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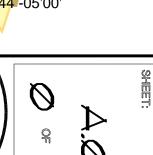
Columbia County, Florida

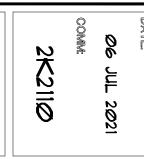
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LIFE SAFETY PLAN

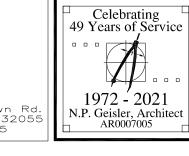






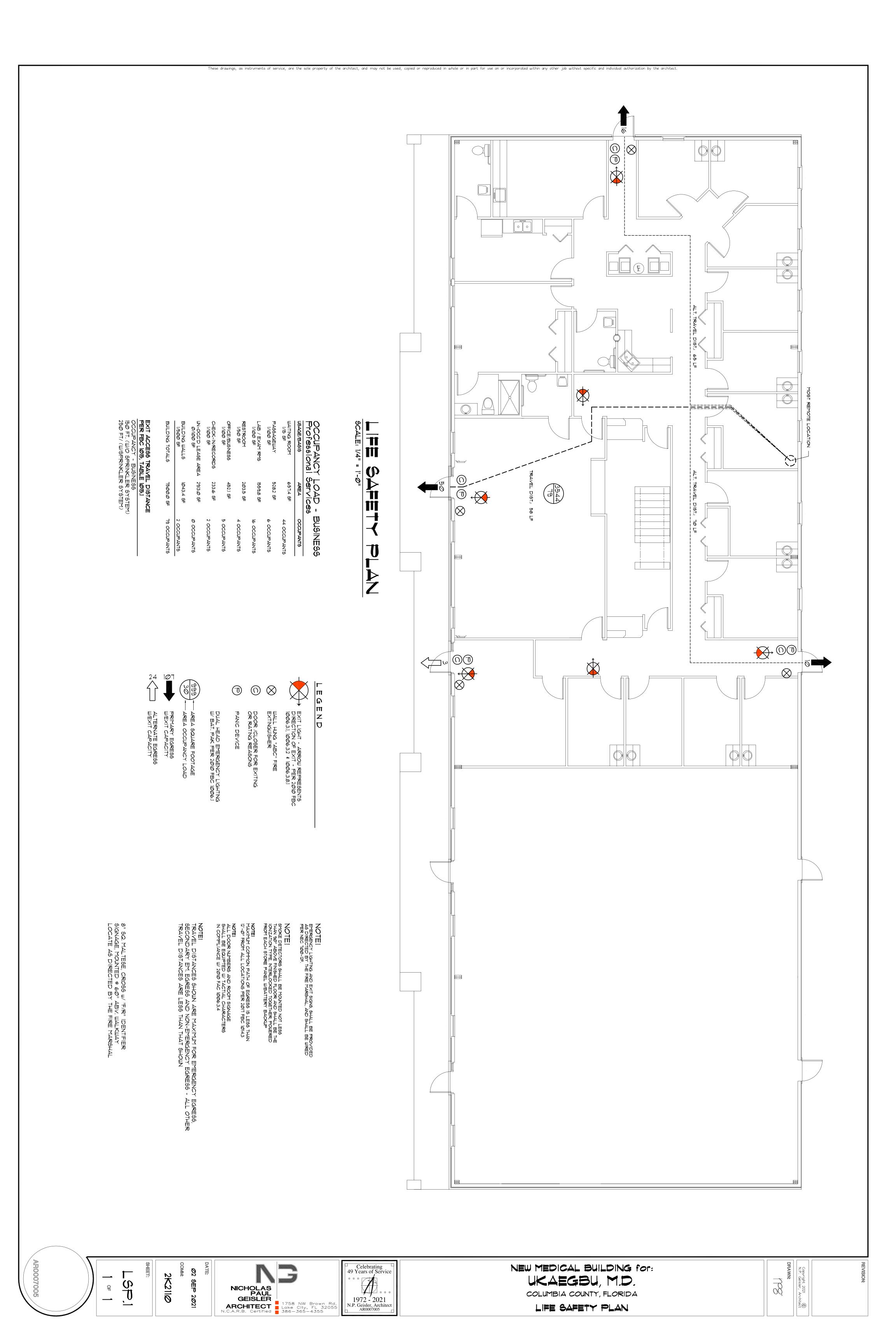












CHNET AL THE CONTRACTOR SHALL INDEMNIFY THE OWNER AGAINST ALL CLAIMS, WHETHER FROM PERSONAL INJURY OR PROPERTY DAMAGE, ARISING FROM EVENTS ASSOCIATED WITH THE WORK PERFORMED UNDER THE CONTRACT FOR THIS PROJECT. NOTES:

- THE CONTRACTOR SHALL PAY FOR ALL PERMITESTS AND THE LIKE THAT MAY BE REQUIRED IOUS AUTHORITIES HAVING JURISDICTION OVER BE THEY CITY, COUNTY, STATE OR FEDERAL. THE CONTRACTOR AND/OR SUB-CONTRACTORS SHARANT ALL WORK FOR A PERIOD OF ONE YEAR FOLLD ATE OF FINAL COMPLETION AND ACCEPTANCE BY DEFECTS IN MATERIALS, EQUIPMENT, COMPONENTS AMANSHIP SHALL BE CORRECTED AT NO FURTHER CONNER DURING THE ONE YEAR WARRANTY PERIOD. AT THE OWNER'S OPTION, A WARRANTY INSPECTION SHALL BE DERFORMED DURING THE ELEVENTH MONTH FOLLOWING THE COMMENCEMENT OF THE WARRANTY PERIOD, FOR THE PURE-00SE OF DETERMINING ANY WARRANTY WORK THAT MAY BE REQUIRED. THE CONTRACTOR SHALL BE PRESENT DURING THINSPECTION IF REQUESTED BY THE OWNER. THIS PROJECT
- ALL WORK SHALL BE IN ACCORDANCE W/ APPLICABLE CODES AND LOCAL REGULATIONS, INCLUDING APPLICABLE ENERGY CODES. ALL COMPONENTS OF THE BUILDING SHALL MEET WITH THE MINIMUM ENERGY REQUIREMENTS OF THE BUILDING CODE. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT IN WRITING PRIOR TO THE COMMENCEMENT OF THE WORK. THE OWNER SHALL FILE A "NOTICE OF COMMENCEMENT" PRIOR TO THE BEGINNING THE THE PROJECT AND THE CONTRACTOR(S) SHALL FILE "NOTICE TO OWNER" AND PROVIDE "RELEASE OF LIEN" FOR ALL PAYMENT REQUESTS PRIOR TO DISBURSEMENT OF ANY FUNDS. , AND ALL DISPUTES ARISING FROM EVENTS ASSOCIATED THE CONSTRUCTION OF THIS PROJECT BETWEEN THE IER, CONTRACTOR(S) AND SUPPLIERS SHALL BE RESOLVEDUGH BINDING ARBITRATION.
- ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY BE PRESSURE TREATED. . INSULATION SHALL BE LEFT EXPOSED AND ALL LABLES T INTACT ON THE WINDOWS AND DOORS UNTIL INSPECTED THE BUILDING OFFICIAL.

GENERAL H.V.A.C. NOTES

- HYAC SUB-CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT TO INSTALL A COMPLETE & OPERATING HYAC SYSTEM. SUB-CONTRACTORS PROVIDING HYAC INSTALLATION SHALL BE SUB-JECT TO THE PROVISIONS OF NOTES I THRU 6, GENERAL NOTES/D.Ia.
- IT IS THE HYAC SUB-CONTRACTOR'S RESPONSIBILITY NFPA-90A AND ALL APPLICABLE CODES. HVAC SYSTEM SHALL BE AS DETAILED IN THE PLANS (IF INCLUDED), OR SHALL BE AS DIRECTED BY THE OWNER IN CONSULTATION WITH THE HVAC SUB-CONTRACTOR. YAC SUB-CONTRACTOR SHALL FURNISH SHOP DWGS FOR DUCTWORK, ONDENSING UNIT 4 AIR HANDLER, EXHAUST FANS AND AIR DEVICES. 10 CO HTIM JJG
- FLEXIBLE DUCT SHALL BE FULLY ANNEALED, CORRUGATED ALUM-NUM W/13/4 LB. DENSITY FIBERGLASS INSULATION AND SHALL BE UL. LISTED. SHEET METAL DUCT SHALL BE LINED W/1" MATFACED DUCT LINER & WRAPPED W/13/4 LB. FOILFACED FIBERGLASS INSULATION. ALL FIBERGLASS DUCT SHALL BE FOILFACED, R4.2/R6.0 DUCTBOARD.
- ALL AIR DEVICES SHALL BE OF ALUMINUM CONSTRUCTION FOR WALL AND CEILING APPLICATIONS AND STEEL CONSTRUCTION IN FLOOR APPLICATIONS. ACCEPTABLE MANUFACTURER'S SHALL BE TITUS, METALAIRE, NAILORHART, HART & COOLIE OR AS DIRECTED BY THE OWNER. ALL EXHAUST AND OUTSIDE AIR DUCT SHALL BE GALYANIZED SHEET METAL CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH ASHRE, AND SMACNA STANDARDS.
- \overline{o} DO NOT USE LEAD BASED SOL MANDE E

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HYAC SUB-CONTRACTOR SHALL SUPPLY ALL CONTRACTORS, RELAYS, AND THERMOSTATS. THE ELECTRICAL SUB-CONTRACTOR SHALL PRO-VIDE ALL SWITCHES, DISCONNECTS & CONTROL WIRING. THERMOSTATS SHALL BE APPROVED BY THE EQUIPMENT MFG'R.

REQUIRED BY THE OWNER, THE HYAC SUB-CONTRACTOR SHALL JPPLY A TEST AND BALANCE REPORT IN ACCORDANCE WITH AIR ALANCE COUNCIL STANDARDS, SIGN AND SEALED BY A REGISTERED

ALL DUCT SIZES INDICATED INSIDE DIMENSIONS.

N THE TILANS

ALL EQUIPMENT SHALL BE FULLY WARRANTED FOR I YEAR AND THE COMPRESSOR(S) SHALL BE WARRANTED 5 YEARS FROM DATE OF FINA ACCEPTANCE, BY THE OWNER.

- AIR CONDITIONING CONDENSATE DRAIN PIPING SHALL BE THREADED STEEL PIPE, COPPER DRAIN, WASTE OR VENT PIPE AND FITTINGS, OR P.Y.C., SEE NOTE 12, BELOW. INSULATE ALL CONDENSATE PIPING EXCEPT WHERE UNDERGROUND, AND ELECTRIC HEAT WRAP WHERE EXPOSED TO FREEZING CONDITIONS.
- P.Y.C. SCHEDULE 40 PIPE AND FITTINGS MAY BE USED FOR SOIL, WASTE, VENT, RAINWATER OR CONDENSATE PIPING AS APPROPRIATE, WHERE APPROVED BY LOCAL BUILDING CODES & OFFICIALS. P.Y.C. MAY NOT BE USED TO PENETRATE CHASES OR FIRE RATED WALLS / CEILINGS. ALL FIXTURES MUST BE PROVIDED WITH READ AND WHERE PROVIDED, MARKED ACCESS PAN
- DIELECTRIC COUPLINGS ARE REQUIRED BETWEEN ALL DISSIMILAR METALS IN PIPING AND EQUIPMENT CONNECTIONS. FIXTURE AND INSTALL APPROVED
- ISOLATE COPPER PIPING FROM HANGERS INSULATOR PADS. *S*
- <u>@</u> PROVIDE 1/2" TRAP PRIMER LINE FOR ALL <u>П</u> SUPPORTS W/ HAIR FELT
- PROVIDE COMBINATION COVERPLATE / CLEANOUTS, FINISH AS DIRECTED BY TH ACCESS PANELS FOR ALL CLEANOUT PLUG FOR ED VALVES.

COORDINATE W/ THE ELECTRICIAN, PARTICULARLY ELECTRICAL Nr. 29, TO ASSURE SUITABLE SIZES OF BREAKERS, SWITCHES AND WIRING.

IT IS THE RESPONSIBILITY OF THE HYAC SUB-CONTRACTOR TO CO-ORDINATE LOCATION OF CEILING DIFFUSERS, GRILLES AND REGISTERS IN THE FIELD WITH THE ELECTRICIAN, LIGHTS AND ARCHITECTURAL ELEMENTS.

YAC SUB-CONTRACTOR SHALL PROVIDE & INSTALL FROITS, TRANSITIONS & BENDS REQUIRED TO PROVI

DE A COMPLETE

GENERAL MILLWORK NOTES

- SCOPE OF WORK INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING: FABRICATION AND DELIVERY OF MILLWORK, SHOWN IN THE DRAWINGS, TO THE JOB SITE, INSTALLATION OF CABINET HINGES, CATCHES, DRAWER & TRAY GUIDES, ADJUSTABLE SHELF STANDARDS & SURFACE BOLTS. MILLWORK SUB-CONTRACTOR PROVIDING CASEWORK, MILLWORK OR THE LIKE FOR THIS PROVISIONS OF NOTES I THRU 6 OF THE GENERAL NOTES, THIS SHEET.
- APPLICABLE STANDARDS OF "AWI QUALITY STANDARDS & GUIDE CIFICATIONS" APPLY TO THIS PROJECT, UNLESS NOTED OTHERWISE
- MILLWORK SUB-CONTRACTOR SHALL SUBMIT FOR APPROVAL BY THE OWNER, THE FOLLOWING ITEMS, PRIOR TO FABRICATING ANY MAT'LS OR MILLWORK: COMPLETE SET OF SHOP DRAWINGS, SAMPLES OF WD. SPECIES RECEIVING TRANSPARENT FINISH, MFR'S LITERATURE FOR ALL SPECIALTY ITEMS NOT MFD. BY THE ARCHITECTURAL WOODWORK FIRM AND HARDWARE SCHEDULE, SHOWING HARDWARE USED AT EA. LOCATION & CONFORMANCE W/ THE DESIGN INTENT OF THE DRAWINGS OR DIRECTIVES ISSUED BY THE OWNER. AM "CUSTOM" GRADE EXCEPT AS OTHERWISE NOTED OR DIRECTED BY THE OWNER, SHALL BE THE BASE STANDARD OF QUALITY REQ'D OR THIS WORK.
- PRODUCTS SHALL INCLUDE THE FOLLOWING:

 SOFTWOOD SOLID STOCK PINE, C OR BETTER
 HARDWOOD SPECIES AS SELECTED BY OWNER
 PLYWOOD, OPAQUE FINISH FIR, GRADE A/B
 PLYWOOD, TRANSPARENT FINISH SPECIES AS SELE
 PARTICLE BOARD HIGH DENSITY, W/ RESIN BINDER
 LAM. PLASTIC YFG, COLORS, PATTERNS & TEXTURE
 BY OWNER
 LAMINATING ADHESIVES POLYVINYL ACETATE, URE
 FORMALDEHYDE, CASEIN AS SELECTED BY OWNER
 I BINDER
- ASSEMBLE WORK AT MILL NSOFAR AS POSSIBLE. DELIVER SITE READY

ATE, UREA-

PROTECT MILLWORK FROM MOISTURE & DAMAGE WHILE IN TRANSIT TO THE JOB SITE. UNLOAD AND STORE IN A PLACE WHERE IT WILL BE PROTECTED FROM MOISTURE AND DAMAGE AND BE CONVENIENT FOR INSTALLATION.

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- FABRICATE WORK IN ACCORDANCE WITH MEAS THE JOB SITE. UREMENTS TAKEN AT
- LEAVE OPERATING HARDWARE (DANCE WITH T Σ Σ Σ NUFR'S DIRECTIONS.
- DAMAGED SURFACES SHALL BE REPAIRED TO MATCH UNDAMAGED ADJACENT PORTION OF THE WORK.

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PLUMBING NOTES:

- ALL WORKMANSHIP AND MATERIALS SHALL BE SUB-CONTRACTORS PROVIDING PLUMB ALL MATERIALS SHALL BE NEW. TERIALS AND INSTALL-IN STRICT ACCORDANCE ORDINANCES.
- ALL WORK SHALL BE PREFORTED BY A LICENTRACTOR IN A FIRST CLASS WORKMANLIKE MANSYSTEM SHALL BE FULLY OPERATIONAL. SED PLUMBING CON-
- ALL EXCAVATION & BACKFILL AS REQUIRED FOR THIS PHASE OF THE CONSTRUCTION SHALL BE PART OF THE PLUMBING SUB-CONTRACTOR'S RESPONSIBILITIES. (IF INCLUDED) ARE DIA-
- PLUMBING FLAT PLANS AND RISER DIAGRAMS GRAMATIC. DO NOT SCALE THE DRAWINGS FOR THE PLUMBING FIXTURES. ALL WORK SHALL BE COORDINATED OF THE CONSTRUCTION.
- WATER PIPING SHALL BE TYPE L COPPER UP TO 1", 4 TYPE K FOR ALL LARGER SIZES. ALL UNDERGROUND PIPING SHALL BE TYPE K COPPER. AT THE OWNERS OPTION SUPPLY PIPING MAY BE C.P.Y.C., SCHEDULE 40 OR SCHEDULE 80. * RAINWATER PIPING SHALL BE CAST IRON NO-HUBADE WITH NEOPRENE GASKETS AND STAINLESS STEEL SPIGOT CAST IRON BELOW GRADE W/ LEAD * OAKUM OWNERS OPTION, P.Y.C., SCHEDULE 40, SEE NOTE 12.

- ILY ACCESSIBLE STOPS IELS.

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FILTERS SHALL BE DISPOSABLE TYPE AND HAVE INITIAL SHARE WEIGHT ARRESTANCE OF 10% AND A CLEAN PRESSURE DROP OF 0.15. PROVIDE 2 SETS, ONE DURING CONSTRUCTION AND ONE FOR USE AT FINAL ACCEPTANCE.

ALL WORK IN THIS TRADE SHALL TRADES SO AS TO AVOID CONFLOFTHE JOB.

ICTS OR HINDERANCE TO COMPLETION

CONDENSATE DRAIN PIPING SHALL ARMAFLEX INSULATION.

BE NOULATED WITH 1/2" THICK

- ARRESTERS ON MAIN LINE OR RISERS
- OR DRAINS FROM NEAR

Γ H C T 70 | C A L NOTES:General

- NSTALL ALL ELECTRICAL WORK IN CONFORMANCE WITH THE NEC 2020 Edition, and it's amendments as adopted by the Permit Issuing authority at the time of construction.
- NSTALL ONLY COPPER WIRING ON THIS PROJECT: THW, TW, THUN, THIN OR NY CABLE, UNLESS NOTED OTHERWISE. ALL CONDUCTORS *O 4 SMALLER MAY BE SOLID. ALL CONDUCTORS *O AND LARGER SHALL BE STRANDED TYPE.

- NSTALL ONLY HIGH POWER FACTOR BALLASTS AT FLUORESCENT FIXTURES.
- NSTALL GFI BREAKERS OF DEVICES AT ALL BATHROOM, REST-ROOM, KITCHEN, GARAGE AND EXTERIOR RECEPTACLES AND ASNOTED ON THE DRAWINGS.

- 10TOR STARTERS SHALL BE MANUAL OR MAGNETIC WITH OVER-OAD RELAYS IN EACH HOT LEG.

MATERIALS TO COMPLY WITH THE FOI

TOMING:

SEC. 45 OF ADA SEC. 43 OF ADA APPLICABLE SECTIONS OF NEPA FIRE CODES APPLICABLE SECTIONS OF NEPA 101-LATEST LIFE

FIXTURES, DEVICES AND RELATED HARDWARE NOT SPECIFOR MENTIONED ELSEWHERE ARE TO BE OWNER SELECTED COMPLY WITH THE ABOVE APPLICABLE ADA SECTIONS.

