GENERAL NOTES

ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITION OF THE FLORIDA BUILDING CODE, ACI 318.14 AND ASCE 7-16.

NO DIMENSIONS SHALL BE SCALED FROM DRAWINGS

GENERAL CONTRACTOR SHALL CHECK, REVIEW AND VERIFY ALL PLANS, DIMENSIONS AND SITE CONDITIONS PRIOR TO CONSTRUCTION. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES OR OMISSIONS NOTED ON THE DRAWINGS OR IN THE CODES. RULES AND REGULATIONS, SPECIFICATIONS, OR ANY VARIATIONS NEEDED IN ORDER TO CONFORM.

ALL REFERENCED STANDARDS REFER TO THE EDITION ENFORCED AT THE TIME THESE PLANS AND SPECIFICATIONS ARE ISSUED FOR BID.

STRUCTURAL DRAWINGS SHALL BE WORKED TOGETHER WITH ARCHITECTURAL. AIR CONDITIONING. MECHANICAL AND ELECTRICAL DRAWINGS TO LOCATE DEPRESSED SLABS, SLOPES, DRAINS, OUTLETS RECESSES, OPENING REGLETS, BOLTS SETTINGS, SLEEVES, ETC. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

GENERAL CONTRACTOR SHALL RESTRICT AND PROPERLY ISOLATE ALL CONSTRUCTION EQUIPMENT AND LOADS FROM INDUCING OR TRANSMITTING VIBRATIONS TO THE STRUCTURE DURING CONSTRUCTION.

WHEN PERFORMING WORK BELOW GRADE, CARE SHALL BE TAKEN TO AVOID DAMAGING ANY EXISTING UTILITIES ALL UNKNOWN UTILITIES. ALL UNKNOWN UTILITIES DISCOVERED DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPORTED TO ALL AFFECTED PARTIES, INCLUDING THE ARCHITECT/ENGINEER.

GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING HIS CONSTRUCTION DOCUMENTS WITH ANY REVISED DRAWINGS AND SPECIFICATIONS, FIELD ORDERS, CHANGE ORDERS AND CLARIFICATION SKETCHES ISSUED DURING THE COURSE OF CONSTRUCTION.

"BY OTHERS" DENOTES LABOR AND MATERIALS BY OTHERS. HOWEVER THE GENERAL CONTRACTOR SHALL PROVIDE COORDINATION AND FREE ACCESS FOR THE WORK.

TYPICAL DETAILS AND NOTES ON THESE DRAWINGS SHALL APPLY UNLESS SPECIFICALLY NOTED OTHERWISE. CONSTRUCTION DETAILS AND SECTIONS NOT COMPLETELY SHOWN OR NOTED SHALL BE SIMILAR TO DETAILS AND SECTIONS SHOWN OR NOTED FOR SIMILAR CONDITIONS.

THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH THE LOCAL BUILDING DEPARTMENT WHERE CONFLICTING INFORMATION APPEAR, THE MOST STRINGENT SHALL APPLY.

BACKFILL AROUND THE EXTERIOR PERIMETER OF WALLS SHALL NOT BE PLACED UNTIL AFTER THE WALLS ARE SUPPORTED BY THE COMPLETION OF INTERIOR FLOOR SYSTEMS. DO NO PROCEED WITH BACK FILL UNTIL (7) DAYS AS A MINIM AFTER THE COMPLETION OF INTERIOR FLOOR SYSTEMS UNLESS WALLS ARE ADEQUATELY BRACED. BACKFILL SHALL NOT BE PLACED UNTIL AFTER COMPLETION AND INSPECTION OF WATERPROOFING WHERE WATERPROOFING OCCURS.

TEMPORARY BRACING SHALL BE PROVIDED AS REQUIRED TO HOLD ALL COMPONENTS OF THE STRUCTURE IN PLACE UNTIL FINAL SUPPORT IS SECURELY ANCHORED.

THE CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES OF EVERY KIND, INCLUDING WATER AND POWER. NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHOWN OR INDICATED ON THESE DRAWINGS. ALL MATERIALS SHALL BE NEW MATERIALS AND WORKMANSHIP SHALL BE OF GOOD QUALITY. ALL WORKMEN AND SUBCONTRACTORS SHALL BE SKILLED IN TRADE.

THE CONTRACTOR SHALL ADEQUATELY PROTECT HIS WORK. ADJACENT PROPERTY AND THE PUBLIC. AND BE RESPONSIBLE FOR DAMAGE OR INJURY DUE TO HIS ACT OR NEGLECT.

THE PREMISES SHALL BE KEPT FROM ACCUMULATION OF WASTE MATERIALS, AND DEBRIS, AND AT THE END OF THE JOB THE CONTRACTOR SHALL REMOVE ALL RUBBISH, SURPLUS MATERIALS, AND TOOLS AND LEAVE THE BUILDING BROOM CLEAN.

JOB SITE VISITS BY THE ENGINEER DO NOT CONSTITUTE AN OFFICIAL BE UNDER A SEPARATE CONTRACT INSPECTION, UNLESS SPECIFICALLY CONTRACTED FOR. "THRESHOLD" INSPECTION AS REQUIRED BY THE LOCAL BUILDING DEPARTMENT.

SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN FULL AGREEMENT WITH THE LATEST STRUCTURAL DRAWINGS.

WATER PROOFING

THESE DRAWINGS DON'T INTEND TO PROVIDE WATER PROOFING GUIDELINES. G.C. OR OWNER SHOULD HIRE A WATER PROOFING CONSULTANT TO PROVIDE SUITABLE WATER PROOFING DETAILS.

FOUNDATION NOTES

GENERAL CONTRACTOR SHALL PERFORM THE SITE PREPARATION. IT SHOULD BE INITIATED BY CLEARING THE ENTIRE AREA PLANNED TO BE DEVELOPED. TREE STUMPS, MAJOR ROOF SYSTEMS, BURIED UTILITY CONDUITS, DRAINAGE TRENCHES, TREES/SHRUBS/LOW VEGETATION, AND BURIED STRUCTURES SHOULD BE REMOVED IN THEIR ENTIRETY FROM BENEATH THE PROPOSED BUILDING CONSTRUCTION AREAS. SITE PREPARATION SHOULD ALSO INCLUDE DEMOLITION OR REMOVAL OF ANY EXISTING ABOVE GROUND STRUCTURES THAT MAY INTERFERE WITH THE NEW CONSTRUCTION.

FOUNDATION EXCAVATION BOTTOMS SHOULD BE LEVEL OR SUITABLY BENCHED, AND FREE OF ANY LOOSE SOIL THAT HAVE BEEN DISRUPTED IN THE CONSTRUCTION PROCESS. LOOSENED BEARING SOIL SHOULD BE RECOMPACTED PRIOR TO PLACEMENT OF REINFORCED STEEL.

FOOTING EXCAVATION SHOULD BE CUT TO FINAL GRADE AND FOOTING CONSTRUCTED AS SOON AS POSSIBLE TO MINIMIZE POTENTIAL DAMAGE TO BEARING SOILS AS RESULT OF EXPOSURE TO THE ENVIRONMENT.

GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO APPLY ALL FILL PLACEMENT RECOMMENDATIONS THAT APPEAR IN GEOTECHNICAL REPORT.

THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ANY INTERPRETATION THAT THE SUBSURFACE CONDITIONS DESCRIBED IN THE TEST BORING LOGS OCCUR CONSISTENTLY THROUGHOUT THE JOB SITE. TEST BORING ARE INCLUDED ONLY TO ASSIST THE CONTRACTOR ONLY AT THE SPECIFIC LOCATIONS AND AT THE PARTICULAR TIMES THEY WERE TAKEN.

GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SHORING, SHEETING AND BRACING OF EXCAVATION.

IN NO CASE SHALL TRUCKS, BULLDOZERS, OR OTHERS HEAVY EQUIPMENT BE PERMITTED CLOSER THAN 8'-0" FROM ANY FOUNDATION WALL UNLESS APPROVED BY ENGINEER.

GENERAL CONTRACTOR SHALL INSTALL ALL PIPE SLEEVES. BOXED OPENINGS, ANCHOR BOLTS, ETC., AS REQUIRED FOR THE VARIOUS TRADES. WALL POCKETS TO RECEIVE BEAMS AND SLABS SHALL BE PROVIDED AS REQUIRED. SHOP DRAWINGS SHOWING THE POSITION OF OPENINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER PRIOR TO PLACEMENT OF CONCRETE.

MINIMUM CONCRETE COMPRESSIVE STRENGTH FOR FOUNDATION WORK SHALL BE 4,000 PSI AT 28 DAYS, WITH A WATER-TO-CEMENT RATIO OF 0.40, U.O.N.

ALL REINFORCING STEEL USED IN FOUNDATION WORK SHALL COMPLY WITH ASTM A4615 (S1) GRADE 60 (U.O.N.) SEE "REINFORCING STEEL" UNDER "GENERAL NOTES."

CENTER ALL FOOTINGS UNDER THEIR RESPECTIVE COLUMNS U.O.N. ON PLAN.

JOINTS BETWEEN OLD AND NEW CONCRETE

APPLY SIKA ARMATEC 110 BONDING AGENT AT CONSTRUCTION JOINTS AND POUR STRIPS (EXCEPT SLABS ON GRADE)

OPENINGS IN SLABS

ALL OPENINGS IN CONCRETE SLABS SHALL BE LOCATED, SIZED AND REINFORCED (WITH THE EXCEPTION O SMALL OPENINGS AND/OR SLEEVES OF A SIZE THAT WILL NOT DISPLACE OR INTERRUPT THE CONTINUITY OF THE REINFORCING) AS SHOWN ON RESPECTIVE FLOOR PLANS AND DETAILS. ANY ALTERATIONS REQUIRE APPROVAL OF THE STRUCTURAL ENGINEER. G.C. TO PROVIDE ALLOWANCE FOR THE REINFORCING REQUIRED FOR ALL OPENINGS. ALL OPENINGS REQUIRED BY OTHER TRADES ARE TO BE COORDINATED W/ ARCH. & MECH. DWGS. AND ARE SUBJECT TO STRUCTURAL ENGINEERING APPROVAL.

