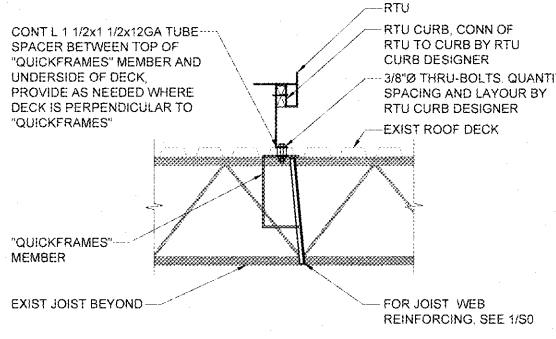
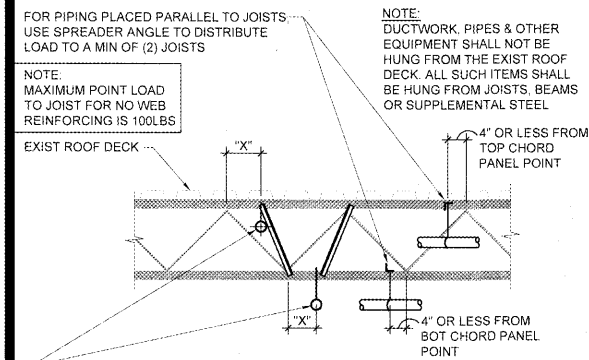


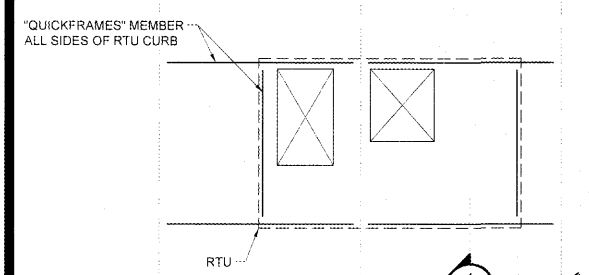
1 JOIST WEB REINF DETAIL



4 JOIST WEB REINF DETAIL



2 HANGING LOAD SUPPORT



3 RTU SUPPORT FRAMING PLAN

NOTES:

- RTU CURB SUPPORT MEMBERS SHALL BE DESIGNED AND PROVIDED BY QUICKFRAMES USA, LLC 710 W. BROADWAY RD. SUITE 203 MESA, ARIZONA 85210. OFFICE: 480.464.1500. FAX: 480.464.1504. WEBSITE: WWW.QUICKFRAMES.COM. EMAIL: SALES@QUICKFRAMES.COM
- QUICKFRAMES MEMBERS ARE TO BE LOCATED DIRECTLY BELOW RTU CURB SO 3/8" THRU-BOLTS FROM CURB CAN BE INSTALLED THRU TOP FLANGE OF QUICKFRAMES MEMBER.
- CUT OPENINGS IN TOP OF DECK ONLY. LARGE ENOUGH FOR DUCTS. DO NOT REMOVE DECK UNDER ENTIRE RTU.
- GENERAL CONTRACTOR SHALL PROVIDE RTU & CURB INFORMATION (UNIT WEIGHTS, CURB DIMENSIONS & UNIT DIMENSIONS) TO QUICKFRAMES AS REQUIRED TO PROPERLY DESIGN QUICKFRAMES SUPPORT MEMBERS.
- FASTENERS TO PROPERLY DESIGN QUICKFRAMES SUPPORT MEMBERS FASTENERS TO QUICKFRAMES MEMBERS W/ #10-16 SCREWS AT 6" OC

GENERAL STRUCTURAL NOTES

- BUILDING CODE:**
 - THE 2017 FLORIDA BUILDING CODE (FBC) AS ADOPTED BY THE BOARD OF COUNTY COMMISSIONERS IN BROWARD COUNTY, FLORIDA
 - BASED ON THE 2015 INTERNATIONAL BUILDING CODE.
- DESIGN LOADS:**
 - ROOFS:

LIVE	20 PSF
SNOW: GROUND SNOW LOAD, P _s	0 PSF
 - WIND:

BASIC WIND SPEED, V	170 MPH ULTIMATE
EXPOSURE	C
INTERNAL PRESSURE COEFFICIENT, GC _{pi}	±.18
SEISMIC DATA	
SEISMIC DESIGN CATEGORY	A

LOCATION	EXTERIOR WALLS	
	TRIBUTARY AREA	
	10 SQ. FT.	500 SQ. FT.
TYPICAL	±66.4	±51.0
WITHIN 6'-0" OF BUILDING PERIMETER	---	---
WITHIN 6'-0" OF BUILDING CORNER	±81.7	±51.0

LINEAR INTERPOLATION MAY BE USED FOR TRIBUTARY AREAS BETWEEN THOSE SHOWN
 PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE PROJECTED SURFACES, RESPECTIVELY

- GENERAL NOTES:**
 - CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR THE SAFETY OF PERSONS AND PROPERTY. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND REGULATIONS DURING THE WORK. THE ENGINEER WILL NOT ADVISE ON NOR ISSUE DIRECTION AS TO SAFETY PRECAUTIONS AND PROGRAMS.
 - THE STRUCTURAL DRAWINGS HEREIN REPRESENT THE FINISHED STRUCTURE. DURING ERECTION OF THE STRUCTURE, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR TEMPORARY GUYING, SHORING, BRACING, FORMING, ETC. TO HOLD THE STRUCTURE IN PROPER ALIGNMENT AND TO WITHSTAND ALL LOADS TO WHICH THE STRUCTURE MAY BE EXPOSED AND ARE IN PLACE. THE INVESTIGATION, DESIGN, SAFETY, ADEQUACY AND INSPECTION OF SUCH TEMPORARY MEASURES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
 - DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED. SUBJECT TO REVIEW BY THE ENGINEER.
 - ARCHITECTURAL DRAWINGS, MECHANICAL DRAWINGS, ELECTRICAL DRAWINGS, TELECOMMUNICATION DRAWINGS, FIRE PROTECTION DRAWINGS, EQUIPMENT DRAWINGS AND RELATED ITEMS ARE BY OTHERS.
 - CONTRACTOR AND SUBCONTRACTORS SHALL THOROUGHLY REVIEW ALL DRAWINGS PRIOR TO SUBMITTALS. MISCELLANEOUS FASTENERS, CLIPS, ETC. THAT ARE NOT DETAILED ON THE DRAWINGS ARE TO BE PART OF THE CONTRACTOR'S REQUIREMENTS FOR FULL INSTALLATION OF ALL STRUCTURAL SYSTEMS ARE TO BE PART OF THE BID. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO THE BID TO ASCERTAIN CONDITIONS WHICH MAY AFFECT THE BID.
 - DURING THE BIDDING STAGE, CONTRACTOR SHALL REQUEST AN INTERPRETATION OF CONDITIONS PRIOR TO BIDDING. IF NO REQUEST IS MADE, BOTH PROVISIONS SHALL BE PRESUMED TO BE INCLUDED IN THE BID AND THE ARCHITECT/ENGINEER SHALL DETERMINE WHICH PROVISION GOVERNS, AND THE CONTRACTOR SHALL PERFORM THE WORK AT NO ADDITIONAL COST TO THE OWNER.
 - ALL OMISSIONS AND CONFLICTS BETWEEN THE ARCHITECT'S ELEMENTS OF THE CONSTRUCTION DRAWINGS AND/OR SPECIFICATIONS AND/OR EXISTING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
 - THE CONTRACTOR SHALL COORDINATE ALL DIMENSIONS, ELEVATIONS, SLEEVES, HANGERS, OPENINGS, ANCHORS, EQUIPMENT SUPPORTS, AND DETAILS WITH THE ENTIRE CONSTRUCTION PACKAGE INCLUDING ARCHITECTURAL DRAWINGS, MECHANICAL DRAWINGS, ELECTRICAL DRAWINGS, TELECOMMUNICATION DRAWINGS, FIRE PROTECTION DRAWINGS AND EQUIPMENT DRAWINGS.
 - MECHANICAL UNITS SUPPORTED BY ROOF STRUCTURE ARE SUBJECT TO THE ACCEPTANCE OF THE STRUCTURAL ENGINEER.
 - DO NOT HANG ANYTHING EXCEPT MECHANICAL CEILING GRIDS FROM THE STEEL ROOF DECK.

