MECHANICAL ANCHORS

1. MECHANICAL ANCHORS SHALL BE AS FOLLOWS OR APPROVED EQUAL:
   HILTI KWIK BOLT TZ ANCHOR (KB–TZ) AS MANUFACTURED BY HILTI INC., ICC ESR–1917, ICC ESR–3785 AND COLA RR–25701.
   HILTI HSL–3 CARBON STEEL HEAVY DUTY EXPANSION ANCHOR AS MANUFACTURED BY HILTI INC., ICC ESR–1545 AND COLA RR–25903.
   STRONG–BOLT WEDGE ANCHOR AS MANUFACTURED BY SIMPSON STRONG–TIE COMPANY, INC., ICC ESR–1771 AND COLA RR–25705.
   TITEN HD SCREW ANCHOR AS MANUFACTURED BY SIMSPON STRONG–TIE COMPANY, INC. ICC ESR–2713 AND COLA RR–25741.
   HILTI KWIK HUS–EZ (KH–EZ) SCREW ANCHOR AS MANUFACTURED BY HILTI INC., ICC ESR–3027, ICC ESR–3056 AND COLA RR 25897.
   HILTI HDA UNDERCUT ANCHORS AS MANUFACTURED BY HILTI INC., ICC ESR–1546 AND COLA RR 25939.
2. INSTALL ANCHOR AS INDICATED IN MANUFACTURER'S WRITTEN INSTRUCTION AND REFERENCED ICC EVALUATION REPORT OR COLA RESEARCH REPORT. DO NOT DRILL INTO EXISTING REINFORCING STEEL. BUT ADJUST HOLE LOCATION AS REQUIRED.

STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL SHALL COMPLY WITH CBC STANDARD 22–1, AISC AND THE FOLLOWING ASTM STANDARD SPECIFICATIONS, UNLESS NOTED OTHERWISE:

ALL STRUCTURAL STEEL UNLESS NOTED BELOW _____ ASTM A36
WIDE FLANGE SHAPES _____ ASTM A992 (50 KSI)
PIPES _____ ASTM 53, GRADE B (35 KSI)
TUBES _____ ASTM A500, GRADE B (46 KSI)
ANCHOR BOLTS AND UNFINISHED BOLTS _____ ASTM A307
THREADED ROUND STOCK _____ ASTM A36
HIGH STRENGTH BOLT _____ SEE HIGH STRENGTH BOLT SECTION
STAINLESS STL. BARS & SHAPES__ASTM A276, GRADE TYPE 304
STAINLESS STL. PIPE & TUBE _____ ASTM A269, GRADE TYPE 304
STAINLESS STL. THREADED ROD _____ ASTM A193, B8, CLASS 2
REINF. STEEL _____ SEE CAST–IN–PLACE CONCRETE SECTION

2. ALL FABRICATION AND ERECTION SHALL CONFORM TO THE LATEST EDITION OF AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.

3. ARCHITECTURAL PLANS ARE PART OF THE STRUCTURAL DESIGN DRAWINGS AND ARE TO BE USED TO DEFINE DETAIL CONFIGURATIONS INCLUDING, BUT NOT LIMITED TO, RELATIVE LOCATIONS OF MEMBERS, ELEVATIONS, LOCATIONS OF OPENINGS, ETC.

4. SUBMIT SHOP DRAWINGS TO THE ARCHITECT (STRUCTURAL ENGINEER) FOR REVIEW PRIOR TO FABRICATION.

5. NO FIELD CUTTING OR BURNING OF STRUCTURAL STEEL SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE ARCHITECT (STRUCTURAL ENGINEER).

6. WELD STRUCTURAL STEEL IN COMPLIANCE WITH ANSI/AWS D1.1 EXCEPT AS AMENDED IN CBC CHAPTER 22 & AISC LATEST EDITION. WELDERS SHALL BE CERTIFIED AS REQUIRED BY THE GOVERNING CODE AUTHORITY. WELDING SHALL BE PERFORMED BY THE ELECTRIC ARC PROCESS USING E70XX ELECTRODES UNLESS NOTED OTHERWISE. WELDING MAY BE PERFORMED USING THE SUBMERGED ARC PROCESS WITH AUTOMATIC WELDING (SAW–1). PERFORM SHOP WELDING AND PERFORM ULTRASONIC TESTING OF FULL PENETRATION GROOVE WELDS WELDED IN SHOP BY A FABRICATOR APPROVED BY THE GOVERNING CODE AUTHORITY.