ANALYSIS NOTES

THE STRUCTURAL DESIGN AND ADEQUACY OF EXISTING MATERIAL WAS VERIFIED IN ACCORDANCE WITH THE FOLLOWING COVERING CODES: GENERAL:

2020 FLORIDA BUILDING CODE, 7TH EDITION ASCE 7-16. MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES: DESIGN LOADS: CONCRETE: ACI 318-14, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE; ACI 530-13, BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES; MASONRY: AISC 360-10, SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS; ALUMINUM: ADM 1-2015, ALUMINUM DESIGN MANUAL; AWC NDS 2018, NDS FOR WOOD CONSTRUCTION W/ 2015 SUPPLEMENT;

DESIGN LOADS:

LIVE LOADS.

STEEL:

WOOD:

THE FOLLOWING ASSUMPTIONS WERE ASSUMED IN THE STRUCTURAL DESIGN:

LIVE LONDO.	
ROOF: FLOOR:	20 PSF 40 PSF (OFFICE)
WIND LOADS: RISK CATEGORY: BASIC WIND SPEED: EXPOSURE CATEGORY:	II VULT=175 MPH (FBC 2020,1616.2.1) C
FOUNDATION NOTES:	······

A MAXIMUM SOIL BEARING PRESSURE OF 2,000 PSF WAS ASSUMED FOR DESIGN.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF THE FOOTING EXCAVATION REVEALS UNSUITABLE OR UNSTABLE SOILS, OR MATERIAL AND CONDITIONS NOT ANTICIPATED IN THIS AREA.

ANY FREESTANDING WATER SHALL BE PUMPED OUT OF FOOTING EXCAVATION PRIOR TO CONCRETE PLACEMENT.

IN THE ABSENCE OF A SOIL REPORT THE SOIL COMPACTION SHALL ADHERE TO THE FOLLOWING MINIMUM REQUIREMENTS FOR THE MODIFIED PROCTOR DRY DENSITY TEST: SLAB-ON-GRADE: THE SOIL SHALL BE COMPACTED TO A MINIMUM DEPTH OF ONE (1) FOOT BELOW STRIPPED GRADE. ANY LOOSE, SOFT, OR UNDESIRABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH STRUCTURAL FILL IN LOOSE LIFTS NOT EXCEEDING 12 INCHES IN DEPTH. BELOW ARE MINIMUM COMPACTION LEVELS REQUIRED: SLABS LESS THAN 5 INCHES THICK: 93%

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SLABS GREATER THAN 5 INCHES THICK:	Q	95
STRIP FOOTINGS 24 INCHES WIDE OR LESS:	93%	
STRIP FOOTINGS 24 INCHES WIDE OR MORE:	97%	
BACKFILL SOILS PLACED ADJACENT TO FOOTINGS, V	WALLS:95%	

AS REQUIRED, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SHORING, SHEETING AND BRACING OF EXCAVATION.

IN NO CASE SHALL TRUCKS, BULLDOZERS, OR OTHERS HEAVY EQUIPMENT BE PERMITTED CLOSER THAN 8'-0" FROM ANY FOUNDATION WALL UNLESS APPROVED BY ENGINEER.

CONCRETE NOTES:

UNLESS NOTED OTHERWISE, THE CONCRETE MIX SHALL OBTAIN A COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.

THE CONCRETE SHALL BE BATCHED, MIXED, AND TRANSPORTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR READY-MIXED CONCRETE ASTM C94. THE CONCRETE SHALL BE PLACED WITHIN 90 MINUTES OF BATCH TIME AND WHEN THE CONCRETE TEMPERATURE IS LESS THAN 95 DEGREES FAHRENHEIT.

THE MAXIMUM WATER-TO-CEMENT RATIO OF ALL PROPOSED CONCRETE WORK SHALL BE 0.40. THE CONTRACTOR SHALL NOT BE PERMITTED TO ADD WATER TO THE CONCRETE MIX TO IMPROVE WORKABILITY.

THE CONCRETE SHALL CONTAIN THE MAXIMUM SIZE AGGREGATE PERMITTED BY ACI CODE UP TO 3/4" MAXIMUM. THE GUIDELINES FOR MAXIMUM AGGREGATE SIZE ARE NOT GREATER THAN 1/5 (20%) THE NARROWEST OPENING IN THE FORMS, AND 1/3 (33%) THE DEPTH OF THE SLAB.

THE MAXIMUM SLUMP SHALL BE 4"+/-1" FOR ALL CONCRETE.

IF USED, FLY ASH SHALL NOT EXCEED 20% BY WEIGHT OF TOTAL CEMENTITIOUS CONTENT. SLUMP LIMITS SHALL BE STRICTLY ADHERED TO.

THE CONTRACTOR SHALL APPLY BONDING AGENT WHERE CONCRETE IS CAST AGAINST EXISTING CONCRETE SURFACES.

CONCRETE REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE DEFORMED BARS, FREE FROM LOOSE RUST AND SCALE CONFORMING TO ASTM A615, GRADE 60, U.O.N.