ICALLY DEFINED

- THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF THE POWER COMPANY & TELEPHONE COMPANY.

- CIRCUITS ON PANEL SCHEDULE (AND PLANS) ARE TO DETERMINE LOAD DATA AND SIZE. THE CONTRACTOR SHALL PROVIDE CIRCUITS AND ROUTING OF CONDUITS AND WIRING TO SUIT JOB CONDITIONS, AND BALANCE THE JOB, THROUGHOUT.
- CHECK EQUIPMENT FOR PROPER VOLTAGE, PHASE AND AMPERAGE RATING PRIOR TO CONNECTION TO CIRCUITS.
- ELECTRICAL EQUIPMENT AIC RATING AND FEEDER SIZE SHOWN ON THE PLANS ARE DESIGNED FOR MAX. AVAILABLE FAULT CURRENT AND MAX. ALLOWABLE VOLTAGE DROP, RESPECTIVELY WHEN CONDUIT RUNS EXCEED 200 FEET, PULL BOXES SHALL BE INSTALLED SO THAT NO PULL EXCEEDS THIS DISTANCE.

DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION OF EQUIPMENT. CONFIRM WITH OWNER.

DESIGN VALUES/LOADS & CODES
WIND DESIGN SPEED: 130 MPH, UNLESS NOTED OTHERU

CONSTRUCTION DOCUMENTS

SOIL DESIGN STATEMENT:
FOOTING DESIGN IS BASED UPON 1000 PSF:
VIDED BY CLEAN SAND, GRAVEL OR STONE
16: CLAY, HIGH LEVEL OF ORGANICS OR OTH
REQUIRE FOUNDATION MODIFACATIONS.

TROJECT INFORMATION / NOTES

- FROUNDING: GROUND ALL MAIN DISCONNECTS TO STANDARD FROUND ROD(S) AND TO COLD WATER SUPPLY AS PER ARTICLE 50 OF NEC-1994.

LIFE SAFETY: NFPA-101 - LATEST

ELECTRICAL CODE: NATIONAL ELECTRIC

100 100 100

- 2020 EDITION

1th EDITION

REPONT I

PLAN SETS

ANGES TO FINAL PLASE DO NOT MAKE ANY STRUCTULTING WITH THE ARCHITECT.
ILITY FOR STRUCTURAL DAMAPLANS OR BY SUBSTITUTION ON THE PLANS.

BUILDING CODE: 2020 FLORIDA BUILDING

LIVE LOADS: Ist FLOOR: 40PSF, 2nd FLOOR BY SHAPE FACTORS APPLIED TO THE WIND DESIGN WIND SPEED.

FORCE GENERATED BY THE

NOT SCALE OF ARTEST ARITHMETIC MAY BE NOT DIMENSIONED.

SHOWN ON THE PLANS TO LOCATE BE USED TO DETERMINE THE LOC.

ALL ITEMS.

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THESE

SNA SNA

- PROVIDE CONTINUITY OF NEUTRAL ON MULTI-BRANCH CIRCUITS BY SPLICING AND BRINGING OUT A TAP, ASSURING NO OPEN-INGS OF NEUTRAL IN REPLACEMENT OF A DEVICE.
- COLOR CODE MULTI-CIRCUIT WIRING AS FOLLOWS: NEUTRAL WHITE, GROUND GREEN, LINE ALL OTHER COLORS.
- NSTALL ONLY THOSE ELECTRICAL DEVICES THAT BEAR A "ULOR OTHER RECOGNIZED TESTING LAB LABEL. ALL MATERIALS SHALL BE NEW.
- NSTALL NON-FUSED DISCONNECT SWITCHES AT ALL PIECES OF ELECTRICAL EQUIPMENT LOCATED WHERE SAID EQUIPMENT IS NOT VISIBLE FROM THE CIRCUIT BREAKER THAT PROTECTS IT: SIZE IN ACCORD WITH THE LOAD, ALL DISCONNECT SWITCHES SHALL BE H.P. RATED, HEAVY DUTY, QUICK-MAKE QUICK-BREAK TYPE ENCLOSURES SHALL BE AS REQ'D FOR EXPOSURE

WATERCLOSETS: SHALL COMPLY WITH HEIGHT OF SEAT SHALL BE IN ACC

ORDANCE WITH SEC.

DISPENSERS: SHALL

COMPLY WITH SE

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AVATORIES, SINKS & MIRRORS: SHALL HEIGHTS SHALL COMPLY WITH SEC. EXPOSED PIPES & SURFACES SHALFAUCETS SHALL COMPLY WITH SECMIRRORS SHALL COMPLY WITH SECMIRRORS

T W SECTION.

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GRAB BARS: SHALL

COMPLY WITH SE

4.16.4 OF

RESTROOM NOTES

A.D.A NOTES:

ACCESSIBILITY

- ISOLATE DISSIMILAR CONDUIT AND TUBING METALS FROM SOIL, WATER AND GAS PIPING AND OTHER BUILDING MATERIALS WHERE DAMAGE BY FRICTION OR ELECTROLYSIS MAY OCCUR, EXCEPT WHERE ELECTRICAL GROUND IS PROVIDED.
- FURNISH AND INSTALL ALL ELECTRICAL DEVICES AND ITEMS REQUIRES FOR A COMPLETE, OPERATING SYSTEM, PROVIDING THE FUNCTIONS AS DETAILED IN THE PLANS (AND SPECS).
- OUTLET BOXES SHALL BE PRESSED STEEL OR PLASTIC OR ALL DRY LOCATIONS, FOR WET LOCATIONS, CAST ALLOY WITH THREADED HUB OUTLET BOXES SHALL BE INSTALLED.
- PRESENT TO VERIET PROPER FUNCTION PRIOR TO C.O.

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- COORDINATE ALL WORK THROUGH GC TO AVOID CONFLICTS. CO-ORDINATE WITH HYAC CONTRACTOR AND ELECTRONICS SYSTEMS CONTRACTORS SO THAT A COMPLETE, FUNCTIONING SYSTEM IS INSTALLED, IN EACH CASE, WITH NO EXTRA COST TO THE OWNER.
- ALL PANEL SCHEDULES SHALL BE FULLY FILLED OUT AND SHALI BE TYPEWRITTEN. EA. CIRCUIT SHALL BE CLEARLY IDENTI-FIED A TO WHAT IS INCLUDED ON SAID CIRCUIT. EMERGENCY LIGHTING AND EXIT SIGNS, IF INDICATED ON THE PLANS, SHALL BE WIRED PER NEC 100-12F.
- IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW EVERY MINOR DETAIL OF THE CONSTRUCTION.

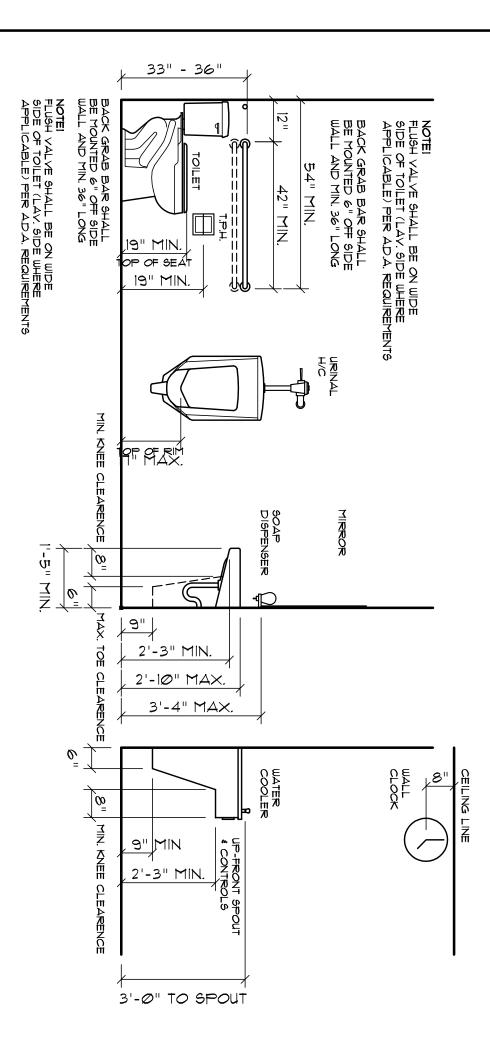
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- FURNISH AND INSTALL DISCONNECT SWITCHES AND WIRING FOR HVAC SYSTEM AS PER MANUFACTURER'S RECOMMENDATIONS. CONTROLS ARE TO BE SUPPLIED BY THE HVAC CONTRACTOR, CONNECTED BY THE ELECTRICAL CONTRACTOR.
- ALL RACEWAYS BELOW GROUND SHALL BE A MINIMUM OD 3/4". - CIRCUIT BREAKERS, TWO AND THREE POLE, SHALL BE MMON TRIP. NO TIE HANDLES OR TANDEMS SHALL BE CEPTABLE.

22.

- ELECTRICAL CONTRACTOR SHALL VERIFY ALL COMPONENTS FOR ALL ELECTRICAL APPLICATIONS & DETERMINE THE CORRECTNESS OF SAME. ANY DISCREPANCY SHALL BE REPORTED TO THE OWNER PRIOR TO FABRICATING ANY MATERIALS, ORDERING COMPONENTS OR DOING ANY WORK. ALL FUSES, UNLESS NOTED OTHERWISE ON THE DRAWINGS, SHALL BE CURRENT LIMITED TYPE (C.L.) RATED 200,000 AIC
- PANEL BOARDS SHALL BE CIRCUIT BREAKER TYPE, VERI

2010 FLORIDA ACCESSIBILITY CC FULL IMPLEMENTATION OF THE RULES AND REQUIR ACCESSIBILITY CODE SHALL BE PART OF THIS PR RESTRICTIVE OF THE REQUIREMENTS OF EITHER TH CODE OR THE AMERICANS WITH DISABILITIES ACT NOTE! ALL DOOR HARDWARE LATCHSETS/LOCKSETS SHALL BE LEVER TYPE, OR OTHER APPROVED HARDWARE FOR MEANS OF EGRESS, TYPICAL, T.O. 3'-4" MAX. 3'-4" MAX. 3'-4" MAX. 0 4'-Ø" MAX. _ 5'-Ø" MAX



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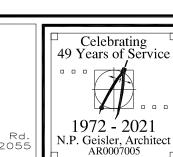
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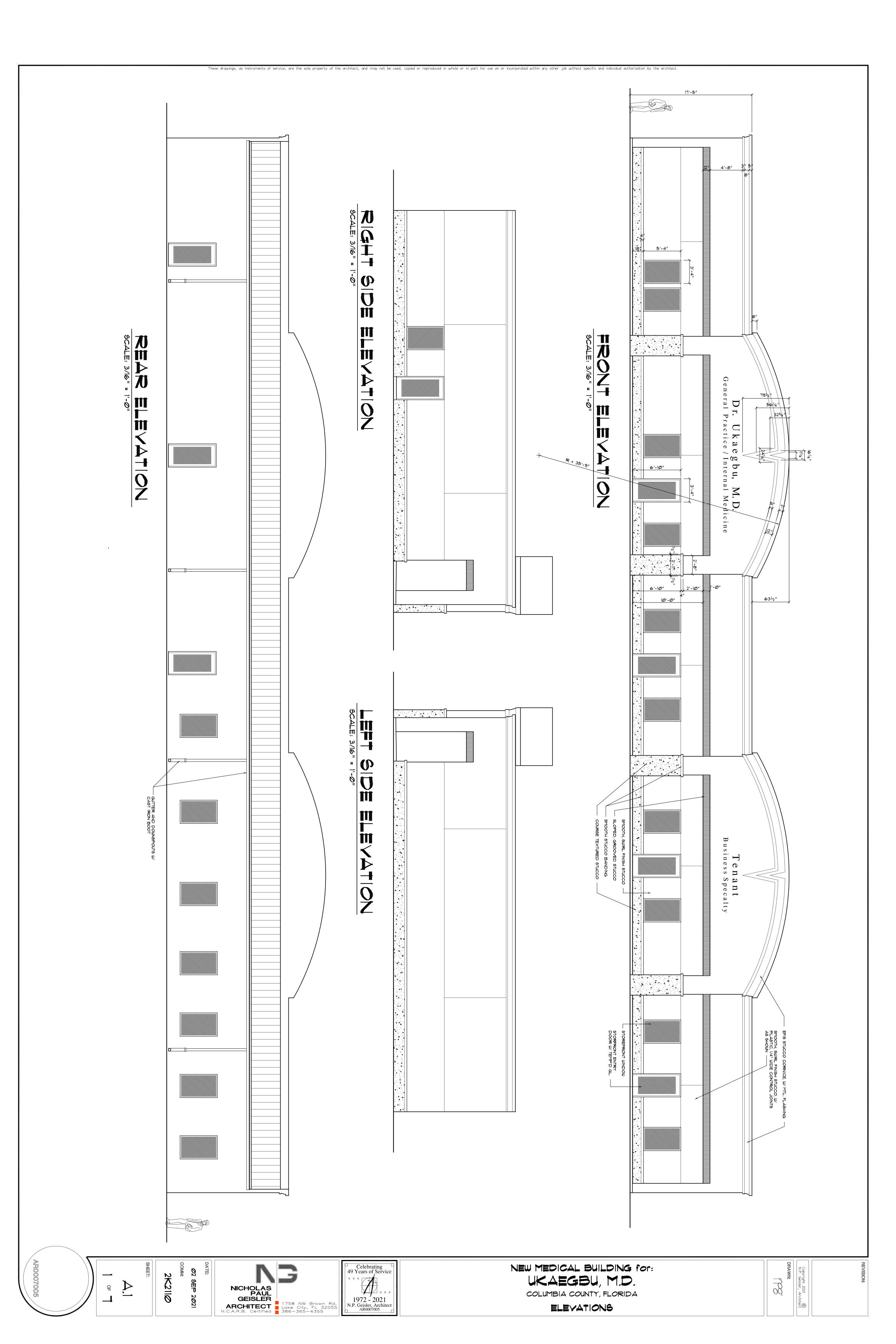