7. UNLESS A LARGER SIZE FILLET WELD IS INDICATED, PROVIDE MINIMUM SIZE OF WELD PER AISC AISC 360, TABLE J2.4.

QUALITY ASSURANCE

1. SPECIAL INSPECTION AND MATERIAL TESTING:

TESTING LABORATORY (SPECIAL INSPECTOR) SHALL BE RETAINED BY OWNER OR AGENT FOR THE OWNER, BUT NOT THE CONTRACTOR, AND APPROVED BY THE ARCHITECT, STRUCTURAL ENGINEER AND BUILDING OFFICIAL.

TESTING LABORATORY (SPECIAL INSPECTOR) SHALL PERFORM REQUIRED TESTS AND INSPECTIONS FOR THE WORK ASSIGNED FOR CONFORMANCE TO THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.

TESTING LABORATORY (SPECIAL INSPECTOR) SHALL FURNISH TEST AND INSPECTION REPORTS TO THE ARCHITECT, STRUCTURAL ENGINEER, BUILDING OFFICIAL AND CONTRACTOR.

2. ALL CEMENT, AGGREGATE, REINFORCING STEEL, STRUCTURAL STEEL, ETC. SHALL BE FROM IDENTIFIABLE TESTED STOCK. COPIES OF CERTIFIED LABORATORY TEST REPORTS SHALL BE FURNISHED TO THE ARCHITECT (STRUCTURAL ENGINEER) AND, UPON REQUEST, TO GOVERNING CODE AUTHORITY. IF MATERIALS CANNOT BE IDENTIFIED OR IF CERTIFIED LABORATORY TEST REPORTS CANNOT BE MADE AVAILABLE, TESTING LABORATORY WILL PERFORM TESTS TO DETERMINE CONFORMANCE WITH CONTRACT DOCUMENTS AS DIRECTED BY ARCHITECT (STRUCTURAL ENGINEER).

3. SPECIAL INSPECTION, COMPLYING WITH CBC SECTIONS 1704 & 1707 (UNLESS NOTED OTHERWISE), SHALL BE PROVIDED BY A TESTING LABORATORY, EMPLOYED BY THE OWNER, FOR ALL THE FOLLOWING:

   A. FIELD WELDING INCLUDING SHEAR STUDS (TO BE PERFORMED BY WELDERS CERTIFIED BY THE GOVERNING CODE AUTHORITY)

   B. PERIODIC SPECIAL INSPECTION FOR MECH'L. ANCHORS

4. TESTING LABORATORY SHALL REVIEW CONCRETE MIX DESIGN DATA AND SHALL PERFORM THE FOLLOWING CONCRETE TEST AT FREQUENCY INDICATED IN CBC SECTION 1905.6:
   A. SLUMP TESTS IN COMPLIANCE WITH ASTM C143.
   B. PREPARE FOUR TEST CYLINDERS FOR COMPRESSIVE STRENGTH TESTING IN COMPLIANCE WITH ASTM C39, ACI 318.05 AND CBC SECTION 1905.6. TEST ONE CYLINDER AT 7 DAYS AFTER DEPOSIT, TWO CYLINDERS AT 28 DAYS AFTER DEPOSIT AND RETAIN REMAINING CYLINDER FOR TESTS UNTIL COMPLETION OF PROJECT. DETERMINE CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS BASED ON AVERAGE OF TWO CYLINDERS TESTED.

5. REFER TO SPECIFICATIONS FOR ADDITIONAL TEST AND INSPECTION REQUIREMENTS.

GENERAL (cont.)

8. THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE SHOWN, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT ALL WORK AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY REPRESENTATIVES OF THE ARCHITECT (STRUCTURAL ENGINEER) DURING CONSTRUCTION SHALL BE DISTINGUISHED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS.

9. ALL ERECTION PROCEDURES SHALL CONFORM TO OSHA STANDARDS, AND ANY DEVIATION MUST BE APPROVED BY OSHA PRIOR TO ERECTION.

10. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES.