ALL REINFORCING SHALL BE DETAILED AND FABRICATED FOLLOWING THE REQUIREMENTS OF ACI 315. PLACING OF REBARS SHALL CONFORM TO "CRSI RECOMMENDED PRACTICES FOR PLACING REINFORCING BARS."

MINIMUM CONCRETE COVER FOR STEEL REINFORCEMENT:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: CONCRETE EXPOSED TO EARTH OR WEATHER:

CONCRETE NOT EXPOSED TO EARTH OR WEATHER"

SLAB-ON-GRADE: 3/4" BEAMS, COLUMNS, SHEARWALLS: 1-1/2"

TIES. STIRRUPS AND SPIRALS:

ALL REINFORCING BARS SHALL BE SECURELY HELD IN PLACE DURING CONCRETE POURING. IF REQUIRED, ADDITIONAL BARS SHALL BE PROVIDED BY THE CONTRACTOR TO FURNISH SUPPORT FOR THE BARS. BARS



1-1/2"

SUPPORTS SHALL BE PLASTIC TIPPED FOR EXPOSED CONCRETE. LEGS OF FOUNDATIONS CHAIRS SHALL BE GALVANIZED. PLASTIC "DONUT" SPACERS WILL BE REQUIRED FOR STEEL AGAINST FORMS IN CONCRETE BEAMS AND WALLS IF FIFLD CONDITIONS WARRANT.

ALL REINFORCING BARS MARKED "CONTINUOUS" SHALL BE LAPPED 48 DIA. AT SPLICES AND CORNERS. LAP CONTINUOUS TOP BARS AT CENTER BETWEEN SUPPORTS AS REQUIRED.

ALL STRUCTURAL LUMBER SHALL BE SOUTHERN YELLOW PINE.

WOOD NOTES

ALL WOOD IN CONTACT WITH CONCRETE AND CEMENTITIOUS MATERIAL, OR EXPOSED TO THE EXTERIOR ELEMENTS, SHALL BE PRESSURE-TREATED.

CONTRACTOR SHALL PROVIDE EQUAL OR BETTER LUMBER TO REPLACE ANY EXISTING FRAMING. ALL FASTENERS AND CONNECTIONS SHALL BE COATED WITH ZINC OXIDE, OR HOT-DIPPED GALVANIZED STEEL UNLESS NOTED OTHERWISE.

REFER TO THE FASTENER SCHEDULE FOR MODEL NUMBERS & REQUIRED FASTENERS FOR EACH CONNECTION THE FASTENER HEADS USED FOR ATTACHING THE DECKING SHALL BE COUNTERSUNK, AND SHALL BE INSTALLED SO THAT THE HEAD IS FLUSH WITH THE EXPOSED SURFACES OF THE CONNECTING MATERIAL. ALL THREADED RODS SHALL BE ASTM A193, GRADE E B7. (Fy=105 PSI, Fu=125 PSI)

- 1. WOOD DESIGN TO BE IN CONFORMANCE WITH THE LATEST EDITION OF THE NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION AND WITH THE 2020 FLORIDA BUILDING CODE, HIGH VELOCITY HURRICANE ZONE.
- TO BE DRIED, WELL SEASONED AND GRADE MARKED AT MILL.
- 3. TO BE No. 1 SOUTHERN PINE, No.2 DOUGLAS FIR. 4. ALL STRUCTURAL WOOD MEMBERS TO BE FIBER STRESSES IN BENDING OF I'b OF 1200 P.S.I AND A
- MAXIMUM MOISTURE CONTENT OF 19 %. 5. STORE ALL LUMBER AND PLYWOOD IN CONTACT WITH CONCRETE, STUCCO, MASONRY OR OTHER
- CEMENTITIOUS MATERIALS SHALL BE TREATED TO COMPLY WITH AWPA STANDARD LP-2. 6. STORE ALL NUMBER LUMBER ABOVE GRADE OR FLOOR STACK TO ALLOW PROPER AIR CIRCULATION AND PROTECT FROM WETTING WITH SUITABLE COVER.
- 7. ALL WOOD TRUSSES SHALL BE DESIGNED FOR THE SUPERIMPOSED LOADS GIVEN ON PLANS PLUS THE SELF-WEIGHT OF TRUSSES.
- 8. ALL WOOD TRUSSES SHALL ALSO BE DESIGNED TO RESIST GIVEN UPLIFT LOADS. 9. ALL WOOD TRUSSES SHALL BE DESIGNED FOR COMPONENTS AND CLADDING LOADS UNDER 2020 FBC AND ASCE 7-16 WIND PARAMETERS.
- 10. SUBMIT SHOP DRAWINGS AND CALCULATIONS BARING THE SEAL OF A FLORIDA STRUCTURAL ENGINEER DRAWINGS SHALL IDENTIFY AND LOCATE ALL COMPONENTS AND SHALL SPECIFY MEMBER SIZES, GRADES, BRACING (BOTH PERMANENT AND FOR ERECTION PURPOSES), ANCHORAGE, CONNECTIONS AND ALL OTHER NECESSARY FABRICATION AND ERECTION INFORMATION.