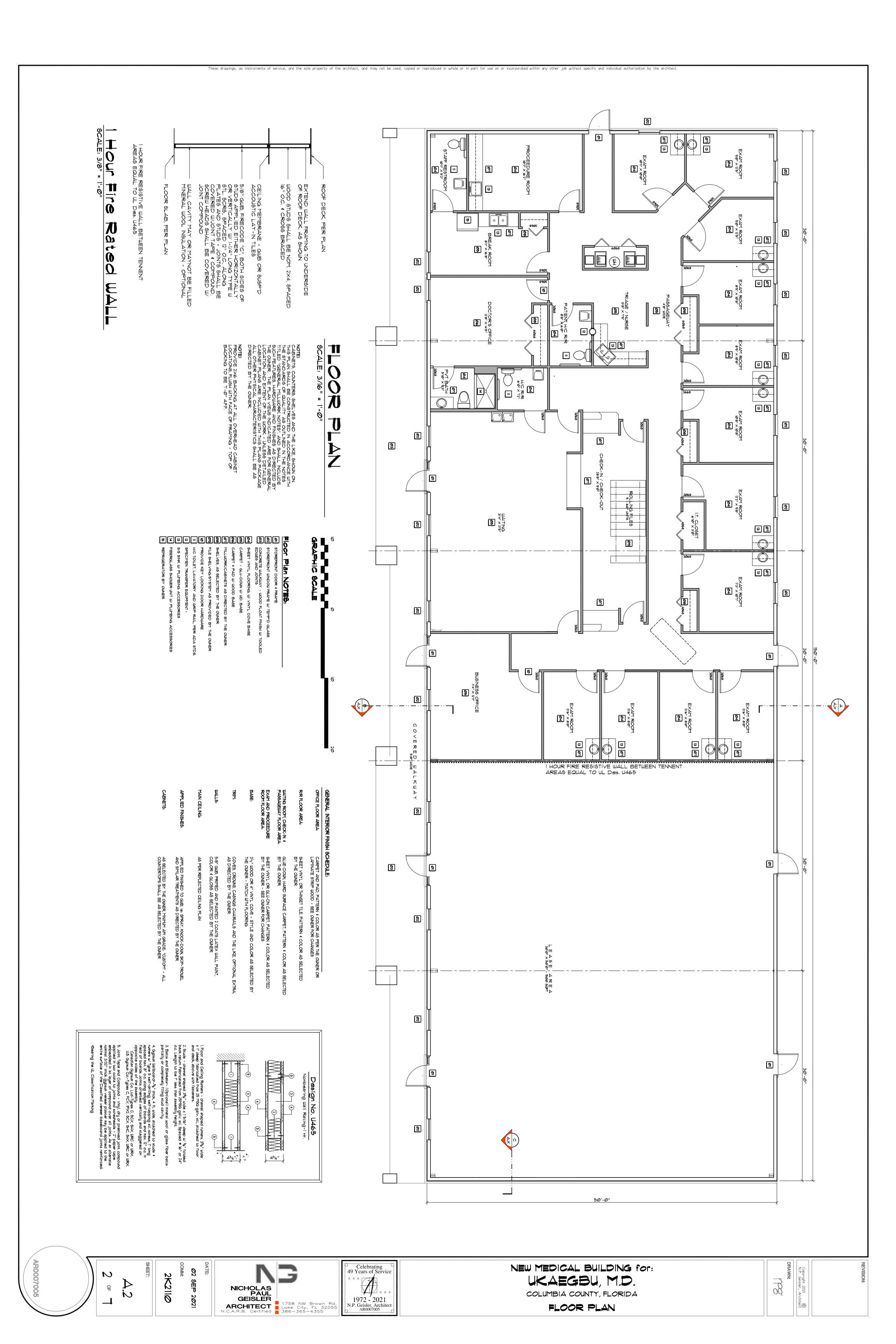


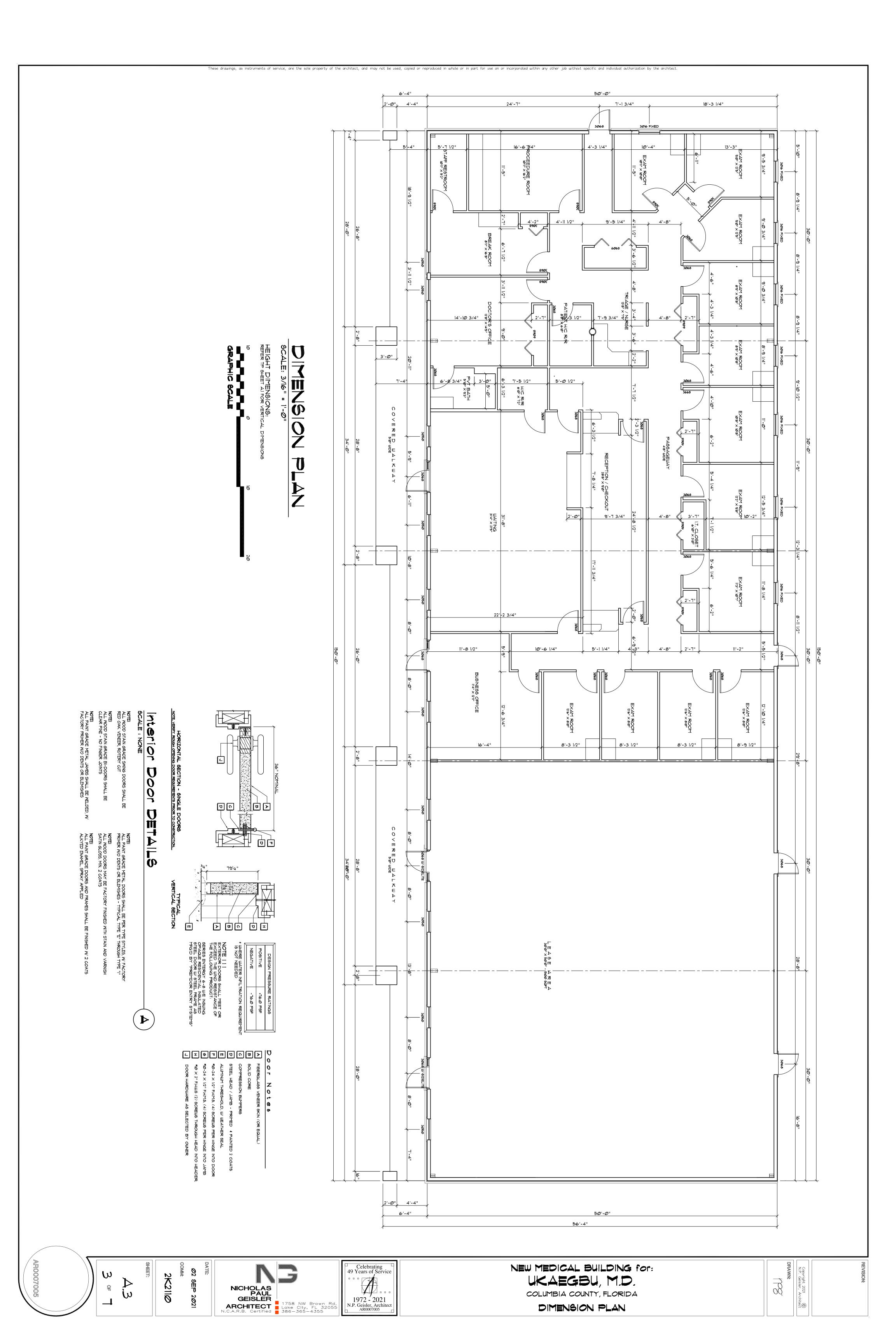
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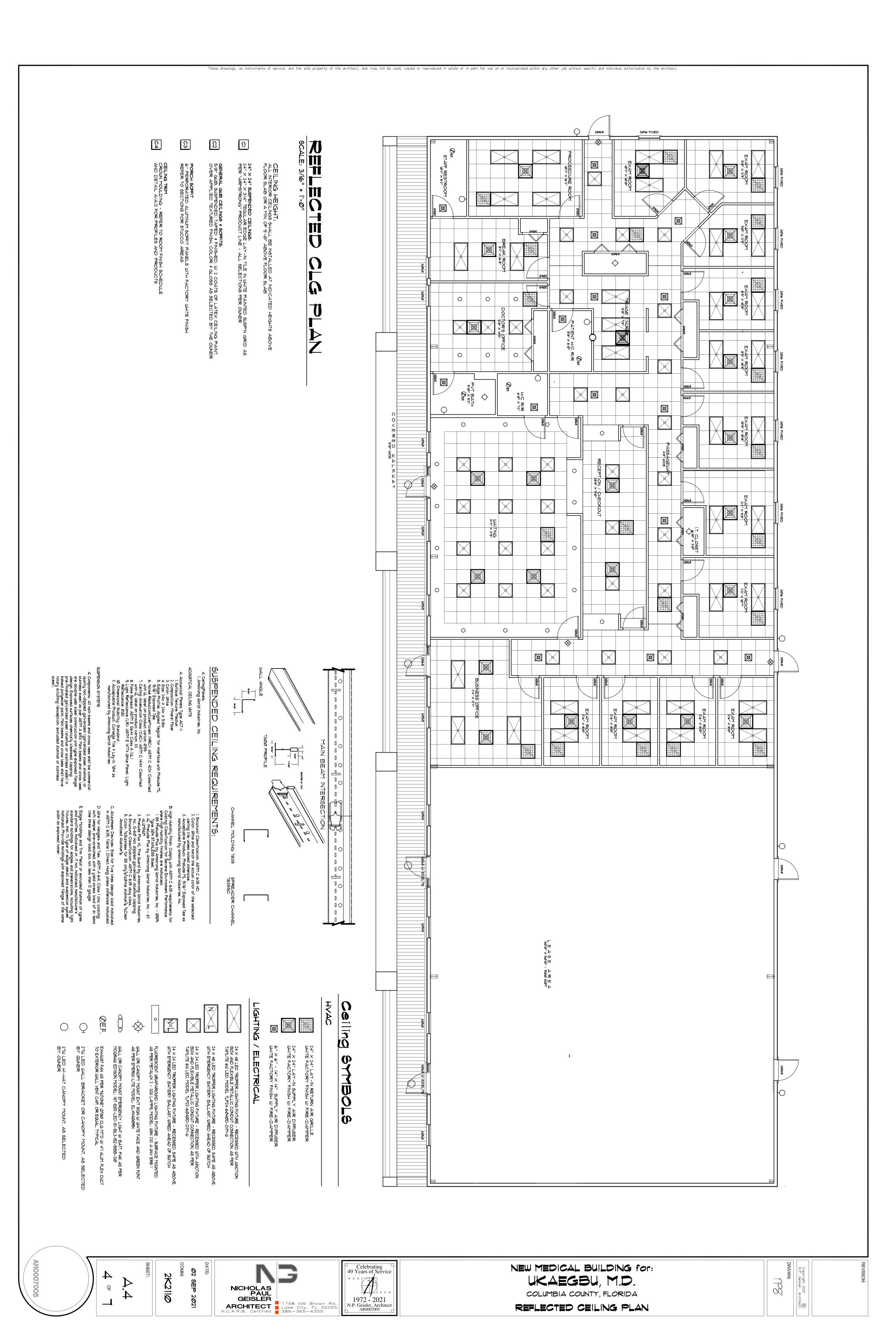
NEW MEDICAL BUILDING for: COLUMBIA COUNTY, FLORIDA

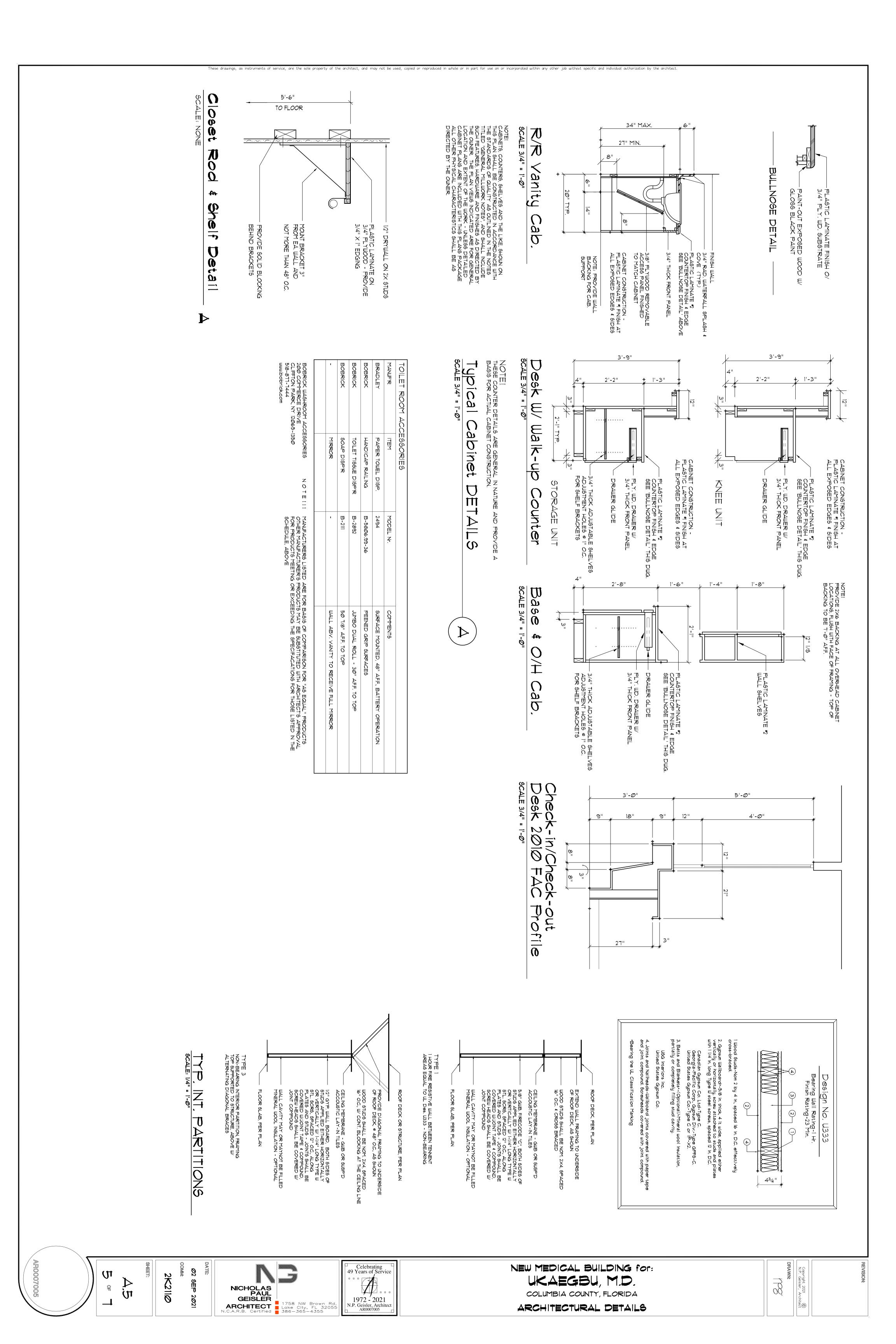
GENERAL INFORMATION

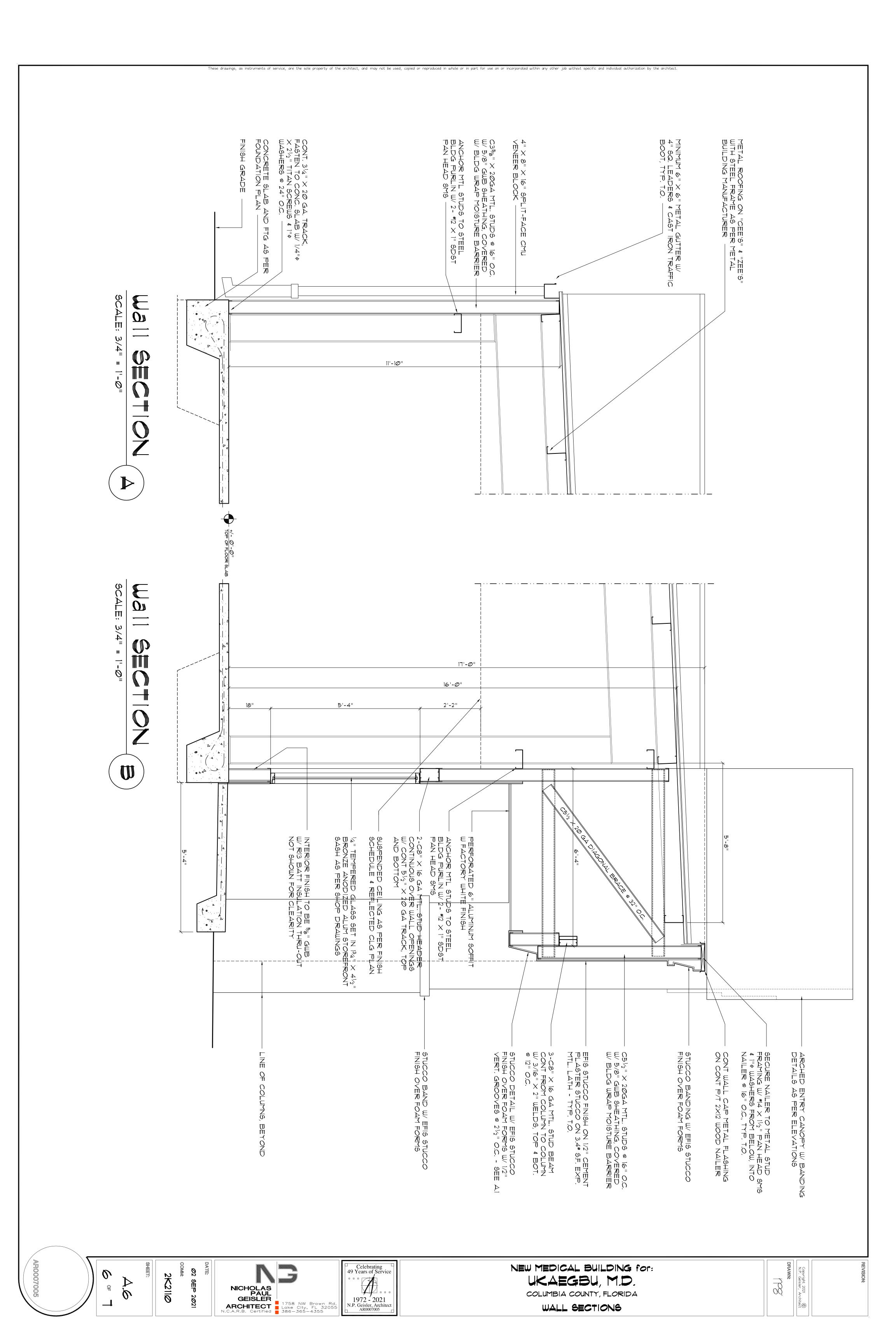


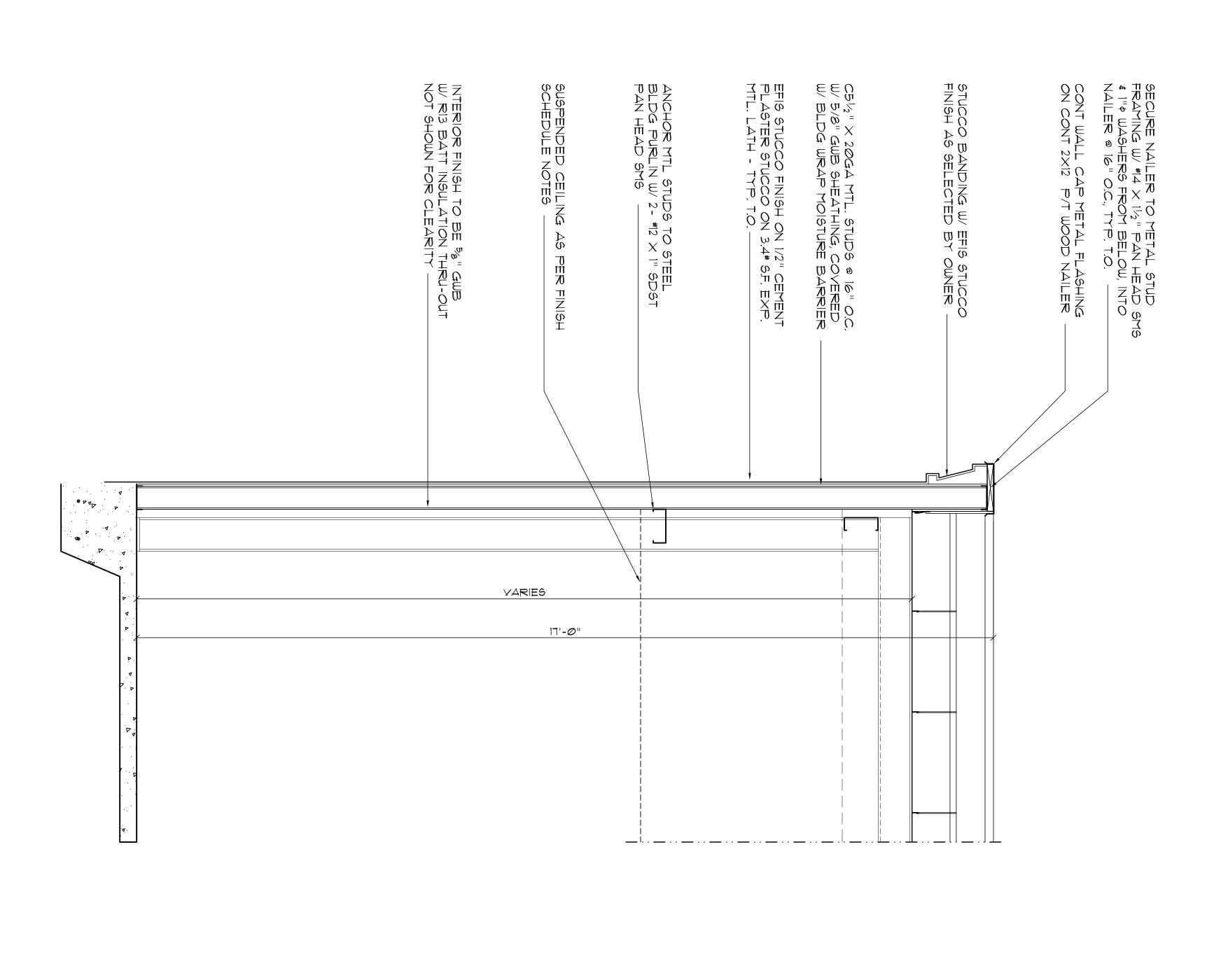




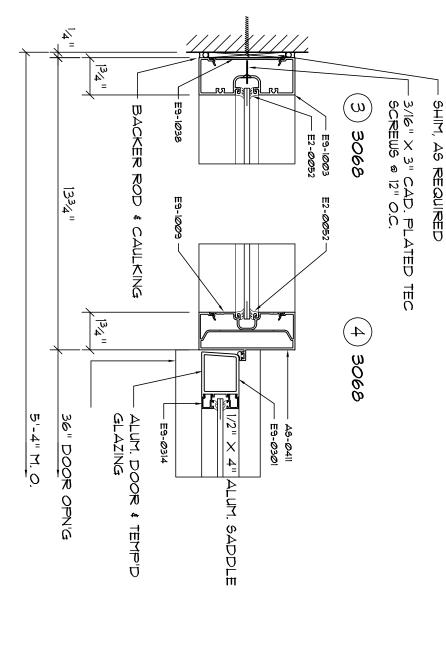




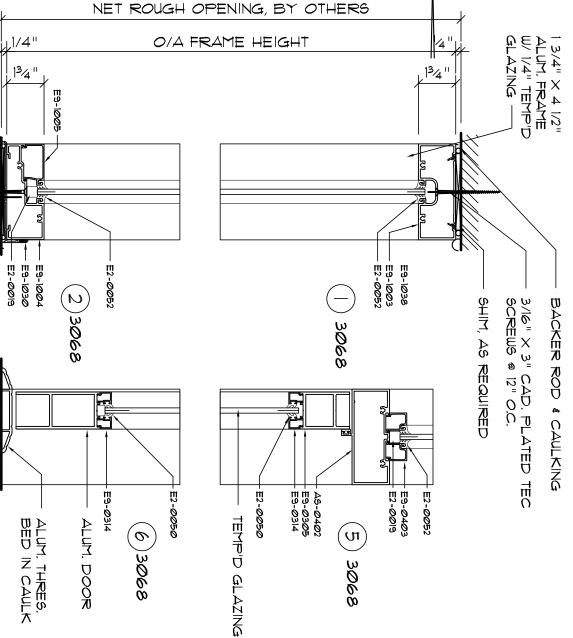




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Typical ゴロジャ



SCALE: 2" П (O) (III) (III)

FIELD MEASUREMENTS:
FEILD VERIFY ALL OVERALL FRAME
SIZES PRIOR TO METALS FABRACATION

STOREFRONT DOORS A
MANUFACTURER:
YKK AP AMERICA, INC.
1606 CURRENCY DRIVE
ORLANDO, FL 32801 FINIOH:

N ACCORDAN

COLOR: DARK

COLOR: DARK

STOREFRONT D

EXTERIOR: 1/2

NTERIOR: 1/2 DOORS - MEDIUM STYLE 35D: 9/16" TINTED TEMPERED GLASS /4" CLEAR TEMPERED GLASS NOE WITH AA-MI2C22A42/A44 < BRONZE

STOREFRONT EXTERIOR: STOREFRONT I EXTERIOR: I | 3/4" X 4 |/2" "C-SLOT"; TYPE 45F| |" TINTED TEMPERED GLASS |4" CLEAR TEMPERED GLASS 13/4" X 6" "C-SLOT": TYPE 60FI

DOOR HARDWARE:
CLOSER - CONCEALED, SELECTIVE HOLD OPEN OFFSET PIVOTS - BALL BEARING TYPE

PUSH BARS: STANDARD ALUMINUM UNITS PULL HANDLES: STANDARD ALUMINUM UNITS LOCKS - "ADAMS-RITE" Nr.: 4010, DEAD LATCH, LEVER 4560 ON EXTERIOR IN COMBINATIN W/ PANIC DEVICES, EA. LEAF.

