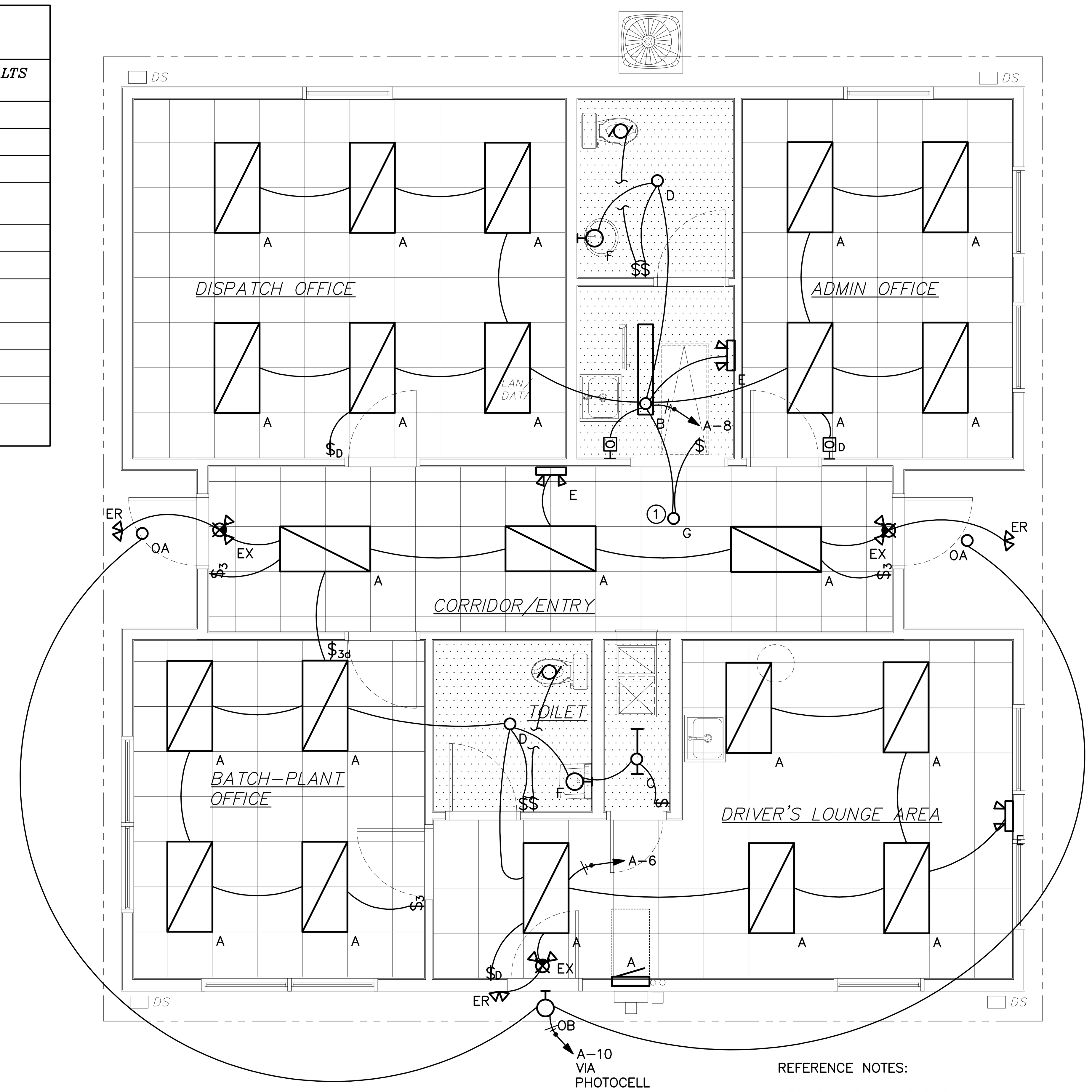
SIGNED: [signature]

NAME: Gregory McDowell

TITLE: Professional Engineer

SWITCH SCHEDULE

SYMBOL	NOTE 1
$ D	DIMMER SWITCH
$	Single Pole Switch
D	0-10V LOCAL WALL MOUNT DIMMER / SENSOR WATTSTOPPER PW-311
	WALL BOX OCCUPANCY SENSOR GREENGATE ONW-P-1001-MV-W
$ 3	3-WAY SWITCH
$ 3d	3-Way Dimmer



NOTE: DIMMERS SHALL BE SLIDE TYPE WITH PRE-SET, COMPATIBLE WITH FIXTURES/LAMPS TO BE CONTROLLED. SIZE FOR MINIMUM 125% OF LOAD CONTROLLED. PROVIDE 0-10V DIMMING CONTROL WIRING WHERE REQUIRED.

REFERENCE NOTES:

① PROVIDE KEYLESS FIXTURE W/LED LAMP IN ATTIC SPACE.

(REF) SITE NORTH — PLAN NORTH

1 / E102 PROPOSED FLOOR PLAN — LIGHTING

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

GRAPHIC BAR SCALE (FOOT UNITS) 0 2 4 8

no.	date	revision

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SEAL 018518 12/15/21 GREGORY L. MCDOWELL — NORTH CAROLINA

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FLOOR PLAN — ELECTRICAL — LIGHTING

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