PLYWOOD SHEATHING

SHALL CONFORM TO THE AMERICAN PLYWOOD INSTITUTE, AND MUST BE CONNECTED TO THE WOOD MEMBERS WITH 8d RING SHANK NAILS AT 6" C/C AT ALL SUPPORTS. PLYWOOD SHEETS TO BE STAGGERED THRU-OUT FLOOR AND ROOF SYSTEM USE 5/8" EXTERIOR GRADE STRUCTURAL PLYWOOD AS RATED FOR SCREW APPLICATIONS, USE #10 SCREWS AT 6" C/C.

WOOD MEMBERS

- 1. ALL WOOD MEMBERS TO BE SOUTHERN PINE No.2 OR BETTER.
- ALL WOOD IN CONTACT WITH CONCRETE MUST BE PRESSURE TREATED WOOD. ALL BOLTED CONNECTIONS TO BE COMPLETED WITH A301 GALVANIZED STEEL BOLTS WITH WASHERS AT EACH END.
- 3. FABRICATION, ERECTION AND CONNECTIONS TO BE AS PER RECOMMENDATIONS OF THE A.I.T.C (AMERICAN INSTITUTE OF TIMBER CONSTRUCTION), LATEST EDITION.
- ALL WOOD MEMBERS TO BE FREE OF ALL IMPERFECTIONS AS : SPLITS, CHECKS, OR EXCESSIVE KNOTS, UNSATISFACTORY MATERIALS TO BE REPLACED AT NO COST TO OWNER
- 5. ALL WOOD TO WOOD CONNECTIONS TO BE COMPLETED WITH SIMPSON TYPE HANGERS, AS NOTED IN PLANS OR AS REQUIRED.

TERMITE PROTECTION STATEMENT

TERMITE PROTECTION SHALL BE PROVIDED BY REGISTERED TERMITICEDES, INCLUDING SOIL APPLIED PESTICIDES, BAITING SYSTEMS, AND PESTICIDES APPLIED TO WOOD, OR OTHER APPROVED METHODS OF TERMITE PROTECTION LABELED FOR USE AS A PREVENTATIVE TREATMENT TO NEW CONSTRUCTION. UPON COMPLETION OF THE APPLICATION OF THE TERMITE PROTECTIVE TREATMENT, A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF

AGRICULTURE AND CONSUMER SERVICES" IN COMPLIANCE WITH FBC 2020 R318 CONCRETE REPAIR PROCEDURE

THE FOLLOWING SEQUENCE SHALL BE FOLLOWED TO REPAIR CRACKED, SPALLED CONRETE AND EXPOSED RUSTED REINFORCEMENT STEEL. THE LIMITS OF THE AREAS TO BE REPLACED SHALL BE SPECIFIED BY THE ENGINEER ONCE THE REPAIR CONTRACTOR STARTS REMOVING LOOSE CONCRETE.

CHIP OFF ALL CRACKED, LOOSE AND HOLLOW SOUNDING CONCRETE, WHETHER VISIBLE OR CONCEALED. THE CONCRETE SHALL BE CHIPPED AWAY TO EXPOSE ALL CORRODED STEEL.

EXPOSE THE REINFORCING STEEL, REMOVE A MINIMUM OF 1" OF CONCRETE ALL AROUND REBARS WHICH SHOW SIGNS OF CORROSION. THE LIMIT OF CHIPPING WILL BE DEFINED BY THE ENGINEER. CLEAN THE CORRODED REBAR BY HAND METHODS WITH A WIRE BRUSH FOR LIMITED AREAS; OTHERWISE USE A POWERED WIRE BRUSH OR SANDBLASTING. REMOVE ALL OXIDATION AND FLAKES TO GRAY STEEL SURFACE.

IF THE REINFORCING STEEL HAS LOST MORE THAN 10% OF ITS CROSS-SECTIONAL AREA, SPLICE A NEW REBAR OF THE SAME DIAMETER AS THAT OF THE EXISTING REBAR WITH A SPLICE OR MECHANICAL COUPLER. IF 15% OR MORE REINFORCING HAS BEEN COMPROMISED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

IF SPLICE LENGTH IS NOT AVAILABLE, EPOXY GROUT THE NEW STEEL DOWEL INTO SOUND CONCRETE BY DRILLING HOLES INTO EXISTING CONCRETE AND USING HILTI HIT-RE 10 EPOXY SYSTEM OR SIMILAR PRODUCT. THE LENGTH OF THE ADDED BAR SHOULD BE EQUAL TO THE LENGTH OF THE DETERIORATED SEGMENT OF THE EXISTING BAR PLUS A LAP SPLICE LENGTH ON EACH END.

AS AN ALTERNATIVE TO THE LAP SPLICE, A TYPE I MECHANICAL SPLICE, AS DEFINED BY ACI 318, SHALL BE UTILIZED TO ACHIEVE CONTINUITY OF THE REPAIRED REBAR. THE TYPE 1 MECHANICAL SPLICE SELECTED BY THE CONTRACTOR SHALL BE APPROVED BY THE ENGINEER OF RECORD. THE BAR COUPLER MAY BE THE D250SCA BAR LOCK COUPLER MANUFACTURED BY DAYTON SUPERIOR, OR A SIMILAR PRODUCT. THE CONTRACTOR SHALL PROVIDE THE ENGINEER OF RECORD WITH SPECIFICATIONS OF THE BAR COUPLER TO BE USED. THE CONTRACTOR SHALL SEEK APPROVAL FROM THE ENGINEER OF RECORD FOR THE BAR COUPLERS PRIOR TO INSTALLATION.