PANIC HARDWARE: CONCEALED ROD TYPE, WIDTH ACTUATOR BAR AILL FINIGH EXTRUDED ALUMINUM

INSTALLATION TOE QUITOEMENTS:
CONTRACTOR SHALL PREPARE OPENINGS TO RECEINDOW/DOOR UNITS AS SCHEDULED. HEIGHT SHALL BE FRAME HEIGHT + 1/2" WIDTH SHALL BE FRAME WIDTH + 1/2"

NET OPENING

THRESHOLD:

NET OPENING

CLEANING:

USE ONLY A SOLUTION OF A MILD LIQUID SOAP IN WATER FOR

ALL SURFACES, INCLUDING GLAZING AND SASH MATERIALS.

WINDOWS

STOREFRONT GLASS & GLAZING:

REFER TO PLANS, AND DETAILS AND FOR SIZE, AND TYPE.

), STOREFRONT SHALL BE EQUAL TO YKK AP AMERICA, INC. 1606 CURRENCY DR., ORLANDO, FL 32807, OTHER APPROVED 1FG'RS ARE KAWNEER CO. AND VISTAWALL ARCHITECTURAL

. MIRRORS SHALL BE "A" QUALITY 1/4" THICK POLISHED LATE WITH FULL STAINLESS OR ALUMINUM FRAME AND ONCEALED FASTENERS.

EXTERIOR GLASS SHALL BE 1/2" CLEAR, FULLY TEMPERED ITH BUTT GLAZED JOINTS, JOINT NOT TO EXCEED 3/8" AP NOR LESS THAN 1/4". SEAL JOINTS WITH OMMERCIAL GRADE NEUTRAL CURE, CLEAR SILICONE. CID CURE SILICONE WILL NOT BE ACCEPTED. PPLICATION SHALL BE TAPE AND TOOL.

6. ALL ALUMINUM STOREFRONT FRAMING AND DETAILS NDICATED ON THE DRAWINGS AND/OR DETAILS, SHALL BE EQUAL TO VISTAWALL SERIES 2000. THE FRAMING SHALL BE ACCURATELY ASSEMBLED WITH UNEXPOSED FASTENERS UTILIZING EXTRUDED SPLINES, CLIPS AND/OR SNAP-IN FEATURES. ALL GLAZINGSHALL BE HELD IN PLACE BY E.P.D.M. GLAZING GASKETS. NO APPLIED STOPS SHALL BE PERMITTED. ALL EXPOSED SURFACES SHALL BE FREE OF UNSIGHTLY SCRATCHES AND BLEMISHES. THE FINISH SHALL BE ANODIZED ALUMINUM. COLOR: DK. BRONZE IN ACCORDANCEW/ AA-MI2C22A42/A44

. DOOR FRAMES FOR ENTRANCE DOORS SHALL BE LUMINUM STOREFRONT FRAME WITH CUT OUTS AND ACKING PLATES FOR (3) BUTT HINGES FOR EACH DOOR EAF. LOCATION OF HINGES TO BE COORDINATED BY ENERAL CONTRACTOR WITH STOREFRONT UBCONTRACTOR. FINISH OF ALL SILL FLASHING SHALL BE £040" LUMINUM TO MATCH STOREFRONT MATERIAL.

9. ALL DOOR AND FRAMING SECTIONS SHALL BE EXTRUDED ALUMINUM ALLOY AND TEMPERED TO MEET OR EXCEED FINISHING AND STRUCTURAL CRITERIA. DOOR STILES AND RAILS, EXCLUDING GLASS STOPS, SHALL BE TUBULAR AND HAVE Ø.125" WALL THICKNESS. ALL WEATHERING SHALL BE HARDBACKED SILICONE TREATED POLYPROPYLENE. ANY EXPOSED FASTENERS SHALL BE ALUMINUM, STAINLESS STEEL OR OTHER NON-CORROSIVE MATERIAL. DOOR VERTICAL STYLES SHALL BE NOMINAL 4-1/4", BE A MINIMUM OF 8-1/2". ALL DIMENSIONS NOTED ABOVE ARE WITH GLASS STOPS ON. IØ. ALL EXPOSED SURFACES SHALL BE FREE OF UNSIGHTLY SCRATCHES AND BLEMISHES. THE FINISH SHALL BE ANODIZED, AS PER YKK AP AMERICA, INC. PRODUCTS STANDARD - DARK BRONZE.

II. DOOR STILES AND RAILS SHALL BE ACCURATELY JOINED AT CORNERS WITH CONCELAED REINFORCEMENT BRACKETS SECURED WITH BOLTS AND SCREWS, AND SHALL BE "MIG" WELDED. DOORS SHALL HAVE SNAP-IN STOPS WITH BULB GLAZING VINYL ON BOTH SIDES OF GLASS. NO EXPOSED SCREWS SHALL BE PERMITTED. EACH DOOR LEAF SHALL BE EQUIPPED WITH AND ADJUSTING MECHANISM LOCATED IN THE TOP RAIL NEAR THE LOCK STILE, WHICH PROVIDES FOR MINOR CLEARANCE ADJUSTMENTS AFTER INSTALLATION. WEATHERING SHALL BE INSTALLED IN THE HINGE STILE OF PAIR OF DOORS. DOOR FRAME AND SIDELIGHT FRAMING SHALL BE ACCURATELY JOINED AT CORNERS WITH CONCEALED SCREWS. URATELY JOINED

12. DESIGN CRITERIA FOR WIND LOADS SHALL BE IN ACCORDANCE WITH ASCE-1-16 DESIGN WITH WIND VELOCITY OF 130 M.P.H., BUILDING IMPORTANCE FACTOR

13. ALL HARDWARE FOR ENTRANCE DOORS, WITH THE EXCEPTION OF THE CYLINDERS, SHALL BE FURNISHED AND INSTALLED BY ALUMINUM STOREFRONT CONTRACTOR AS FOLLOWS:

A. 1-1/2 PAIR OF 4-1/2" BUTTS

B. ADAMS-RITE 8400 SERIES MORTISE EXIT DEVICE
C. LCN SUPER SMOOTHEE MOUNTED PARALLEL ARM
WITH DROP PLATE
D. BUG SWEEP WITH SLIDE ON COVER
E. MANUFACTURER'S STANDARD WEATHERSTRIPPING
F. PH - 11 PULL HANDLE ON EXTERIOR
G. ALL HARDWARE SHALL BE FINISHED AS SELECTED
BY THE OWNER.

14. ALL ITEMS SHALL BE SET IN THEIR CORRECT LOCATIONS AS SHOWN ON THE DRAWINGS AND SHALL BE LEVEL, SQUAREM PLUMB, AND AT PROPER ELEVATION AND IN ALIGNMENT WITH OTHER WORK. THIS CONTRACTOR SHALL DO ALL CAULKING AND SEALING ASSOCIATED WITH THIS WORK.

SCALE: YARIOUS

Store front

M

SCALE: 2"

11

190,091

REFER TO HEAD DETAIL

II. AFTER ERECTION, THE CONTRACTOR SHALL PROTECT EXPOSED PORTIONS FROM DAMAGE BY MACHINES, PLASTER, LIME, PAINT, ACID, CEMENT, OR OTHER HARMFUL COMPOUNDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF PROTECTIVE MATERIALS AND CLEANING PER STOREFRONT FRAMING MANUFACTURER'S PRINTED INSTRUCTIONS.

6. DOORS SHALL OPERATE FREELY AND SHALL NOT RATTLE JHEN CLOSED. SWING TYPE DOORS SHALL HAVE HEAD AND JAMB CLEARANCE OF 3/32" PLUS OR MINUS 1/32".

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GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24-INCH (610 MM) RADIUS OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES (1524 MM) ABOVE THE FLOOR OR WALKING SURFACE.

4.4 ONE OR MORE WALKING SURFACES WITHIN 36 INCHES (914 MM) HORIZONTALLY OF THE PLANE OF THE GLAZING.

4.3 TOP EDGE GREATER THAN 36 INCHES (914 MM) ABOVE THE FLOOR.

4.2 BOTTOM EDGE LESS THAN IB INCHES (457 MM) ABOVE THE FLOOR.

GLAZING IN DOORS AND WALLS OF ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS AND OTHER SUCH FACILITIES WHERE SUCH GLAZING IS LOCATED 36 INCHES (914 MM) OR LESS, MEASURED HORIZONTALLY, FROM A STANDING OR WALKING SURFACE WITHIN THE ENCLOSURE AND WHERE THE BOTTOM EDGE OF THE EXPOSED GLAZING IS LESS THAN 60 INCHES (1524 MM), MEASURED VERTICALLY, ABOVE SUCH STANDING OR WALKING SURFACES.

THE FOLLOWING SHALL BE CONSIDERED FOR THE PURPOSES OF GLAZING:

GLAZING IN SWINGING DOORS AND FIXED AND SLIDING PANELS OF SLIDING (PATIO) DOOR ASSEMBLIES.

GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL, OTHER THAN THOSE LOCATIONS DESCRIBED IN ITEMS 2 AND 3 ABOVE, THAT MEETS ALL OF THE FOLLOWING CONDITIONS:

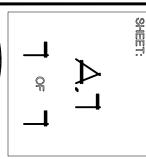
EXCEPTION: GLAZING IN WALLS DOOR IN A CLOSED POSITION II GROUP R2 SHALL BE SUBJECT .

3 PERPENDICULAR TO THE PLANE OF THE IN GROUP R3 OR WITHIN DWELLING UNITS IN TO 2004 FBC 2405.2.I(4).

4.1 EXPOSED AREA OF AN INDIVIDUAL PANE GREATER THAN 9 SQ FT (0.84 M^2).

TEMPERED GLASS NOTES:

\R0007005















WALL SECTION / STOREFRONT DETAILS

8 50

A. EACH PIECE OF GLASS SHALL BE LABELED, NOTING THE NAME OF THE MANUFACTURER, GRADE, QUALITY AND TYPE. LABELS SHALL BE INTACT SEFORE AND AFTER INSTALLATION.

, MATERIALS: ALL GLASS AND GLAZING SHALL BE IN COORDANCE WITH THE STANDARDS AND ECOMMENDATIONS OF THE CURRENT EDITION OF THE LAZING MANUAL OF THE FLAT GLASS JOBBERS ASSOCIATION.

1. ALL SHOP DRAWINGS SHALL BE SUBMITTED FOR ENGINEER'S ONLY AFTER THEY HAVE BEEN THOROUGHLY REVIEWED BY THE FOR CONSTRUCTION METHODS, DIMENSIONS AND OTHER TRADE REQUIREMENTS, AND STAMPED WITH THE CONTRACTOR'S APPROTHE ARCHITECT ASSUMES NO RESPONSIBILITY FOR DIMENSIONS, ENGINEERING DESIGN BY DELEGATED ENGINEERS, ERRORS OR RESULT OF REVIEWING ANY SHOP DRAWINGS. ANY ERRORS OR CHECKING OR REVIEW OF DRAWINGS BY THE ARCHITECT AND EVENCE OR DORK IS DONE IN ACCORDANCE WITH SUCH DRAWINGS. 3. SHOP DRAWINGS SHALL CONTAIN ALL INFORMATION SHOWSTRUCTURAL PLANS (RELATED TO THE DELEGATED DESIGN) DESIGN LOADS, IN ADDITION TO THE INFORMATION REQUIRED DELEGATED ENGINEER'S DESIGN. 5. THE CONTRACTOR SHALL USE THE STRUCTURAL DRAWING SPECIFICATIONS TOGETHER WITH THE ARCHITECTURAL, MECHAELECTRICAL AND OTHER TRADE DRAWINGS AND SHOP DRAW DEPRESSED SLABS, SLOPES, DRAINS, OUTLETS, RECESSES, OSETTING, SLEEVES, DIMENSIONS, ETC. NOTIFY ARCHITECT/ENG WRITING, OF ANY POTENTIAL CONFLICTS BEFORE PROCEEDING WORK. 2. ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO SITUATION ELSEWHERE ON THE PROJECT, EXCEPT WHERE A OR SECTION IS SHOWN. I. THE DRAWINGS ARE INTENDED TO SHOW THE GENERAL DESIGN AND EXTENT OF THE WORK AND ARE PARTIALLY THEY ARE NOT INTENDED TO BE SCALED FOR ROUGH-IN TO SERVE AS SHOP DRAWINGS OR PORTIONS THEREOF. 3. PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR ALBORONTRACTORS SHALL VERIFY ALL GRADES, LINES, LEVEL AND COORDINATE EXISTING CONDITIONS AT THE JOB SITE WIT AND SPECIFICATIONS. THEY SHALL REPORT ANY INCONSISTE IN THE ABOVE TO THE ARCHITECT/ENGINEER BEFORE COMMENTED THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL LAY OF FROM ESTABLISHED REFERENCE POINTS AND BE RESPONSIBELEVATIONS AND MEASUREMENTS IN CONNECTION WITH THEIR THE STRUCTURAL INSPECTIONS CAN BE MADE ON A FORODUCT APPROVAL, MANUFACTURER'S DATA AND OTHER RINFORMATION, MUST BE REVIEWED AND ACCEPTED BY THE AFORMATION, MUST BE REVIEWED BY THE BUILDING DEPARTMEN OF TRECORD AND APPROVED BY THE BUILDING DEPARTMEN DRAWINGS AND DELEGATED ENGINEERING: ⋗

SIGNED TO BEAR ON WELL COMPACTED

YE AN ALLOWABLE BEARING CAPACITY OF 2,500 PSF

4. ALL WELDING TO BE IN ACCORDANCE WITH A.W.S. LATEST "STRUCTURAL WELDING CODE - STEEL", CLEAN AND RUSTPROOF ALL WELDS WITH HEAYY DUTY RUSTPROOFING PAINT. 3. ALL COLUMN BASE AND CAP PLATES SHALL BE 3/4" THICK (UNLESS) OTHERWISE NOTED). WIDTH AND LENGTH AS REQUIRED FOR PROPER BOLTING AND AS INDICATED ON THE PLANS AND DETAILS. TUBE AND PIPE COLUMNS TO BE CONCRETE FILLED WITH VENT HOLES TOP, MIDDLE AND BOTTOM. 2. STEEL TUBES TO BE DOMESTIC STEEL CONFORMING TO A.S.T.M. A-500 GRADE B (Fy=46 K.S.I.).

COLD FORMED METAL FRAMING: (SHOP DRAWINGS REQUIRED) 5. ALL CONNECTIONS TO BE FIELD AND SHOP WELDED AND DEVELOP MEMBER IN SHEAR. STEEL BEARING ON STEEL TO BE WELDED THERETO. SPLICE LOCATIONS TO BE REVIEWED BY ARCHITECT/ENGINEER

ALL PRODUCTS SHALL BE FREE OF RUST, DENTS, BENDS & TWISTS AND STORED ON A FLAT PLANE PRIOR TO INCLUSION IN THE WORK. 2. ALL CFMF COMPONENTS SHALL BE MANUFACTURED AS PER ASTM C 955 AND BE GALVANIZED WITH A MINIMUM G-60 COATING PER ASTM C 955. . ALL COLD FORMED METAL FRAMING SHALL BE DOMESTIC A.S.TM. A 653 (Fy = 33 K.S.I.) STEEL, AND DESIGNED IN ACCORDANCE WITH THE LATEST S.S.M.A. SPECIFACATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF COLD FORMED METAL FRAMING AND THE S.S.M.A. CODE OF STANDARD PRACTICE.

STRUCTURAL STEEL: (SHOP DRAWINGS REQUIRED)

FOOTINGS)

1. ALL STRUCTURAL STEEL TO BE DOMESTIC A.S.T.M. A-36 (Fy=36 K.S.I.) AND DESIGNED IN ACCORDANCE WITH THE LATEST A.I.S.C. "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" AND THE A.I.S.C. CODE OF STANDARD PRACTICE.

). ALL WELDING TO BE IN ACCORDANCE WITH AWS. LATEST, EI3 & DI3 STRUCTURAL WELDING CODE - STEEL". CLEAN AND RUSTPROOF ALL FIELD WELDS WITH ZINK RICH RUSTPROOFING PAINT.

SPLICE LOCATIONS TO BE REVIEWED BY ARCHITECT/ENGINEER.

STEEL BEARING ON STEEL TO BE WELDED THERETO.

4. BOTTOM TRACK SHALL BE SECURED TO THE CONCRETE FOUNDATION WANCHOR BOLTS AS PER THE FOUNDATION PLAN AND SHALL BE FURTHER FASTENED AT EA. FULL STUD W/.111" X 1½" PAF, SHOT THROUGH A 1" X 16 GAHOLELESS WASHER.

5. ALL CONNECTIONS TO BE FIELD AND SHOP WELDED AND TO FULLY DEVELOP MEMBER IN SHEAR.

REFER TO MAIN

SUZZZARY TEXT FOR EXPANDED

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DESIGN SOIL BEARING PRESSURE: 1000 PSF / MASONRY / METALS GENERAL NOTES

EXPANSIVE SOILS: WHERE DIRECTED BY THE SOILS ENGINEER, SOIL AUGMENTATION PER THE SOILS ENGINEER'S SPECIFICATIONS SHALL BE IMPLEMENTED PRIOR TO PLACING ANY FOUNDATIONS - TESTS AS SPECIFIED SHALL BE PREFORMED TO DETERMINE THE SUITABILITY OF THE SUB-GRADE TO SUPPORT THE DESIGN LOADS.

REINFORCING STEEL SHALL BE GRADE 40 AND MEET THE REQUIRE MENTS OF ASTM A615, ALL BENDS SHALL BE MADE COLD. LEAN SAND FILL OVER STRIPPED AND COMPACTED EXISTING GD. IALL BE PLACED IN 12" LIFTS. BOTH SUB-SOIL AND FILL COMPAC-ON SHALL BE NOT LESS THAN 98% AS MEASURED BY A MODIFIED ROCTOR TEST AT THE RATE OF ONE TEST FOR EACH 2500 SF OF JILDING PAD AREA, OR FRACTION THEREOF, FOR EACH 12" LIFT.

WELDED WIRE MESH SLAB REINFORCING SHALL MEET THE REQUIRE: MENTS OF ASTM A185 - MIN. YEILD STRESS = 85 KSI.

CONCRETE SHALL BE STANDARD MIX F'C = 2500 PSI FOR ALL SLABS, COLUMNS AND BEAMS OR SHALL BE STANDARD PUMP 3000 PSI. STRENGTH SHALL BE ATTAINED WITHIN 28 DAYS OF FMENT. MIXING, PLACING AND FINISHING SHALL BE AS PER ACI STANDARDS.