11. DESIGN, MATERIALS, EQUIPMENT AND PRODUCTS OTHER THAN THOSE DESCRIBED BELOW OR INDICATED ON THE DRAWINGS MAY BE CONSIDERED FOR USE, PROVIDED PRIOR APPROVAL IS OBTAINED FROM THE OWNER, ARCHITECT (STRUCTURAL ENGINEER), AND THE APPROPRIATE GOVERNING AUTHORITY.

12. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL SAFETY ORDINANCES.

13. TAKE FIELD MEASUREMENTS AND VERIFY FIELD CONDITIONS AND COMPARE SUCH MEASUREMENTS AND CONDITIONS WITH CONTRACT DOCUMENTS. IF ERRORS, INCONSISTENCIES OR OMISSIONS ARE DISCOVERED, PROMPTLY NOTIFY ARCHITECT (STRUCTURAL ENGINEER) BEFORE PROCEEDING WITH WORK.

14. MODIFICATIONS OR SUBSTITUTIONS: DESIGN, MATERIALS, EQUIPMENT AND PRODUCTS OTHER THAN THOSE INDICATED OR SPECIFIED MAY BE CONSIDERED FOR USE PROVIDED A WRITTEN REQUEST, SUBJECT TO REVIEW, IS SUBMITTED TO OWNER, ARCHITECT (STRUCTURAL ENGINEER) AND GOVERNING CODE AUTHORITY PRIOR TO ITS USE OR INCLUSION OF ANY SHOP DRAWING.

15. EXISTING STRUCTURAL DRAWINGS FOR THE N/A PROJECT PREPARED BY N/A DATED N/A INCLUDING ALL ADDENDA AND REVISIONS ARE A PART OF THESE CONTRACT DOCUMENTS.

16. CONDITIONS SHOWN OR NOTED AS EXISTING ARE BASED ON BEST INFORMATION CURRENTLY AVAILABLE AT THE TIME OF PREPARATION OF THESE DRAWINGS. NO WARRANTY IS IMPLIED AS TO THE ACCURACY OF THESE EXISTING CONDITIONS.

GENERAL

1. THE FOLLOWING NOTES AND TYPICAL DETAILS APPLY TO ALL DRAWINGS UNLESS NOTED OTHERWISE.

2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.

3. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED SUBJECT TO REVIEW BY THE ARCHITECT (STRUCTURAL ENGINEER).

4. ALL CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS AND THE 2022 CALIFORNIA BUILDING CODE (CBC).

LIVE LOADS: ROOF: N/A

WIND:
- ULT DESIGN WIND SPEED _____ 95 MPH
- EXPOSURE _____ C
- RISK CATEGORY _____ II
- IMPORTANCE FACTOR _____ 1.0

SEISMIC:
- DESIGN CATEGORY: _____ D
- SITE CLASS: _____ D
- MAPPED SPECTRAL RESPONSE ACCELERATIONS:
  - Ss: _____ 1.83
  - S1: _____ 0.72
- SPECTRAL RESPONSE COEFFICIENTS:
  - Sds: _____ 1.29
  - Sd1: _____ 1.01
- IMPORTANCE FACTOR _____ 1.0
- RESPONCE MODIFICATION COEFFICIENT:
  - R longitudinal: _____ N/A
  - R transverse: _____ N/A
- SEISMIC RESPONSE COEFFICIENT
  - Cs longitudinal: _____ N/A
  - Cs transverse: _____ N/A
- COMPONENT RESPONSE MODIFICATION FACTOR
  - Rp: _____ 2.0
- COMPONENT AMPLIFICATION FACTOR
  - Ap: _____ 2.5
- OVERSTRENGTH FACTOR Ω: _____ 2.0

5. GOVERNING CODE AUTHORITY: CITY OF LONG BEACH DEPARTMENT OF BUILDING AND SAFETY.

6. PROVIDE OPENINGS AND SUPPORTS FOR MECHANICAL EQUIPMENT, DUCTS, PIPING, VENTS, ETC. AS REQUIRED. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR ADDITIONAL OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS. ALL SUSPENDED EQUIPMENT TO BE PROVIDED WITH APPROVED LATERAL OR SWAY BRACING.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT (STRUCTURAL ENGINEER) AND BE RESOLVED BEFORE PROCEEDING WITH THE WORK.