THE CONTRACTOR SHALL FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION OF THE BAR COUPLERS.

THE EXISTING CONCRETE SURFACE OF THE AREA TO RECEIVE REPAIR GROUT SHALL BE CUT AT 90 DEGREE ANGLE TO THE SURFACE ROUGHENED TO MINIMUM OF 1/8" AMPLITUDE BY MEANS OF SAND BLASTING OR OTHER APPROVED EQUIVALENT METHOD. CLEAN ROUGHENED SURFACE OF MATERIALS. APPLY ONE FULL COAT OF SIKA ARMATEC-110 EPOCEM TO THE STEEL. SATURATE CHIPPED CONCRETE AREA WITH SIKAQUICK VOH TO BOND REPAIR MORTAR.

REBUILD THE CONCRETE SECTIONS WITH SIKATOP-123 PLUS FOR OVERHEAD REPAIRS, AND SIKATOP 122 ELSEWHERE. THE CONCRETE SHALL BE REPAIRED TO THE ORIGINAL DIMENSIONS IN ACCORDANCE WITH SIKA REQUIREMENTS, FOR APPLICATIONS GREATER THAN 1" THICK, USE REPAIR MORTAR WITH 3/8" COARSE AGGREGATE IN ACCORDANCE WITH MANUFACTURERS SPECS. CURE AS RECOMMENDED BY MANUFACTURER. FINISH THE REPAIRED SURFACE TO MATCH THE ADJACENT EXISTING SURFACE AND APPLY A GOOD QUALITY PRIMER AND ELASTOMERIC PAINT MATCH EXISTING. CONTRACTOR SHALL SUPPLY PAINT SPECIFICATION TO THE OWNER FOR APPROVAL PRIOR TO APPLICATION.

REINFORCING STEEL TO BE BILLET STEEL CONFORMING TO THE LATEST ASTM A615, GRADE 60 SPECIFICATIONS, FABRICATED IN ACCORDANCE WITH MANUAL OF STANDARD OF THE CRSI AND PLACED IN ACCORDANCE WITH ACI 315 AND ACI MANUAL OF STANDARD PRACTICE.

ALL CHIPPING SHALL BE DONE BY HAND OR LIGHT-DUTY CHIPPING HAMMER.

THE MINIMUM 28-DAY COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 5000 PSI.

ALL CONCRETE WITH 5,000 PSI WITH CORROSION INHIBITOR AND THE WATER-CEMENT (W/C) RATIO SHALL NOT BE GREATER THAN 0.45.

#6 BARS OR LARGER:

#5 BARS OR SMALLER:

BEAMS, COLUMNS PEDESTALS & TENSION TIES:

ACI PRC-546-14, GUIDE TO CONCRETE REPAIR;