DELDS SHALL BE AS PER "AMERICAN WELD" OR STRUCTURAL STEEL APPLICATIONS.

NICHOLAS PAUL GEISLER

02 SEP

2021

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5. AT ALL TIMES, PROVIDE PROTECTION AGAINST WEATHER (RAIN, WIND, STORMS OR THE SUN), SO AS TO MAINTAIN ALL WORK, MATERIALS APPARATUS AND FIXTURES FREE FROM INJURY OR DAMAGE.

4. PROVIDE AND MAINTAIN GUARD LIGHTS AT ALL BARRICADES, RAILINGS, OBSTRUCTIONS IN THE STREETS, ROADS OR SIDEWALKS TRENCHES OR PITS ADJACENT TO PUBLIC WALKS OR ROADS.

N N N

6. COLUMN REINFORCEMENT: DOWELS TO BE SAME SIZE AND NUMBER AS VERTICAL REBARS ABOVE. LAP 36 BAR DIAMETER OR MINIMUM OF 18 INCHES, U.O.N. PROVIDE RIGID TEMPLATES FOR DOWEL LOCATION. PROVIDE STANDARD HOOKS AT TOP OF ALL VERTICAL REINFORCEMENT AT NONCONTINUOUS COLUMNS (U.O.N.).

1. ALL DOWELS FOR COLUMNS SHALL BE SECURED IN POSITION PRIOR TO CONCRETING. PUSHING THE DOWELS INTO POSITION IN WET CONCRETE IS NOT PERMITTED.

I THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCE OR PROCEDURES, SAFETY PRECAUTIONS, SHORES, RESHORES, LATERAL BRACING AND PROGRAMS IN CONNECTION WITH THE PROJECT, ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. OUR SERVICES DO NOT GUARANTEE NOR ASSURE LIABILITY FOR THE JOB SAFETY, TEMPORARY SHORING AND BRACING AND THE PERFORMANCE OF THE CONTRACTOR.

4. ALL REINFORCING TO B LATEST A.S.T.M. A-615 GRAD MANUAL OF STANDARD PRA AND C.R.S.I. MANUAL OF STA

BE NEW BILLET STEEL CONFORMING TO THE DE 60, FABRICATED IN ACCORDANCE WITH C.R.S.I. RACTICE AND PLACED IN ACCORDANCE WITH A.C.I. 315 ANDARD PRACTICE.

CONCRETE

UNLESS OTHERWISE DETAILED ON DRAWINGS:

(BOTTOM).....

3. ALL CONCRETE TO BE OF 3,000 P.S.I. AT 28 DAYS

: REGULAR WEIGHT WITH A DESIGN STRENGTH S. MAXIMUM SLUMP 5".

. THE CONTRACTOR IS RESPONSIBLE AND SHALL COMPLAFETY REQUIREMENTS OF THE STANDARD BUILDING CODE OCAL, STATE AND FEDERAL LAWS.

OYIDE ALL SHORING, BRACING AND SHEETING AS, STRUCTURAL STABILITY AND FOR THE PROPER REMOVE WHEN WORK IS COMPLETED.

REQUIRED

SLABS

ON GRADE:

BEAMS:

(TO THE TIES) ..

... 1-1/2"

CENTERED W/SLAB

CONSTRUCTION MEANS AND METHODS:

6. AT THE END OF THE DAYS WORK, COVER ALL WORK LIKELY TO BE DAMAGED. ANY WORK DAMAGED BY FAILURE TO PROVIDE PROTECTION BE REMOVED AND REPLACED WITH NEW WORK AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL STRUCTURES, SIDEWALKS AND PUBLIC UTILITIES.

PAY FOR ALL DAMAGES TO ADJACENT TO STREETS OR OTHER PUBLIC PROPERT

8. BEAM REINFORCEMENT: NCHES. BOTTOM BARS SPIONLY AT MID-SPAN. ALL TO (U.O.N.). ALL HOOKS TO BE (U.O.N.).

T: LAPPED 36 BAR DIAMETER OR MINIMUM 18 PLICED ONLY AT SUPPORTS, TOP BARS SPLICED TOP BARS HOOKED AT NONCONTINUOUS EDGES E STANDARD 90 DEGREE HOOKS AS REQUIRED

9. ADDED REINFORCEMENT: PROVIDE ADDITIONAL CORNER WARS BENT 36 INCHES MINIMUM EACH WAY AT "L" AND "T" CORNERS IN OUTER FACES OF ALL BEAMS TO MATCH ALL HORIZONTAL BAR (TOP, BOTTOM AND INTERMEDIATE REBARS).

AN FOR MINIMUM SIZE CONCRETE TIE BEAM REQUIREMENTS

DESIGN

BASED ON 2004 FBC 1609 BASIC

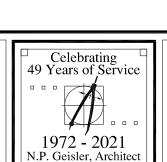
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LOAD CRITERIA:

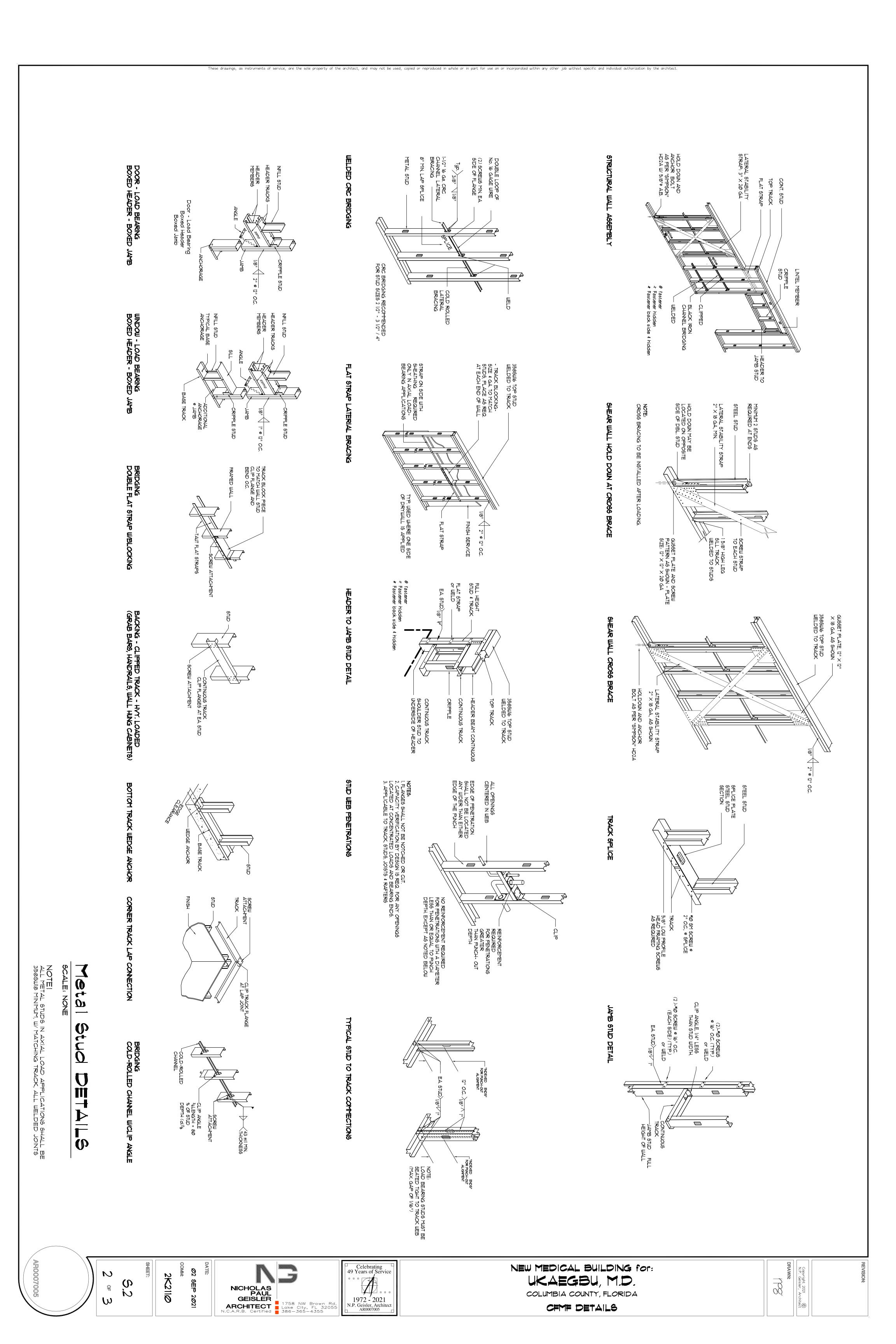
ARCHITECT.C.A.R.B. Certified

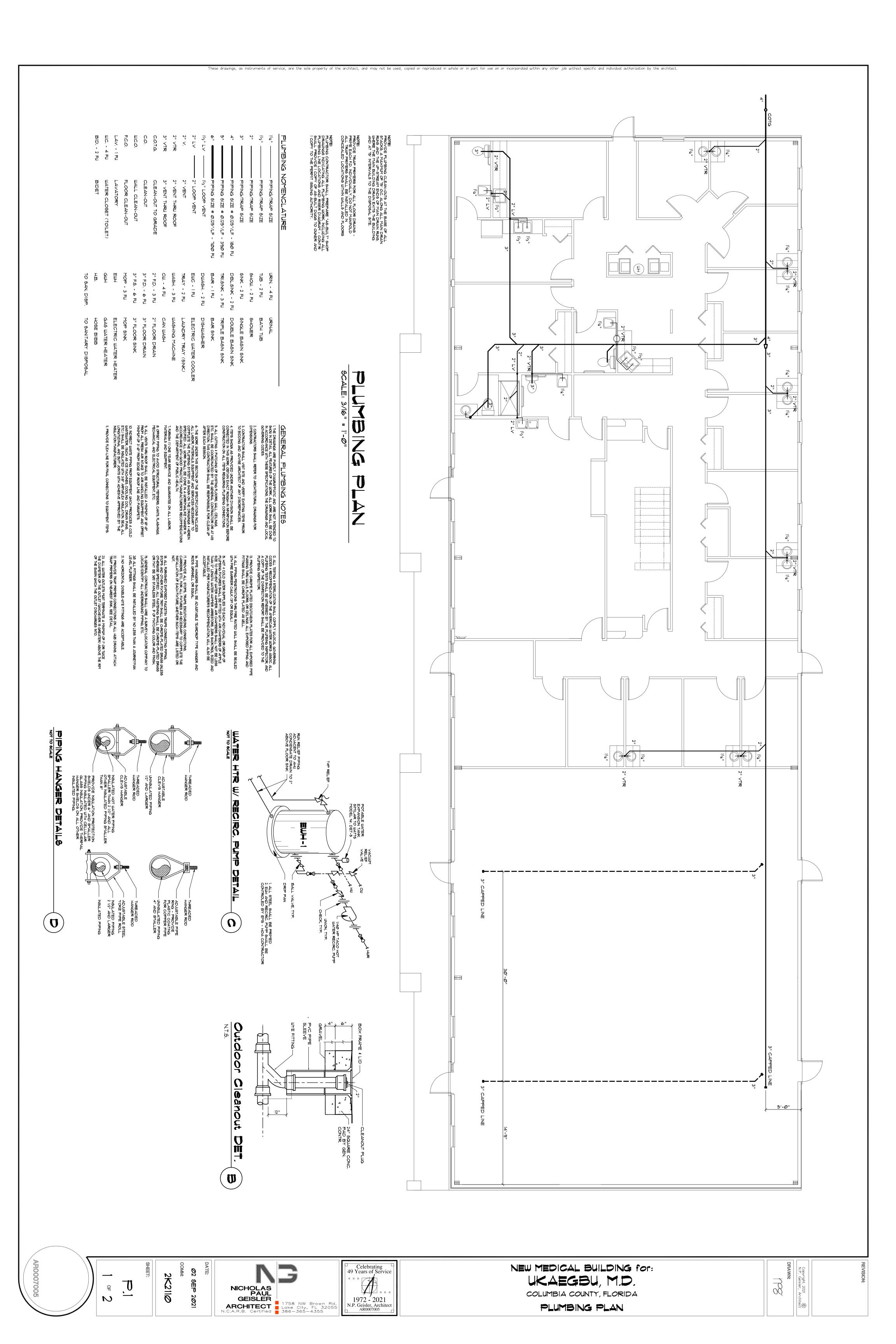
1758 NW Brown Rd.
Lake City, FL 32055
386-365-4355



NEW MEDICAL BUILDING for: UKAEGBU, M.D. COLUMBIA COUNTY, FLORIDA STRUCTURAL NOTES

1972 - 2021 N.P. Geisler, Architect AR0007005





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A. Disinfection of all water piping which shall carry potable water or any other piping connected thereto which is not separated by a backflow preventor.

B. Disinfection shall be chlorine, either in the form of hypochlorite solution or in the form of compressed gas applied through an approved choicinator.

C. After completion of all tests, replacement, and repaire, all water supply systems shall be through an approve sediment and/or debris.

D. Begin disinfection only after flushing system.

E. The system shall be filled with a solution containing 50 parts per million available chlorine and allowed to stand for twenty-four hours, or as required by local authorities, whichever is greater.

F. During Chlorination all valves and equipment shall be operated to insure that chlorine reaches all parts of the system.

G. Following disinfection all treated water shall be flushed from the system through its extremities until the quality of water delivered is comparable with the quality of the public water supply and satisfactory to the public health authority having jurisdiction.

H. Disinfection and flushing shall be repeated if samples taken daily over a period of three days show that water quality is not being maintained.

Samples shall not be chawn from hydrants or through unsterilized hose.

K. If disinfection and flushing has been repeated three times and water quality cannot be maintained, the Architect shall have the authority to trequire disassembly of piping as he shall deem necessary to determine the cause of contamination.

1. Any disassembly, cleaning or repair shall be at no additional expense to the Owner.

2. Disinfection, flushing and testing shall be repeated upon reassembly of the piping.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the Plumbing Contractor. However, it is not intended to define a subcontract between the Plumbing Contractor and General. The General Contractor is responsible for the entire project and any questions regarding scope of work shall be directed to the General Contractor.

B. Work shall include all labor, materials, fixtures, equipment, tools and service necessary for installation, testing and adjusting of all mechanical systems shall be furnished and installed in compliance with the Drawings, Specifications, and any Addenda thereto.

C. Drawings and Specifications shall be understood to cover, according to their intent and meaning, complete mechanical systems. Work shown and not specified, or work specified and not shown shall be performed as though mentioned in both.

D. Minor items and accessories reasonably inferred as necessary for the complete and proper operation of any system shall be provided by contractor or subcontractor for such system whether or not they are specifically called for.

E. Before submitting a bid, the Plumbing Contractor is to coordinate with the utility company shall be furnished and performed by the Plumbing Contractor.

I. If well and septic, contractor shall be furnished and performed by the Plumbing Contractor.

I. If well and septic, contractor shall be furnished and performed by the Plumbing Contractor.

E. Before submitting a bid, the Plumbing Contractor is to coordinate with the extent of performance by the Utility Company shall be furnished and performed by the Plumbing Contractor.

I. If well and septic, contractor shall be ordinate with General Contractor and review civil drawings to coordinate his scope of work.

F. All work shall be performed or installed in strict accordance with Standard Plumbing Code all applicable rules, regulations and codes of local state and Federal Governments having lawful jurisdiction, and each contractor and subcontractor shall be responsible for such secure approach.

F. All work shall be performed to secure the performed by the responsible for 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       compliance.

G. Fees for permits, inspections, patent use, royalties, etc. shall be paid by the contractor.

I. Furnish all equipment and personnel and conduct all tests required to secure approval of the installation.

2. Any repairs or changes required to secure the approval of the installation shall be done at no additional expense to the Owner.

1. All work shall be installed in accordance with the appropriate codes and satisfy the local inspector having jurisdiction.

1. Furnish all equipment and personnel and conduct all tests required to secure having jurisdiction.

2. Any repairs or changes required to secure the approval of the installation secure approval of the installation of the installation.

2. Any repairs or changes required to secure the approval of the installation shall be done at no additional expense to the Owner.

I. Upon completion of each part of the system is installed with proper covers, safeties, controls, etc., and that all are in proper working order.

J. A set of "red-lined" mechanical drawings shall be contractor shall demonstrate to the Engineer that each item on that system is installed with proper covers, safeties, controls, etc., and that all are in proper working order.

J. A set of "red-lined" mechanical orawings shall be carefully maintained at the job site.

Actual conditions are to be put on the drawings in red on a daily basis so the drawings will continuously show locations and routings of piping, ducts, grilles, equipment, valves, and any equipment specified on the drawings of piping, ducts, grilles, equipment, valves, and any equipment specified on the drawings of piping, ducts, grilles, equipment, valves, and any equipment and materials shall be a to additional manufacturer may require supplemental information prior to accepting or requesting an alternate.

1. All work shall be performed in compliance with OSHA regulations.

N. Shop drawings and product data shall be submitted on all equipment, fixtures, etc. I submittals must be performed in compliance with OSHA reg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      i. Rough-in:
1. Contractor shall rough-in for all equipment, fixtures, etc., in building whether or not such equipment is furnished by this Contractor or by Owner.
2. Determine in advance the location and size of all openings and chasses necessary for proper installation of all work and have openings and chasses provided during construction.
3. Install all inserts for hangers and supports of mechanical work and equipment work as general construction progresses.
4. Rough-in openings in masonry or stud walls shall be cut, not broken or chiseled.
5. Sleeves shall be required at all points where piping passes through concrete walls, slabs or masonry wallst sleeves installed below grade or where subject to high water conditions shall be installed watertight.

Coordination:
1. Work shall be coordinated between all Contractors, Subcontractors, Installers, Suppliers, Traces, etc., to:
a. Insure a neatly fitted installation.
b. Determine the nature and extent of the work of others.
c. Eliminate interferences which develops or is foreseen and cannot be resolved by the affected trades, etc. shall be handled as follows:
a. Cease installation of that portion of the work which is in conflict as no additional compensation will be allowed for any relocation, etc.
b. Continue work only on other portions of the work which are not in conflict.
c. Notify the Architect immediately.
d. Architect's decision shall be final as to any relocation, rerouting, removal, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           e. No additional compensation will be allowed for removal, relocation, repairs or changes required by interferences.
Clear away all debris, surplus materials, etc., resulting from work on operations, leaving be and equipment in clean first-class condition.
Where factory finish is provided on equipment, all marred or damaged surfaces shall be suched-up or refinished hereunder as approved.
All plumbing fixures shall be thoroughly cleaned of all plaster, stickers, rust stains, and ther foreign matter, and be left ready for use.
Surfaces of all floor drains, cleanouts and other equipment shall be cleaned and left lass condition.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nemsions.

o measurements shall be scaled from Drawings and used as definite dimensions
layout or fitting work in place.

ayout of equipment, as shown on the plans, shall be checked and exact location
termined by dimension if equipment approved by the Architect.

consult the Drawings for all dimensions, locations of partitions, sizes of structural
mber, foundations, etc.

To not make final layouts until shop or equipment drawings are approved and job
notitions verified.

Accavation and Backfill:

Accavation and Backfill:

Accavation and Backfill:

Contractor shall coordinate with General Contactor to determine the
tent or has work regarding excauation and backfill.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Le visit to determine:

Existing conditions.

Tow and where materials will be delivered and stored.

Special problems encountered during construction.

Camine all Contract Drawings and Specifications to determine:

Spe of construction to be used.

Tow construction or work will affect the work of this Section.

Illustre and extent of work of other trades.