- EXISTING CONSTRUCTION:**
 - WHenever applicable prior to fabrication and construction, CONTRACTOR SHALL FIELD VERIFY ALL EXISTING ELEMENTS, DIMENSIONS, DETAILS OF EXISTING STRUCTURAL CONNECTIONS AND OTHER CONDITIONS WHERE THEY AFFECT THE CONSTRUCTION. NOTIFY THE ENGINEER IF THERE ARE ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS. CONSULT WITH THE STRUCTURAL ENGINEER BEFORE MAKING ANY MODIFICATIONS TO THE EXISTING STRUCTURE NOT INDICATED ON THE CONTRACT DOCUMENTS.
 - BEFORE PROCEEDING WITH ANY WORK WITHIN THE EXISTING FACILITY, THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING STRUCTURE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY BRACING, SHORING AND OTHER SAFEGUARDS TO MAINTAIN ALL PARTS OF THE EXISTING WORK IN A SAFE CONDITION DURING THE PROCESS OF DEMOLITION AND CONSTRUCTION AND TO PROTECT FROM DAMAGE THOSE PORTIONS OF THE EXISTING WORK WHICH ARE TO REMAIN.
 - THE CONTRACTOR SHALL CONSIDER ALL HAZARDS DUE TO WELDING WITHIN THE EXISTING FACILITY, INCLUDING FIRE HAZARD, TOXIC SMOKE HAZARD AND LIQUEFACTION OF MEMBERS UNDER LOAD. VERIFY THE PRESENCE OF ANY TOXIC MATERIALS PRIOR TO BIDDING THE WORK OR SUBMITTAL OF FINAL PRICE.

- POST-INSTALLED FASTENING:**
 - POST-INSTALLED SYSTEMS ARE BASED ON THE FOLLOWING (UNLESS NOTED OTHERWISE):

DESCRIPTION	ANCHOR/ADHESIVE	APPLICATIONS
ADHESIVES	HILTI HIT-HY 200 OR POWERS AC 100+ GOLD	CONCRETE (EXCLUDES PRECAST HOLLOW-CORE)
EXPANSION ANCHOR	HILTI KWIK BOLT 3 (TZ) OR POWERS POWER-STUD+ SD1 (SD2)	---
POWDER-ACTUATED FASTENERS	HILTI X-U 32	COLD FORMED STEEL FRAMING TO CONCRETE

SUBSTITUTIONS WILL BE CONSIDERED PROVIDED THE CONTRACTOR SUPPLIES DOCUMENTATION OF EQUAL OR GREATER CAPACITY BASED ON ANCHOR SIZE, EMBEDMENT DEPTH, SPACING AND EDGE DISTANCE.

- POST-INSTALLED ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.
 - INSTALLATION REQUIREMENTS FOR ADHESIVE ANCHORS:
 - HORIZONTAL OR UPWARDLY INCLINED ORIENTATIONS
 - INSTALLATION SHALL BE PERFORMED BY PERSONNEL CERTIFIED IN ACCORDANCE WITH ACI(CRS) ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM.
 - INSTALLATION SHALL BE CONTINUOUSLY INSPECTED DURING INSTALLATION BY AN INSPECTOR SPECIALLY APPROVED BY THE BUILDING OFFICIAL.
 - ALL OTHER ORIENTATIONS
 - INSTALLATION SHALL BE PERFORMED BY PERSONNEL TRAINED TO INSTALL ADHESIVE ANCHORS. TRAINING SHALL INCLUDE PRODUCT-SPECIFIC TRAINING OFFERED BY THE ADHESIVE MANUFACTURER AND SHALL BE INSPECTED IN ACCORDANCE WITH THE ICC REPORT.

- COLD-FORMED STEEL FRAMING:**
 - DESIGN, FABRICATION AND ERECTION OF COLD-FORMED STEEL FRAMING SHALL CONFORM TO THE NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS (AIS1 S100), LATEST ADOPTION.
 - DETAILS SHOWN ON THE DRAWINGS ARE INTENDED TO EXPRESS A DESIGN MINIMUM PERFORMANCE.
 - FURNISH BRIDGING, BLOCKING, CLIP ANGLES, BRACING, REINFORCEMENTS, FASTENERS AND ALL OTHER ACCESSORIES FOR COMPLETE INSTALLATION AS RECOMMENDED BY THE MANUFACTURER FOR THE APPLICATION INDICATED. ALL BRIDGING (IF REQUIRED) SHALL BE INSTALLED PRIOR TO THE ADDITION OF ANY LOADING.
 - STUDS AND ACCESSORIES SHALL BE GALVANIZED WITH A G-60 COATING MEETING THE REQUIREMENTS OF ASTM A653.
 - NOTCHING OR COPING OF STUDS IS NOT ALLOWED, UNLESS NOTED OTHERWISE.
 - SPICES IN AXIALLY LOADED STUDS ARE NOT PERMITTED.
 - END OF STUDS SHALL FIRMLY AND SQUARELY SEAT TO RUNNER TRACKS, TOP AND BOTTOM.
 - SECURELY ANCHOR ALL GIRTS AND PURLINS TO EACH OTHER AND TO THE SUPPORTING STRUCTURE.
 - RUNNER TRACK SHALL BEAR FULLY ON SUPPORTING STRUCTURE AND SHALL BE FASTENED TO CONCRETE WITH POWDER-ACTUATED FASTENERS PER THE POST-INSTALLED FASTENER SECTION, UNLESS NOTED OTHERWISE.
 - TOP TRACK CONNECTIONS OF NON-LOAD BEARING WALLS SHALL PROVIDE FOR A 1/2" MINIMUM VERTICAL DEFLECTION OF SPANDREL BEAMS, GIRDERS, ETC., UNLESS NOTED OTHERWISE.
 - THE GAUGE OF ALL CONNECTING ELEMENTS, INCLUDING TRACKS, SHALL BE NO LARGER THAN THE GAUGE OF THE MEMBER BEING CONNECTED.

- STRUCTURAL STEEL:**
 - DESIGN CODE: SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (AISC 360), LATEST ADOPTION.
 - MATERIAL SPECIFICATIONS (UNLESS NOTED OTHERWISE):

STRUCTURAL STEEL WIDE FLANGE	ASTM A992
OTHER STRUCTURAL STEEL ROLLED SHAPES, PLATES & BARS	ASTM A36
HOLLOW STRUCTURAL SECTIONS	ASTM A500, GR B
THREADED RODS	ASTM A36
WELDS (E70XX ELECTRODES)	AWS D11
 - ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED ACCORDING TO THE SPECIFICATIONS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), LATEST ADOPTION. PROVISION 4.4 AND APPENDIX A OF THE AISC CODE OF STANDARD PRACTICE ARE SPECIALLY DELETED FROM THE PROJECT CONTRACT DOCUMENTS. THE FABRICATOR SHALL PROVIDE ITS SCHEDULE FOR THE INSTALLATION OF STEEL AND ERECTION DRAWINGS A MINIMUM OF 14 DAYS PRIOR TO FIRST SUBMITTAL.
 - ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWS D11. UNLESS OTHERWISE NOTED, PROVIDE CONTINUOUS FULL PENETRATION WELDS PER THE REQUIREMENTS MEETING MINIMUM THICKNESSES ALLOWED PER THICKNESS OF MATERIAL WELDED. ALL WELDS SHALL HAVE A MINIMUM YIELD STRENGTH OF 58 KSI.
 - HOLES IN STEEL SHALL BE DRILLED OR PUNCHED. ALL SLOTTED HOLES SHALL BE PROVIDED WITH SMOOTH EDGES. BURNING OF HOLES AND TACK CUTTING AT THE SITE ARE NOT PERMITTED.