GLENN N. ALMQUIST, STRUCTURAL ENGINEER
1400 QUAIL STREET, SUITE 245
NEWPORT BEACH, CA 92660
PH (949) 261-6161
FAX (949) 261-6194
e-mail glenn@gnase.com

REGISTERED PROFESSIONAL ENGINEER — GLENN N. ALMQUIST — 2353 — Exp. 12-31-23 — STRUCTURAL — STATE OF CALIFORNIA

PROJECT: INTERNATIONAL CITY BANK EVAPORATIVE CONDENSER REPLACEMENT AND UPGRADE 249 EAST OCEAN AVE. LONG BEACH, CA 90802

A	1	SUBMITTAL

Project Name and Address
INTERNATIONAL CITY BANK FLUID COOLER REPLACEMENT AND UPGRADE
249 EAST OCEAN AVE.
LONG BEACH, CA 90802

Sheet Title
STRUCTURAL NOTES, PARTIAL ROOF FRAMING PLAN, SECTIONS & DETAILS

Sheet:
S1

GNA — Designed By	GNA — Checked By
JRM — Drawn By	GNA — Proj. Mngr.
AS NOTED — Scale	202323 — Job Number

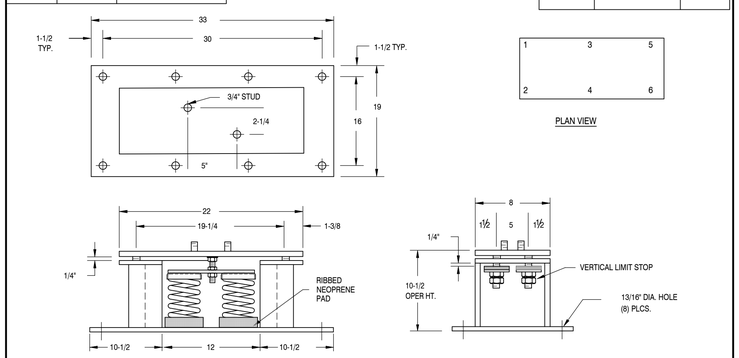
MEP, INC.
CONSULTING ENGINEERS AND PLANNERS
853 North Citrus Ave
Covina CA. 91723–1117
TEL: (909) 447–0201
CELL: (909) 374–0578
E–Mail: oscar@mep–inc.com

JOB NO. MEP–22–173

7

MARK	MAKE	MODEL
EC-1	EVAPCO	LSC-345E

MTS	SPRING OD.	DEFLN.
1-6	(2) 4.25"	2"

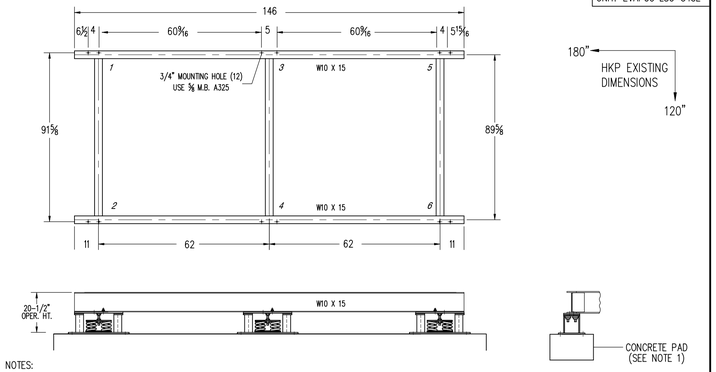


NOTES:
·1. FOR ANCHORAGE, VERIFY WITH YOUR SEOR HOW TO ATTACH TO THE EXISTING PAD.
YOU CAN RESIZE THE ISOLATOR BASE PLATE PER YOUR NEEDS.