Illustre to determine existing conditions or nature of construction will allation

Intract Drawings show the compensation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ction cities.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and satisfy the loca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   c. Described in the remainded while construction is in progress.

f. Machine excavation shall be held a sufficient distance from foundations and footings.

f. Machine excavation shall be held a sufficient distance from foundations and footings.

g. Provide and maintain barricades and temporary bridges around excavations as required for safety.

h. Water lines may be benched above sanitary lines in same trench if they are likely in the later provided and provided above sanitary lines.

J. Grade brizontal drainage 1/4 inch per foot minimum.

K. Install same type material specified for the inside building to 8 feet outside building.

3. Backfill for all sewer lines shall be placed in accordance with manufacturer's printed instructions.

b. Backfill trenches only after piping has been inspected.

c. The backfill below paved areas and walks shall be brought to within 6 inches of finished grades the remaining six inches shall be brought to within 6 inches of finished grades the remaining six inches shall be backfilled with clean topsoil.

d. The backfill below sodded or seeded areas shall be backfilled with clean topsoil.

d. The backfill should be supported and south fill material from off the site as may be required for backfill.

d. The backfill below sodded or seeded areas shall be backfilled with clean topsoil.

d. The backfill below sodded or seeded areas shall be backfilled with clean topsoil.

e. Provide and place any additional fill material from off the site as may be required for backfill.

e. Exposed piping as specified in Section 15/934 for permanent installation.

b. Pipe shall be adequately supported during construction with blocking or single to prevent injury to personnel or damage to equipment or materials.

Exposed piping.

c. Run exposed piping thus and level.

b. C. Run exposed piping the situation of level or supports.

e. Install concealed pipes close to building's structure to keep furring to a minimum.

f. Siepe water piping to material supports and bose on piping to date the close structure 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. Type L, Hard Copper.
2. Joints
a. Solder using lead-free solder and no 3. Fittings
a. Wrought copper or cast brass
b. Steel fittings prohibited.
B. Water Supply Below Grade or Under SI
1. Type K hard drawn copper tubing.
2. Joints
a. Solder using Silver solder or "Sil-Fo: 3. Fittings:
a. Wrought copper or cast brass
a. Wrought copper or cast brass
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PLASTIC PIPE AND FITTINGS

A. Vent piping (Above grade).

1. Piping shall be PVC

2. Polyvinyl Chloride (PVC) - ASTM D-1784-60T

a. Schedule 80

b. Type 1, Grade 1
c. Pipe shall bear NSF seal and ASTM designation
3. Joints
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a. Bonded joints
b. Fittings
a. PyC - ASTM [
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PER PIPE
omestic Water Supply Above Grade or Slab
pe L, Hard copper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bonded Joints
FlyC - ASTM D
ABS - ASTM D
anitary piping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Schedule 80.
Type I, Grade I.
Pipe shall bear ASTM designation and NSF seal
Dints
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 D-2665-69.
1 D-2661-69.
1g (Below Grade).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       grade shall have a clean-out plug in the bottom of the grade shall be cast brass with chrome finish.

Grade shall be cast iron.

Grade shall be less than 2 inches.

be double trapped.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             e using adhesive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |versolderor"5||-Fos."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       f trenches evenly to insure uniform bearing for all piping. sessary for Joint making. ree from water while construction is in progress. svel to establish elevations and grades. ion shall be held a sufficient distance from foundations and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 secure - 4500 peig.
with built in stop.
srature 100 to 300 degrees F.
ed charge of non-combustible g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        shock absorbers on all domestic
secified in this section.
sfactures
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  erground Piping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     using adhesive per
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>да</u>в.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and drawin
                                                                                                                                                                                                                                                                                of vertical
                             A. Provide F. drawings and per Fig.

B. Acceptable Manufacturers

1. Johns-Manville

2. Certainteed

C. Fiberglass insulation

1. Rigid lightweight heavy density fiberglass with jacket.

2. Temperature applications to 650 F.

3. Insulation, jacket, and adhesive shall be tested under probable as Flame spread - 25.

b. Smoke developed - 50.

4. Equal to Johns-Manville Micro-Lok 650 AP-1.

D. Closed cell, elastomeric tubular pipe insulation.

1. Closed cell, elastomeric tubular pipe insulation.

2. Tested under procedure ASTM E-84, NFPA 255, and UL a. Flame spread - 30.

b. Smoke density - 1000.

The cement insulation is a flame spread in the coughly insulation.

The coupling insulation is a flame spread in the coughly insulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A. Size
1. All unions shall be the same size as the line in which they noted otherwise.
B. Location
1. Unions shall be located between the shut-off valve and a linet and outlet to all water heaters b. Lavoratories and sinks c. Water coolers d. Water closets and toilets e. Inlet and outlet of cooling coil f. Inlet and outlet of pumps
2. Where final fixture connection is made by compressionnot be required.
a. This exception does not apply to water heater.
C. Acceptable Manufacturers
1. Crane
2. Jenkins
3. Vogt
4. Stockman
D. Unions for 2-1/2 inches and smaller copper
1. Brass ground joints, brass body
2. 150* rated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. All piping shall be supported from structural building members, i.e. block beams, columns, purlines, floor joists, etc.

2. Piping shall not be supported from ceiling tile or grids, conduit, mechanical equipment, ductwork or non-structural steel.

3. Perforated strapping may be used only for piping 3/4 in. or smaller and only when concealed in walls or ceilings.

4. Hangers for piping run flush along the walls shall be stamped steel straps similar to conduit straps for piping run flush along the walls shall be steel work type hangers and threaded rod supports for pipe piping run flush along the walls shall be steel work type hangers and threaded rod supports for pipe over two (2) inches.

5. Hangers for piping not run along walls shall be clevis type hangers with threaded not over one foot from elbows or connecting horizontal run.

7. Hangers shall be placed so as to prevent sag and permit proper drainage.

8. Hangers shall not be placed at more than the maximum distances shown on the placed so as to prevent sag and permit proper drainage.

9. Hangers shall be placed at more than the maximum distances shown on the placed so as to prevent sag and permit proper drainage.

1. Pipe size Max. Span - Ft.

1. Pand 3/4 6

1. And 1-1/4 8

1-1/2, 2, 2-1/2 10

3. and 4 12

5. and 6 14

8. and larger 16

4. Concentrations of valves and fittings will require closer spacing.

9. Hangers shall be attached to structural steel by heavy steel clamps.

1. Pipe hangers shall be attached to structural steel by means of expansion bolts (shields).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A. Hot, cold, and/or tempered water

1. Shutoff valves above grade

a. Bronze Gate Valve

2. Shutoff valves below grade

a. Bronze Gate Valve

(1) Install in fiberglass box with cov

3. Drain valves

a. Bronze Gate Valves

B. Acceptable Manufacturers

1. Crane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       F. Check Valve

1. Swing check valve

2. Screwed ends and cap

3. Bronze ground disc

4. 200 lb WOG

5. NIBCO T413 or equal

G. Wall Hydrant WH

1. Fully recessed with "key" operated co

2. 3/4" felmale inlet

3. 3/4" male threaded hose outlet

4. Rough chrome plated

5. Vacuum breaker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A. Supply a pressure relief valve on each hot water heater and hot water booster heater B. Valve size, pressure, and temperature rating shall be as specified by the tank manufacture except that in no case shall the valve be smaller than 3/4 inches inlet and outlet.

C. Valve shall have a handle for manual operation and testing.

D. Valve shall be cast brass or bronze.

E. Pipe the outlet of the pressure-temperature relief valve to outside of building and terminate 2" above grade or per local code.

NSULATION

A. Provide piping insulation on all piping designated on the "Piping Schedule" shown on drawings and per Florida Energy Code. Min R4 per inch.