ALL CONCRETE SHALL BE "READY MIXED" AND IN ACCORDANCE WITH ASTM SPECIFICATIONS C-94 A CERTIFICATE OF MANUFATURERS MIX AND STRENGTH IS TO BE PROVIDED AND HAVE A MINIMUM OF 520 LBS OF CEMENT PER CUBIC YARD. NO WATER TO BE ADDED AFTER TRUCK APPROVED CONCRETE POURING SHALL NOT BE INTERRUPTED LEAVES PLANT WITHOUT APPROVAL OF ENGINEER OR PLANT ENGINEER. PLANT CONTROL IS ALL DUE DILIGENCE SHALL BE DONE PRIOR TO CONCRETE POURING TO AVOID COLD REQUIRED. MAXIMUM MIX TIME AT POINT OF DEPOSIT IS 90 MINUTES. CONTRACTOR SHALL JOINTS. SUBMIT CONCRETE MIX DESIGN FOR REVIEW AND APPROVAL. AVOID ANY CONCRETE PREMATURE DRYING, AND OR EXCESSIVE HOT TEMPERATURES. NOTIFY ENGINEER OF RECORD PRIOR TO REMOVAL OF FORMS TO ALLOW THE ENGINEER SUBMIT PUMP MIX OR GRANITE MIX DESIGN. TO INSPECT THE STRUCTURAL ELEMENTS RIGHT AFTER REMOVAL OF FORMS AVOID CONCRETE DEFECTS LIKE HONEYCOMB, SHRINKAGE CRACKING DUE TO CONCRETE COVER OF THE REBARS SHALL BE AS DETAILED IN THE DRAWINGS. WHERE COVER IS DIFFERENTIAL TEMPERATURE, AND SURFACE DEFORMATIONS. NOT DIMENSIONED, USE THE SAME COVER AS DIMENSIONED FOR SIMILAR ITEMS. WHERE THERE ENGINEER OF RECORD TO DETERMINE IF DEFECTIVE CONCRETE NEEDS TO BE REPAIRED ARE NO SIMILAR ITEMS. USE THE FOLLOWING: OR REPLACED. ANY DEFECTIVE CONCRETE SHALL BE REPAIRED AS PER ENGINEER OF RECORD CONCRETE CAST-IN-PLACE NON PRESTRESSED CONCRETE MEMBERS REPAIR PROCEDURES. CAST AGAINST & PERMANENTLY IN CONTACT WITH GROUN EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: REPAIR PROCEDURES THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN SHORING, BRACING, AND SUPPORT NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND AS REQUIRED. SLABS, JOISTS & WALLS (#11 BARS OR SMALLER REMOVED ALL DAMAGED OR UNSOUND CONCRETE FROM THE MARKED AREAS. REFER TO ACI CONCRETE REPAIR DOCUMENTS EXPOSED THE ENTIRE REINFORCING STEEL USING IMPACT BREAKERS, HYDRO DEMOLITION, OR ANOTHER SUITABLE METHOD. IF IMPACT BREAKERS ARE USED FOR ACI PRC-224-01, CONTROL OF CRACKING IN CONCRETE STRUCTURES CONCRETE REMOVAL, THE BREAKER SHALL NOT EXCEED 30 LBS. A 15 LB IS PREFERRED TO MINIMIZE DAMAGE TO THE SUBSTRATES, REINFORCING STEEL, AND SURROUNDING THE CONTRACTOR SHALL BE RESPONSIBLE TO REMOVAL AND REINSTALLATION OF SHUTTERS CONCRETE. DOWNSPOUTS, PATIO FRAMES, HANDRAILS AND FRAMES THAT IMPEDE CONCRETE REPAIRS. PROVIDE PROTECTION FROM ANY PHYSICAL DAMAGES TO ANY AND ALL ITEMS REMOVED. PROVIDE A MINIMUM OF 3/4" CLEARANCE BETWEEN EXPOSED REINFORCING STEEL AND PERFORM SPALL/DELAMINATION REPAIRS NOTED IN THE REINFORCED CONCRETE REPAIR SURROUNDING CONCRETE PROCEDURE. NOTIFY THE ENGINEER WHEN REPAIR IS COMPLETED. REMOVAL SHALL CONTINUE ALONG THE LENGTH OF THE REINFORCING STEEL UNTIL 6 THE CONTRACTOR SHALL SUBMIT TO THE ENGINEERS FOR APPROVAL A LIST OF THE UNITS THAT INCHES OF UNCORRODED REBAR IS OBSERVED. REQUIRED REMOVAL PRIOR TO CONCRETE REPAIR. THE PERIMETER OF THE REPAIR AREA SHALL BE SAW CUT 3/4" DEEP TO PROVIDE A CONCRETE CYLINDER AND SLUMP TEST VERTICAL EDGE FOR THE REPAIR MATERIAL. AT LEAST ONE SET OF CYLINDERS SHALL BE PROVIDED FOR STRENGTH AND SLUMP TESTS PER UPON COMPLETION OF DEMOLITION, THE AREA SHALL BE CLEANED OF ALL DEBRIS AND POUR OR FOR EACH 50 CUBIC YARD OF CONCRETE, WHICHEVER IS LESS. AT LEAST TWO SETS PREPARED FOR REPAIR. OF TESTS ARE RECOMMENDED FOR COLUMN POURS. FOR EACH POUR THE ENGINEER SHALL BE PROVIDED WITH ONE (1) 3-DAY TEST, ONE (1) 7-DAY TEST, ONE (1) 28-DAY TEST, ONE (1) REINFORCING STEEL SHALL BE CLEANED USING HIGH-IMPACT (SANDBLASTING) OR SPARE, AND ONE (1) SLUMP TEST. MECHANICAL (POWERED WIRE BRUSH) METHODS AND CAREFULLY INSPECTED BY THE STRUCTURAL ENGINEER. STUCCO REPAIR, SEAL, AND PAINT PROCEDURE IF STEEL REINFORCING HAS LOST CROSS-SECTIONAL AREA DUE TO CORROSION, A REMOVE EXISTING STUCCO A MINIMUM 2" AWAY FROM WHERE THE STUCCO IS CRACKED OR STRUCTURAL ENGINEER SHALL BE CONSULTED FIRST. LOOSE. THE DAMAGED REINFORCING STEEL SHALL BE REPAIRED BY EITHER REPLACING OR CALL FOR ENGINEER'S INSPECTION IF BLOCK OR CONCRETE UNDER STUCCO IS CRACKED OR PLACING SUPPLEMENTAL STEEL REINFORCING WITH THE SAME DIAMETER IN THE SPALLING. ENGINEER OF RECORD OR SPECIAL INSPECTOR SHALL ADVISE ON REPAIRS AS NEEDED. AFFECTED SECTION. SUPPLEMENTAL REINFORCING STEEL SHALL BE LAP-SPLICE OR MECHANICAL SPLICED TO STUCCO AND CONCRETE CRACKS SHALL BE REPAIRED WITH SIKADUR 32, SIKAQUICK VOH, OR EXISTING STEEL. NOTE THAT IF THE SUPPLEMENTAL STEEL WILL BE LAP SPLICED, THE EQUAL APPROVED. IF WALL SURFACE IS BROKEN. CLEAN STUCCO/CONCRETE OF LOOSE NEW STEEL SHALL BE EXTENDED (LAP LENGTH) BEYOND THE DAMAGE AREA IN MATERIALS TO PROVIDE SOUND CONTACT FOR REPAIR MATERIALS. FOLLOW MANUFACTURER'S ACCORDANCE WITH ACU 318-08 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL DIRECTIONS. IF THERE ARE HAIRLINE CRACKS, ROUTE THE CRACKS OUT OF THE SURFACE AND REPAIR AS PER SIKA REPAIR 223 OR EQUAL. CONCRETE". APPLY PROTECTIVE COATING TO ALL REINFORCING STEEL (OLD AND NEW) IN FOR EXTENSIVE CRACKS IN CONCRETE WALL MATERIAL. INSTALL 1/4"x2" LONG TAPCONS ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR STEEL SURFACE @ 6" O.C. ALONG LENGTH OF CRACKS IN GALVANIZED METAL LATH. PRFPARATION.