- SUBMITTALS:**
 - GENERAL SUBMITTAL REQUIREMENTS
 - CONTRACTOR SHALL REVIEW, STAMP, SIGN AND DATE ALL SUBMITTALS PRIOR TO FORWARDING TO ARCHITECT/ENGINEER. THE ENGINEER'S REVIEW IS FOR CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE ENGINEER'S REVIEW DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW, CHECK AND COORDINATE THE SUBMITTALS. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS IN THE SUBMITTALS.
 - SHOP DRAWINGS SHALL BE IN THE FORM OF BLACK-LINE PRINTS OR PORTABLE DOCUMENT FORMAT (PDF) FOR REVIEW. DRAWINGS BELOW AS "CERTIFIED" SHALL BEAR THE SIGNED AND DATED SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. IN NO CASE SHALL REPRODUCTIONS OF THE CONTRACT DOCUMENTS BE USED AS SHOP DRAWINGS. DRAWINGS SHALL SHOW ERECTION PLANS, DIMENSIONS, BRACING AND BRIDGING REQUIREMENTS, DETAILS, SUPPORTED MECHANICAL EQUIPMENT AND PIPING. SUBMITTALS ARE REQUIRED.
 - INCLUDE MANUFACTURER'S PRODUCT DATA AND LATEST TECHNICAL DATA, SECTION PROPERTIES AND MATERIAL STRENGTHS OF ALL FRAMING MEMBERS THAT ARE USED.

- SPECIAL INSPECTION:**
 - SPECIAL INSPECTION IS REQUIRED IN ACCORDANCE WITH FBC SECTION 1701 FOR THE FOLLOWING PORTIONS OF CONSTRUCTION:

STRUCTURAL WELDING:
9.1.1.1 ONLY PERIODIC FABRICATORS IN ACCORDANCE WITH IBC 1704.2.2 SHALL BE USED.
9.1.1.2 FULL TIME INSPECTION SHALL BE REQUIRED EXCEPT FOR THE FOLLOWING ITEMS WHICH REQUIRE PERIODIC INSPECTION, INCLUDING 100% VISUAL INSPECTION:
9.1.1.3 SINGLE-PASS FIELD-PERFORMED FILLET WELDS NOT EXCEEDING 5/16"
9.1.1.4 VERIFICATION OF WELDER QUALIFICATIONS, WELDING PROCEDURES AND MATERIALS
 - MECHANICAL FASTENERS, ADHESIVE ANCHORS AND REINFORCING INSTALLED IN HARDENED CONCRETE.
 - REPORTS FOR THE ABOVE SHALL BE SUBMITTED TO THE ENGINEER. ALL REPORTS SHALL CLEARLY INDICATE COMPLIANCE OR NON-COMPLIANCE.
 - THE CONTRACTOR SHALL NOTIFY THE SPECIAL INSPECTOR AT LEAST 48 HOURS IN ADVANCE FOR WORK THAT WILL REQUIRE INSPECTION OR TESTING.
 - UPON COMPLETION OF EACH PHASE OF THE WORK, THE SPECIAL INSPECTOR SHALL SUBMIT A LETTER STATING COMPLIANCE WITH AND VARIANCES FROM THE PROJECT REQUIREMENTS (IF ANY).
 - UPON COMPLETION OF THE PROJECT, THE SPECIAL INSPECTOR SHALL SUBMIT A LETTER STATING COMPLIANCE WITH THE PROJECT REQUIREMENTS INCLUDING MEASURES TAKEN TO CORRECT PREVIOUSLY IDENTIFIED NON-COMPLYING ITEMS.

ABBREVIATIONS		
ACI	AMERICAN CONCRETE INSTITUTE	CRSI CONCRETE REINFORCING STEEL INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
AISI	AMERICAN IRON AND STEEL INSTITUTE	SDI STEEL DECK INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	SJI STEEL JOIST INSTITUTE
AWS	AMERICAN WELDING SOCIETY	SSMA STEEL STUD MANUFACTURER ASSOCIATION

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 33004

SPACE #M115

SPECIALTY

SHEET TITLE:

GENERAL STRUCTURAL NOTES

REVISIONS:

NO:	DATE:	BY:
△	02.19.19	PERMIT
△	04.03.19	BD RECHECK

PROJECT NO: 190029
 DRAWN BY: AAD

SO

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