B. Acceptable Manufacturers

1. Johns-Manville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ronze gate valves:
inch and smaller
Rising stem, wedge disc gate, b
200 psi, water, oil, gas
Stuffing, box and brass gland, so
Threaded ends
Model equal to Nibco T-111
Sronze Globe Valve
inch and smaller
Rising stem, bronze only
150 psi, water oil gas
Stuffing box, brass gland, screw.
Threaded ends
Threaded ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4" Female thread inlet
4" Male thread hose outlet
bugh chrome plated
cose-key type
rovide with vacuum breaker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qual to Chicago No. 3877-E27,
ovide with vacuum breaker.
rying contact cement
| to Johns-Manville "Aerotube Elastomeric Pip
| nsulation only after pipe has been thoroughly
| nitect, Engineer and State or local inspectors.
```

N

igular Model - dual height, ada mi-recessed mi-recessed ainless steel top, sides and front inches from wall to front inches from wall to front inches from wall to front rt No. 023754.001, wrist blade.) Itomatic pressure regulating valve ounting height - 31" floor to top of basin ter delivery:

1 GPH of 50 degrees F water odel and Manufacturer:

1 qual to Oasis Model ODP-14M

h 1-1/4" ground Joint tubular, 11 gauge, p flange with brass nuts± less cleanou @1-D-F-BN.

, chrome-plated ut, Sterling 50190 ,

embly equal to Kohler

rs.

on wall using bracket supplied by the manufacturer.

and supported per manufacturer recommendations.

per ANSI Standard IIT.I-1980, Section 4.15.

02 SEP 2021

2K2IIØ

Model and Capacity REFER TO WATER HEATER SCHEDUL

ater Heaters
lass lining fused to steel tank
latures Gas

borking pressure - 150 PSI

'ully automatic thermostat contribute and vent, po

Three-year warranty





. Cleanout ferrule.
(1) Wade W-8530-B Series or equal.
Exposed Wall Cleanouts
Same size as pipe.
Polished chrome cleanout cover over wall opening.
nstall all cleanouts and coverplates flush with the finished floor in a chance which presents a tripping hazard due to improper installocation and reinstalled.

size as drain pipe through 4 inches. tion cleaout plug for easy access by

010-U Series, or equal. Cleanouts: crawl space or in unfinished n

oor Cleanouts:
Ime size as drain pipe through 4 inches.
Ajustable housing to match finished floor.
eavy duty top.
Ickel brass secured cover.
Strule as required to match soil pipe.

ride cleanouts as shown on sptable Manufacturers

NEW MEDICAL BUILDING for: UKAEGBU, M.D. COLUMBIA COUNTY, FLORIDA PLUMBING NOTES

set ir.

sepage op.

leavy duty grate, ...

square top, polished bra.

Adjustable top.

4-inch outlet unless otherwise noted ...

Yodel - equal to Wade, Series W - 1390.

Shower Drains:

Cast iron floor drain with integral clamping collar.

Seepage openings.

Heavy duty grate, with vandalproof screws.

Square top, polished brass.

Adjustable top.

4-inch outlet unless otherwise noted on Drawings.

Yodel - equal to Wade, Series W - 1390.

Your collar.

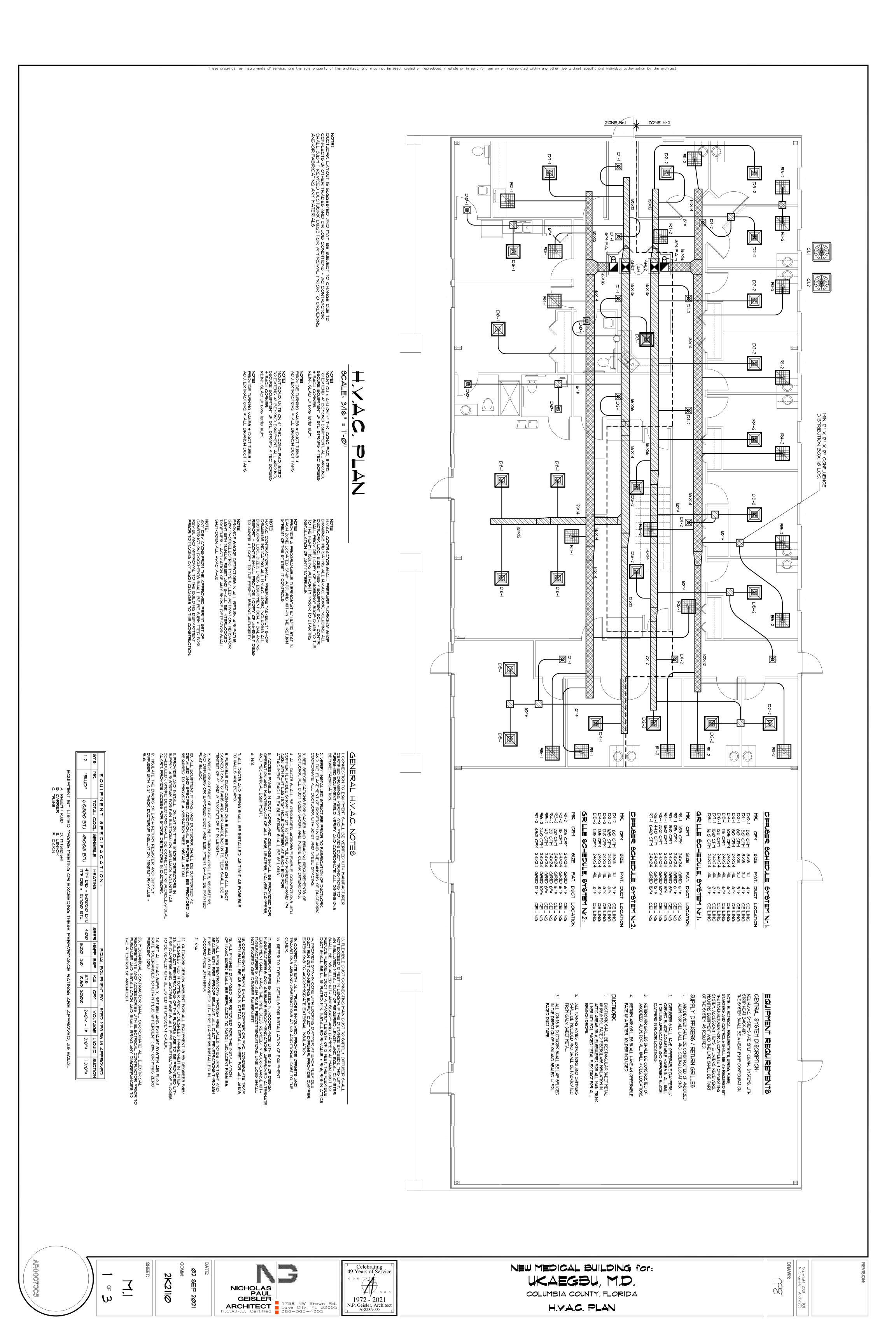
Trawings.

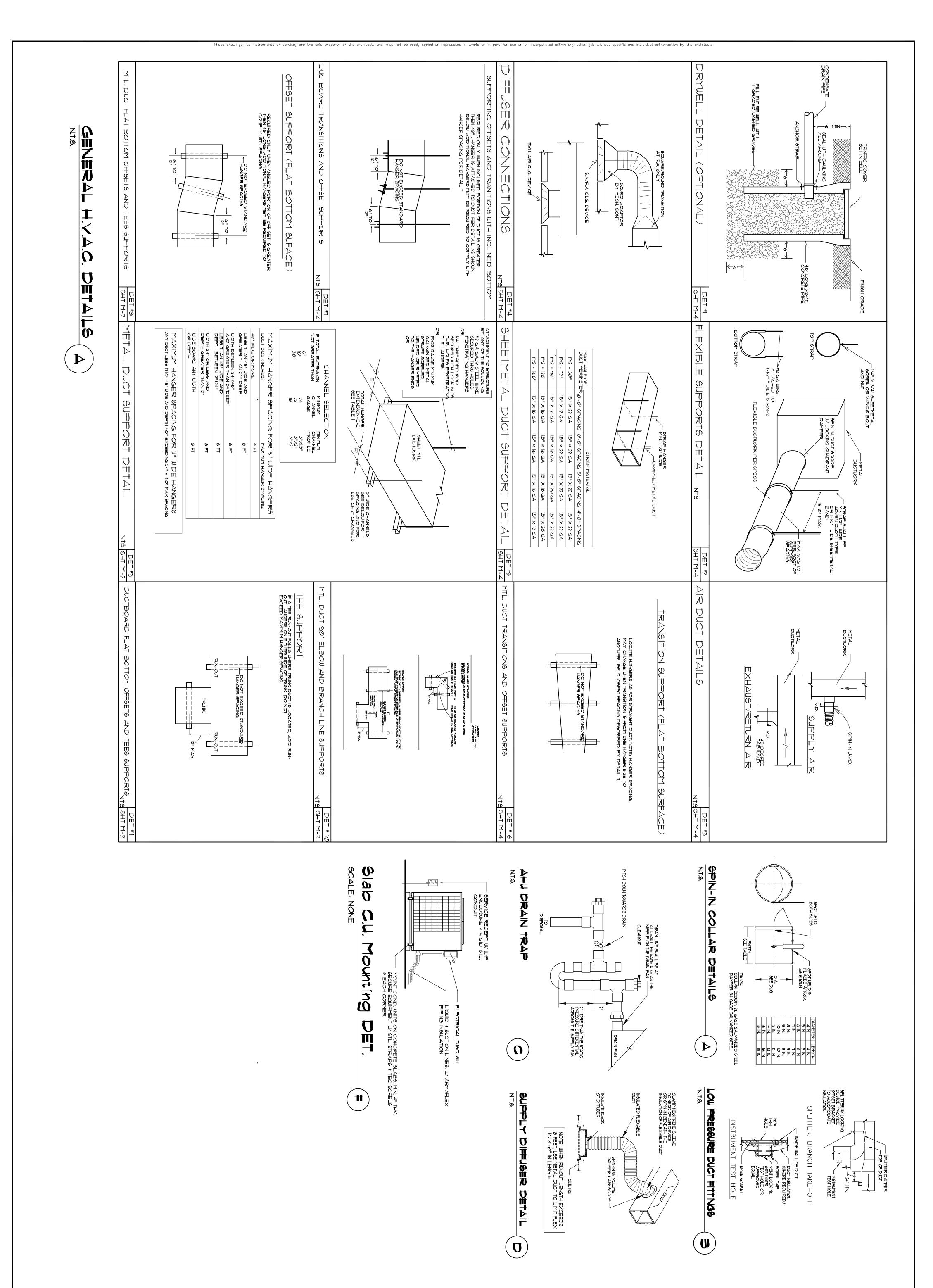
You locations show in is not him.

on floor drain with integral clamping collar. ge openings.
ge openings.
duty grate, with vandalproof screws.
s top, polished brass.
able top.
outlet unless otherwise noted on Drawings.
- equal to Wade, Series W - 1390.
Drains.

g nut. elve two (2) coats of paint,

Ç. Ø





AR0007005

DATE:

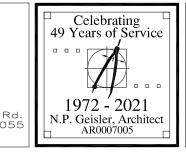
Ø2 SEP 2Ø21

COMM:

2K2110

NICHOLAS
PAUL
GEISLER
ARCHITECT
N.C.A.R.B. Certified

1758 NW Brown Rd.
Lake City, FL 32055
386-365-4355



NEW MEDICAL BUILDING for:

UKAEGBU, M.D.

COLUMBIA COUNTY, FLORIDA

H.Y.A.C. DETAILS

Copyright 2021

N.P. Geisler, Architect

DRAWN:

Jacobs regarding

Jacobs and service necessary

Jacobs and and secessary

Jacobs and not shown and not specified, or work

Jacobs and not shown shall be performed as though mentioned in both.

Jacobs and the general contractor is to coordinate with the General contractor to ascertain, in detail, the division of work, and the extent of performance other subs and the General Contractor.

Jacobs and the General Contractor.

Jacobs and the General Contractor, and each contractor and subcontractor shall be esponsible for such compliance.

Fees for permits, inspections, patent use, regulations and codes of local state and Federal accordance shall be tested for proper operation, rotation air supply, water supply ressures, flows, balance, vibration, and appropriate interlocks as required by these selfications or manufacturers' recommendations.

Jacobs shall be installed in accordance with the appropriate codes and satisfy the local spector having jurisdiction.

Jacobs shall be installed in accordance with the appropriate codes and satisfy the local spector having jurisdiction.

Jacobs shall be installed in accordance with the appropriate codes and satisfy the local spector having jurisdiction.

Jacobs shall be installed in accordance with the appropriate codes and satisfy the local spector having jurisdiction.

Jacobs shall be installed in accordance with the appropriate codes and satisfy the local spector having jurisdiction.

Jacobs shall be installed in accordance with the appropriate codes and satisfy the local spector having shall be yystems.

These sizes and thermal overload heaters shall be checked against each motor nameplate.

The amperage shall be read at each electrical motor to determine the load imposed on it.

Adjustment and Balance:

Adjust variable type pulleys, volume dampers, control dampers, etc. to provide correct volumes to main trunk lines.

Check and adjust outside air quantities as required.

Adjust air extractors and manual balancing dampers to supply correct air volume to each main branch duct from main trunk lines.

Adjust manual balancing dampers to supply correct volume to each individual branch duct. ALANCING OF AIR SYSTEMS

Balance and adjust each air distribution system shown on the Draw
Perform work in accordance with procedures and standards descrind Adjustment Manual."

Balancing shall be done by a certified balancing firm independent contractor. Diect to high water conditions shall be installed watertight.

Ordination:

Ordinated between all Contractors, Subcontractors, Installers, Insta pre factory finish is provided on equipment, all marred or damaged surfaces shall be shed-up or refinished hereunder as approved.

I proughly clean all items of equipment, leaving them in first-class condition.

I clean or wash if necessary air surfaces of all coils, fan housings, fan wheels, fan irs, air unit plenums, and all air filters.

I pumps, motors, fans and other rotating equiment shall be stored at 6ite with openings, ind, etc., covered to exclude dust and moistures all stockpiled conduit shall be ed on dunnage, and protected from weather, from entry of foreign materials. measurements shall be scaled from Drawings and used as definite dimensions ayout or fitting work in place.

yout of equipment, as shown on the plans, shall be checked and exact location similar the Drawings for all dimensions, locations of partitions, sizes of structural per, foundations, etc.

not make final layouts until shop or equipment drawings are approved and job ditions verified.

chanical reference symbols are given on the mechanical legend on the drawings. Inch-in: erminal registers only for minimal adjustment of air flows, i.e. less than 5% of air of Drawings show the arrangements and sizes of principal apparatus and sto be provided under this Contract and connection thereto. These shall diese closely as actual building construction will permit. Sions of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaranteed to be as-built done of work as indicated on Plans are not guaran ine in advance the location and size of all openings and chases by for proper installation of all work and have openings and provided during construction.

If inserts for hangers and supports of mechanical work and the work as general construction progresses.

In openings in masonry or stud walls shall be cut, not broken or conditions.

I where materials will be delivered and stored.

If where materials will be delivered and stored.

If Contract Drawings and Specifications to determine:

Construction to be used.

Struction or work will affect the work of this Section.

Indextent of work of other trades.

I determine existing conditions or nature of construction will granting additional compensation.

In the determine additional compensation. aving jurisdiction.

Dietion of each part of the mechanical system, the contractor shall demonstrate neer that each item on that system is installed with proper covers, safeties, c., and that all are in proper working order.

"red-lined" mechanical drawings shall be carefully maintained at the job site. Inditions are to be put on the drawings in red on a daily basis so the drawings ously show locations and routings of piping, ducts, grilles, equipment, valves, uipment specified on the drawings or in these specifications.

It and materials shall be new and meet or exceed specification requirements. It is that is the current model for which replacement parts are available. The manufacturers are listed, additional manufacturers may request approval for cits up to 10 days in advance of bid. Engineer may require supplemental prior to accepting or rejecting the alternate.

Thall be performed in compliance with OSHA regulations.

Wings and product data shall be submitted on all equipment, fixtures, etc. shall include all equipment to be installed by the subcontractor and all must be made at same time.

We are will review one submittal and one resubmittals subsequent. or shall rough-in for all equipment, fixtures, etc., in building not such equipment is furnished by this Contractor or by D. Outdoor Unit - HPIA,IB,2A,2B,3,456
I. Outdoor unit shall be designed for use with Refrigerant 22 and contain sufficient charges (R22) for complete system. Brass service valves with refrigerant line fittings and service ports shall be located on exterior of unit.
2. Outdoor coil shall be constructed with aluminum fins mechanically bonded to non-ferrous tubing. Factory installed coil refrigerant metering device shall be mounted on unit liquid service valve. Metering device internal components shall be removable for cleaning or replacement.
3. Outdoor unit fan shall be propeller type, direct driven, and arranged for vertical air dischage. Fan motor shall be factory lubricated, inherently protected and resiliently mounted. Mounted.

4. Compressor shall be of the welded-hermetic type with internal vishall be covered with a shield to muffle operating sound. Compresor both thermal and current -sensitive overload device. Compressor with a crank-case heater and have internal high-pressure protectifus. Controls shall be factory wired and located in a readily access and protective devices shall include a liquid line low pressure sward protective devices shall include a liquid line low pressure sward to match indoor unit terminal board and accessory them standardized point-to-point connection.

E. Resistance Heater:

I. Heaters shall be wired for the number of stages of operation ind Drawings.

2. Heaters shall be equipped with thermal and current overload development listings and applicable codes.

F. Refer to Mechanical Equipment Schedule for Model Numbers. SPLIT SYSTEM HEAT PUMPS CU-1, C A. Split System heating and cooling coil where specified. B. Acceptable Manufacturers 1. AAON 2. ADDISON 3. Approved equal ASTM D-2665-69 Il vibration isolation and pressor motor shall have sor shall be equipped action. ally bonded to copper vices. cated on the DUCT ACCESSORIES

A. Air distribution system shall be furnished complete with duct accessories necessary to allow complete air balancing and adjusting of flow and volume.

B. All square duct corners and "T" connections shall be fitted with turning vanes.

C. All branch duct takeoffs shall be fitted with nonadjustable air turning vanes AND manual volume

control dampers, OR adjustable volume extractors which are adjustable from outside the duct.

D. Each grille and diffuser shall be fitted with a manual volume control register at the face of the grille and adjustable from the face of the grille without requiring removal of the grille.

E. Acceptable Manufacturers

1. Barber Colman r turning vanes:
r turning vanes:
ultiple radius vanes
teel construction
lectrocoated white finish
faximum pressure loss = 20
fodel number - equal to Barber of
DA and AOOF

Apart up to 24 in. largest dimension and not more than 4 ft. apart above 24 in. largest dimension

K. Leakage:

I. Contractor shall make necessary repair and shall make duct system ready for a leakage test.

2. Test shall be performed by Test and Balance Contractor.

3. Leakage shall not exceed 1 % leakage for high pressure duct and 5 % for low pressure duct construction. 3. Duct Wrap:
3. Duct Wrap:
1. 2" inch thick fiberglass
1. 2" inch thick fiberglass
2. Flamespread 25 per ASTM E-84
3. Smoke developed 50 per ASTM E-84
4. Factory applied vapor barrier - heavy duty
4 mil vinyl film, class 1, meeting NFPA 90A and 90B,
UL rated trusses, etc.

3. Vertical ductwork, all sizes, shall be supported by bands bolted or screwed to walls, studs, etc.

4. Hanger bands shall be bent over one (I) inch from end and turned under corners of rectangular duct.

5. Duct hanger bands shall be fastened with sheet metal screws at six (6) inch intervals up sides and into bottom.

a. Sheet metal screws shall be 3/4 inch so as not to penetrate duct liner completely.

G. Trapeze Hangers

I. Horizontal ductwork larger than 20 inches largest dimension and all exposed ductwork shall be supported by trapeze tupe handers. A. All ductwork for air supply, return, fresh air or exhaust shall be supported by duct hangers, clamps, clips or supported by duct hangers, clamps, clips or supported.

B. Acceptable Manufactureres

Duct hangers may be a manufactured item or field fabricated as required.

C. Galvanized steel straps

I. Minimum le gauge and one inch wide

D. Trapeze hangers

I. Ducts 20 inches to 40 inches largest dimension.

a. Minimum 1/4 inch x1 inch x 1/4 inch steel angles.

b. Minimum 1/2 inch x 1-1/2 inch x 1/4 inch steel angles.

b. Minimum 1/2 inch x 1-1/2 inch x 1/4 inch steel angles.

b. Minimum 3/8 inch threaded rod.

C. Ducts above 40 inches largest dimension and plenums

a. Minimum 1/2 inch x 1-1/2 inch x 1/4 inch steel angles.

b. Minimum 3/8 inch threaded rod.

E. Supports

I. All ductwork shall be supported from structural building members, i.e. block, beams, columns, purlins, joists, etc.

C. Ductwork shall not be supported from celling tile or grids, conduit, mechanical equipment, piping or non-structural steel.

3. Ductwork hangers shall be attached to building steel by bolts, screws, clamps or welding.

F. Hanger Bands

I. Horizontal concealed ductwork up to 20 inches
largest dimension shall be supported by one (1) inch x 16 gauge galvanized steel straps at a maximum spacing of 10 ft. and at each elbow or branch takeoff. Low pressure ductwork and fittings shall be made tight for minimum air leakage.

Duct tape shall not be used to seal joints.

All ductwork, except in equipment rooms shall be concealed in construction spaces above ceilings, in partitions, chases, etc.

Ducts shall be constructed to provide specified air chrough building without adding noises to the air stream by sudden contractions as sharp edges.

Ducts shall be securly fastened to the structure with harmonic connections: Connections:

Ducts shall be air tight braced and reinforced to prevent vibration and breathing

Seal supply, return, exhaust and outside air ductwork with adhesive sealing compound

Exterior ductwork to be housed with metal cover, galvanized or aluminum, or weather proofed using felt and AB 20 and asphalt mastic (bull).

Rectangular duct connections shall be made with pocket slip or Bar-s slip not more than 8 ft. apart up to 24 in. largest dimension and not more than 4 ft. apart above 24 in. largest dimension Leakage: Underside of ductwork greater than 24" wide shall lso be secured with mechanical fasteners with tape. Pressure tape is not acceptable. Connection shall be made with not less than 4" wide sxible collar using "Ventglas" 30-ounce neoprene coated glubre construction methods for various items are not licated on the Drawings or specified herein, all such k shall be fabricated and installed in strict accordance in the recommended methods, metal gauges, hanging occdures, access door and accessory installation, etc., outlined, the latest edition of SMACNA'S Duct Manual of Sheet Metal Construction for Ventilating and Air construction for Ventilating and Air system. rlap seams of ducturap, secure with 4" wide open re glass fabric and two coats of vapor retarder tioning System. I all ductwork generally as shown on the drawings puired by SMACNA Manual. tmetal in.

And spacing shall be at a maximum spacing of 10 feet on horizontal and at each elbow or branch takeoff.

The shall be driven through any ductwork and into floor joists, as etc.

2. Titus
2. Dampers - mounted vertically
1. Damper construction shall meet the requiremen of NFPA 90A.
2. Type B, low profile, low pressure loss.
3. Blade stack shall only enter the air stream to % of the damper height.
4. Damper requires no extra height for duct installation, i.e., there shall be no "top cap."
54 Blades shall be 4-1/2 inch depth - roll formed installation, i.e., there shall be no "top cap."
55 Blades shall be 4-1/2 inch depth - roll formed installation, i.e., there shall be no single of take.
6. Frame, E-shaped, one piece roll-formed in gauge galvanized steel.
7. Blades rotate, travel and seal on a single central frame track
8. Classified 1-1/2 hour rating, UL Listed.
9. Fire dampers shall have thermal link lo. Model: FIRE DAMPERS

A. Provide fire dampers at all locations shown or

I. Fire dampers shall have only thermally actuated

B. Acceptable Manufactureres

I. Prefico Manufacturing Co.

2. Ruskin a. Dampers shall be equal to a Prefco
"Low Profile B" or approved equal.
Dampers - mounted horizontally in ceiling:
UL Listed ceiling damper
Round or square as required
2 hour rated
Single or additional approximation. 2 hour rated Single or dual blade depending on duct si Model Number . Frefco Model 5650, 5600, or 5660

2. Ruskin
E. Access Doors:
1. Insulated hinged duct access door
2. Standard gauge galvanized steel
3. Continuous piano hinge
4. Gasketed at door frame surface and at frame to duct surface
5. Positive acting cam latch handle
6. Doors shall be of sufficient size to allow access to both sides of damp
7. If duct width is greater than 36 inches, provide access doors on each sof duct for access to entire dampers.
8. Exception:
a. Where access door must be installed in such a position that hinged opening is not possible, provide door that is completely removable.
b. Removable door shall have cam-locks on both sides
9. Model Numbers:
a. Hinged doors shall be equal to Penn Ventilator Model DAD
b. Non-hinged removable door shall be equal to Penn Ventilator Model DAD
b. Non-hinged access hole in each trunk line or branch duct for insertion of air-flow pitot for flow measurement. D. Parallel Diava.

1. Low leakage non-degradable
2. Friction free metal to metal seals incorporated into the blade and frame shapes
3. Galvanized steel frame, 16 gauge
4. Galvanized steel blades, 22 gauge with double-wrapped center and edge forming
5. Maximum leakage - 11 CFM per sq. ft. \$1 inch 6.P.
6. The static pressure loss shall not exceed Ø.1"

W.G. \$2000 FPM and 50 % modulation
1. Model Number
a. Equal to Prefco Model 5150
1. Motorized damper shall be activated by a low vo controlled by a 4-20 MA or 0-14 V DC signal. ELink:

1. Fusible link rated at 165 Degrees F. release temperature.

2. DUCT ACCESS PANELS AND TEST HOLES

4. Provide an access panel at each return air and/or fresh air of for inspection and cleaning of dampers.

1. Where return and fresh air dampers are located adjacent, one sufficient, providing each damper is accessible.

3. Provide an access panel at each fire damper for resetting affire and smoke damper.

7. Provide test holes for measurement of air flow, on each branch trunk line or plenum.

8. Acceptable Manufacturers

1. Penn Ventilator Co.