PATCH STUCCO WITH DOUBLE COAT STUCCO TO ORIGINAL FLUSH SURFACE. PREPARE STUCCO WITH PRESSURE WASH TO RECEIVE A COMPLETELY NEW SURFACE OF STUCCO FOR A FINAL EVEN APPEARANCE.

REPLACE ALL EXISTING CAULK AROUND ALL EXTERIOR EXISTING DOORS AND WINDOWS WITH SIKAFLEX 15 LM OR EQUALLY APPROVED. CLEAN SURFACE AND APPLY SEALANT IN A UNIFORM MANNER TO GIVE A CLEAN FINISH. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

CLEAN SURFACES OF ALL DIRT. DUST. OR OTHER CONTAMINANTS THAT AFFECTS THE ADHESION OF PAINT OR THE APPEARANCE OF PAINT.

PAINT ALL EXTERIOR STUCCO & EXPOSED CONCRETE WITH ELASTOMERIC PAINT AS APPROVED BY THE OWNER OR ASSOCIATION.

CONCRETE REPAIR NOTES

ALL CONCRETE REPAIR WORK SHALL BE IN ACCORDANCE WITH THE CONCRETE REPAIR SPECIFICATIONS AND THE ICRI TECHNICAL GUIDELINE No. 03730 "GUIDE FOR SURFACE PREPARATION FOR THE REPAIR OF DETERIORATED CONCRETE RESULTING FROM REINFORCING STEEL CORROSION".

THE CONTRACTOR SHALL ENSURE THAT STRUCTURAL ELEMENTS ARE NOT OVERLOADED AND SHALL BE RESPONSIBLE FOR INCREASING STRUCTURAL SUPPORTS OR ADDING NEW SUPPORTS AS MAY BE REQUIRED AS A RESULT OF ANY CUTTING, REMOVAL, OR DEMOLITION WORK PERFORMED UNDER THESE CONTRACT DOCUMENTS.

CONCRETE POURING

CONCRETE POURING SHALL CONFORM WITH ACI 301, 318 AND 304 GENERAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD 48 HOURS PRIOR TO CONCRETE POURING.

KEEP CONCRETE LOG/RECORD WITH DATE, TIME, AND TEMPERATURE AS WELL AS LOCATION FOR EVERY CONCRETE POURING. KEEP CONCRETE LOG/RECORD FOR THE CONCRETE TEST WITH THE NAME OF COMPANY WHO PERFORMED THE TEST.

ID:	3"
) .	2" 1-1/2"
): ?):	3/4" 1-1/2"

A FINAL ENGINEER INSPECTION SHALL BE PERFORMED PRIOR TO PLACING REPAIR MATERIAL TO INSPECT THE REPAIR CAVITY, COATING, AND TO VERIFY THAT ALL BOND-INHIBITING MATERIALS (DIRTS, CONCRETE SLURRY, LOOSELY BONDED AGGREGATES, OR ANY MATERIAL THAT MAY INTERFERE WITH THE BOND OF THE REPAIR MATERIAL TO THE EXISTING CONCRETE) HAVE BEEN REMOVED.

NEWLY CAST CONCRETE SHALL CONFORM TO THE ORIGINAL MEMBER SHAPE AND SIZE. UNLESS OTHERWISE NOTED.

ADDITIONAL REPAIRS, REINFORCEMENTS, OR STRUCTURAL REPLACEMENTS SHALL BE APPROVED BY THE ENGINEER.

STRUCTURAL SCOPE OF WORK A. REPAIR CONCRETE TIE BEAM IN CENTRAL AC ROOM. B. DEMOLISH & REBUILD AHU ENCLOSURE (ATTACHED STRUCTURE) AT REAR ELEVATION. C. CONSTRUCT ROOF OVER MOP SINK AT REAR ELEVATION.

ISSUE	DATE
3. CITY OF MIAMI COMMENTS	12/23/2022
4. CITY OF MIAMI COMMENTS	01/27/2023

AMERICANO MEDIA GROUP STUDIC 2920 NW 7 ST MIAMI, FL 33125

PROJECT: **INTERIOR REMODELING**





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VDES PROJECT #22D078

08/15/2022

SHEET