M.W. SAUSSE' & CO., INC. VALENCIA, CALIFORNIA 91355 VIBREX TYPE RMLS–EQ–12	JOB NAME: 249 OCEAN TOWER	REVISIONS:	DRN: TDT
	CUST.:	A:	DATE: 8-18-23
	CUST. P.O.:	B:	SHEET NO.: -1.1
	MECH. ENGR .: MEP INC.	C:	
	MARK: EC-1	D:	

ISOLATOR DETAIL — 6

UNIT: EVAPCO LSC–345E



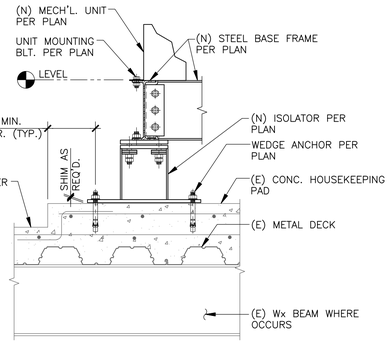
NOTES:
1. ADEQUACY OF CONCRETE PAD MUST BE VERIFIED BY CONTRACTOR.
2. APPROXIMATE ISOLATION STEEL & ISOLATORS = 750 + 900 LBS
3. FOR ISOLATOR DETAILS, SEE DWG–1.1
4. M.W. SAUSSE & CO. INC. IS NOT RESPONSIBLE FOR THE STRUCTURAL INTEGRITY OF THE EQUIPMENT WHEN ANCHORED AS SHOWN.
5. ALL DIMENSIONS TO BE FIELD VERIFIED BY CONTRACTOR BEFORE CONSTRUCTION.

M. W. SAUSSE' & CO., INC. 28744 Whitherspoon Pkwy. Valencia, CA 91355 Phone: (661) 257-3311 Fax: (661) 257-7673 Vibrex RMLS–SB	JOB NAME: 249 OCEAN TOWER	REVISIONS:	DRN: TDT
	CUST.:		DATE: 8–18–23
	CUST. P.O.:		SHEET NO.: –1
	MECH. ENGR.: MEP INC		
	MARK: EC–1		

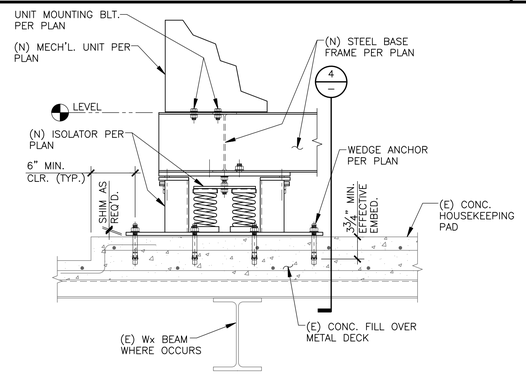
BASE FRAME DETAIL — 5

STRUCTURAL NOTES — 2

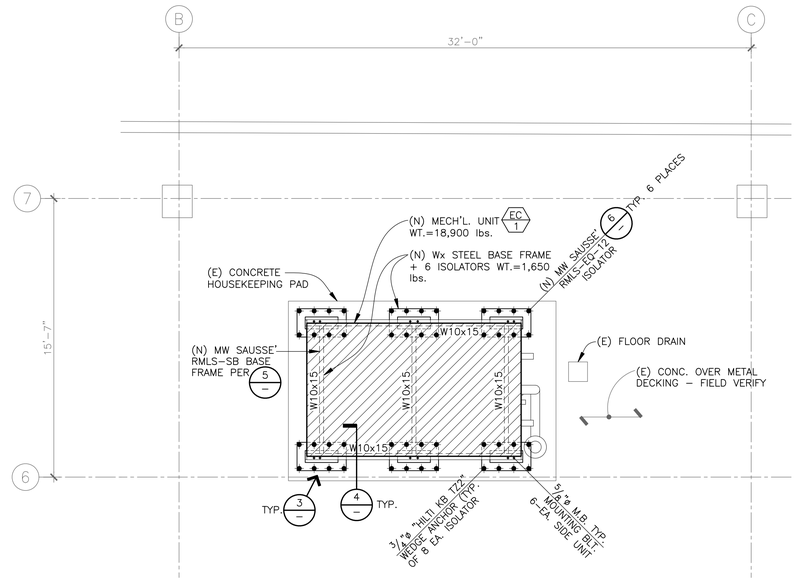
NOTE:
FOR ADDITIONAL INFO. NOT NOTED HERE FOR CLARITY, SEE DETAIL 3/–



(N) ISOLATOR TO (E) CONC. PAD DETAIL — 4



(N) ISOLATOR TO (E) CONC. PAD DETAIL — 3



PARTIAL ROOF FRAMING PLAN — SCALE: 1/4" = 1'–0" — 1