2. Service. resetting a KE DETECTOR tor shall install duct smoke detectors to shut down all units pply CFM in excess of 2000 CFM. fire stats on each unit as required by code. hall shut down all unit components including fans, compr

MALL LOUVERS

A. Wall louvers shall be heavy-gauge extruded-aluminum type with multiple breaks or ridges to prevent water from travelling up the blade. Blade depth shall be 4 in, unless shown otherwise on the drawings.

B. Blade shall slope at approximately 45 deg, and shall be reinforced on the outer and inner edges with a reinforced lip.

C. Louvers shall be factory-anodized aluminum color, unless specified otherwise. If specific color is required, a sample of the required color will be furnished.

E. Louver shall be factory-anodized aluminum bird screen in a removable frame on the inside. Insect screen, if shown on the drawings for intake louvers, shall be abeliance in the masomy opening with the flarge extensing around the perimeter of the louver. Arounde multips to mitake louvers, shall be designed from the wall to allow cauking.

C. For larger-size louvers may opening with the flarge extensing around the perimeter of the louver and I/4 in, away from the wall to allow cauking. Secure the louver in such a way to prevent entry into the building.

I. Caulk the perimeter of the louver at the junction of the wall with silicone caulk, applied as recommended by the manufacturer. Allow room for expansion and contraction without damage to the caulking.

J. Louvers shall be equal to ruskin.

DISPOSABLE FILITERS

A. Provide 4" pleated filters for MAU-1 4 MAU-2.

C. Provide 4" pleated filters for MAU-1 4 MAU-2.

IT SYSTEMS 1, 2, 3, 4

Provide Heat - Cool - Off. Fan-On-Auto, thermostat, electror uily programmable with 4 functions per day, seven day/week programmable.

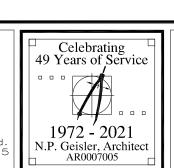
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ARCHITECT 1758 NW Brown Rd. Lake City, FL 32055 .C.A.R.B. Certified 386-365-4355

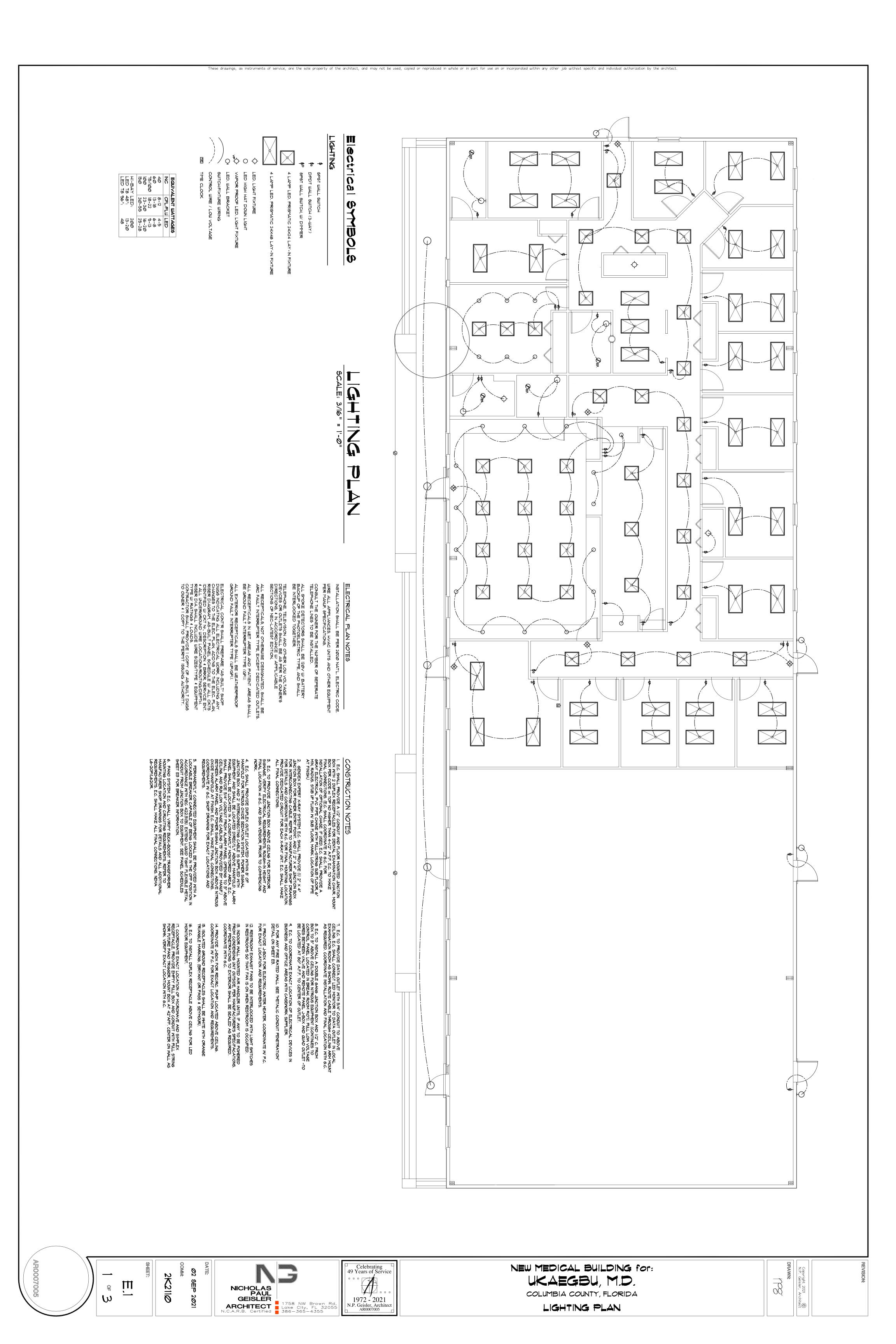


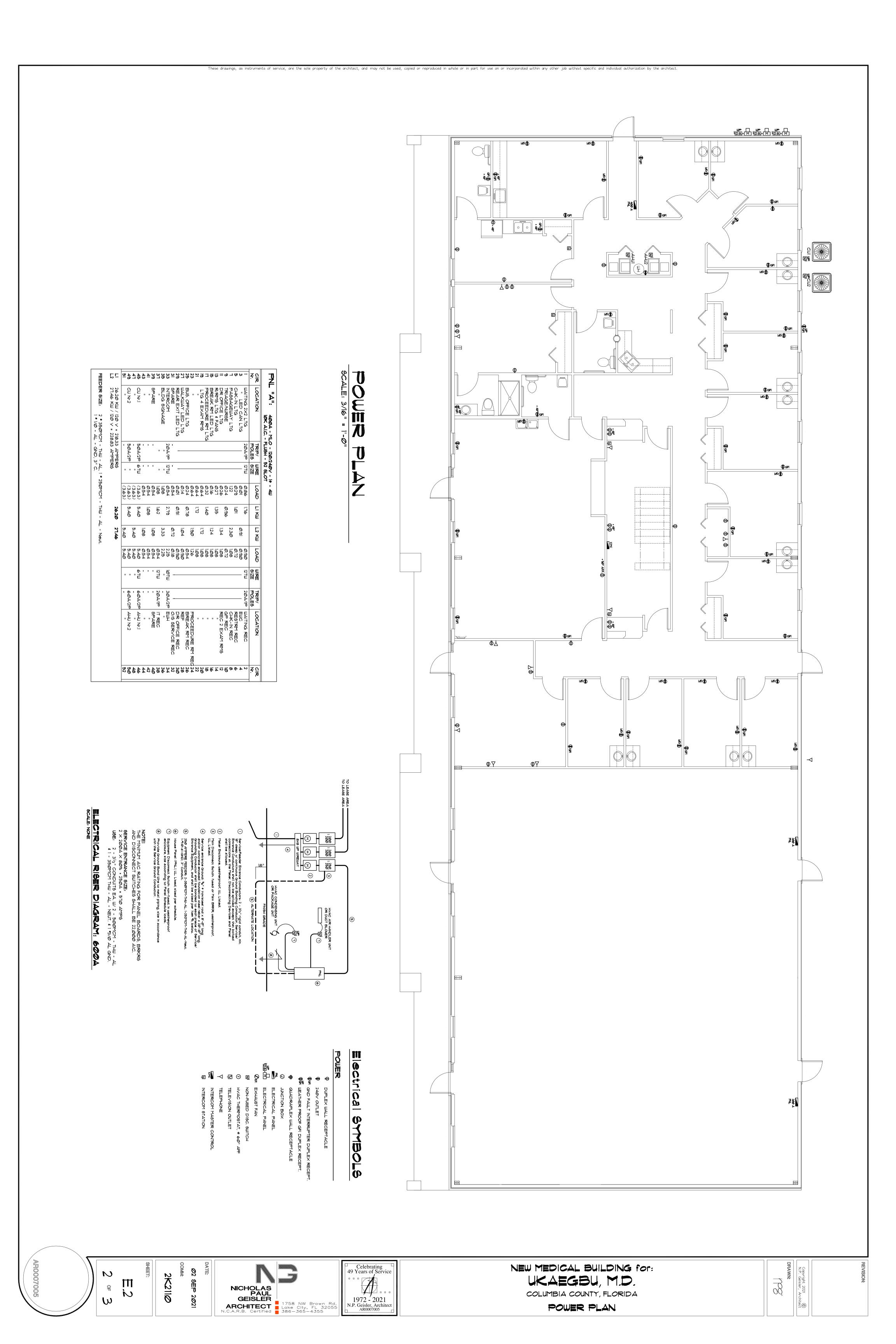
NEW MEDICAL BUILDING for: UKAEGBU, M.D. COLUMBIA COUNTY, FLORIDA

nidity above set point, the compressor shall controlled by modulating the reheat coil to re shall be controlled by modulating the

heat strips shall cycle

and for heating or cooling. ppen to set point for proper outside cupled mode, the outside air damper the drawings- in unoccupied mode,





a. Insure a neatly fitted installation.
b. Determine the nature and extent of the work of others.
c. Ellminate interferences.
d. Maintain maximum headroom and clearances.
2. Any interference which develops or is foreseen and cannot be resolved by the affected trades, etc., shall be handled as follows:
a. Cease installation of that portion of the work which is in conflict as no additional compensation will be allowed for any relocation, etc.
b. Continue work only on other portions of the work which are not in conflict.
c. Notify the Architect immediately.
d. Architect's decision shall be final as to any relocation, rerouting, removal, etc.
e. No additional compensation will be allowed for removal, relocation, repairs or changes required by interferences.
U. Clear away all debris, surplus materials, etc. resulting from work on operations, leaving job and equipment in clean first-class condition.
V. Clean all panel board, switches, boxes, etc., and leave them in a ready-to-use condition.
U. Install with proper screws or bolts, all panelboard instion box covers. used as definite dimensions for layour councer in place.

4. Layout of equipment, as shown on the plan, shall be checked and exact location determined by dimension of equipment approved by the Architect.

5. Consult the Drawings for all dimensions, locations of partitions, sizes of structual member, foundations etc.

6. Do not make final layouts until shop or equipment drawings are approved and job conditions verified.

7. Electrical reference symbols are given on the electrical legend on the drawings. a. Type of construction to be used.
b. How construction or work will affect the work of this Section.
c. Nature and extent of work of other trades. Failure to determine existing conditions or nature of construction will not be considered as a basis for granting additional compensation.
General
Contract Drawings of considered as a basis for special The Electrical Contractor shall include in his bid the cost of furnishing installing, maintaining and emoving all material and equipment required to provide emporary lights and power to perform the work of all rades during construction and until work is completed. Adequate lighting and receptacle outlets for operation of hand tools shall be provided throughout the project, including shantles, trailers, field offices, temporary oilet enclosures, and shall be extended as construction progresses.

Before submitting a bid, the Electrical Contractor is a coordinate with the electric power company to secretain, in detail, the division of work, and the extent of performance by the Flectrical Contractor.

All electrical work required by the Electrical Contractor.

All work shall be performed by the Electrical coordinate with the telephone company before bidding.

All work shall be performed or installed in strict incoordance with the National Electrical Code, Latest Ed. and all oplicable rules, regulations and codes of local, state, and ideral Governments having lawful jurisdiction, and all general subcontractors shall be responsible for such compliance.

All panelboards, disconnects, relays, magnetic contractors and time clocks shall be labeled with the ame designation shown on the Drawings.

Labels shall be laminated plastic engraved, with linimum 3/4 inch width, minimum letter size 3/8 inch. Mount a typewritten directory behind glass or plastic when is lequipment and personnel and conduct all este required to secure approval of the installation. Coordination:
Work shall be coordinated between all Contractors,
Subcontractors, Installers, Suppliers, Trades, etc. to:
a. Insure a neatly fitted installation.
b. Determine the nature and extent of the work Furnish all equipment and personnel and conduct all sats required to secure approval of the installation. Safety Tests
All systems shall test free from short circuits and grounds, shall be free from mechanical and selectrical defects and shall show and insulation resistance between phase conductors and ground of of not less than that reqired by the National Electrical Code.
All systems shall show proper neutral connections. Upon completion of each pary of the electrical system, the contractor shall demonstrate to the Engineer that avhitem on that system is installed with proper covers, safeties, controls, etc., and that all are in roper working order.
A set of "red-lined" electrical drawings shall be arefully maintained at the job site. Actual conditions and other information required by the Engineer. Equipment and materials shall meet or exceed specification the drawings of cable trays, conduits, pull boxes, circuit independent, and other information required by the Engineer. Equipment and materials shall meet or exceed specification quirements, and be New, unused, of best quality and grade, of best quality and grade, which current model for which replacement parts are available.
All work shall be performed in compliance with OSHA regulation shall be submitted on the various equipment series and product data shall be submitted on the various equipment schedules and rin other Sections of this Specification, i.e.
Inches of this specification and where materials will be delivered and stored.

In a condition shall be determined by the condition shall be accorded to the condition shall be ontract Drawings show the arrangements and sizes ontract Drawings show the arrangements and sizes principal apparatus and devices to be provided der this Contract and connection thereto these all be followed as closely as actual building instruction will permit.

Dimensions of work as indicated on Plans are not brantee to be as-built dimensions.

The measurements shall be scaled from Drawings and so definite dimensions for layout or fitting ork in place. ...
scial problems encountered during ruction.
Ine all Contract Drawings and Spectermine: A. Conduit for power, teleptomunication, control, and miscellarion which are shown on the drawings or described specifications.

1. All boxes for wiring and devices and special systems.

2. Wiring for all power, communication, fire alarm and auxiliary equipment, controls and other devices.

3. All panels for power, lighting, and distribution of electricity as shown on the Drawings and panel scheded.

4. All circuit breakers shown on lighting, power, distribution and main distribution panels.

5. All disconnects and starters as described herein.

6. All fuses as shown and specified.

EXCAVATION AND BACKFILL

A. Contractor shall be coordinate with the General Contracted to the electrical scope of work.

1. YAH-IN

Ahall rough-in for all equipment, whether or not such the contractor or under the contractor of the contra CONDUIT

A. Rigid metal conduit shall be steel, hot dip galvanized. Minimum size shall be 3/4".

B. Electrical Metallic Tubing (EMT) shall be steel, electro or hot dip galvanized.

C. Flexible Metallic Tubing shall be galvanized steel. Sealtite type UA or EF shall be used for all motor connections.

D. Rigid Non-metallic conduit shall be listed for use as electrical raceways. All FVC shall be high density

Type I Schedule 40.

E. All conduit shall be installed in a first-class workmanship manner.

F. All conductors shall be installed in conduit.

G. Fitings or symmetrical bends shall be required wherever righ angle turns are made in exposed work.

H. Bends and offsets shall be avoided wherever possible, but where necessary, they shall be made with an approved condumachine. I. All conduit joints shall be cut square, reamed smooth and dr. J. Conduit shall be installed in horizontal and vertical runs in such a manner as to insure against trouble from the collection of trapped condensation and shall be arr. devoid of traps.

K. Special care shall be used in insuring that exposed conduit runs are parallel or perpendicular to walls, structural members, or intersections of vertical planes and cell. During construction, all conduit work shall be protected to prevent loagement of dirt, plaster or trach in conduits, fittings or boxes.

M. Conduits which have been pklugged shall be entirely freed of accumulations or be replaced.

N. All conduits in floors or below grade shall be swabbed free of debris and moisture before wires are pulled.

O. Conduit shall be properly supported as specified elsewhere P. Expansion fittings or other approved devices shall be used to provide for expansion and contraction where conduit expansion joints.

Q. A flexible rounding strap shall bridge expansion joints and conduit. A. All conduit shall be supported on structural building members, i.e. columns, beams, purlins, block, studs, etc.

B. Conduit shall be supported on galvanized or aluminum brackets, clamps, or straps.

C. Conduit hangers shall be attached to building steel by beam clamps or welding.

D. Hangers and supports shall be attached to stud walls with wood screws.

E. Hangers and supports shall be attached to masonry with expansion type anchors (shield).

F. Supports shall be channel type supports such as manufactured by Uni-Strut, Globe, Kindorf, or equal. 4. Hangers and supports shall be attached to stud walls with V. Final connection to motors, etc., shall be made with eithe 1. The same type of conduit which leads up to the equipm 2. Armored flexible conduit which shall be waterproof for any locations outside, in kitchens, or any inside area subject to water, heavy moisture, condensations of shape caused fittings shall be in new, unused condition free from rust, excessive dirt and moisture, kinks, flats, cuts, or other distortions of shape caused by impact, crushing or bending.

2. Concealed conduit in building, above slab shall be EMT conduit with "set-screw" or compression fittings.

3. Exposed conduit in building, above slab shall be EMT conduit mebedded in or penetrating slab shall be PVC with waterproof joints.

5. Exposed conduit outside building, above grade shall be rigid galvanized steel with threaded waterproof foints.

6. Underground conduit shall be PVC with waterproof joints. dinate with the General Contractor lity to perform the excavation and sope of work. J. Solid neutral.

K. Panels rated at 10,000 AIC shall have stab-in breakers.

L. Panels rated greater than 10,000 AIC shall have bolt-on breaker.

M. Breakers size and quanity as shown on Schedules.

N. Breakers listed as "spare" shall be furnished and installed.

O. Panel listed with "space" shall be provided with extra space for 1. Each "space" shall be on one single pole.

P. Panels rated 225 amp. or less shall be provided as full 42 space panels unless specifically noted otherwise.

Q. Unless otherwise indicated on Drawings, install all panels with the top of the trim 6'-3" above finished floor.

R. Install panelboards in location shown on the Drawings.

G. Panelboards shall be mounted with screws, bolts, or anchors as resurfaces as defined by the National Electrical Code, 3/4 inch ply boards shall be installed on walls behind and beside the panels to assure code compliance. A. The panelboards shall be of dead-front construction with code gauge galvanized steel box, and hinged front finished in grey lacquer.

B. Doors shall be provided with a plate tumbler lock with flush handle and typed directory card and holders.

C. Panels rated 225 amp or less and 10,000 AIC shall be Square D, type NQO, or equal.

D. Panels rated 420 to 800 amp shall be Square D, "I-Line" or equal. Panels greater than 800 amps are considered to be Distribution Switchboards.

F. Furnish and install electrical system as described on Drawings, panel schedules and electrical riser diagram.

G. Panels shall be surface mounted or recessed as specified on the panel schedule.

H. All panelboards shall be circuit breaker type unless noted oth I. Voltage, phase, wires as specified on schedules.

J. Solid neutral. All under unit be shall be and intervals.

Provide pull boxes as shown on the Drawings, as equired by code or as needed for ease of construction. Outlets shall be installed in the location shown on the drawings.

Contractor shall study the general building plans in elation to the space surrounding each outlet; in contractor shall study the general building plans in price that his work may fit all other work required by these Specifical All steel supports for outlet boxes shall be furnished and installed. Outlets boxes for use with exposed steel conduit hall be cast steel. Cast metal fittings shall be consumed to the space surrounding each outlet; in prehings in electrical equipment, enclosures, ablinet, outlet and junction boxes shall be furnished and installed. All conduit connections to electrical boxes shall be made with lock suits and junctions to electrical boxes shall be made with locknuts shall be drawn down tight to make ground and permanently marked on the outler covering at regular intervals. It conductors sulfa hall be new and manufacturer's ame permanently marked on the outler covering at regular intervals.

Conductors Alla Cho. 8 or smaller may be soild or stranded that hall be insulation.

Conductors Alla No. 8 or smaller may be soild or stranded that hall be newed for the NEC. Green color cooling is required by the NEC. For conductors will be sized according to the National lecturer of 20 are separate ultring shall be insulated with relutional be insulated in conduit.

Conductors shall be sized according to the National lectures shall be shall be used.

All wring shall be installed in conduit.

Conductors shall be sized according to the National lecture of 20 are used and specifical write plants of the sized according to the National lecture of the sized according whichever is greater. Minimum size for 20 are seed to 3 and marked and sized box in the sized a eneral duty fuses shall be equal to Bussman 250 volt, n, JJN Fuses.

Otor circuit fuses and compressor fuses shall be all to Bussman 250V, "Fusetron FRN" dual element fuses are time for a chall be all to Bussman 250V, "Fusetron FRN" dual element fuses. ed for general disconnects. r rated for motor disconnects. ral Spec. W-5-865c for Heavy Duty

unicines
seneral lights switches shall be specific
de,
5-277 volt, 15 amp, heavy duty, ivory.
Catalog numbers shall be:
957 ||Ø|-|
1951 ||Ø|2-|
1484 ||Ø|3-|
1484 ||Ø|3-|
1500 ||Ø|4-|
1500

A. Underground or overhead service entrance as sho
B. Installation of metering equipment and hardware as shown on the drawings.
C. All equipment and circuits shall be grounded in acc Electrical Code, Artical 250.
D. Provide ground fault protection for all circuits not all receptacles in bathroom, and exterior location
E. Provide ground fault protection an all temporary or required by OSHA or the Nation Electrical Code. 2. Catalog numbers:
a. Switches: Single gang--Pl
Two gang----P2
Three gang----P3
b. Single Receptacle 93091
c. Duples Receptacle Single gang P8
Two gang P82
d. Telephone plate Single gang plate with rubber bushing
e. Television plate Single gang with coaxial connector for cable connection.
f. Special purpose outlets: Single gang P1882
Duplex T423
g. Weatherproof covers: Switches T420
Receptacles 5205W0 ROUND FAULT PROTECTION ce with the National

4. Bond ground to nearest cold water supply pipe and to footer or slal with same size conductor as reqired for driven ground.

5. Provide ground wire *8 Minimum to the telephone board.

7. Mechanical Equipment.

7. All mechanical equipent motors shall have grounded cases.

7. All equipment shall have a ground wire bonded theequipment.

7. All equipment shall have a ground.

7. Carbinet fame, ect., to the system ground.

7. Ground Fault Protection shall be provided for all receptacles labelled GFI or where required by letter A of this section.

7. The designation GFI on the drawings denotes a ground fault protecte. de a driven ground rod as close as posse location, sized as shown on the drawing. vase and/or own on drawings. noted on the drawings ble to the service or in accordance onduit as the gro

del or part number listed below are for since and establishing quality.
To far as practical, all wiring devices shall same manufacturer.

Catalog numbers listed are Hubbell unless

appressions devices shall be installed and located in accordace with the of all applicable National Fire Protection Association (NFPA)

or the specific type and voltage action for both normal (L-N) and

shall be listed by underwritters' laboratories, amrked in accoradance with referenced

one devices shall be manufactured by a company se design, development, and manufacture of such land electronics systems equipment, the said firm shall

Acceptable manufacturers shall be Hubbell unless on Acceptable manufacturers shall be Hubbell, Palind Seymour, Leviton, or Arrow-Hart.

General Purpose Receptacles

General purpose receptacles shall be pecification grade, 120 volt AC, 15 amp, NEMA 5-grounding type, Ivory.

Catalog numbers shall be:

a. Single receptacle: 5261-1

b. Duplex receptacle: 5262-1

Single appliance type receptacles shall be specification grade, 120 volt AC, NEMA 5-20r, 20 amp, grounding type, Ivory.

Catalog numbers shall be:

3. Single receptacle: 5361-1

5. Duplex receptacle: 5361-1

5. Duplex receptacle: 5361-1

5. Duplex receptacle: 5361-1

the receptacie: 0562-1
silal purpose receptacle: 5362-1
ifal purpose receptacles shall be ifal purpose receptacles shall be ifal purpose receptacles shall be ifal purpose ropliance cord.
In a numbers for special purpose rope as follows, based on voltage and as follows, based on voltage and purpose rope.

none riser.
ocal utility representative for any
ements prior to starting the work
one board as shown with 120 volt outlet and
and on the board.
ATA board as shown with 120 volt outlet and
and on the board.

hown with 120 volt outlet and

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NICHOLAS
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ARCHITECT
N.C.A.R.B. Certified

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UKAEGBU, M.D. COLUMBIA COUNTY, FLORIDA

ELECTRICAL NOTES

NEW MEDICAL BUILDING for: